

S T U D Y A S S O C I A T I O N

G E W I S

 **SUPREMUM**

VOL 51 N<sup>o</sup> 0

**THE  
TRUTH  
ISSUE**

# EDITORIAL

**EDITOR IN CHIEF** Nadym van Schaik

During one of our first meetings of the year, one member from our committee said these wise words:

“Truth is that tomato is a fruit.

Knowledge is knowing that tomato is a fruit

Wisdom is not putting tomatoes in a fruit salad ”

After these wise words were spoken, we decided on the theme of this year’s first edition: truth. This edition is packed with interesting stories, and many people weren’t shy to write an opinion piece. You can read about the internationalisation of GEWIS, the Office 365 project of the TU/e, and Eminem’s new album. However, Supremum wouldn’t be Supremum if we hadn’t included columns such as Chairman’s Note, Education First and GEWISSCHENSCHAFT.

As everyone probably knows, three fraternities are celebrating their lustrum this year. The oldest of the three is I.V.V, whose members wrote some amazing pieces for this editions. The other two celebrating fraternities, GEPWNAGE and Athena, will be featured in the upcoming editions.

We hope you will enjoy this edition as much, as we enjoy making it.



# CONTENTS

EDITORIAL	1
CHAIRMAN'S NOTE	3
EDUCATION FIRST	4
A STEP IN THEIR DIRECTION	5
TRUTH BE TOLD	6
THE MAGIC OF KURT GÖDEL	7
DIFFERENT TACTICS ON THE GAME WE ALL LOVE	10
SUPRE MUM	11
COMIC	13
TRUTH, A METAPHYSICAL INVESTIGATION	14
MODELING SEQUENCE DATA: DIFFERENT TAKES ON THE MATTER	15
TRAINING ON PAPER: MANAGE YOUR STRESS	17
GEWIS, GDPR AND A CURIOUS NON-PROTECTION	20
IT'S TIME FOR THE TRUTH	21
IN THE SPOTLIGHT	25
LIFE AS I.V.V FEUT	27
TRUE REASONS TO GO BOARDING	28
EMINEM GOING MILDLY KAMIKAZE	29
DIRE PANE AL PANE E VINO AL VINO	31
SUPRE MUM	33
ZIT IN WIJN WEL DE WAARHEID?	35
WHERE ARE MY BITS AT?	37
FRESH FROM THE CAMP	40
INTRO 2018: FINDING OUR PLACE AT THE UNIVERSITY	41
ACE ATTORNEY SERIES	43
KOOKALMANAK AVAILABLE NOW!	46
IN BAC LIES TRUTH	47
GEWISSENSCHAFT	48
THE TRUTH IS IN THE CAKE	51
WHAT'S 37 REALLY ABOUT?	53
DE VERGANKELIJKHEID DER SEIZOENEN	55
JAPIE BEER FESTIVAL AS FLUFFY UNICORNS	57
COMMITTEES & FRATERNITIES	61

25



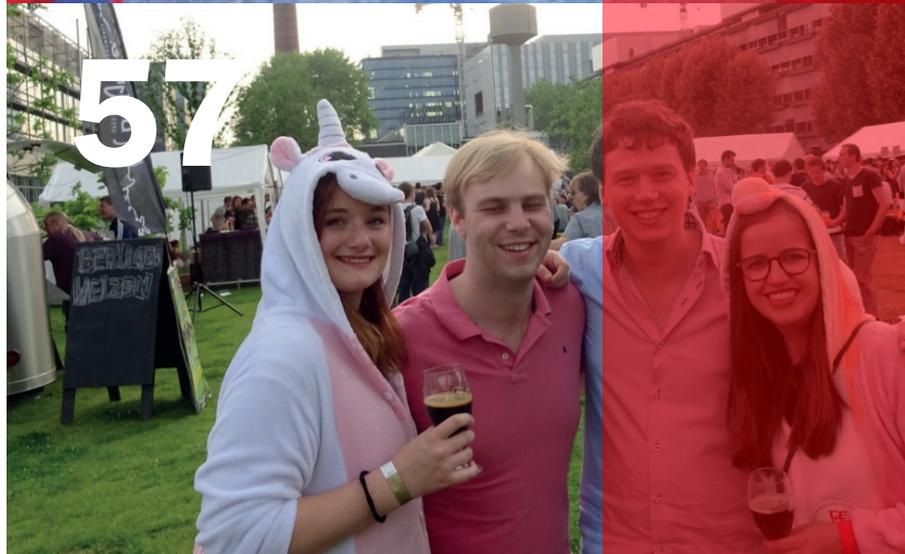
31



51



57





GEWIS

# CHAIRMAN'S NOTE

*At the moment of writing, the academic year has just started. A new academic year and therefore new chances for everyone. For me, it is something different this time. This year, I will spend my time dedicated to our study association GEWIS to develop my soft skills.*

**TEXT** Illona Hoenderop

The introduction week and the FLUP were a huge success where I had the possibility to get to know the new students. To get to know all the students by name was really hard and I am still working on it. The fresh energy from the new students gives me motivation to continue learning names! Hopefully, I will soon know most of them by name, which will make the communication during the year much more pleasant.

Besides that I want to get to know the new students, I also give them the possibility to meet us (the board). We introduced ourselves as the board members and also told them about what GEWIS offers them. For example all the great activities organized by all the committees and fraternities we have. As a board member I hope I can attend most of the activities we organize at GEWIS, because I really appreciate the effort which is put into the organization of activities.

They have already seen our GEWIS room a few times, most of the time during the lunch break where they can get a good impression of the culture of GEWIS. During the lunch break most of the time it is busy with people who are chatting, eating and playing games. Instead of a general story about GEWIS, these are the moments that provide the real impression about what GEWIS is and the first year students feel they can be part of it.

The new students also have faced some unwritten rules which make GEWIS what it is right now. For example 'One beer is not a beer' is a rule we handle, because you never drink alone, but always together. This way we try to encourage social interaction

between the members of GEWIS. Another example which also sprung from this idea is 'No laptops are allowed in the GEWIS room', because we have the board room and lounge where you can study or do other work. The GEWIS room is a place where you can take a break and do not need to stress. These rules are part of GEWIS and provide the social and fun part we have at GEWIS. The truth is, for me this is why GEWIS is so important: the perfect balance between education and fun. And when you did not already experience it, the other two main topics career and personal development are also in balance with each other and those two.

*“ The GEWIS room is a place where you can take a break and do not need to stress. ”*

In the end, we can say that GEWIS consists of a lot of diverse students (and civilians) who form together the true story of GEWIS. The last weeks I have already seen some first year students who will probably write new chapters of this story. The truth is that they may be the board of our study association in the future!



# EDUCATION FIRST

*A new academic year has started, the first edition of MomenTUm has taken place, a new board has been installed and therefore a new Educational Officer will try to improve our education. A new year comes with many new challenges. We try to improve ourselves continuously, which is a challenge in itself.*

TEXT Thomas Wiekping

Improving education for example, is quite a vague statement. After all, the quality of education depends on many factors. You must first think of what factors can be influenced by yourself and what cannot. As a university, it is hard to influence the budget our government spends on education. Even though student numbers have increased tremendously over the past ten years, our staff and facilities did not. When you continue misbalancing staff and students, our education will deteriorate.

One factor the university can influence, is the number of students entering a program. These so-called caps or numerus-fixi have already been introduced for Computer Science and are likely to be introduced for Applied Mathematics at some point as well. Believe me or not, nobody wants to have caps. But one thing we certainly want less is decrease our quality of education. And introducing a cap is a feasible solution to that.

Another short-term solution to our limited capacity could be introducing lecture streaming and evening lectures. The university is already experimenting with those solutions. Our new time schedule is one way of implementing this. But the truth is that these new implementations do not necessarily lead to better education. There is one way to find out: try and evaluate.

Evaluation is an important part in the process of improvement. We as a study association play an indispensable role here. We are the portal for the department and university to students. By the means

of reported complaints, feedback sessions and conversations among students we do our best to give the department a clear image of student opinions and suggest solutions to problems we are currently facing. This enables the university to properly evaluate their newly implemented solutions and improve our education while facing the usual restrictions, such as budget and time.

For the bachelor Applied Mathematics and the bachelors in Computer Science we have feedback sessions each quartile, the so-called kringgesprekken. During these sessions students, teachers, academic advisors, quality assurance and sometimes even the program director sit together and discuss how courses are going. Changes to the curriculum or university-broad changes (such as live streaming) are discussed as well. Your input does lead to solutions here. If you have never been to a kringgesprek before, but want to join these lunch-provided feedback sessions nevertheless, please send an email to [co@gewis.nl](mailto:co@gewis.nl).

Kringgesprekken are not the only way to give feedback. When sending an email to [complaints@gewis.nl](mailto:complaints@gewis.nl) your feedback will be heard by the Student Council and, if necessary, raised to higher levels within our department. Improvement of the quality of our education is a challenge we can only achieve by working together. I wish you all best of luck for this academic year and do not hesitate to reach out to me if problems arise.

A vertical portrait of a young man with short brown hair, wearing a dark blue suit jacket, a white shirt, and a light pink tie. The image is split vertically down the middle, with the left half having a pinkish-red tint and the right half being natural color.

GEWIS





# A STEP IN THEIR DIRECTION

**A** rather significant part of mathematics and computer science students at the TU/e are internationals. This is something the TU/e promotes, which results in a lot of diversity on the campus. Unfortunately, this diversity does not seem to extend much to our student association GEWIS. We put effort into making all important information, such as general members meetings and activity announcements, available in English. This is an important part in making internationals feel more welcome. In this article I wish to propose an extra step to make internationals feel more at home. Illustrated by a story of an amazing moment resulting from a little effort, let me take you back to the introduction week.

**TEXT** Dave Emons

During the introduction week I had the privilege to be a parent of a group of amazing kiddos. Among these kiddos were two Bulgarian ladies. As to be expected, at some point during the introduction week these specific kiddos were struggling with homesickness. While talking about this issue, we discussed what they missed so, whether there was anything we could do for them etc. During this conversation these kiddos joked about Bulgarian cheese that would make everything better. Noted!

Thursday afternoon, while all kiddos were out and about doing fun workshops, after a highly necessary nap, I started my search for Bulgarian cheese. Fortunately, in the modern day and age the internet can answer many questions. After searching a little on the web, I found this street with all sorts of culture related stores. Among these stores was a Bulgarian market-like shop. I explained the story above and the person running the shop provided me with the desired cheese and also succeeded in selling me this tomato mash after he told me everyone in Bulgaria knew it and loves it.

Once stocked with cheese, tomato mash and crackers, I assembled all kiddos at the field we usually gathered. Once they were all there, they were mostly confused as they had no idea what we were going to do. I explained we were going to have a picnic. The moment

I showed them all what I had for the picnic most faces got even more confused. Except for two. Those two were simply lost for words.

After having examined the cheese and tomato mash in disbelief they exclaimed it was the actual real thing from home. This is when I filled all the other kiddos in on what exactly was going on, after which they were all excited to taste one of the crackers. Apparently, I was spot on with the tomato mash, as it is supposed to go with the cheese on the crackers.

Thus, for the next half an hour, this is how short the cheese lasted, these two Bulgarian kiddos sat down on the grass, pretty much as a cracker factory sharing their culture with whomever wanted to try, smiling ear to ear. One was even so touched a few tears were shed. At this moment everyone was so excited in their culture and I dare say they felt more at home from then on.

I hope this story might inspire some of you to reach out to the internationals you know. If you show a little interest in their home, they might feel more at home here too.



# TRUTH BE TOLD

“ **M**ankind is divided into two sorts: such as live according to man, and such as live according to God. These we call the two cities... The Heavenly City outshines Rome. There, instead of victory, is truth.”

TEXT dr. Robert van der Drift (dean)

In the fifth century A.D. Saint Augustine of Hippo wrote his seminal 22-volume 'The City of God' as a response to criticism that the new Christian faith had ruined the Roman empire. Nowadays, we tend to look more to science than to religion to find the truth. Perhaps mathematics is seen as the purest form of science. A science that can bring absolute proof without the banality of experiments. And in some senses it can even do so without the imperfection of human language. In fact, in Dutch 'wiskunde' (mathematics) is a combination of the words 'wis' (meaning 'definite' or 'sure') and 'kunde' (meaning 'skill' or 'art'). Mathematics delivers that what is sure, the absolute truth.

“ Perhaps mathematics is seen as the purest form of science. ”

The English term is derived from the Greek, meaning 'knowledge'. So how come the same Saint Augustine warned contemporaries: "The good Christian should beware of mathematicians. The danger already exists that mathematicians have made a covenant with the devil to darken the spirit and confine man in the bonds of Hell."? Well, human languages sometimes leave us lost in translation: up until the 18th century the term mathematics actually more commonly meant 'astrology'.

Since most people are not able to follow strings of mathematical formulas to arrive to the absolute truth, this truth must be communicated in layman's terms.

And from there things start to fall apart. There is a reason witnesses in the American judicial system have to swear to tell "the truth, the whole truth and nothing but the truth". Unfortunately, many newspaper headlines are not held to similar standards. Let's take the imaginary example: "crimes by immigrants doubled over the last year". This in itself could be true ('the truth'). But without context ('the whole truth') it is difficult to judge if we would need to take immediate action or that things are actually much better than last year. What if the trend is: 30.000 – 250 – 500? The headline is still true, isn't it? And what if crime rates by non-immigrants tripled from 100.000 to 300.000 over the last year? Do we still think the headline told the truth?

Many poor scientists have seen politicians and journalists take their beautiful, flawless truth and turn it into their own reality. But cherry picking by journalists is not the only problem. We have seen too many examples in recent years where scientists themselves have invented results and created their own successful truth. No wonder perhaps that the age-old faith in science is wavering. Scientific integrity is an important theme that deserves attention in BSc and MSc education. Take a look at the new protocol by the association of dutch universities (VSNU)! And think about what you can do to make sure the truth is told.

DEPARTMENT





# THE MAGIC OF KURT GÖDEL

*From my perspective, geniuses are born every day: the professor who is able to transfer his vast knowledge of Calculus to three hundred freshmen, the musician making an album, inspiring millions, the artist capturing an idea perfectly in a single painting, etc.*

**TEXT** Robert de Keijzer

However, sometimes, and this happens extremely seldom, a person is born who transcends this status of genius. A person who in my eyes is an absolute magician. The kind of person who does something so extraordinary that it is centuries ahead of what the general expert in that field should be capable of doing. When I think about these magicians a few names come to mind: Leonard Euler with his famous  $e^{i\pi} + 1 = 0$ , Isaac Newton reforming Classical Mechanics and inventing Calculus and Albert Einstein revolutionizing physics with his General Relativity (we'll come back to this particular magician in a bit). I am most definitely forgetting people that belong in this list, but one person that I will not forget is Austrian mathematician Kurt Gödel and his infamous Incompleteness Theorems that put the world of mathematics upside-down. Gödel succeeded in proving that a 'perfect' mathematical system does not exist and that there are always truths that cannot be proven.

Gödel was born in 1906 in the Austro-Hungarian city of Brno (now Czech Republic). He was the embodiment of a mathematician: weakly-built, paranoid, anxious, and unstable. I can only aspire to have a physique so well-suited for mathematics. He suffered from a rheumatic episode at the age of six and never fully recovered. Gödel was known around town as 'Herr Warum', or 'Mr. Why' in English. Gödel was an excellent student excelling in languages, theology, and especially mathematics.

He started studying Theoretical Physics at the University of Vienna but quickly moved on to mathematics, inspired by minds such as Emmanuel Kant, Hans Hahn, and Bertrand Russell. In the end it was David Hilbert whose book "Grundzüge der theoretischen Logik" set the course for Gödel's future work. In this book, Hilbert proposes a program (conveniently called Hilbert's program) that proposes to ground all existing theories to a finite, complete set of axioms and then show that these axioms were consistent. Or explained in a more light-hearted way: Hilbert tried to tackle the problem of trying to prove everything that is true (theorems), assuming only some basic truths that do not contradict each other (consistent axioms). This is the problem that Gödel chose for his dissertation, the problem that would haunt him for years and finally would give him his rise to minimal fame, which is probably the highest amount of fame a mathematician can receive, and more importantly, handle.

“ Gödel was known around town as 'Herr Warum'... ”

The Incompleteness Theorem states that there exists no 'perfect system'. When this paper was released in 1931 it shook the world of mathematics with disbelief and confusion. Afterwards, Kurt Gödel just kept being

Kurt Gödel and fully focused on his mathematics. He went to lecture at Princeton where he met Albert Einstein. The two immediately became good friends and bonded over their passion for science. Einstein once said that the work he had done near the end of his life was fruitless, but he kept going to Princeton so he could have the privilege of walking back home with Gödel. The two discussed politics, science and life in general.

Einstein is ultimately famous for his General Relativity. A system of 10 notoriously difficult field equations describing gravity. People who fully grasp the idea behind General Relativity are scarce, and people who can find solutions to its equations are even scarcer. Gödel, being an absolute magician, managed to find one (later called the Gödel Metric) and gifted this to Einstein for his 70th birthday (a gift from a true mathematician). The Gödel Metric is pretty special in the sense that it describes a universe where time travel is possible. Gödel's Metric describes a rotating universe. However, we know our own universe is non-rotating, so the solution doesn't hold for our universe. But still, the possibility of time travel in one solution gives rise to the idea that there might be more solutions where this is possible.

Gödel's weird personality is very well captured in the story of his American citizenship. At his citizenship trial, Gödel decided to have Einstein, who became an American citizen a few years before, as his witness. During his citizenship test the officer conducting the interview was talking about how wonderful it was that the U.S. could never become a dictatorship. Gödel coolly mentioned that this is in fact entirely possible and very likely due to a loophole in the constitution that he discovered while prepping for his test. The officer was clearly surprised and irritated, and Einstein decided to cut Gödel off and steer to another topic.

