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Cursor

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Da Vinci Code

Finally: Soon, science will be freed from cheats, thieves, storytellers and other evildoers. Transparency will sweep over the world of academia like never before. And it's all thanks to the Da Vinci Code, as I decided to dub the oath for good-behavior for scientists that was thought up by VSNU chairman Sijbold Noorda. The title ties in nicely with the existing Hippocratic Oath taken by physicians and healthcare professionals in the world of medicine. And since Da Vinci - who wasn't half bad as a painter, either - is pretty much regarded as the

godfather of modern science, we're covering all fields of research by using his name. Now let's hope Dan Brown won't be starting any trouble. Noorda expects that by taking an oath the 'Gedragscode Wetenschaps-beoefening' (code of conduct for science) will become a much bigger deal among scientists. Should someone slip up then, they'll be publicly pilloried on the website of their umbrella organization: naming and shaming! As if Diederik Stapel's tarring and feathering wasn't sufficiently off-putting.

Do we really need this public display of atonement after the eccentricities of that Tilburg charlatan? Noorda and KNAW chairman Robbert Dijkgraaf think we do. But what's it worth in a world of ever-increasing copy-paste behavior and an academic setting in which researchers come to depend more and more on means found outside the first and second flow? Am I wrong, or is this oath just a palliative?

Just a talk. Beyond science

"Oh, everything's become barred a long time ago. There's nothing left, but we're still here." Professor emeritus Henk M. Buck sighs. It's about The Case. His case, but also the scientific hoax that has been inextricably linked to TU/e ever since 1991. It's been over twenty years, a period after which even serious crimes become barred. But still, there's an icy silence, much to Buck's sorrow. The 82-year-old professor would love to clear the air. "Go beyond science, from man to man." But many of the people involved have since left TU/e. The current Executive Board and the Departmental Council of Chemical Engineering & Chemistry now have an all-new make-up, and they're not exactly the obvious bodies to talk to.



Still, it would do them honor were they to offer peace of mind before death do everyone part. Just a good talk. Beyond science. An old man can't very well be denied that, can he?

◀ Rewwwind www.tue.nl/cursor

Our Rewwwind feature provides you with snippets of last week's news. What happened online after the previous Cursor magazine was published?

Dean of TN Kopinga resigns early

15 march - Prof.dr.ir. Klaas Kopinga, dean of the Department of Applied Physics since 2005, will resign early on September 1 of this year. The decision has been made after deliberations with the Executive

Board, where all pros and cons were considered. In a year and a half's time, Kopinga will be given emeritus state and will stay active within the department on a part-time basis until then.

Short power failure causes inconvenience on campus

14 march - A short power failure has caused inconvenience on TU/e campus. For a short time there was no electricity, due to which alarm systems were set off, computers shut down and ICT was

having problems. As a precaution, several laboratories were evacuated. The power failure was caused by a defective cable.

Stricter rules student grant international students

12 march - International students studying in the Netherlands will have to work more in order to be entitled to a student grant. State Secretary Zijlstra will be tightening the rules

starting from the next academic year. EEA-students are currently entitled to a student grant if they work at least eight hours a week. Zijlstra wants to change that to fourteen hours.

TU/e updates Zijlstra during working visit

8 march - State secretary Halbe Zijlstra of Education, Culture and Science (OCW), recently visited TU/e on a short working visit. He was updated on the Bachelor College

that is to start in September of this year. He also made a tour past Strategic Areas Health and Smart Mobility.



Photo | IEC Archive



Photo | Bart van Overbeeke

◀ Flashback

Construction site 1961 versus 2012

We present to you: two views from the thirteenth floor of the Hoofdgebouw. In 1961, our photographer saw a lot of hustle and bustle at E-hoog, which was being constructed at the time to house Electrical Engineering. Since the department's establishment in 1957 until they could finally move into E-hoog in 1963, faculty and students had been working at the Paviljoen (the white low-rise in the background) and even in buildings scattered across the city. Back then, W-hal saw very few construction workers compared to today. You can tell from the drawn blinds the brand new building is in use already. In half a century's time the roof has been removed, polished up and put back again. The five protruding floors will be the future home of Mathematics & Computer Science.