Near the end of his life Gödel became fragile and more and more paranoid. He refused to eat food that had not been prepared and tasted by his wife (Yes, he had a wife. I know right. What?). When his wife fell ill and was hospitalized for 3 months, Gödel starved himself

to death. Leaving behind his legacy and one of the most beautiful theorems in all of mathematics.

Formally the Incompleteness Theorem states:

*For any computable axiomatic system that is powerful enough to describe the arithmetic of the natural numbers, that this system is either incomplete or inconsistent.*

Let's take a closer look at two of these terms: inconsistent and incomplete.

If a mathematical system is inconsistent it means you can prove something even though it is actually false, thus ruining your entire system. Bertrand Russell, in a lecture on logic, once mentioned that one false proposition implies any proposition. A student then raised his hand and said: "In that case, given that  $1 = 0$ , prove that you are the Pope." Russell immediately responded: "Add 1 to both sides of the equation: then we have  $2 = 1$ . The set containing just me and the Pope has 2 members. But  $2 = 1$ , so it has only 1 member; therefore, I am the Pope." Inconsistency is thus definitely something wished to be avoided in any system describing mathematics.

How about incompleteness? A system is complete if any statement in the system's language can either be proven or disproven. A lot of statements in mathematics are still open problems, we thus do not know if they are true or not. A famous example is Goldbach's conjecture which states that every even integer greater than 2 can be expressed as the sum of two primes.



A very simple statement, but despite countless hours of effort the conjecture remains unproven.

In an incomplete system there are truths which cannot be proven.

Now let's take a look at how Gödel demonstrated that all systems are either inconsistent or incomplete. A theorem is a mathematical sentence. This sentence is uniquely described by finitely many characters. We could give every character a number (e.g. a=01, b=02, z=26, | = 57) and then concatenate these numbers (e.g. MATH=13012008). This would give every theorem a unique number. This is exactly what Gödel did by assigning a prime number to all different characters and then prime factoring the entire sentence.

The theorem now has a 'Gödel number'. Gödel then continued to show that somewhere there is a theorem that states: "Theorem #N is not provable", but the weird thing is that the Gödel number of this theorem is #N! (Note: not #N factorial, I just got excited.)

The statement thus asserts its own non-provability. This playful 'self-reference' is exactly what Gödel exploits and is beautifully described in the must-read 'Gödel, Escher, Bach' by Douglass Hofstadter. If it is false, then you can prove a false statement, thus our system is inconsistent. Now if we assume our system is consistent then theorem #N must be true. So, our system would be incomplete. Either way, we lose.

But hang on, how do we know that theorem #N must be true? It says it can't be proven right? Right, not 'in' the system. What Gödel did was reason 'outside' the system and prove theorem #N to be true. In stepping 'outside' the system lies the heart of the proof. You could raise the argument that we could add theorem N as a new axiom. However, this would be like trying Analysis 1 for the 6th time; there is no point in trying. By adding this theorem #N as an axiom we create a new system which according to Gödel is again incomplete or inconsistent (but with a new theorem #N).

“ ...this would be like trying Analysis 1 for the 6th time; there is no point in trying. ”

Does this then mean that mathematics is a waste and there is no point in trying? No! I do not only say this because I want to have a job later. The axioms chosen for mathematical systems are logical and widely agreed upon. The statements and theorems that follow from them are still true and a lot can be derived from them. The fact that our system might be incomplete does not change this. The fact that Goldbach's conjecture might be true but can't be proven does not change the fact that the development of Calculus rolled us into the industrial revolution. Gödel's incompleteness theorem will not have many consequences in the daily life of the average mathematician. But anyone who calls him- or herself a mathematician will definitely, upon seeing this theorem for the first time, get a little smirk and exclaim a dumbstruck: 'Huh, magical'.

# DIFFERENT TACTICS ON THE GAME WE ALL LOVE

**D**o you know that feeling of losing? Do you know that feeling of drinking somewhat too much alcohol? Do you know that feeling of not hitting the right spot? No, we don't either! That's why we, GEBALLMERPIEK, the newest committee of GEWIS, will take you through two classic beer pong throws. That way, you will never lose a game of beer pong again! (By the way, do you ever lose at beer pong?)

**TEXT** Luuk Meeuwis - GEBALLMERPIEK

Please note that using these throws is at your own risk! You might get a little tipsy trying them many times during in one evening, or you might get punched in the face for being that annoying bouncer...

## THE BOUNCER

A well-known throw for those who feel like taking a risk. According to the GEWIS beer pong rules, a ball that first bounces on something (other than a different cup or the floor) and then lands in a cup, implies that both the cup that it landed in and a cup of the choice of the receiving team have to be drunk. Shortly, you can make the opponents drink two cups with only one ball, amazing! However, the receiving team is allowed to hit the ball away once it has landed on the table, which makes it a risky tactic. So, if you ever feel the pressure that you are going to lose a game, make sure to try this effective strategy to get into the winning mood again!

A variation of this strategy is a real annoying move: either wait for your opponents to be distracted, or make it even worse and distract them yourself! After this, take your chance and aim in all peace to get that double score!

## THE TRICK SHOT

Especially for those who feel like only winning by sheer luck! I can guarantee you that the opponent will hate you when you hit this shot.

According to the GEWIS beer pong rules, a trick shot throw can be obtained by grabbing the ball off the table, after you threw it and it rolled back on the table. (Notice that your feet have to remain behind the table for this!) Congratulations, you get another opportunity to throw the ball! However, this is no regular throw, this has to be a ~special~ throw! So go feel lucky and throw it from under your leg, throw it over your shoulder or hit it from a standing beer bottle! The possibilities are endless!

The fun part about this Trick shot, is the fact that this shot, because of its enormous difficulty, counts as a bomb! That means that the cup itself and ALL surrounding cups have to be drunk once this Trick shot hits! Now try losing a game if you hit the middle cup in the beginning of the game with a Trick shot (that's SEVEN cups!), I would be amazed.

After reading about these useful tactics, I imagine that you can't wait to try out these shots. Luckily, GEBALLMERPIEK will organize an amazing beer pong tournament, where you can show off your skills! You might win this tournament, and receive an amazing price! Or join us in a game of beer pong at another time at GEWIS, it is likely that one of us is in the mood for a game...





**D**o you have a question for SupreMUM as well? Leave your question in the SupreMUM box in the GEWIS room or send it to [supremum@gewis.nl](mailto:supremum@gewis.nl) and you may get an answer in the next edition!

**Dear SupreMUM,**

**This year, a gala will take place. However, I've never been to a gala before. Can you tell me what the customs are, and how to get a proper date?**

### THE LETTER

*As a gentleman*

Any good gala starts with an invitation. The gentleman writes a hand-written letter in silver ink on blue paper. Mind your handwriting, otherwise the lady might not be able to read it.

*As a lady*

For the lady, the gala starts with a waiting game. You can drop subtle hints towards a desirable gentleman. However, sometimes a subtle hint might not be enough, some gentlemen are simply not that "perceptive". Once you receive the long awaited letter, you have to think about your response. But one thing is for sure: you have to invite the gentleman for a cup of tea by means of a hand-written letter in gold ink on pink paper.

### THE VISIT

*As a gentleman*

I recommend to dress nicely when visiting the lady you intend to take to the gala. Dress to impress! She may not have made up her mind yet. Whether she wants to come with you to the gala or not, is fully dependent on what is served with the tea. But more on that later. When you are there, be observant. If she is accepting your offer, she will indicate the color of her dress to you. This can be done by leaving a small piece of the dress visible sticking out of the closet, or by arranging a bouquet in the colors of her dress. Remember this color very carefully.

*As a lady*

When the gentleman comes to visit, serve him some

of your best tea. You don't have to serve something with the tea right away, it's okay if you stall a little. But not too long, since the gentleman may walk out of the door before you get the chance. Choose what to serve with the tea based on the rules below. Make sure to hint the color of your dress to the gentleman when you are going to accept his offer. If you already have your dress at home, try to make a small piece of it peeking out of your closet. If you don't have your dress yet, but you know the color already, try to buy a bouquet of flowers in the color of you dress.

*As the tea*

You can show up alone at the table. This means your lady has rejected the gentleman. If you show up with a cookie, your lady accepts the gentleman's offer. However, the gentleman cannot expect anything from the lady after the gala. If you show up with cake, the lady accepts the gentleman's offer to go, and the gentleman might even have more opportunities with the lady after the gala. The gentleman should then use the gala to impress the lady, and steal the lady's heart. There is one more option that trumps all of the above: cake with (whipped) cream! This is also called "slagroomtaart" in Dutch. Should you come with slagroomtaart, then the gentleman has already conquered the lady's heart.

### WHAT (NOT) TO WEAR?

*As the gentleman*

A gala means a white tie dress code. Nothing less than this is acceptable. White tie means full penguin. Thus wearing a dress tailcoat, white bow tie, etc. Mind you, watches are not allowed during galas. We don't want to watch you watch your watch during the gala, as this indicates towards the host of the gala that you are worried of things such as time, instead of having the time of your life. Keep in mind to bring two handkerchiefs: one for you and one for your lady.



### *As the lady*

White tie means floor length gowns for the lady. These gowns differentiate themselves by being more elaborate than usual with intricate details. Less is more doesn't count when dressing up for a white tie event. You might want to choose a lighter color dress during hotter seasons, and a darker colored dress during colder seasons. Overall, the darker the dress, the more elegant the look. It is custom to dress up your gown by adding jewelry. The more elaborate, the better. However, your jewelry shouldn't outshine your dress. Finish your look with a matching clutch and high heels. Gloves are allowed, but there are rules that come with them. Rings must be worn underneath gloves, while bracelets must be worn over gloves.

## THE CORSAGE AND THE BOUTONNIÈRE

### *As the gentleman*

The gentleman is responsible for the corsage for the lady, and getting a boutonniere for himself. Still remember the color that was hinted to you during your visit? The color of the corsages should match the color of the lady's dress. As a gentleman, you must wear the boutonniere on the lapel of your dress tailcoat.

### *As the lady*

You have an easy job. Just before the gala, the gentleman must make sure you receive a corsage that matches both his boutonniere and your gown.

## THE GALA

### *As the gentleman*

You will pick the lady up at her house and greet her with a kiss on her hand. However, your lips should barely touch her hand. Should the lady wear gloves, then you must abstain from giving the lady a kiss on the hand. You will then bring the lady to a dinner, before accompanying her to the gala. The lady will walk on your left side and you will guide her with your left arm. However, when a dangerous situation occurs, you must be a real gentleman and switch sides such that you are walking on the more dangerous side. Mind you, a not-so-dangerous situation for you, might be a disaster for the lady. Puddles of water can ruin a dress in no time, and walking over grates with high heels

can be very difficult. If you cannot avoid a dangerous situation for your lady, you might want to lift her up in your arms and carry her to safety (ask for her permission first!).

As the saying goes, the lady always goes first. The exception of this rule is when the lady must ascend stairs. To avoid stares and unpleasant situations, you will go first and make sure your lady is following you. The exception of the exception of the rule is when encountering very steep stairs. In case the lady falls or trips, try your best to catch her and help her up again.

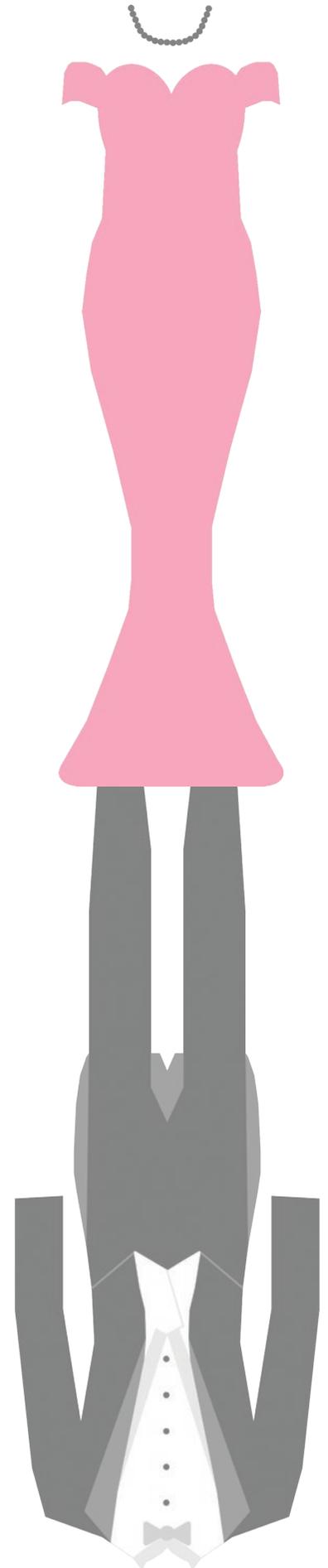
You can ask a lady for a dance and you do this by curtsying to your lady. Once you receive a single nod from her, you can go ahead and take her to the dancefloor. When you are rejected, it is disrespectful to go directly to another lady and ask her for a dance. This might give the other lady the impression that she is your second choice.

As the gentleman, it is your responsibility to make sure your lady has appropriate transportation to her home.

### *As the lady*

As said before, gloves are an optional addition to your outfit. However, with gloves come rules. When the gentleman arrives to bring you to dinner, he will give you a kiss on your hand. However, if you are wearing gloves, the gentleman is not allowed to kiss you on your hand. When you are wearing gloves, you must keep them on for the whole night, except for dinner as you are then allowed to choose whether to keep them on. When being escorted by the gentleman, you will walk on his left side and hold on to his left arm. When encountering a dangerous situation, the gentleman might suggest to switch sides.

A gentleman might ask you to dance with him. After he curtsied to you, you nod once to approve of the dance. When you have promised to dance with another gentleman, you must reject all other gentlemen until you have danced with the gentleman you have promised to dance with.





# TRUTH, A METAPHYSICAL INVESTIGATION

**T** *ruth* is a most variable construct, for it is devoid of all structure or formality. The question as to what truth 'is', if such a verb even makes sense, has been a near endless search for all mankind. Even after all these long years and various immense brains pondering this dilemma, we are no closer to an answer. That is excluding the inherit intuition that something can be true or false, which feels embedded in human nature. Lacking precise vocabulary, I could only exclaim: "In Vino Veritas".

**TEXT** Yoram Meijaard - I.V.V

Allow me to elaborate: embedded at the core of all but the most vicious beings, lies a tremendous tendency to speak the truth. Lying is an act so detrimental that it could be considered a moral sin in all cultures. Yet, on a daily basis, most people tell lies. These, 'little white lies' are a construction by our society that might be considered acceptable. For instance, telling someone your honest opinion on their appearance might lead to, as one might imagine, a brief interaction between the palm of her hand and your gentlemanly cheeks.

Yet, without pointing fingers, there is an apparent correlation between societies and their dedication to the truth. Some, like ours, have a unique interaction with the truth: not speaking your mind is considered rude, hence the truth must be spoken. This might lead to confrontation, which is a consequence that the Dutch can live by. However, our Scandinavian friends generally object to confrontation, thus they avoid speaking the truth in order to prevent a direct confrontation. This 'talking around the bush' can be found in many different advanced societies, including our British neighbour, the Belgian, and the Japanese. Consequently, we must ask ourselves whether we are the odd ones out, whether the rest of the world is screaming at us to be normal, while we are not listening.

I would argue that this is not the case. As indicated above, the truth is most sacred, for words without truth bear no meaning. Resistance to the truth is, inevitably, futile. Yet, why do our people keep telling lies and increasingly keep avoiding any form of confrontation? Perhaps it is because they are keen of heart and wish no ill deeds bestowed upon the opposition. Alternatively, it is because they are faint of heart and cannot take the confrontation due to their own deficiencies. Whichever way this little truth will fall, courage or fear, there is a way out for both.

Within Dispuut "In Vino Veritas" proudness is taken into the precise articulation of thought, the uncompromised expression of one's personality channeled through the construction of decency. For those aspiring greatness, this experience can be quite overwhelming. They are held back by society, by the boundaries needlessly created in their mind, inhabiting their articulatory abilities.

Fortunately, a solution exists, which has been proudly administered by Dispuut "In Vino Veritas" since time immemorial. Our bonds, crafted in the fire released by this godly substance, last a lifetime and beyond. Our collective will, established by the purity of thought and the well-spoken word, resonates in the halls in which we trod. Thusly I must conclude: in wine indeed lies the truth.



FRATERNITY





# MODELING SEQUENCE DATA: DIFFERENT TAKES ON THE MATTER

**M**y name is Niek Tax, and I am a final year PhD student in the Architecture of Information Systems group at TU/e. Currently, I am in the process of finishing up my PhD thesis. After having read several articles in previous editions of the *Supremum* in previous years that were focused on the life of a PhD student, this article will be more research focused.

**TEXT** Niek Tax

## PROCESS DISCOVERY: FROM SEQUENCES TO PROCESS MODEL

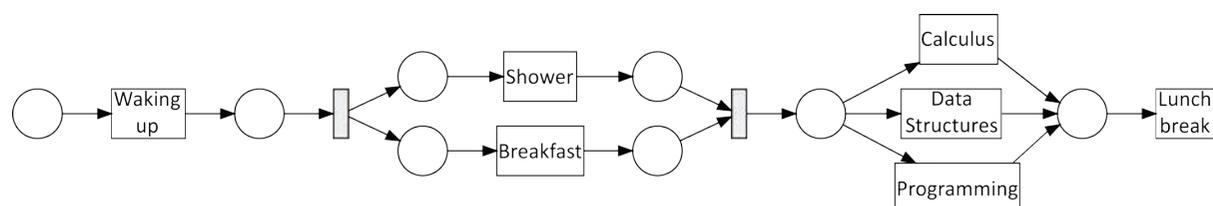
Process Mining has for many years been one of the research areas that Eindhoven University of Technology excels in within the discipline of computer science. The AIS research group of professor Wil van der Aalst has played a vital role in developing the process mining field since the early days, and even after his recent move from TU/e to RWTH Aachen, a very strong process mining group remains at TU/e. Process mining is a form of data science that addresses the analysis of data that originates from business processes. One of the central challenges within process mining is process discovery: algorithms that aim to learn a description of the business process from data that was recorded while executing that business process. To briefly introduce process discovery, let's pretend that we have recorded several days of data that originates from the "process" of the student life of a computer science student:

The figure below shows a process model that a process discovery algorithm might discover from this data, in

which the process model is represented is represented as a Petri net. Note that just like, finite state automata and other basic models of computation that are covered in introductory computer science courses, a Petri net defines a formal language over the allowed behavior. This means that the model specifies exactly which sequences can and which sequences cannot occur, according to the model. The Petri net of the figure, for example, allows only for sequences that start with 'waking up', and after waking up it allows for either 'shower' or 'breakfast'.

## OTHER RESEARCH FIELDS THAT FOCUS ON LANGUAGE IDENTIFICATION FROM SEQUENCES

Process mining is not alone in its aim to learn a formal language from sequential data, as there exists other research fields that have similar goals. An example of such a research field that shares this aim can be found in the area of deep learning, which is nowadays a very trendy topic. Some types of neural networks that have been developed in this deep learning world aim to model sequential data. An example of such is the recurrent neural network [1], which can be used



DAY	PROCESS
Day 1	<Waking up, Breakfast, Shower, Calculus, Lunch break, Programming, GEWIS borrel, Dinner, Sleep>
Day 2	<Waking up, Breakfast, Shower, Data structures, Lunch break, Calculus, Sports, Shower, Dinner, Sleep>
Day 3	<Waking up, Shower, Breakfast, Programming, Lunch break, Train to parents, Dinner, Sleep>

to learn a probability distribution over sequences. In doing so, these neural networks learn a sort of probabilistic form of a formal language in the sense that for every possible sequence it provides some likelihood score.

There are plenty more research fields in addition to process discovery and recurrent neural networks that also aim to infer which sequences are possible / not possible, or which sequences are likely / unlikely, based on a dataset that consists of example sequences. Other such fields, for example, include Grammar Induction [2], where the goal is to find a formal grammar from sequential data. Such a formal grammar is then represented as a regular expression in the case of a regular language, or as an EBNF (a grammar type that is often used to specify programming languages, see for example the EBNF specification for Java [3]) in the case of a context-free language. Other fields that aim to learn a language from sequence data are the research fields of Markov chains and (hidden) Markov models, which, like recurrent neural networks, learn some probabilistic form of a language.

### LACK OF TRANSFER BETWEEN RESEARCH FIELDS

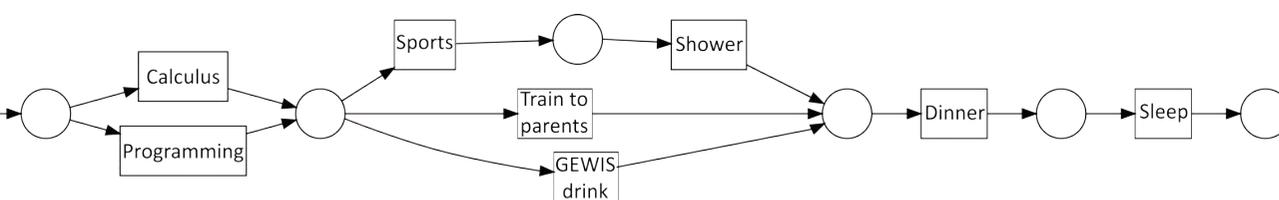
Even though on an abstract level they are all trying to model sequences based on data, process discovery, deep learning, grammar induction, and Markov chains are distinct research fields where there is very little knowledge transfer between the topics. There is for

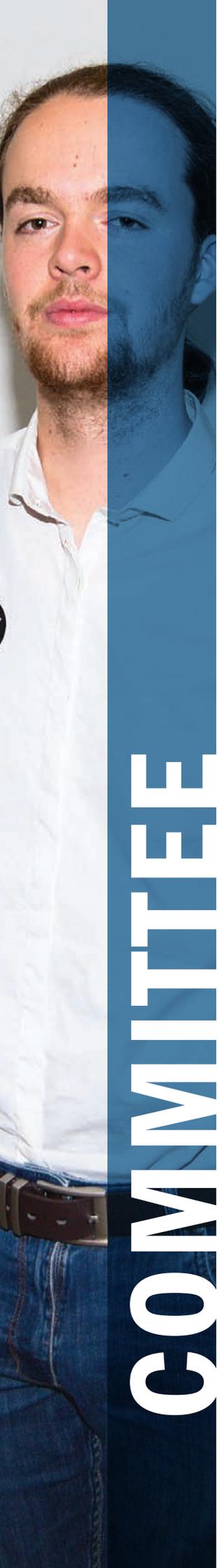
example little to no work on comparing how the methods from these different fields compare to each other, and it is generally not investigated what the effects of a new proof or new finding in one research field are to the other research fields. I believe that this lack of knowledge transfer between research fields does not arise from bad intent, but is merely a consequence of several factors. First, it is hard to search for relevant research articles from other research fields: the fact that terminology often differs between research fields makes it hard to come up with the right search terms. Secondly, researchers often know the other researchers in their research field personally. This is especially the case in smaller research communities such as process mining. As an effect are very well aware of new research in their own research community, but not of new research from other, related, communities.

Recently, together with two fellow PhD students, we have made a small first step to bridge the research fields that are concerned with learning a language based on sequence data, by comparing and benchmarking several techniques that originate from different fields on several datasets, published in [4]. Currently, we are working on extending this study, by taking into account more techniques and evaluating more datasets.

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- [2] [https://en.wikipedia.org/wiki/Grammar\\_induction](https://en.wikipedia.org/wiki/Grammar_induction)
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- [4] Tax, N., van Zelst, S. J., & Teinemaa, I. (2018). An Experimental Evaluation of the Generalizing Capabilities of Process Discovery Techniques and Black-Box Sequence Models. In Enterprise, Business-Process and Information Systems Modeling (pp. 165-180). Springer, Cham.





# TRAINING-ON-PAPER: MANAGE YOUR STRESS

**S**tudents without stress are a rarity. According to het Centraal Bureau van de Statistiek, only ten percent of students never experience stress. About half of all students say to experience stress very often and even suffer from it, even though stress can be very useful to meet certain deadlines on time. The question is, how do you manage your stress?

**TEXT** Arend Verbeek

## WHAT IS STRESS?

Stress is a natural defense mechanism. Stress makes you run faster if you're chased by a lion. Though these kinds of situations do not happen often in everyday life, stress is still an important part of human behavior. Becoming stressed and returning to homeostasis (the biological term for relaxed) are processes that are controlled by the autonomic nervous system. The autonomic nervous system is the part of your nervous system that controls almost all unconscious or automatic acts such as your heart rate, digestion, and sexual arousal. But becoming stressed is handled by a different part of this system than getting relaxed, namely the sympathetic- and the parasympathetic system respectively. The large difference between those two is that the first one triggers really quickly and the other needs quite some time to work.

This means that you can get stressed really fast, but that your body needs time to 'reset' again afterwards. Maybe you've experienced this for yourself, that, when you sit down after a stressful situation, you're unable to relax because you still feel stressed. Because being stressed triggers a fight-or-flight response that impacts multiple bodily functions, being stressed for longer periods of time can have a negative effect on your health. Stress is not all bad though. A bit of stress makes you work harder when facing a deadline and,

especially for students with procrastination problems, stress is the only motivator. There is a really nice Ted Talk called 'Inside the mind of a master procrastinator' by Tim Urban about this subject. However, to truly help you with your stress problems you need to know when and why you are stressed.

## REFLECTIVE THINKING

Most people who are chronically stressed find it hard to say why they are stressed, because they feel stress with almost all activities they do. For that reason, it is important to know when you are stressed and what stressed you out the most. Here follow a few exercises to determine that. These exercises also make you think about these stressful situations in the hope that you will experience them as less stressful the next time you encounter them. These exercises may seem silly at first, but they work to make you think about why you experience stress and it can help a lot to be aware of that. You can write the given schedules down or you can do the exercises in your head, whatever works for you.

### Exercise 1

This exercise is meant for you to think about how high your stress levels are from day to day and to see what kind of stressful events you encounter during a normal week. The idea of this exercise is that you take this

Stress rate	0	1	2	3	4	5	6	7	8
	No stress		Mild		Moderate		Heavy		Severe

DATE	AVERAGE STRESS RATE	HIGHEST STRESS RATE	STRESSFUL EVENTS
27 September	2 (mild)	5 (heavy)	I had a midterm test

schedule with you during a week and note every day how stressed you were that day and what your highest stress rate was. Also note what event triggered the most stressful situation of this day. In psychology stressed is measured with a number from zero (not stressed) to 8 (severe stress).

For example: on 27 September I was 2/mildly stressed on average, but my highest stress rate was 5/heavy, the stressful situation I encountered was a midterm test.

#### Exercise 2

The second exercise takes a closer look at the stressful events you encountered during the week or in general (you can choose any stressful situation you can remember). The point of this exercise is to determine what triggers your stress and how you react to it. First you write down from when until when you felt stressed and how stressed you were. Then you should determine what caused the stress. It is also important to take note of the symptoms you showed or how you realized you were stressed. The exercise also asks you to think about your thoughts when you were stressed.

For example: on the first of October from 16:00 until 16:30 I was very stressed, about a 6, it was triggered because I didn't understand my homework, I started to breathe more heavily and I was unable to sit still. I also couldn't concentrate anymore. I was thinking to

myself that I would never be able to pass the course and was considering to give it up all together.

#### Exercise 3

The last exercise is about realistic thinking. In this exercise, we take a look at what you thought or expected to happen in the stressful situation and whether this turned out to be true. The point of this exercise is to show that things always seem more severe when you're stressed than when you aren't. If you encounter a stressful situation, you should take note of why you are stressed. In other words: what do you expect to be the problem? Then you should try to find evidence for this expectation and try to estimate the chance of your expectation actually happening. It can be that you feel less stressed now, this is probably because you realized that the problem is not as big you expected. If this is the case, it is important to take note of what this does to your emotions and what the consequences where.

Example: I realized that I still had a lot of work to do and it stressed me out. I expected that I wouldn't have time to finish it. I realized that I still had a few afternoons and if I delayed other stuff, I would have some more time. With this newfound evidence I estimated the chance of my expectation coming true on 30 percent instead of 70 percent. This made me feel less stressed and the consequence was that I could concentrate better on my work.

DATE	FROM	UNTIL	STRESS RATE	TRIGGERS	SYMPTOMS	THOUGHTS
1 Oct	16:00	16:30	6	I didn't understand my homework	Shaking, heavy breathing, unable to concentrate	"I'm never going to pass this course"



## MINDFULNESS

Another great tool to use when you're stressed is mindfulness. It helps you get your stress levels down in a more artificial way. Mindfulness may sound like a lot of mumbo jumbo, but it is nothing more than taking a moment to relax. Mindfulness is all about being aware; being aware of your thoughts, feelings and movements. It's something you can do at your desk, in the library or just before the start of a test. The point is to be mindful of the situation and to try to close everything else off. To turn off your brain such that your body can relax. It's a technique that you need to learn, but even doing it a bit can help a lot. For example, while walking up the stairs to the third floor of MetaForum, you can try to focus only on the action of walking up the stairs, trying not to think of anything else. This may sound like a very easy task, but if you try it, you may find yourself getting distracted quite quickly!

“ Mindfulness is all about being aware; being aware of your thoughts, feelings and movements. ”

One way of practicing mindfulness is through meditation. Meditation can be done in many different ways, but we will only explain a method of breath-awareness meditation.

### Exercise 4

Make sure that you're sitting and that your surroundings are quiet. When you've mastered mindfulness, you can

do this anywhere and anyhow, but for now it is better if it's quiet. Slowly, breathe in through your nose and out through your mouth, three times. With the third breath out, gently close your eyes and let your breath return to its natural rhythm. Try to focus only on how your body moves as you breathe in and out. Once you notice you started to think of something else, just try to get your focus back to your breath. Your mind is wild and will want to think about lots of things, but you must not allow that. Every time your thoughts wander off, bring your attention back to your breath. Try to do this for about five minutes. It is, however, not advisable to set an alarm.

Mindfulness is way easier if there is someone helping you through it. On YouTube you can find a lot of videos of people telling you exactly what to do. If you want some more help you can also download the app Headspace, which is a great service for anyone who wants to do this more regularly.

## SEEK HELP

This training-on-paper is just here to help when you're a bit stressed every now and then. If you experience a lot of stress, please seek professional help. The ESA has multiple programs to help students with chronic stress and professionals with whom you can talk about your problems.

EVENT	EXPECTATION	EVIDENCE	CHANCE	EMOTIONS	CONSEQUENCE
A lot of work	No time to finish	I had a few more afternoons	From 30% to 70%	Less stressed	I could concentrate better



# GEWIS, GDPR AND A CURIOUS NON-PROTECTION

**D**uring the last couple of days, I've been worrying a lot about the state of GEWIS. This is enough to deduce when I have written this piece, which is left to the discretion of the reader. GEWIS is near and dear to my heart. However, as I spend more and more of my time working in, at or for GEWIS, I feel my love turned to anger. I can see a pattern, a structural consequence of a primary misunderstanding deeply embedded in our culture, threatening the very existence of GEWIS and association culture in general.

**TEXT** Yoram Meijaard

Allow me to lecture you in an associations prime directive: bringing together students and better these students whilst having fun. The whole reason why student associations in general are a good addition to a student's life is because elder students teach the younger ones: from 'brallen' and 'brassen' to how to study and what proper manners are. Associations take up a corrective, constructive role, now that the tutelage of your parents is no longer. There is a difference: GEWIS is the next stage in your development, not your mother. Hence, GEWIS is not bound to the mediocre corrective measurements that your mother is constrained by.

Fortunately, GEWIS has constraints. There are moral constraints that prevent incidents that we have seen in studentencorpora. Our practical constraints are correlated to the amount of sponsor money we attract, which knows virtually no real boundaries. However, the most important and interesting constraints are of legal nature.

For a practical example, take a look at the General Data Protection Regulation ("Algemene Verordening Gegevensbescherming") which took hold last year. The board was quite stressed about this, mostly due to internal and external privacy advocates, who preached 'hel en verdoemenis' to anyone who would dare to break the GDPR. Consequently, in every

committee regulation there is a section dedicated to how they respect the privacy of our members. Quite nice, but as everything with the GDPR, significantly overdone.

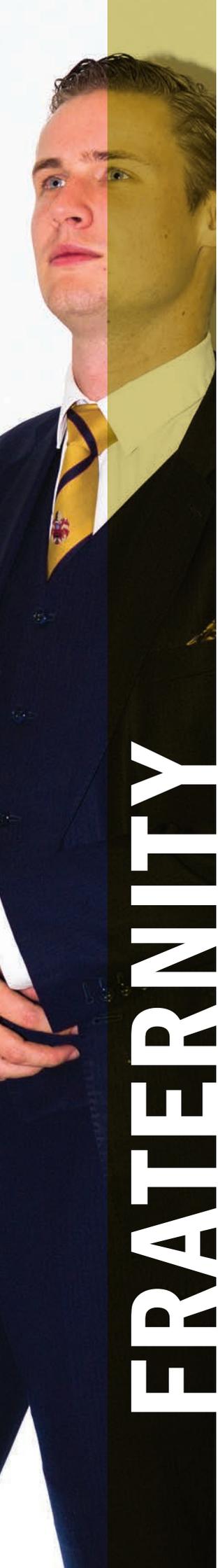
Allow me to introduce my most favorite section of the GDPR: Art. 6, Lid c: "de verwerking is noodzakelijk om de vitale belangen van de betrokkene te beschermen", which states that the processing of private data is allowed if used to protect vital interests of, in this case, GEWIS. This wording is deliberately vague: 'processing' can be anything, as is 'vital interests'.

This is where we get back to GEWIS: in the last couple of days I noticed firsthand how members treat 't Dakterras. Every morning the room is disgusting, trashed and dirty, left for someone else to clean. This is not an incident, nor is it every single member: most people are amazing and take care of our 'home'. If that is you, then well done! You can stop here. For the few members whose neglect and complete disregard the common interest, allow me to clarify my favorite GDPR section: 'vital interests' could legally mean a clean room and 'processing' a schandpaal with pictures of your face. Alternatively, you could just listen to the GEWIS-elders and grow up.

Now that, is some truth!

COLUMN





# FRATERNITY

## IT'S TIME FOR THE TRUTH

*Five years have passed again. I.V.V is able to celebrate his third Lustwijn already. But is our fraternity still the same fraternity as five years ago? How did we come to be the fraternity we currently are? Are we still spreading the same ideals as our founders? It is time for the truth of five years of Fraternity "In Vino Veritas".*

**TEXT** Tim Meeles - I.V.V

Let me commence with the start of my I.V.V career. During my introduction week, my father may have expressed that he was a fraternity member and that this would also suit me, instead of going to a student association. I followed his advice and during my first year, "In Vino Veritas" was of great interest to me. However, I must honestly admit that I.V.V's cardinality was an issue at that time. Many of his members had graduated by then, and the few remaining were not as active as in the flourishing I.V.V years before.

Luckily, I was not alone in being interested in the fraternity. In my first year, I met Keltjens and Schepens, who were also interested. Then I faced a choice that many freshmen, fortunately, do not need to make; will I already join a fraternity this year, or do I want to join a fraternity in the coming years that might not exist anymore at the moment I am open to that decision. As you might know by now, I, or should I say, we together wrote a letter and we became I.V.V-feuten.

Was I ready to be a feut? I would argue I was not. In a period of wearing sweaters, being a childish freshman and completely unaware of the decadence there was to it, there was a lot to learn for me. Obviously, that is what being a feut is for, but only maybe my time as a feut should have lasted a little longer than only the couple of months before the holidays and these holidays themselves. It was only good fortune that I completed my 30 ECTS Binding Study Recommendation after half a year, which ensured there were even a

couple months before the holidays.

Please, do not get me wrong, I slowly started wearing shirts, and I completed all steps towards the membership, be it together with Schepens and Keltjens. I can understand though, how older members of GEWIS questioned the membership of these young ones, while I.V.V had grown older and had established a particular appearance. The time during which we actually were feuten was short and seemed hidden. Was I.V.V in desperate need for members? Would I.V.V keep its sublimity that one had grown used to?

It was time for the new generation. The Senate of Fraternity "In Vino Veritas" changed nearly completely. With a fresh wind, I.V.V sailed the seas, but this also changed our target group. It was clear that I.V.V had grown a little older and as such, had lost the connection with the younger generations of the association. This resulted into the final version of the Bourgondisch Weekeinde in my first year as I.V.V Quaestor. The year after, the Decadent Weekend made its grand entrance. It was introduced as a less expensive alternative of the Bourgondisch Weekeinde, and a stricter policy was set up regarding the target group of this I.V.V weekend.

It is nearly without arrogance that I can say that this policy has clearly worked out. In one year already, a totally different group of participants joined the weekend and with three new feuten, our fraternity started flourishing again. Many of us still look back

at this lovely wine cantus with a warming heart. And, of course, the first edition of the Saturday afternoon activity Meeles. Who would have thought that we would celebrate our Lustwijn this year too?

However, it is not all gold that shines. The Decadent Weekend was not the only challenge for I.V.V in these past years, let me consider the cantus in a couple of words. As the Fraternity grew old, GEWIS could enjoy a couple of the best Praesidia in years. On the other hand, as the Fraternity grew older, these men started not returning for Praesidia and the Praesidium had to rejuvenate. Due to this gap of members joining the fraternity before Keltjens, Schepens and I did, it has been a challenge to find the overweight and quality the Fraternity had been able to present before. Knowing this would only be a matter of time, simply because everybody ages over time, we persevered. I understand the comments in the association that perhaps other people might have been more suitable for the job, at some time. And maybe they were. Of course, there is more to being a Praesidium member for over a hundred drunk singers, than there seems to be. Never judge a book by its cover, and practice makes perfect, you all know the proverbs. On the other hand, it is definitely too arrogant to believe we are the only ones capable

of chairing a cantus. However, to stay in the world of the sayings, we are simply the best.

That brings me to another aspect of "In Vino Veritas". After being a member for some years, I noticed people tend to get a different view of you. Expressions like: 'I like you personally, but not as a group' are not uncommon to an I.V.V member. I know, there is a serious flair of arrogance to most I.V.V'ers. This arrogance is not always appreciated, and we know that. Nevertheless, for us this is part of the role of being an I.V.V'er. Note that I chose to write the word role very deliberately. I profoundly believe that pulling yourself out of your comfort zone and into the spotlight is an asset one is able to learn during one's student life that one profits one for the rest of one's life. This also includes public speaking and pretending to be a little more confident on some matters than you actually are. Please, do not mistakenly consider this as a written excuse for the misconduct of several of the corpora, nor as an excuse to overestimate oneself. But moderately, there is definitely a soft skill to be learnt here; I.V.V does not need the ESA! Next time, look at an I.V.V'er, while knowing there is a tiny role played, and see what we are doing. We aim to play this role with a laugh, so please think of that when you receive



the next email, listen to an I.V.V talk or meet us as a group. In the end, my father taught me that when naked, we are all the same.

My feelings? Of course, it bothers me when my friends tell me they like me better without my I.V.V hat, or clothing as would be proper English. And maybe it has taken me a while to find my own fulfilment of the membership. However, as it there now, it was easier to also leave that at times and put Meeles-flair in the framework I set up in these previous years. Obviously, my framework was also built on my beliefs and where I wanted to see myself in the future. It warms me that the people around also seem to appreciate that, so regarding that, the best is yet to come!

As our fraternity grew, it was also time to renew our activities. Before, we had been recycling several I.V.V activities, and naturally the good ones only need some refinement, but could the new members invent new activities? We could! I still remember the 35th board that needed to spend more money, but did not want to spend that on alcohol related activities. That was the moment that I handed in two budgets with new I.V.V activities. For years, we wanted to organise an I.V.V Etiquette dinner, for two reasons. Because the Wervingsdagen dinner would never have enough spots for all willing GEWIS members, and we believe(d) this activity totally suited our ideals and visions. However, for years we were told GEWIS did not have enough money to support I.V.V in organising it. The etiquette dinner immediately beat the subscription time record: the entire activity was sold out in only 44 seconds. It is a great motivation to keep putting effort in your fraternity when members appreciate it that clearly.

The other new activity was a collaboration with GEWISKI. Aiding a new committee in setting up a new activity is an outstanding way of transmitting experience! And who did not want to go 'skiing with Schepens' and 'Boarden with Beekveld'? Maybe I should not mention here that an après ski and unlimited beer and wine was included in the GEWISKI.V.V and we introduced a wine part to the etiquette dinner; as that might result into clashing

beliefs with the ideas of the board at the time. And, after all, I.V.V was able to spend a significant amount of money in only two weeks!

Not only we organized new activities that identified the new generation, we also gave our own twist to the existing ones. Further, we invited the brother fraternities to these activities, similar to the founders. However, the paths of these brother fraternities and ours separated in the years of lower cardinality of our fraternity, and therefore there was never a good match. Who was I when I just joined I.V.V to revive these bonds? I would probably not believe myself, being a second year student, if I would come up to myself saying our fraternities once had evenings together, or at least try myself before even being partly enthusiastic. Well, when that happened I thought about making new bonds. And during my board year, I met many board members that happened to be a member of Hawking too. As this was an immediate match, we started spending evenings together; and our visions form a harmonious entirety. And today, we are still meeting new members, expanding our network, enjoying amazing wines, tasteful ports, and beers.

Considering other fraternities, we are in love. Or should I say, In Vino Veritas is in love. He is in love with ATHENA, and he was brave enough to declare this love, insecure about her reaction. He was very pleased that she accepted his request to go on a date, and even today he has only got eye for her. To not further intrude on his privacy, I shall leave this subject here.

So, how did I.V.V grow in the past 5 years? Before my membership, during the election GM, I.V.V was not even present when his continuation was discussed. A severe discussion followed, and we got a second chance. Some years later somebody referred to I.V.V as a phoenix that has risen from its ashes and was a lively fraternity again. He thought this was a very good example that illustrated the resilience of a fraternity. At first, I was quite offended by this metaphor. On the other hand, during the past years, I have grown to understand what he meant. I.V.V has risen from his ashes and we got the opportunity to redefine "In Vino

Veritas". And I think we did; all members gave their own contribution to I.V.V and extend our definition.

And so did I. Before, I touched the subject of being Quaestor of Fraternity "In Vino Veritas". After a little over a year and finally our own bank account, I got promoted to being Praeses, which I was for about two years. Currently I am Ab-Actis, after giving my own interpretation to the Vice-Praeses position for a year. In totality, I have had positions in the Senate of I.V.V for over 5 years now, and, obviously, in these years I had my contribution in steering the fraternity to where we are now. But I have also graduated; it is time to say goodbye (good song, by the way) and start enjoying my status as a Monseigneur. However, this is very

difficult for me. I have spent five years of my time and energy in getting I.V.V where is now and of course I have confidence in our new new generation, but it is difficult to let go. Was I able to create our new I.V.Vision? Does everybody know what our fraternity stands for? It is time let go, and trust the amazing new members, feuten and aspiring feuten and enabling them to place their own stamp on our fraternity. It is, after all, a living organ in all aspects. As long as we drink wine and enjoy each other's company, we are the happiest, that is something I do not have to let go yet!

Het ga u goed!

Mgr. Meeles

Ab-Actis der Dispuut "In Vino Veritas"





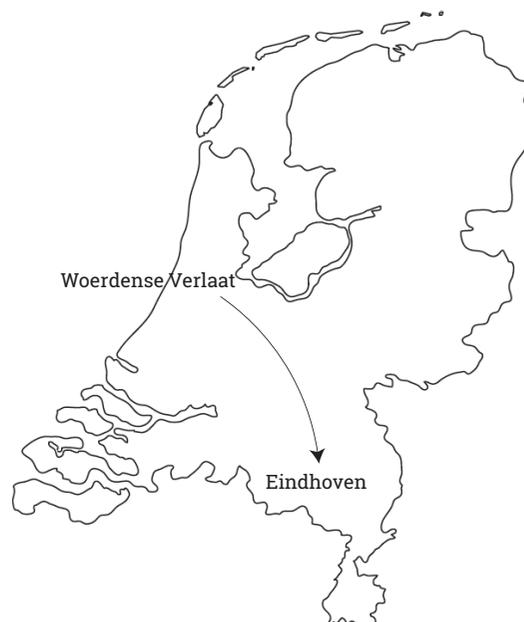
# MEMBER

## IN THE SPOTLIGHT

*They say that time flies when you are having fun. Well, one might add that the saying also applies when you are busy. About a week ago, I was asked by one of the Supremum editors to write this short story about myself, and here we are, a couple of days before the deadline. Doing things just before the deadline might make it sound like I'm your typical student. Well, I'm willing to argue that I stand out of the crowd as much as you do, but more on that after a short introduction.*

**TEXT** Erik Takke

Hi! I'm Erik Takke and will already be twenty by the time you read this. Man, I'm getting old! I was raised, together with my little brother and sister, in this hole in the earth called Woerdense Verlaat, which is located on the border of Zuid-Holland and Utrecht. To get a sense of what living there looks like, you should know that about a third of all living entities is made up of livestock and one in every three of the 900 people that live there has exceeded the age of 65. The closest supermarket is located about three kilometres east and the nearest train station is reached after a ten kilometre journey. Some of you would probably get shivers from hearing all this boringness, but I've really enjoyed living there all those years. It's a peaceful place and you can have a chat with everybody. Since it is quite a distance from Eindhoven, it wouldn't surprise you that when I started studying here at the



TU/e about two years ago, I moved to Eindhoven. Currently, I share a house in Strijp with 3 roommates and enjoy every second of it. One works full-time as a software engineer and the other two are both working on a master's degree in mechanical engineering. Even though I'm technically not an 'active member' of GEWIS, I'm often there during lunch breaks to have lunch and play a board or card game with friends. Some of the games we've played recently are Coup, I know, Set, and, my favourite, Spyfall.

Now that you know my background, let's get back to my earlier statement saying that I'm not your typical student. Three years ago, when I was orienting on which study I wanted to do and where, I couldn't decide between studying Computer Science and Mathematics. Once I figured out that I would be able to combine both here at the TU/e, I knew I couldn't just choose one. No no no, I had to choose both. So, after finishing high school, I signed up for the double bachelor Mathematics and Computer Science. Thus far everything has run smoothly: I'm currently working on finishing both studies nominally by the end of this year. Now, if the workload of four courses per quartile wasn't enough already, by the end of last year a buddy of mine asked me whether I would be interested in following a fifth course: Introduction to Chemistry. Since I'd always enjoyed chemistry in high school, I didn't see a reason as to why not. So, here I am, trying to manage five courses this quartile. If you haven't caught on to the fact that I'm telling this in a joking manner and not as a brag, here you go. I'm a quirky guy who just loves

studying. There is however one thing to take away from all this: please, for your own well-being, do not attempt to follow 5 courses in one quartile if you want to have a social life. Even though I have thus far been able to handle it all, I've had to sacrifice most of the little spare time that I have. I don't mind doing so, because I find it to be worth the effort, but know what you are getting yourself into.

Now that that warning is out of the way, we can continue describing another one of my quirks. This one being that I don't drink. Period. This probably ties in with the fact that I really like studying. I just really enjoy my brain when it is fully functioning! I've never seen the appeal of numbing it, let alone paying for drinks to be able to do so. Don't get me wrong, I really enjoy having a barbeque with friends, or a party every once in a while. I just like my parties "kind, sober and fully dressed".

So, the question that you are dying to ask by now is what I do with my spare time? Even though I currently don't have much of it, when I do, I really enjoy spending my spare time playing board and card games with friends, but video games also do the trick. Something completely different is a hobby I picked up about a year ago. It's around that time that I really started to invest time in nature and cityscape photography. Okay, that might be overstating it a bit. It really is photography

of whatever environment I have available to me. I do however really love landscape photography, especially sunsets and stars. Every day the sunset is different, but the colours it produces have me in awe time after time again. When I see the stars I always get this feeling of how vast the universe is, how little we are and yet how much we as humanity have discovered and achieved. On top of that they just make for great photos. Even though sunsets are getting a bit early now, if you get the chance, I highly recommend you go out there and try to get a glance of it. I know from experience that you can see the sunset when standing on the train station platform, so if you find yourself there at the end of the day, don't forget to take a look. It always brightens my day when I do so!

Since I'm cutting it close to the word limit, I'll end this here. I hope you have enjoyed reading this really strange story about somebody whom you might've never met. I would love to write more about all the things I've experienced, the things I've learned and all the weird things about me, so please, if you enjoyed reading this, drop by and tell me! If you get the opportunity, make sure to say hi, have a talk and come play a game with me and my friends if you feel like it. Be warned, we are fond of altering the rules, so even games that you know by heart bring something new when you play it with us. Best of luck on all your study endeavours.

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*One of the sunsets in Woerdense  
Verlaat photographed by Erik*





# LIFE AS I.V.V FEUT

**H**èt Dispuut, naturally, is well known among GEWIS members. Famous for the Maand'lijkse Borrel, Decadent Weekend, Spel met Ballen and much more extravagant activities, some of you might wonder what it would be like to belong to this elite. Personally, I do belong to the group of people that wonder how members of Hèt Dispuut redefine what it means to live life to the fullest. Becoming a feut der Dispuut "In Vino Veritas" is how I started this enriching journey of learning how to get the most out of life. In this article I will give some insight into what it is like to be a feut of such an outstanding fraternity.

**TEXT** Dave Emons

As feut I am blessed with opportunities to expand my knowledge about the finer things in life. Not only am I often accompanied by iconic GEWIS members with years of experience and wisdom to share. Hèt Dispuut also allows me to meet outstanding people among the wine loving community. What remains to do for me is take in as much wisdom that for example the Dutch Champion wine tasting der Dispuut "In Vino Veritas" brings with him wherever he goes.

**“ If you mess up, this is somewhat expected in the first place. ”**

Besides all wisdoms brought upon me by Hèt Dispuut, I regularly get the chance to expand the boundaries of my comfort zone. The highly appreciated gentlemen that make up Hèt Dispuut often express their creativity by thinking of unique and fun ways to teach me the finer things in life. These are usually things I would never have considered to do on my own initiative and often require me to put myself out there. Due to this creativity I get unique opportunities such as singing

Gaudeamus Igitur for all attendants at the Maand'lijkse Borrel. Fortunately, for me, members of Hèt Dispuut are also there to help me out whenever I have difficulties with for example recalling the text or melody to Gaudeamus Igitur from the 10 minutes I had to prepare.

In some sense being a feut reminds me of being a sjaars. You get introduced to a whole new environment and set of responsibilities. While you have many things to do and are expected to show initiative there remains the general census that a feut is incapable. This sounds rather negative however it gives a certain freedom. If you mess up, this is somewhat expected in the first place. However, if you do manage to get things done you perform above expectations which is always nice.

The best part of being an I.V.V feut is the I.V.V half. Being accompanied by the members of this outstanding fraternity guarantees unforgettable experiences. In the end, the people that compose Dispuut "In Vino Veritas" are not only the best thing about Hèt Dispuut, but also the main reason I wish to join.

# TRUE REASONS TO GO BOARDING

*Doing sports is something that a lot of people try to do regularly. Some people go jogging because they do not want to sit behind their desk all day and want to get some fresh air. Others do some form of sports for the team spirit and to stay healthy. But why would one want to jump around over a lake with a board tied to their feet?*

**TEXT** Kevin Jillissen

Wakeboarding is not a very common and a relatively young sport. That is one of the reasons why people most likely have a surprised or somewhat confused look on their face when they have asked me what sports I do. Some people have never heard of it, others have never heard about the possibilities to do it as a regular sport. I also hadn't really heard much of it before I first tried wakeboarding on holiday several years ago. Since then, I have tried it a few times every summer on a friend's board and I really wanted to do it more often. At the end of last year, I decided it was time to just go for it and buy my own gear to go wakeboarding on the cable parks near Eindhoven.

At first, even getting to stand on the water was quite challenging. As just a student, I do not have access to a powerful motorboat so the only way to wakeboard is getting towed forward by an electrically-driven cable across a lake. As you might be able to imagine, this complicates the process of starting a little. In just an instant you have to accelerate from standing still to somewhere between thirty and forty kilometers per hour. Doing so you dive right into action, or in the worst case, head-first into the water.

Managing to keep your head dry for a moment, the next challenges show themselves as you ride the waves of the lake. When you ask most wakeboarders what they like about boarding, the real reason to go boarding is challenging yourself into doing what you can't do yet. Once the basics of wakeboarding are

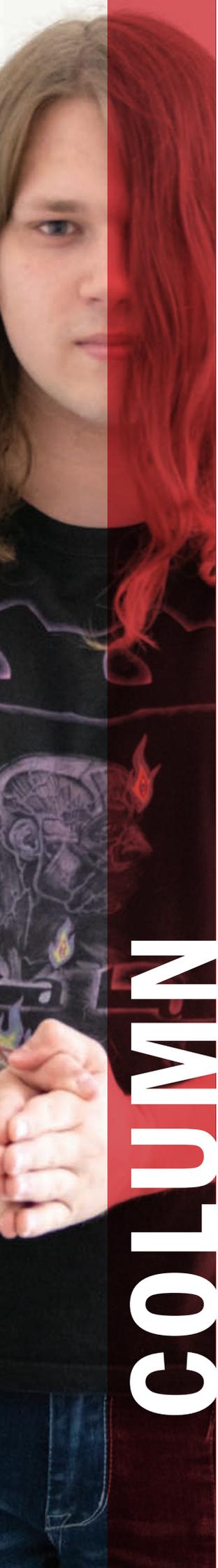
learned, you keep pushing yourself with new challenges. After being able to land from a kicker, which is basically a ramp floating in the water, I challenged myself by trying to do a backflip while flying through the air at around forty kilometers per hour. And I can assure you, that definitely was –and still is today– a hell of a challenge.

“ ... you keep pushing yourself with new challenges. ”

So answering the question of why anyone would want to do this: for me personally, the first and foremost reason to go wakeboarding is definitely the adrenaline kicks that come with it. Managing to perform a trick you have never performed before or riding a new obstacle in the water and succeeding gives such an adrenaline kick and energy boost that it is almost addictive. It is what pushes me to keep enjoying to go boarding. There's always something you haven't done before, so just put on a helmet, tighten your bindings around your feet and go for it.

MEMBER





# EMINEM GOING MILDLY KAMIKAZE

**I** 'VE GOT ANOTHER CONFESSION TO MAKE! Long long time ago, I can still remember how TMF used to make me smile. When I was about eleven or twelve years old, I can still recall an amazing TV network: TMF. This was the first place where I discovered new music. Before this I didn't really care about or listen to a lot of music. But with the death of Michael Jackson I started watching TMF way more often. But the music at the time was a lot of Hip-Hop and Dance music. This resulted in me actually being a Hip-Hop fan, even before I discovered Hard-Rock and Grunge. Hip-Hop artists like Jay-Z, Akon and Eminem were being projected onto my eyes and ears. The ladder of which will earn its spot in this edition of the SUPREMUM. I am going to review the last release from this Rap God: Eminem – Kamikaze.

**TEXT** Lars Verstraelen

Eminem has somewhat of a special place for me still. Songs like 'Space bound', 'Beautiful' and 'The Real Slim Shady' still appear in some of my playlists. Simply because I do not only find a comfort in loud noise and spacey melodies, but also in clever word use and poetic approach in music. This is something that undoubtedly belongs to Eminem. His style of writing made him popular since the 1999 release of 'The Slim Shady LP'. Coming from a guy who suffered several family issues, suicidal thoughts and years of substance abuse, it is not surprising that creativity (in this case in music) would be his sanctuary. Now ten records in, his record 'Kamikaze' gave this Rap veteran yet again a lot of attention.

'Kamikaze' was released on the 31st of august without any promotion of the record beforehand. The cover resembles the artwork of the famous Beastie Boys record 'Licensed to III'. But it does not pressure the release. Even without any announcement made, the record sold over 400.000 copies in its first week. And for good reason! One of the most refined rappers in the current scene delivers new work. So naturally everyone dives onto it. And so did I:



This record is about 45 minutes in length, but it does not feel like it is. In the sense that these 45 minutes flew by in an instant. I got from 'The Ringer' all the way to 'Venom' in the blink of an eye. Speaking of the song 'The Ringer': this song put me a little off my expectations. The song kicks in with the crashing of an airplane into the ground. But right after this impact, the real song kicks in. The rhythm and the melody is something very typical for Rap and Hip-Hop music these days. It is a very laid back tune with a bpm that lays around 60 (which means it is basically a clock). This songstyle is used all across the music scene these days. However: Eminem's rapping makes up for it. As I'm used to, he spits out words in his own way. His intonation and style of rapping is very typical. Every so often he is rapping with a different measure than

the rhythm assigns to the song. This style is apparent on every song on 'Kamikaze'.

From this song, where even 'Gucci Gang' makes a pass, we roll into 'Greatest'. Which is immediately a lot more up tempo, and it also has some more gangster flair to it. Eminem is known for writing diss tracks and having feuds with several artists. This might as well just be one, because it sounds like a verbal fight. Moving to 'Lucky You', the characteristics of the contemporary Hip-Hop scene pop up again; laid back tune and triplet rapstyle. This song is made in collaboration with Joyner Lucas, where he in fact takes the most prominent role, which suits the song well. It gives more of a mixtape feel to the record. This also happens in the songs 'Not Alike', 'Nice Guy' and 'Good Guy'. Here Royce da 5'9 and Jessie Reyez(2x) take the mic respectively.

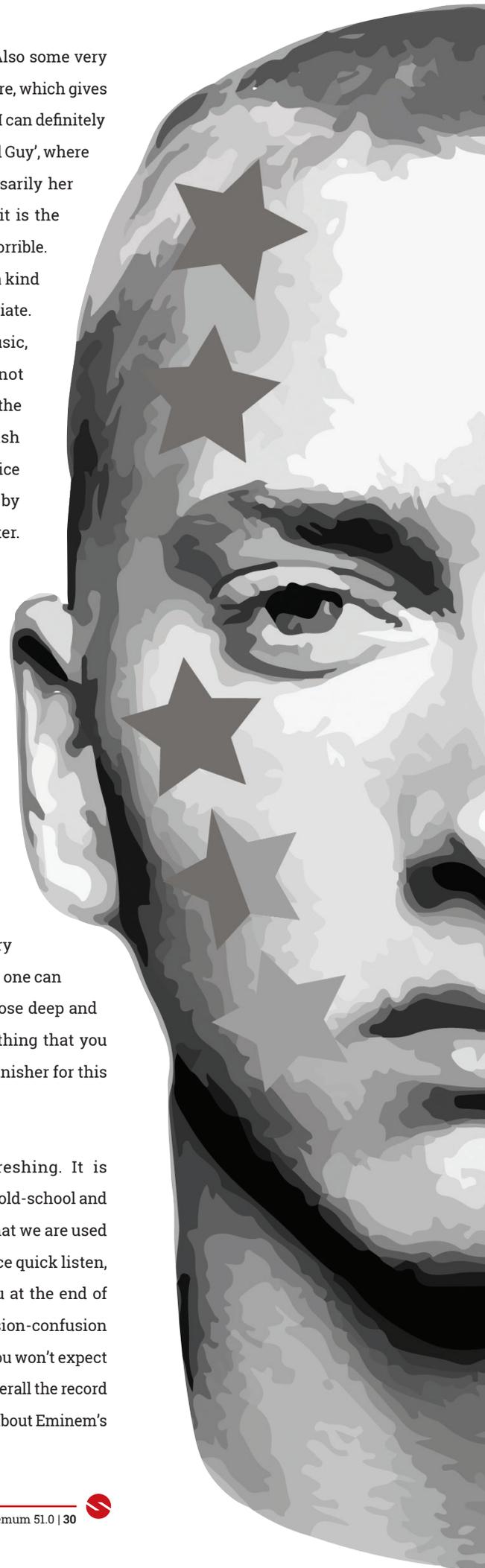
The song 'Normal' also has this laid back modern rap idea. Still with great and complexly oriented rapping from Eminem (for the musicians among us: he raps in triplets and pentuples over a regular 4/4 measure). The song that comes after it really is a reminder of Eminem's style of music which made him famous: 'Stepping Stone'. This is a song where I hear the original Eminem, which everybody would recall him by. Heavy rhythm and melodies, with an aggressive and storytelling rapping style: amazing! Afterwards the song 'Not Alike' appears, where Royce da 5'9 does not complement the record too well. It has a bit too much of a cult and underground Hip-Hop style, which is not really what Eminem's style is all about. However this is definitely a diss track towards Machine Gun Kelly. So for your dosis of roast material, this might just be a go to. After this dissing it is time for the titular track 'Kamikaze'. This song is nice blend between the modern Hip-Hop scene and the old-school style of rapping. It is all about spitting words, but with a nice mechanical beat underneath. This some will surely 'smash into everyone, crash into everything'.

Then we hear a totally different song: 'Fall'. Which has a very dramatic tune to it. You can hear that Eminem is rapping about his past here, which complements

the melancholic melodies very well. Also some very nice background singing is going on here, which gives it that nice bit of spice. Something that I can definitely not say about the songs 'Nice Guy/Good Guy', where Jessie Reyez kicks in. It is not necessarily her that makes the songs not very nice, it is the construction of the songs that make it horrible. The use of a random 'suck my \*\*\*\*' is a kind of shockfactor that I don't really appreciate. Not because I dislike vulgarity in music, but mostly because the shock is not working correctly in this song. Leave the art of shock in rap music to Childish Gambino. So 'Nice Guy' is not really a 'Nice Song', except for some nice rapping by Jessie. But 'Good Guy' is slightly better. Not much though as it is not much of a Rap song. In short: it does not quite fit on the record.

The last song is however one of my favorites: Venom. It is a promotional song for the movie of the same name. And normally I abhor such songs, where it is clear that an artist was paid big money for some promotion. But this one is hella lit. A very powerful buildup, intro, musical arrangement and of course some very strong rapping. This also is a song that one can link to the older work by Eminem. Those deep and theatrical beats and music are something that you want to tune in for. It is a very strong finisher for this record.

This record is shorthandedly refreshing. It is extraordinarily cool to hear a fusion of old-school and modern Hip-Hop. Still with the edge that we are used to when listening to Eminem. It is a nice quick listen, with even some songs sticking to you at the end of the run. Sometimes there is a bit of fusion-confusion for a few minutes, and even stuff that you won't expect within the mindset of this record. But overall the record delivers well, and you will be up to date about Eminem's new work.



Dire Pane Al Pane  
E Vino Al Vino





2014



2017



2017



2015



2018



2015



2017

**D**o you have a question for SupreMUM as well? Leave your question in the SupreMUM box in the GEWIS room or send it to [supremum@gewis.nl](mailto:supremum@gewis.nl) and you may get an answer in the next edition!

Lief SupreMUM,

#### Wat is het doel van het leven?

Laten we beginnen met het verder specificeren van deze vraag, hij kan namelijk op twee verschillende manieren gelezen worden.

Ten eerste kan deze vraag het volgende betekenen: Voor mij als individu, wat is mijn doel om te bereiken in het leven. Meestal wordt dit dan nog wat breder getrokken, en betekent de vraag eigenlijk: Wat moet een mens (in het algemeen) bereiken om een goed leven gehad te hebben? Het is handiger om deze vraag te beantwoorden, omdat het antwoord op de andere vraag natuurlijk af te leiden is uit de antwoorden op deze vraag. Dit is meestal één van de bekende clichés die altijd door leken gebruikt wordt om een voorbeeld te geven van een onopgelost filosofisch probleem. Helaas was deze vraag minder belangrijk in de filosofie dan je zou verwachten. De antwoorden die de mensheid hierop weet komen namelijk meestal voort uit antwoorden uit andere vragen. Gelukkig hebben filosofen door het bestuderen van die vragen al wel een aantal interessante antwoorden gegeven.

Ten eerste heb je het utilitarisme, dat de filosofie achter bijvoorbeeld Spock (van Star Trek) is. Zijn "The needs of the many outweigh the needs of the few", geeft hier een goede beschrijving van. Volgens het utilitarisme is het doel van het leven om zoveel mogelijk geluk te brengen aan zoveel mogelijk mensen.

Daartegenover staat de filosofie van het liberalisme, waarin het doel van het leven juist het vergroten van je eigen vrijheid voorschrijft. Veel mensen gebruiken dit als excuus om zoveel mogelijk geld te verdienen,

en zo hun vrijheid te vergroten, soms helaas ten koste van anderen.

Een totaal andere (maar niet echt vrolijke) stroming is het nihilisme, populair gemaakt door Friedrich Nietzsche. Volgens Nietzsche heeft het leven helemaal geen doel, en is het zinloos om deze vraag te stellen, omdat de vraag helemaal geen betekenis heeft. Iedereen zou zijn leven moeten leiden op de zoals hij zelf wil, zonder een groter doel. Natuurlijk kun je hierin persoonlijke doelen stellen, maar het halen van die doelen maakt je niet een beter mens, aan het einde van zijn leven sterft iedereen toch, en hebben die doelen toch geen betekenis meer.

Een filosofie die er op het eerste gezicht op lijkt, maar voor de echte filosofen onder ons toch echt totaal anders is, is het existentialisme van Jean Paul Sartre. Het idee van Sartre is dat de vraag geen algemeen antwoord heeft; volgens Sartre moet iedereen zijn eigen leven een doel geven (vaak als gevolg van het maken van keuzes). Een consequentie hiervan is dat het doel van het leven niet alleen voor iedereen anders is, maar ook kan veranderen. Het verschil met het nihilisme is dat Sartre niet per sé zegt dat de vraag geen betekenis heeft, maar juist zegt dat het antwoord voor iedereen anders is. Ook is een verschil dat het stellen van doelen volgens Nietzsche geen waarde heeft, terwijl iedereen volgens Sartre juist zelf de waarde eruit moet zien te halen; iedereen moet zelf weten of hij blij wordt van die promotie.

Wat opvalt aan deze antwoorden is dat al deze filosofen eigenlijk niet bezig waren met deze vraag. De oplossing van Sartre bijvoorbeeld is een gevolg van zijn theorie over de vrije wil - *iedereen is niet alleen vrij om zijn eigen keuzes te maken, maar is gedoemd om ze te maken* - terwijl het utilitarisme juist een theorie over ethiek beschrijft.

Daarnaast kan deze vraag kan ook op een andere manier geïnterpreteerd worden: Wat is het doel van het biologische leven. Deze vraag is een stuk makkelijker te beantwoorden, het is namelijk een gevolg van de theorie van biologische evolutie. Het doel van het biologische leven is om zich te vermenigvuldigen, en de wereld te vullen met leven, en te proberen zijn eigen DNA zo ver mogelijk over het universum te verspreiden.

Ten slotte wil ik jullie ook nog even het advies van plato mee geven; volgens hem was het doel van het leven namelijk het vergaren van kennis. Ik hoop dat ik jullie daarom met dit antwoord ook een stapje dichterbij het doel van het leven heb gebracht.



**Dear SupreMUM,**

### **What is the life cycle of fruit flies?**

The fruit fly, also called *Drosophila melanogaster*, are those small flies that you see everywhere during the summer. For the lifecycle, let's start with the birth. Note that the duration of the life cycle depends on the temperature, the listed times are at room temperature.

Fruit flies come from fruit fly eggs. Normally, those eggs are laid into rotting fruit or mushrooms. However, they already hatch 12 to 15 hours after the egg was laid. When they are hatched, they are called larvae, just like the babies of other insects. They moult (vervellen) when they are 24 hours old, and again at 48 hours. When they are 96 hours old, they will start metamorphosing into an adult fly. This transformation takes another 96 hours, which means that the fruit fly will be 8 days old afterwards.

During this period of its life, the fly only has a single occupation, that is, to get as many nutrients as possible. Because the eggs are most often laid on a piece of rotting fruit, the larve does this by eating the

microscopic organisms that are decomposing the fruit, and also eating bits of the fruit itself. However, the life of a fruit fly larvae is a little more complicated than just eating. According to research, they often try to aggregate in groups, especially when it is hard to burrow into the fruit. While aggregating, they also have social interaction with each other, by means of touching.

One current hypothesis of this behaviour is that they do this to try to find a safer space to moult. Interestingly, it has been found that fruit flies can actually feel fear. Not only do they try to flee when they see a predator, their they also act differently for at least a few minutes. Multiple multiple different predators also have a compounding effect, just like people feel more fear when there are multiple threads.

When a fruit fly becomes an adult, females will become sexually mature after 48 hours, while males are directly. When the fruit fly is sexually mature, it will start looking for peers of the opposite sex, and start the courting process. For the male, this process consists of singing a courting song, stalking the female and oral sex. The female can resist the courtship by kicking, increasing her movement and hiding her reproductive organs, and accept by not doing any of those. If the courting succeeds, the copulation process starts. This can take up to 30 minutes. Interestingly, in fruit flies, the females prefer a shorter copulation than the male. After copulation is done, both the male and the female will look for other partners. The female can store sperm of multiple males, although mating with multiple males does decrease their egg laying rate.

The reason we know this much about fruit flies is that they are interesting test subjects for our experiments, and because their brains are relatively simple; fruit flies only have a thousand firing neurons, a number which is already simulatable by a computer.

So next time when you see a bunch of fruit flies, instead of trying to kill them with a fly swatter, give them some rotting fruit, it might save a lot of traumatic experiences.





# ZIT IN WIJN WEL DE WAARHEID?

**E**enieder die enigszins bekend is met het Dispuut weet natuurlijk waar de naam van het Dispuut voor staat. Voor de niet geïnitieerden verwijst de naam naar de levensspreuk, "in wijn zit de waarheid". In een tijd van "fake news" en "alternatieve feiten" lijkt het steeds belangrijker om de waarheid in alles te vinden. Wijn schijnt hiervoor het ideale middel te zijn; men schenkt één persoon voldoende wijn en vaker wel dan niet zal de waarheid op een gegeven moment, zoals kurk uit een slecht geopende fles, altijd naar boven komen.

**TEXT** Luc Damhuis - I.V.V

Binnen het Dispuut is dit al vaak genoeg bewezen, bij een avondkout wordt zo meermaals de waarheid besproken. Bij het gewone volk dan wel het gepeupel is de exacte hoeveelheid wijn die de waarheid laat verschijnen een stuk lastiger te bepalen. Het is namelijk zo dat er bij het eerder genoemde gepeupel maar een zeer vluchtig tijdsbestek is waarin de waarheid daadwerkelijk naar boven drijft. Schenk een persoon te weinig wijn en de leugens zullen blijven vloeien als water in de Nijl, wanneer een persoon te natgierig is verdwijnt de mogelijkheid tot verstaanbaar converseren als sneeuw voor de zon. Binnen het Dispuut zorgt louter het bezitten van een lidmaatschap voor een enorme tolerantie op het gebied van consumeren van wijn, iets wat uit het formaat van het zogenoemde "Praeses glas" een onbetwistbaar feit is. Bovendien brengt het lidmaatschap naast vele andere voordelen een uitstekende zelfkennis met zich mee. Ieder lid weet dan ook te allen tijde de eer aan zichzelf te houden, en zal zich dan ook nimmer laten inhalen door de man met de hamer. Kortom wanneer een persoon lid is van het Dispuut brengt wijn de waarheid met gemak naar boven en deze persoon weet precies welke hoeveelheid hiervoor nodig is. Dit is iets wat bij het gepeupel ontbreekt.

Maar genoeg over ons, dit schrijven had namelijk ooit de intentie om te zoeken naar het nut van de waarheid

en of wijn de waarheid voldoende teweeg kan brengen. Dit laatste hangt dus van een kritieke factor af, of men wel of geen lid is van het Dispuut. Desniettenstaande is het eerste deel van dit vraagstuk nog niet beantwoord. In het laatste deel van dit lettervrucht zal er op zoek worden gegaan naar de functie en het praktisch nut van de waarheid in het leven van een student.

**“ Schenk een persoon te weinig wijn en de leugens zullen blijven vloeien als water in de Nijl, ... ”**

De hamvraag is hier dus of de waarheid altijd preferabel voor een student is. Is het bijvoorbeeld gunstig voor een student dat zijn studieadviseur te allen tijde een eerlijke op waarheid gebaseerde mening geeft. Een mogelijk scenario zou hier zijn dat een labberlottige student zich als enorme schobbejak heeft gedragen en ver van een BSA is. Er is echter nog wel een sprankje hoop al heeft de studieadviseur hier een hard hoofd in. Is het dan gunstig dat de studieadviseur tegen deze student zegt "Schobbejak, ga jij maar een cursus volgen bij de Fontys, want dit gaat hem niet worden zo", met

gevolg dat de student emotioneel een enorme klap krijgt en zijn laatste sprankje hoop uiteen ziet spatten? Of zal een studieadviseur zijn persoonlijke waarheid voor zichzelf moeten houden en achterkousig de student zijn laatste sprankje hoop gunnen. Beide scenario's zijn natuurlijk alles behalve optimaal maar het leven is nu eenmaal niet optimaal.

Een ander scenario: een student is op snerpende hertjes aan het jagen, maar vangt de hele avond bot. Is het dan gunstig voor de student dat zijn vrienden hem de waarheid vertellen en vertellen "dat het hem deze avond niet gaat worden"? Of heeft de student er meer baat bij wanneer de vrienden hem nog wat vloeibare moed in de vorm van gerstenat dan wel wijn schenken, en hem terug de (eeuwige) jachtvelden op bonjournen?

Het gemakkelijkste antwoord is natuurlijk louter gebruik te maken van de waarheid wanneer het om een gunstige waarheid gaat en negatieve waarheden zo proberen te verdraaien dat de klap minder hard binnenkomt. Echter er is nooit iemand sterk en zelfstandig geworden van leven als "Goednieuwsshow". Hoe nadelig de waarheid dan ook mag zijn voor het gevoel van de ontvanger, de waarheid zal altijd een interne kwestie aan het daglicht brengen. Iets wat de ontvanger vaak dwingt tot zelfreflectie met een verbetering van karakter als gevolg. Mijn mening is dan ook dat in een groot aantal van de gevallen de waarheid ten opzichte van de gevoelens van de ontvanger de boventoon moeten voeren. In enkele zeer gevoelige kwesties kan de voorkeur aan de gevoelens van de ontvanger worden gegeven (denk hierbij aan het gezegde "over de doden niets dan goeds"). Nu hoor ik al menig persoon scanderen: "maar meneer de schrijver wat als het vertellen van de waarheid de ontvanger buitenproportioneel kwetst, is het dan niet

beter om de waarheid te verdraaien of zelfs te verbergen?" Wanneer een persoon zo diep gekwetst kan raken door de waarheid, hoe negatief of hard deze dan ook mag zijn, en hier fysieke pijn door ondervindt, wil ik als schrijver de ontvanger een korte cursus op het gebied van hoe (over)leef ik in de "grottemensenwereld" adviseren. Want het deelnemen in de hedendaagsche maatschappij vergt nu eenmaal een bepaalde tolerantie ten opzichte van kritiek, en een vermogen tot zelfreflectie.

Deze schrijver begrijpt dat niet eenieder het hiermee eens zal zijn, echter is dit mijn oprechte mening en hier zal u het toch echt mee moeten doen. Alle reacties en vraagstukken kunnen worden gestuurd naar [wenemenhetmee@dispuutivv.nl](mailto:wenemenhetmee@dispuutivv.nl)

P.S. Het is inderdaad mooi om lid te zijn, bovendien is het lidmaatschap mooi, belangrijk en geil.





# WHERE ARE MY BITS AT?

*This year, the usual list of "after carnival surprises" got extended: your emails had moved! The Office 365 project team sent you an email boasting about how much better the new system works, that you got lots of space for email and data in the cloud, and that you received access to the most recent Office products.*

**TEXT** dr. Andreas Hülsing, dr. Luca Allodi and prof. dr. Tanja Lange

At first this may seem an all-round pleasant surprise: it is great to have "cloud storage" that is accessible from all your devices; it is great if your data is then mirrored over several data centers to ensure that it is safe from all sorts of technical and natural hazards; it is great to have on-demand access to your files.

This may all sound great, but what they are not telling you is the massive impact this may have on some operative aspects you are probably just taking for granted: using your email for private purposes? The recipient may not be the only one who reads it! Sharing sensitive or secretive documents on your latest world-changing project? Think twice! Accessing TU/e services from elsewhere in the world? You may be prevented access to the system! If this sounds concerning to you, we suggest you keep reading.

When you put something in "the cloud", all you are really doing is just putting it on someone else's computer. So, what exactly happened during the carnival week? Your files have moved from file servers at the university to Microsoft servers elsewhere --

typically Ireland, the Netherlands, Finland, or Austria (assuming that the university has bought a package for data center region "Western Europe"). Your data will be replicated across these data centers, but your account might be serviced from help desk teams and other systems anywhere in the world.

What this really means is that Microsoft (or whoever asks Microsoft nicely) can have full access to your emails, your files, and even go as far as tampering with them. Sounds implausible? Here's an example: since the move, links in your emails are replaced by others forged by Microsoft mapping to safelinks.protection.outlook.com and including your email address and some random-looking string. That way, Microsoft checks every link you receive via email and prevents you from visiting known phishing sites; it can even blacklist bad domains at click time by going there before you go. Great, right? Not really. This means that Microsoft has access to your emails and does manipulate them: although the links are rewritten in an automated way, it shows that, if needed for any other reason, Microsoft has access and can read or modify your (perhaps private or secret) exchanges. We don't know what you send in your messages but if John Oliver has got it right [1], you may not want anybody having a stroll through your inbox and files. The problem is, the university has made the decision to transition for you, with not only worrisome implications for your future behavior, which you could still adjust, but for your past behavior as well: your data has moved!

Moving the student accounts was only the first step in the plan of the TU/e to outsource email and storage to the Microsoft Cloud. Next should be employees and services. That likely includes your student data, though details are hard to get. In general, there is a significant lack of communication regarding the migration to "the cloud". If you search for it, you can find information on the intranet ([2] and pages linked from there), but students and university staff seem to be pretty much in the dark. Of the few who noticed, many have raised complaints and some departments, including Mathematics and Computer Science, are voicing their

concerns and putting up resistance. Early in July, the CIO office decided to hold off on migrating employee accounts until they had done a more detailed assessment of security and privacy issues. One new event was that Trump had signed the "Cloud Act" in March, which says, in short, that the US government has the right to access data stored by US companies, independently of where the data is located. This removed the pro-cloud argument that data stored at Microsoft's European data centers would not fall under the authority of the US. Microsoft Ireland had been fighting a request for data from the US on grounds that the data was not stored in the jurisdiction, but the case was withdrawn following the passing of the Cloud Act, see [3].

On the TU/e side some information regarding the migration that was available in May vanished during summer but is now back (after some edits) and the text does not fully match the arguments given in the detailed security statement by the CISO [4]. After the summer break, work on the Office 365 migration seems to be picking up speed again - the information pages have been polished and updated, some people who put up resistance have been interviewed by outside consultants and even Microsoft's National Security Officer visited TU/e for an interview. All in all, the university seems set on moving, and there is a reason behind the general problem of admitting mistakes: making a mistake here is expensive! Moving data to a service is a one-way street. While it is possible to get data back, this requires payment by the gigabyte - and there are a lot of gigabytes in the student data. Yes, you heard right! One has to pay to get the data back! However, realizing the migration was a mistake will only become more expensive once also all employee accounts have moved. Yet, that will still be dwarfed by the fines a court could levy if TU/e is found to have violated data-protection laws, most importantly, the EU's GDPR (General Data Protection Regulation) which took effect May 25, 2018.

How did we get here and where do we go from here? Those are complicated questions. Our understanding is that Microsoft made a financially interesting offer



to the university and the “Round Table of Basic Services” (Tafel Basisdiensten) evaluated the offer and made a recommendation to the board of the university (College van Bestuur) to enter into a contract. Since the ICT services were centralized, the overall quality had decreased, mostly due to the lack of (qualified) people and funding cuts. This may make outsourcing in the form of moving to the cloud seem like a good idea, but Microsoft is not going to give TU/e a good deal just to be nice. TU/e is an interesting test case for Microsoft’s Office 365 and they might have made a good offer in order to get a foot in the door. Our reputation, the fact that TU/e decided to trust Microsoft, will be used as advertisement to other universities, so we are paying after all, just not in Euros: we are setting an example and pay with our reputation.

We think that the board and round table made a short-sighted decision, which is prioritizing perceived short-term gains over structural solutions that keep expertise and data at TU/e. We are concerned about the security and confidentiality of student data and the ability of our foreign students to work when they are visiting home. For now, using the Microsoft services is not possible from Cuba, Iran, the Democratic People’s Republic of Korea, Sudan, and Syria, but Trump’s travel ban has shown his appetite for adding more countries to blacklists. We enjoy TU/e as an international university that is open to people from other countries and don’t think that another state’s government or a company should be allowed to dictate what services we can offer to our international students.

We are also very concerned about the security and confidentiality of our research data and the collaborations of Microsoft with intelligence services such as the NSA and other three-letter agencies, but that’s enough material for another article.

## REFERENCES

[1] Government Surveillance: Last Week Tonight with John Oliver (HBO), n 5 Apr 2015 [https://www.youtube.com/watch?v=XEVlyP4\\_11M](https://www.youtube.com/watch?v=XEVlyP4_11M)



[2] Office 365 <https://intranet.tue.nl/universiteit/digitale-universiteit/de-tafel-basisdiensten/programma-het-nieuwe-werken/office-365/>



[3] Microsoft Ireland, the CLOUD Act, and International Lawmaking 2.0 <https://www.stanfordlawreview.org/online/microsoft-ireland-cloud-act-international-lawmaking-2-0/>



[4] Security & data storage <https://intranet.tue.nl/en/university/digital-University/the-round-table-of-basic-services/flexible-working-program/office-365/translate-to-engels-faqs/security-on-office-365/>



# FRESH FROM THE CAMP

*To embrace my first freezing camp wasn't that bad, meeting and getting to know some eccentric individuals was a true experience enough.*

TEXT Jay Benedicto

The introweek had a lot of activities for a short amount of time. If it was up to me, I would have prolonged that week to a whole fortnight. So when one of the GEWIS officers informed me about a follow up weekend (FLUP), I could not wait to sign up! But, what is FLUP exactly? Does it mean Fellows Love Unsober People? Or is it that Freshmen Lack Upper Perspective? In my opinion, FLUP stands for Fun that Lasts Until you Pass out. Although technically, it points to all of the above.

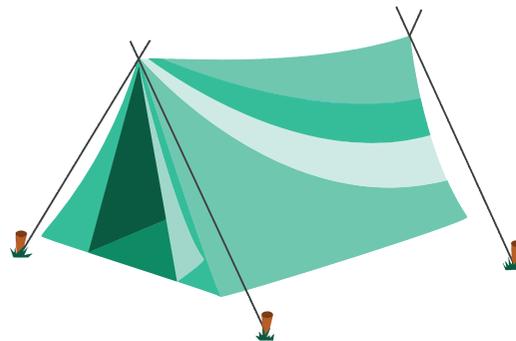
A few days before the event, everyone was talking about it during the weekly borrel, asking for spare places to sleep in. The next day, after a long day of lectures, I finally had something to look forward to, warm meals, cozy tents and a busy weekend. Then again, I stood corrected. Cycling from bar to bar was not what I had in mind. When the midnight had already passed, we still had to walk for more than an hour to the campsite itself. With flat tires and heavy feet, we wanted to crawl inside of a dry, warm, already set-up tent. However, we discovered that we still had to set them all up, in the midst of the coldness and darkness. Thankfully, there was no itinerary planned for the next "hours". Note that I did not say day, for it was already morning when we arrived.

Just when I had started to fall asleep, some extremely loud non-stop sappy music made me come out of my sleeping bag. At first, I have to admit I was hesitant to approach anyone with whom I haven't had to chance to be acquainted yet, but everyone did make me feel welcome, especially the higher year students (even though, by this time, I have forgotten most of their names). Searching for activities in which I could participate, it made me come to a realization that the

day was not about how many games you win, it was about with whom you had fun.

As an artist, I love karaoke, so it was indescribable how enthusiastic I was for my first ever cantus. Although beer is not my favourite drink, and I had no idea of what everyone was singing, I still managed to sing my heart out to every song. That evening, I stayed up late ON PURPOSE! The coldness in the night was replaced by the warmth of hot (guys') hands. The light of the bonfire was a perfect ending of such an unforgettable experience.

Looking back to that weekend, FLUP has accomplished its main goal. We all had fun from the moment we gathered at GEWIS, and stepped on that bicycle. Bonding with our peers, sharing laughter together, it was NOT only about the destination, but also about the journey itself. We will all have something to treasure and to carry with us in life. Sleepless nights. Freezing beds. Was it all worth it? Definitely.



MEMBER





# INTRO 2018: FINDING OUR PLACE AT THE UNIVERSITY

TEXT Chris Lam & Bas van Doren

CHRIS LAM (23), PRE-MASTER STUDENT :  
COMPUTER SCIENCE AND ENGINEERING

“LEFT FOOT, LEFT ARM, RIGHT ARM, RIGHT FOOT, URGH!”

We all yelled unenthusiastically while doing morning gymnastics directed by our intro parents. The gymnastics involved sequentially swinging our limbs in all four directions, following the order we scream. We'd barely gotten familiar with each other's faces, and there we were, awkwardly jumping and screaming like a group of Neanderthals. "This will help you wake up and cope with the coming few mornings." says one of our intro parents hoarsely. He had a few drinks with the other intro parents the night before - perhaps to set the mood for the week. He looked drowsy, though strangely energetic at the same time. "Every morning is gonna get exponentially tougher", he adds. I'd just set foot into the university about two hours ago and I was already confused whether this was a brief taste of their proud Brabantian culture, or I'd simply been out of the student life for too long. Either way, I didn't feel at ease and felt conflicted about whether Eindhoven was the right place for me.

I was born and raised in a small town in the north of the country, or, as the locals here evidently like to call it, from *boven de rivieren*: "above the rivers". A term referring to the rivers that geographically divides the north and the south. It's generally said that up north we tend to be relatively conservative and reserved, while the people in the south are *gezelliger*: "outgoing, merrier". As someone who'd never bothered visiting the south before and who'd spent a year in the even more conservative South Korea, I was worried that I'd have trouble fitting in. On the other hand, this was precisely the reason I decided to move. My life had

become too comfortable and I felt that I needed a change in order to keep growing. Hence, my decision to move to the exciting and vibrant city of Eindhoven.

As the morning exercises had ended and everyone grabbed their backpacks, we started ticking off some unusual but memorable activities from our schedule. Some of the highlights included sardining as many people as possible inside a hatchback, slamming each other with foam tubes from wheelbarrows, and of course, a lot of drinking. The activities were fun, but it wasn't until we intoxicated ourselves and damaged our vocal cords on the first night, that I'd started to become comfortable among my fellow intro goers.

“ LEFT FOOT, LEFT ARM, RIGHT ARM, RIGHT FOOT, URGH! ”

Despite our busy schedule, we were fortunately still able to enjoy the vast but calm campus of the TU/e while picnicking. During one of these picnics, we were introduced to a group of mathematicians; among them was Bas. We were told their group would merge with ours due to some unfortunate circumstances of one of our intro parents. Bas and the rest of the group were interesting and friendly people. They definitely contributed to keeping the rest of the week fresh and enjoyable.

BAS VAN DOREN (17), BACHELOR FRESHMAN:  
APPLIED MATHEMATICS

Just like Chris, and, probably, like thousands of other students starting their studies, I was a little bit nervous before the introduction week. It was Sunday, the 19th



of August. I had just arrived in Eindhoven, after a lengthy voyage from my home town, in the darkest depths of Zeeland, where there are still no passenger trains in the year 2018. It was then that the realization came that I stood at the dawn of a new stage of my life, namely my life as a student at the TU/e. All of these slightly (or more than slightly) nervous first year students, including me, had been asking themselves the same questions: "How will this turn out? "Have I picked the right study at the right university? Will I find a nice group of friends?"

In contrast to Chris, who continued to have some doubts here and there, all my questions and doubts had vanished after the introweek, and a lot of excitement had come in its place. Does this have anything to do with me being from onder de rivieren and him being from boven de rivieren? I will leave that up to you. Anyhow, I was thrilled to be properly introduced to the TU/e, to Eindhoven, to my fellow

students, to the study, and very importantly, to GEWIS! One of the great things about the introweek is that you get to know all kinds of people, that you would not usually meet. My intro group was a great mix of all kinds of people: Dutch and internationals, boys and girls, introvert and extrovert, party animals and people that value their night's rest. Despite these differences between students, the group was a great blend of people that got along very well with each other. Led by lovely intro parents, we were involved in a great diversity of fun activities all day long, ranging from a math quiz to building a sublime and very stable (\*ahum\*) human pyramid. After these long and exhausting days, it was time to party hard, for those who had not had enough yet.

Halfway through the week, we (a group of mathematicians) merged with a group of computer scientists, because one of their intro parents was not able to continue. All of these computer scientists, Chris being one of them, were exceedingly nice people, and a great addition to our group. With this new, big, happy family we kept doing all kinds of fun activities during the day, and party through the nights. The traditional

'doorhaal donderdag' was the culmination of this."

## FINAL THOUGHTS

Outside of all the fun and exciting activities, the week also had its serious side which we both appreciated. The university had arranged a lecture to give us an appetizer of what studying in Eindhoven felt like. This was followed by presentations held by alumni speaking about their experiences at the TU/e. It was a pleasant change of pace and motivated us both for what is about to come.

### CHRIS:

For me, this serious part of the program reminded me of why I chose to attend this university in the first place. It confirmed that TU/e is indeed the place that I was looking for: a place for further intellectual pursuit. Something that my previous university seriously fell short of. And this on itself, combined with the great friends and memories I've made throughout the week, was sufficient to convince myself that I'd made the right decision."

### BAS:

The introduction week has been a balanced mixture of more or less anything you would and wouldn't imagine. The few lectures and quizzes we got were a welcome intermezzo of sitting down and exercising the brain, next to all of the outdoor activities we did. After all, we are at a university, and it may seem somewhat wrong if we would have exclusively partied throughout the whole week.

All in all, both of us can say that it was an unforgettable start of our studies at the TU/e. The introduction was excellent at showing what the university has to offer and we'd definitely love to do this again. We want to thank everyone who contributed to this fantastic week and we look forward to giving the freshmen next year an even greater week!





# ACE ATTORNEY SERIES

*A*h, the Ace Attorney series, the video game equivalent of courtroom movies. Set in the 'near future' of 2016, all trials must finish in three days, and all defendants are practically guilty until proven innocent. In the midst of this hot mess of a trial system is Phoenix Wright, a rookie defence lawyer, who has to prove his client's innocence against all odds. To make matters worse, Miles Edgeworth, a prosecutor with a years long perfect win record, quickly becomes his arch rival.

TEXT Henk Alkema

Now, since the Ace Attorney series is all about storyline, it would be weird to skip any games in the series. Instead, I will split the games into three categories: the first main trilogy, the second main trilogy, and the spin-offs. I will rate the games on gameplay, story and presentation. Do the old games stand the test of time?

The gameplay consists of two parts: investigations and trials. During investigations, you talk to potential witnesses, and examine the crime scene and surroundings, in order to gather as much evidence about the truth as possible. Feeling wholly underprepared, you then stumble into the next day of trial, trying to either discredit the prosecuting

attorney's theory enough to grant you another day of investigation, or to indict the true culprit and prove their guilt on the spot. Either way, you simply keep picking holes in every single testimony until the truth is laid bare. Don't let the seriousness of murder fool you, though. This game likes to play with its players, as can for example be seen in the enormous amount of name puns: no points for guessing the occupations of Paul Atishon and Paul Meraktis. Also, the amount of recurring jokes keep piling up throughout the series. Finally, one slight warning for the detective purists: the series does contain some supernatural elements; rest assured, the corresponding rules are well-defined and never broken.



# THE ORIGINAL TRILOGY

PHOENIX WRIGHT: ACE ATTORNEY (GBA, 2001)	3.5/5
PHOENIX WRIGHT: ACE ATTORNEY: JUSTICE FOR ALL (GBA, 2002)	4/5
PHOENIX WRIGHT: ACE ATTORNEY: TRIALS AND TRIBULATIONS (GBA, 2004)	4/5

In the first three games, we explore the story of Phoenix Wright, starting from his very first case. Gameplay-wise, these are easily the worst games in the series. During both investigations and trials, I regularly got stuck, making having a walkthrough at hand a basic necessity. When investigating, the solution was usually to present some obscure piece of evidence to an arbitrary witness, who miraculously happened to have seen it before. During trials, most of the time I was trying to point out glaring contradiction A, but the game wanted me to nitpick subtle detail B. The story, however, is where these games show their true colours: while the first few cases are always introductory, serving no other purpose other than getting you up

and running, kickstarting the story line and padding gameplay time, the last case of every game is pure brilliance. The big bads will make use of every (carefully explained) trick in the book of laws, and will come up with the most convoluted ways possible to prevent you from either finding or proving the truth. The presentation is the icing on the cake: the 2D graphics perfectly show off the personalities and emotions of all characters, while the music keeps on adding to the pressure during the trial segments. The games do have a bit of a pacing issue, however, the worst offender being the (previously) last case of the first game (the DS remake contains an extra case, which I wholeheartedly recommend).



# THE SECOND TRILOGY

APOLLO JUSTICE: ACE ATTORNEY (DS, 2008)	3/5
PHOENIX WRIGHT: ACE ATTORNEY: DUAL DESTINIES (3DS, 2013)	4.5/5
PHOENIX WRIGHT: ACE ATTORNEY: SPIRIT OF JUSTICE (3DS, 2016)	5/5

Set 7 years after the end of the first trilogy, Apollo Justice: Ace Attorney introduces Apollo, a rookie defence lawyer and the new protagonist. Phoenix is no longer allowed to practice law, and it is up to Apollo to find out why Phoenix is keeping his past a secret. Luckily, Apollo is able to spot nervous habits of people, unmasking liars or otherwise tense people. The final case, while creative, is extremely unsatisfactory, making this game the worst in the series for me. In the second game, Phoenix Wright: Dual Destinies, another defence lawyer and gimmick are introduced: Athena Cykes and her psychological skills, which allow her to find contradictions between the testimony given and the emotions conveyed. The final game, Spirit of Justice, introduces a new type of testimony:

the final moments of the victims, as seen through the eyes of the deceased themselves. The newly introduced mechanics keep the gameplay fresh, while the new characters prevent the story itself from becoming stale. The last two games are in 3D, while the art style itself luckily remains the same. The music no longer consists of simple MIDI tunes, but instead utilizes a full orchestra, and beautifully so. Furthermore, the gameplay has been thoroughly streamlined, as every single gripe I had with the gameplay of the original trilogy has been taken care of. All in all, these three games form the perfect sequel: more of the things we like, different enough to entertain, while also fixing all problems the original had (I'm looking at you, Yooka-Laylee).



**0**  
Athena Cykes, from the 2nd and 3rd game from the 2nd trilogy, Android-version

**1**  
Phoenix Wright, from the original trilogy, GBA-version

**2**  
Apollo Justice, from the second trilogy DS-version

## SPIN-OFFS

ACE ATTORNEY INVESTIGATIONS: MILES EDGEWORTH (DS, 2010)

3/5

PROFESSOR LAYTON VS. PHOENIX WRIGHT: ACE ATTORNEY (3DS, 2014)

4/5

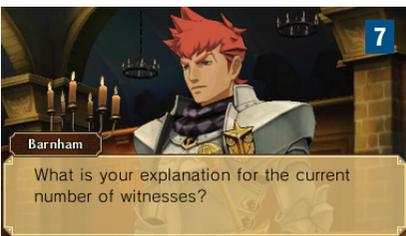
There are two spin-off games currently officially available in English. The first game is Miles Edgeworth: Investigations (its sequel has an unofficial English patch). Playing as Edgeworth, the main prosecutor of the first game, it is your job to use Logic(TM) to deduce the identity of the culprit of every case you get involved in, while unravelling the bigger mystery that is the cause of all these cases. The gameplay merges the gameplay elements of the normal series into one: short investigations are alternated with short discussions, where you find the mistakes in your opponents line of reasoning. New to the investigation is 'Logic', which allows you to draw conclusions from observations you have made. For example, you might deduce that the mysterious item you found can be used to unlock the mysterious lock, by combining the two pieces of information. You then, during the discussions, use your newly gained insight to prevent some poor innocent fool from being dragged off towards the courtroom. This is also my major gripe with this game. For example, you might have deduced that the revolver could not have been the murder weapon, because the

victim has no bullet wounds. So far, so good. However, at some point, you will have to use the same logic -again- while arguing with the detective on the case. This makes the game slower, and therefore a lot less fun than it could have been.

The second spin-off game is Professor Layton vs. Phoenix Wright: Ace Attorney, which combines a Laytonesque story with Phoenix Wright-style trials. The professor and Phoenix get abducted to the mysterious medieval town of Labyrinthia, where magic exists and witches are sent into a fiery pit of death. For the Professor Layton fans, there are 70 high quality puzzles to solve during the main story line. For the Phoenix fans, you have to defend your clients from being declared guilty of being a witch, while the witch trials are disorderly, which results in cross-examining up to 10 witnesses at the same time, each of which might have something to say about what the others testify. Chaotic, but the change in scenery is exactly which makes it so much fun. On the not-so-bright side, the art styles clash horribly, and for some reason the text fast-forwarding feature is notably absent.

## CONCLUSION

So, what is my recommendation? Simply play the first game. If you dislike it, the other games won't be any better. If you do, however, enjoy it, you are in for a treat. While some games are better than others, the quality remains relatively high throughout the series. Feel free to try the spin-offs, especially if you are a fan of what makes them special, but you aren't missing out on anything if you don't. In total, I would call it a true killer series. Pun intended, of course.



3

Miles Edgeworth, in Miles Edgeworth: Investigations (DS)

4

The usage of 'Logic', in Miles Edgeworth: Investigations (DS)

5

Professor Layton vs Phoenix Wright, with both of the main characters;3DS

6

Professor Layton vs Phoenix Wright: with multiple witnesses, 3DS

7

Professor Layton vs Phoenix Wright: one of the inquisitors, 3DS

# KOOKALMANAK AVAILABLE NOW!

Fraternity "In Vino Veritas" celebrates that five more years have passed by. During these five years, by the time this is released, we have seen five marvelous editions of the Decadent Weekend. We thought this was enough cause for celebration on its own. So, to celebrate this special occasion we decided to bundle all the brilliant dishes that we have created during these five years in a cookbook, the 'Kookalmanak'!

Recipes ideal for Christmas dinner, or just to show friends and family some amazing food. If you have not got your copy yet, order one now by sending an email to:  
[kookalmanak@dispuutiv.nl](mailto:kookalmanak@dispuutiv.nl)

\*Limited supply, 'Kookalmanak' is only available in Dutch, for 15 Euros, shipping not included.



## TEASER

And just for you, Supremum readers, a bonus recipe. Though the 'Kookalmanak' only contains recipes meant for more elaborate dinners, sometimes you just want some comfort food, and get back to drinking your wine. For such occasions, might we suggest the Chilli Con Carne from the Friday of DW 2017:

## CHILI CON CARNE

### INGREDIENTS

#### 3-4 SERVINGS

- » 500g minced beef
- » 2 small onions
- » 2 cloves of garlic
- » 70g tomato paste
- » 2 tsp spice mix (onion powder, cayenne, cumin, black pepper, paprika; 1:1:2:2:3)
- » 400g kidney beans
- » 400g canned tomatoes (diced)
- » 140g canned pineapple

### DIRECTIONS:

30-45 MINUTES

1. Finely dice the onions and mince the garlic.
2. Fruit the onion and garlic in a bit of olive oil on low heat, until the onions turn soft.
3. Add the spices and tomato paste, and cook for just a minute to take of the raw edge.
4. Add the minced meat and work it on medium heat until it has your desired structure and browning. For me that is fine and dark brown.
5. Add the canned tomatoes, the beans and the pineapple. And let simmer uncovered for at least 20 minutes or until it has your favorite consistency.
6. Season to taste, and serve with boiled potatoes, rice, bread or add some more beans and eat it as is. Optional add some shredded cheese.





# COMMITTEE

## IN BAC LIES TRUTH

To honor the lustrum we have this year, after all, the last one was two years ago, the BAC would like to enlighten you with some of our truths. Like in every student culture, we keep to a set of rules, but why are these rules in place? Let me start with the most important rule: the BAC is always right, we don't negotiate with intoxicated people.

TEXT Susan van Ewijk

One very well-known rule that is in place at most bars is the rule of one beer is no beer. You might have been tempted at some point to attempt this, order one beer, with the assumption you would get away with it. Now, because one beer is no beer, you always order at least two. This is in no way to constitute excessive drinking, but simply because you do not drink alone. Drinking a beer is something that should be enjoyed and shared with friends, such that while you drink, you can have some good conversations with friends.

The following one is not as much a rule as the others, and if you listened to you mother when you were young, you probably know this by know. The use of the word 'please' is greatly valued by the BAC. Only shouting your order will come off as if you are commanding us, and we do not enjoy being commanded. However, we are not your mom, and it is up to you to teach yourself this valuable life skill.

“ Drinking a beer is something that should be enjoyed and shared with friends.. ”

Another very important rule that we have as the BAC is the rule of not turning your back towards the bar. Why this rule is essential is explained by the type of bar you're visiting. At our bar, we as the BAC stand behind the bar voluntarily. Every Thursday we draft

you your beers and other beverages while getting nothing besides your eternal gratitude in return. Because we are volunteers, it is very rude to stand with your back towards the bar, therefore cutting us off from the rest of the borrel. At bars where the bar personnel is paid, they would of course prefer not to look at your back, but the rule only applies as a courtesy. This is also one of the rules that come with a consequence when disobeyed, but we are sure you all know this by now. If you don't, you are free to give it a try sometime ;)

Finally, there is another spot at the bar you as a borrelaar are not allowed to set foot on, and that is behind the bar. During a borrel this area is reserved for the BAC only, and stepping behind the bar is only allowed with permission of a BAC'er. These periods are indicated by our beautiful green Grolsch lights, where in this case a green light does not mean go. But why are you not allowed to go behind the bar? While I have already spilled some of our truths here, the real truth can be found behind the bar, but unfortunately for you, that is off limits.



# GEWISSENSCHAFT

## SØK ETTER SANNHETEN

*Leaving is easy, saying goodbye is not an issue. At least, that's what I always told the world around me, and mostly what I told myself. Of course, Eindhoven is a lovely city, but why stay here? The rest of the world is calling! There are amazing job options everywhere, and why would I ever stay here? I don't have a job, I don't own a house, I don't have kids, Eindhoven won't disappear when I'm not there.*

**TEXT** Bor de Kock

Of course there are things like friends and family. People you need to call every once in a while, but hey: Skype and FaceTime are free, WhatsApp is always available. So that shouldn't be an issue. In fact, scratch all that, I actually practiced already: when I did my internship in the US, I found out it was actually fine to live abroad. I mean, the US is a bit far, but somewhere in Europe should be fine for a couple of years, right?

**“ I sometimes wish the whole place would have been awful ... ”**

So then there was a job advert. The perfect job advert, with the little catch that it was somewhere in northern Scandinavia, with less than four hours of sun on a typical winter day. And I applied. And I got an offer. And I went to take a look for myself. And most bizarre of all: I accepted. And it makes me reconsider the things I took for truths.

Because between that impromptu trip to Norway this summer and my signature on that contract, doubts started to appear. Do I really want to leave? Is the alternative really better? I sometimes wish the whole

place would have been awful: the choice would have been so easy. But it wasn't! Trondheim is lovely, the people were nice, the university looks basically like you're working at Hogwarts.

So, yes: I signed that contract, I booked a plane ticket, I canceled my lease, and was so sure that it was true: leaving is easy. Saying goodbye is not an issue. Getting rid of all the stuff I gathered in my room during my time at TU/e? A blessing in disguise!

But is it the truth? I'm not so sure anymore. Because every time I cycle through Eindhoven I see the little spots I love. I decline invitations to birthdays I won't be able to attend. I rehearse at Quadrivium for a concert another person will play. I constantly do the things I always do, knowing I'm doing them for the last time in a possibly long time.

But it's happening. Life goes on, new adventures will start, and what the truth is about leaving, I won't know until I'm gone. But no matter how easy or hard it will be to leave, I'm sure what will replace my life in Eindhoven will be just as amazing. And that is probably the most important truth right now.

COLUMN



*Infimum: A strange or funny quotation from a teacher, a student or faculty member. Here you can find infima sent to the Supremum committee via [inf.gewis.nl](http://inf.gewis.nl).*

**Ian:** "Ik mag hem niet! Wie is het eigenlijk?"

**Stefan over een 30 jarig stel:** "Zij kunnen kleinkinderen hebben die ouder zijn dan jij."

**Ilse:** "Ik doe elke keer zo mijn best om die koelkast leeg te zuipen en dan zit die weer vol!"

**Jasper:** "Ik hoorde een groepje proosten maar ze schreeuwden wel heel zacht... die sjaarzen kunnen ook niks!"

**Wesley:** "Dat waren geen sjaarzen, dat was het 36e bestuur..."

**Niels V. na een discussie over dikke mensen:**  
"Iedereen heeft een buik."

**Wesley:** "Vesten zijn echt mijn kledingsstuk, je kan ze opendoen als je ze niet meer past."

**Jealy:** "We zijn er voor verzekerd als iemand dood gaat."

**Meeles:** "Maar een verzekering dekt mijn sprankelende persoonlijkheid niet."

**Tim H over de consti:** "Ik hoop echt dat ik een arm breek."

**Illona H:** "Zit er mascara onder mijn voet?"

**Maureen:** "Ik heb nog nooit kaas op een croissant gehad, lijkt me heel gek."

**Dennis:** "Heb je wel eens een kaascroissant gehad?"

**Maureen:** "...Ja."

**Keltjens:** "Ik ben teleurgesteld in het leven en mezelf."

**Meeles:** "Want je hebt niet alleen de verpakking van je muis, maar ook het draadje doorgeknipt?"

**Nienke:** "Hij heeft er 36 gekocht niet genomen."

**Esther:** "Hoe krijg je blaren van zitten?"

**Steven:** "Nou, als je schoenen aan hebt waarin je nog niet eerder hebt geslapen..."

**Laura K. in de zaal van een diplomautreiking:**  
"Eigenlijk is dit echt tijdverspilling."

**Nicky B:** "Ja, maar dat was jouw functie überhaupt wel een beetje."

**Jasper van B.:** "Hoe bedenkt je zoiets als een kapsalon?"

**Sander D:** "Hoe bedenkt je zoiets als de functie van Green?"

**Fuck de dealer spelende vriendin van Chantal:**  
"Negen!"

**(Dealer) Lucy:** "Zes!"

**Vriendin:** "Zes!"

**Lucy:** "Ja!"

**Ralph van I. tijdens een familieweekend in Vaals:**  
"Kijk, deze straat is de definitie van een open verzameling... Randweg."

**Opeens roept Illona H. door het bestuurshok:** "Oh, nee, waarom kan die man nooit een korte mail sturen?"

**Jeffrey M.:** "Wie, Meeles?"

**Laura tegen Patrick:** "Kun je dat uitleggen maar dan met woorden?"

**Jasper D. over uienradar.nl:** "Klopt dit een beetje?"

**Penningmeester van de BAC:** "Ik weet helemaal niks van geldzaken!"

**Kutjeroen:** "Ik heb dyslexie! Ik lees in vragen!"

**Vincent B:** "Heb je de vallende sterren gisteren gezien?"

**Lloyd L:** "Nee, ik kijk geen tv."

**Ingmar:** "Als ik programmeer met de Dracula graphics kost het printen me superveel inkt met al dat zwart!"

**Jeffrey M:** "Sjoerd, je bent gewoon 92 kilo pure liefde"

**Sjoerd van H:** "En 3 kilo vet!"

**Bor:** "Parachute springen is significant veiliger dan autorijden, en helemaal als Rick achter het stuur zit."

**Tobin:** "Ja ik ben ook echt inkaksimus maximus."

**Illona:** "Het is maar goed dat ik via mijn buik adem en niet via mijn armen."

**Jeroen v Oorschot:** "Ik heb een hekel aan oneindige internetabonnementen. Ik krijg het nooit op."

**Keltjens:** "Waarom is de lounge stuk?"

**Ava:** "De lounge is niet stuk; hij wordt gerepareerd!"

**Ysabelle over Neymar:** "Die man duikt alsof hij naar een rif aan het kijken is."

**Bouke:** "Mensen pesten vaak met hun eigen onzekerheden."

**Tim:** "Jij met je grote piemel!"

**Niekie:** "Ik hou eigenlijk alleen van cola als er Bacardi in zit."

**Saskia:** "De tweede wereldoorlog; het is niet goed, maar het is niet mijn schuld."

**Nicky B:** "Ik kan niet eens bedenken wat je allemaal met een L kan doen!"

**Tobin:** "Eerste regel bij een drankspel: Nooit naar Bart luisteren."

**Niekie:** "Wij dagen de uitdagers uit!"

**Amber:** "Hoe knip je een hond?" Saskia: "In laten sla.. nee niet in laten slapen"

**Kennis van Bouke over Wokkels:** "Hebben we ook minder exotische chips?"

*\* Tijdens 30 Seconds \**

**Jos:** "Het is een soort van wetenschapper..."

**Wesley:** "Oh een psycholoog!"

## WINFIMUM

The Winfimum is chosen by the editors as the winning, most funny, infimum.

**Vincent B:** "Heb je de vallende sterren gisteren gezien?"

**Lloyd L:** "Nee, ik kijk geen tv."

Sent in by: Ava Swevels

**Amber tegen Maureen:** "Ik wist dat je gek was, maar je blijft me verbazen."

**Tim Woodhouse:** "Je weet dat het een goeie avond is geweest als je de volgende dag een rietje in je bierfles ziet liggen."

**Guido tegen Dave:** "Dave ben je dronken?"

**Dave:** "Nee."

*\* Dave gooit ondertussen een stoel weg \**

**Rick R over een gaybar in Nijmegen:** "Ik vond hem niet zo heel gay, het was gewoon een GEWIS-feestje."

**Lars G:** "Ja maar kijk, als ik dit kwartiel mijn vakken haal, dan heb ik volgend kwartiel niks te doen."

**Dylan:** "Dan kun je beter je vakken niet halen, toch?"





# THE TRUTH IS IN THE CAKE

**C**ake is one of the easiest delicacies to bake. You only need six ingredients: butter, sugar, self-raising flour, eggs, vanilla sugar, and, of course, a pinch of salt. Mix it together, seventy minutes in the oven (which should have been preheated to 180°C) and voila! A kitchen filled with the smell of delicious cake made me think: what makes cake special? Is there a way to make cake more special? How can I surprise my committee members during a meeting with 'just a cake'? Perhaps it could be a seventh ingredient: mysterious creativity.

**TEXT** Laura Kuntze

Cake probably makes you think of nice events with family and friends. For me, a cake is something my mom always makes for our birthdays, so we could bring it as a treat for our classmates, friends or colleagues. Once upon a time, my mother made a cake for my sister, but not just a cake. No, she wanted to make it blue, because that was my sister's favorite color. You might know that cake is yellow from itself (because of the egg yolk), so after a lot of blue pigment, the cake that came out of the oven was very green! Although it tasted just like a normal cake, my other sister got sick with the idea of eating a green cake and it took years before she dared to eat normal cake again.

I was inspired by this story, because I wanted to surprise the GETAART Committee with real cake art! I did my Google research and I found pictures like the one in figure 0.

So I went to the store to get some food coloring and started baking at home. Of course I realized that the cake in this picture is made in parts, but I still wanted to give it a try.

I made (or tried to make) 4 different colors. The first color was meant to be red, which of course became more like pink because of the yellow color from the





cake batter. Next I wanted to make a purple color: blue with red. You can see what kind of color came out of that combination in the pictures. For the third color I only used blue and a beautiful green color came out of it. And last but not least I made the natural yellow of the cake even more yellow. Layer by layer I poured these colors. I put the mold in the oven for 70 minutes and that's when the waiting started.

From the outside the result looked like a normal cake, which I made even more delicious with a chocolate topping. The truth is that even I did not know what would be on the inside.

The next day during the GETAART meeting we were all excited on what would be on the inside. Two cuts

with a knife and the truth was revealed. No perfect layers, no perfect bright colors no rainbow, no, the cake actually made art by itself in the oven. The colors were intertwined like what happens when you make a marble cake with vanilla and chocolate.

My conclusion of this experiment is that Google tells lies, a cake with such beautiful, bright colors is impossible to make, because the colors will always mix with the natural yellow color. Apparently you can make or buy white cake batter in the United States, which should make it possible to get the bright colors, but even then it's hard to make a red layer that doesn't become pink. Anyway, no matter which color your cake has, cake will always have the same delicious taste.



# WHAT'S 37 REALLY ABOUT?

***B**y the time you read this we are halfway through our board year. Crazy, when you think about how fast the time went by, since we wrote the previous article as the candidate board. Nevertheless, halfway means we still have six months to look forward to, dozens of mugs we have to wash and several problems we have to face.*

**TEXT** Board 37

However, the real question is: What is the 37th board really about? 37 is the funniest number, period. This is shown in many movies where 37 plays an important role. In the Lego Movie, one of our favorite movies, the overpriced coffee is exactly 37 dollars. Furthermore, 37 is a prime number. Prime numbers are so weird you can't even divide them by anything except for 1 and themselves. And 37 is high enough that you don't even expect it to be a prime number. Okay, you expect 7 and 11 to be a prime number, but once you reach higher numbers such as 37, you're really surprised that it is a prime.

However, I don't think you immediately flipped, full of excitement, to this page once you read the title in the table of contents to read about the revelation of the number 37. You were more curious to find out about all the gossipy details of the 37th board of GEWIS. Well, luckily for you, I'm here to spill all the beans about my fellow board members.

In the last article, we shared a somewhat embarrassing story about ourselves as a way to let you get to know us. At that time, not all of you knew us that well, heck, we didn't even know each other that well! Now time has passed, and we hope you had some serious thoughts on who matched which story I think it is time to give it away who was who: 1. Thomas; 2. Lisan; 3. Ava; 4. Ilse; 5. Niels; 6. Sjoerd; 7. Illona.

Now that we have covered that, we can talk about what the 37th board is really about. This issue is all about the truth, and the truth can be embarrassing or overwhelming like the stories we told you before.

However, we asked ourselves, what can we tell you more about our lives? About this time of the year we have already shared a lot with you. We are here in the GEWIS room practically all days of the week and we show up now and then during the GEWIS activities in the evening. It's hard to share a big revelation with you, since we share already 60% of our day with you. You see us work, stress, relieve, eat and socialize all in our natural habitat of around 37 m<sup>2</sup> that is called GEWIS. To share even more or talk about the truth of the 37th board of GEWIS means that we extend your knowledge about our lives even further while we do not have that much to share anymore. Of course, you see everything we do in the place that now is called our home and you can always ask us (almost) anything.

“ ... game where you need to examine the GEWIS room in order to win the game. ”

Nonetheless some truths aren't a huge revelation or shocking facts, but it is information that was there all along, but you haven't noticed it or payed attention to it. For example, by being in the GEWIS room for (almost) every week day we know the room now like the back of our hand. The truth is that it took some time to get to know it, but now we do it seems logic and even common to know it's every corner. Still we are reminded every day that it is not that common and that we can share some "truths" with you by exploring the GEWIS room with us.

Therefore, we decided to make a little game where you need to examine the GEWIS room in order to win the game. In the list below you will find the objects or places you need to find. On/in this place/object a letter is visible, which you can fill in the block with the respective number of that place/object on the list. If you fill in all the boxes you get a code that is randomly generated (it doesn't mean anything) and you can go to the site [www.gewis.nl/~ceb/public/1819/\[CODE\]](http://www.gewis.nl/~ceb/public/1819/[CODE]) to check whether it is correct. The price for the game will be announced in the newsletter and on the screens of the GEWIS room, so make sure you pay attention and win the prize! We hope you have fun filling in the puzzle and we look forward to the next 6 months we will spent together every day!

1. Top right-hand side of the bag cabinet
2. Trophy cabinet
3. Bottom milk powder jar
4. Long life products drawer
5. Lost and found
6. Garbage bin for cardboard and paper.
7. Cursor container
8. Dishwashing cart
9. PC8
10. Brush and dustpan

1.	2	3.	_____
----	---	----	-------

4.	5.	6.	7.	8.	9.	10.
----	----	----	----	----	----	-----





## DE VERGANKELIJKHEID DER SEIZOENEN

Het is winter  
De openhaard brandt,  
knispert  
Jij vult de leegte op de bank naast mij,  
met een groot glas  
De liefde groeit,  
Rood

De lente breekt aan  
De takjes in het bos breken,  
knisperen  
Jij zit op het terras tegenover mij,  
met een bescheiden glas  
De liefde bloeit,  
Rosé



De zomer kijkt om de hoek  
De zee rolt over de schelpen het strand op,  
knisperend  
Jij ligt op een handdoek bij mij,  
met een gekoeld glas  
Gekoeld als mijn liefde,  
Wit

De herfst nadert  
Mijn favoriete elpee draait,  
knispert  
Jij zetelt op het vloerkleed voor mij,  
met een whiskeyglas  
Ik heb altijd het meest van brunettes gehouden.

~Tim Meeles





# JAPIE BEER FESTIVAL AS FLUFFY UNICORNS

## A TRUE STORY

BY Merel Pennekamp & Laura Kuntze

### PHOTO 1

After our Thor Gala adventure, we became curious to see what the other associations in Eindhoven are up to. So we decided to have a look at the Beer Craft Festival from Japie, which was organized past May in honor of their 12th lustrum. And we did so in style.

### PHOTO 2

It was very sunny, very warm, and crowded with a lot of students enjoying a craft beer.

### PHOTO 3

The first thing we needed were 2 glasses to be able to taste the different beers. We got special glasses with a logo because we pre-ordered our tickets!

### PHOTO 4

We started with a weissen IPA from St. Christoffel and a sweet beer from Oedipus called 'Mannenliefde'.

### PHOTO 5

Soon we found some friendly faces to cheer with!



COLUMN

PHOTO 6

After a while it was time to taste the next one, this time we wanted something special...

PHOTO 7

We asked if we could tap our beer by ourselves or if we could at least get behind the bar for the picture. We didn't expect the answer, because he said 'sure, but only if one of you lays with their head on the bar and the other one taps in their mouth.' And so we did!

PHOTO 8

With our next beers (poured in glasses like civilized unicorns) we hung out with our friends from Wervingsdagen.

PHOTO 9

As more and more people joined the festival, there were more and more familiar faces! We laughed a lot with our friends from FSE and Interimate

2



7



8



9



Cheers

5



Time for the next one!

6



Chill.



**PHOTO 10**

People kept asking why we were wearing our unicorn onesies (stupid question don't you think?).

**PHOTO 11**

Although the onesies were not a problem, it was nice to have a rest in the shadow from time to time.

**PHOTO 12**

Mattijs also came to see the festival!  
We started to feel hungry. Did you know that the spar even bakes your pizza for you?

**PHOTO 13**

Stronger from the pizza we went back to the festival with a new goal: we wanted to take a picture with all the bartenders!

**PHOTO 14**

Of course in the row of bartenders we couldn't miss the Fort committee from Japie!



**PHOTO 15**

As the question 'can we tap our own beer' turned out so well the last time, we thought it would be a great idea to ask it again! The bartender agreed because we were fluffy unicorns, and we had to promise to send him the picture afterwards to show to his wife.

**PHOTO 16**

Laura tried very hard... 2 fingers they say, right?

**PHOTO 17**

Merel fixed the beers and we had our own tapped beer! The bartender was happy with his picture, but he probably wouldn't hire Laura... Ever.

**PHOTO 18**

Surprise, Luuk decided to come to the festival too!

**PHOTO 19**

We had our minds set, but at one bar (in a caravan), the bartender didn't want to take a picture with us. To make up for it, we could enter the caravan and pretend that we were the bartenders ourselves!



It was a new and fluffy adventure! Thanks to Japie for the festival!

A picture says more than thousand words  
Laura and Merel



# COMMITTEES & FRATERNITIES

**G**EWIS is built on top of committees Besided, Study Association GEWIS has several fraternities which contribute to the atmosphere and organize activities.

Find out more at: [www.gewis.nl/association](http://www.gewis.nl/association)

## FRATERNITIES



**ATHENA**  
ATHENA



**B.O.O.M.**  
Buitenplezier Op Onze Manier



**GELIMBO**  
GEWIS Ervaart Limburgse  
Initiatieven Met Bewondering en  
Ontzag



**GEPWNAGE**  
GEWIS Plant Weer Nerdige  
Activiteiten en Geeky  
Evenementen



**I.V.V.**  
In Vino Veritas

## COMMITTEES

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Activiteiten Commissie

**AVICO**  
Audio- en VideoCommissie

**BAC**  
BAr Commissie

**BATA19 ★**  
Batavierenracecommissie 2019

**C4**  
Corporate Communication and  
Contact Committee

**CBC**  
Computer Beheer Commissie

**FESTIVITEIT**  
Feestdagen Extreen Smaakvol  
Tevens Ietwat Verantwoordelijk  
Interessante Toffe Enthousiaste  
Ideeën Teweegbrengen

**FYC19-0 Beercode ★**  
First Year Committee

**FYC19-1 GeDoe ★**  
First Year Committee

**FYC19-2 Carpe Noctem ★**  
First Year Committee

**FYC19-3 PushPin ★**  
First Year Committee

**FYC19-4 de Smurfen ★**  
First Year Committee

**GEBALLMERPIEK ★**  
GEWIS'sers Ervaren BALLen MET  
Rigoreuze Precisie In Excentrieke  
Kups

**GEDWAAL19 ★**  
GEWIS'ers Dwalen Waar Anderen  
Anders Lopen

**GEFLITST**  
GEWIS Fotografeert Leden In  
Toffe Situaties, Toch?

**GEHACK**  
GEWIS Ervaart Het Algoritmisch  
Code Kloppen

**GEILER**  
GEWIS Eet Ijsjes Lekker  
En Regelmatig

**GELIFT**  
GEWIS'sers Liften  
Ieder Fantastisch Traject

**GEMOLD**  
GEWIS'ers moeten  
overall leugens doorzien

**GETAART**  
GEWIS'sers Eten TAART

**GEZWEM**  
GEWIS Zeilt Weer Een Meter

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Introductiecommissie 2018

**ODC**  
Ouderdagcommissie

**SR**  
StudentenRaad

**STIJL**  
Huisstijl Commissie

**SUPREMUM**  
Supremumcommissie

**TRAIN**  
Training

**WC**  
Web Commissie

**YBC18**  
YearBook Committee 2018

# SUPREMUM COLOPHON

## SUPREMUM

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## Software development at Prodrive Technologies

As a Software Developer at Prodrive Technologies you can be involved in the entire software development process. You can work on our completely in-house developed application software (web, windows, iOS, back-ends) that supports all our internal processes, or embedded software for a wide variety of markets and products. At Prodrive Technologies we don't just talk about the newest technologies, we are early

adopters. We give our young teams the freedom to choose the technologies needed to achieve success and the responsibility of the entire project.

We offer flexible working hours (24/7) and unlimited training opportunities. Job opportunities are endless: (graduation) internship, part-time and full-time.