And of course, with progress comes a renaming of buildings. E-hoog has been Potentiaal since 2005, and already during its renovation people started calling W-hal by its new name: MetaForum. (NS)

≡ Clmn Engineering chauvinism



My colleagues often tell me that technical sciences are harder than social ones, implying engineers are smarter and their contribution to their employers' final success is greater than that of the non-engineering staff. Well, becoming a technical specialist is a really difficult task, but an engineer is like a cook at a restaurant. Yes, guests visit the restaurant to enjoy delicious food prepared by a well-trained cook. However, before eating, they are warmly welcomed by a host who arranges a table. Then a friendly waiter whets their appetite by describing the menu and helping guests decide. Meanwhile, guests may be entertained by talented artists on

stage and are aesthetically pleased by the room's creative decoration. Can we state that a guest's ultimate satisfaction depends only on the cook's skills? Not at all. The same is true for any company. Any product designed by an engineer must be promoted by PR-specialists. Its intellectual properties are defended by lawyers. HR-professionals recruit a qualified team and all expenses must be calculated by accountants. Finally, six-digit-figure sales depend on a single signature from a single person who doesn't necessarily have a background in engineering. Even if an engineer holds chauvinistic views he is advised to hide his arrogance for reasons of personal safety. Such engineers should remember that the Sun isn't kindled in a closet and an elephant has no place in an anthill, because in both cases the consequences will be far from positive.

Sultan Imangaliyev, from Kazakhstan, is a student of Systems & Control, Department of Mechanical Engineering

Dr. Wijnand IJsselsteijn, associate professor of Human Technology Interaction Group, Department of IE&IS

Why are motion-controlled computer games so successful?

Weird dance steps, a swinging air guitar, uncontrolled movements during a tennis game. Simply in the living-room and a recipe for success for an evening of fun - the Wii, Kinect or Move computer games. Last week American researchers published an article in a leading scientific journal explaining why these games in particular are so popular. In their view, the interactive capabilities - voice recognition, infrared cameras, body scanners and motion sensors - ensure that you are more involved in the game so that the sense of presence is enhanced. Still, is this really the only reason accounting for the tremendous success, or does social interaction come into it as well? And what does this mean for the gaming world, is it also important for the serious games?

"Motion control provides more fun than the standard operating systems, I'm quite convinced of that, but definitely not because of this paper. In their conclusions they are rather simplifying things", says Wijnand IJsselsteijn,

associate professor with the Human Technology Interaction Group and leader of the Game Experience Lab. "The Americans explain the success especially with reference to the concept of 'presence', a perception of presence in the game - which is actually a very vaguely defined term. Based on our own research we can point to several aspects that may explain the popularity of these games. The main thing is really the social factor, which they have disregarded completely. You play with a group in your living-room, you regularly look silly - which is fun for others to watch. It has also turned out that people value the same game more highly when played in a group than when they play alone. Next Monday an AIO from our group - Brian Gajadhar - will defend his doctoral dissertation about social experience and gaming fun, which are indissolubly connected. In addition, 'embodiment' plays an essential role - using your whole body to control things and the feedback that this (muscle) movement has on the brain. It is quite possible that

this feedback strongly affects the way in which a game is experienced.

The emotion is enhanced by observing your own behavior."

"Measuring the fun factor in computer games is an art in itself. We do not only use questionnaires, as was done in the above research, but complement these with psychophysiology and behavioral measurements. How is someone seated in his chair, how hard do players squeeze a game pad, how does the heart rate change, the skin reaction, the facial expression? And when you announce that the experiment is over, and you "go and analyze data", does the subject continue the game voluntarily? The use of questionnaires alone is quite risky, for it is easy to bias a result."

"One of my biggest criticisms of the American study is the methodological approach. The dependence on questionnaires, but particularly the within-subject-experimental-design. That is, they have had the same subjects play on a standard console and on a console with new motion-based control.



Dr. Wijnand IJsselsteijn. Archive photo | Rien Meulman

You don't need to be a genius to see that subjects will soon grasp the intention of the experiment, and will subsequently behave according to the expectation pattern implicit in the experiment and the questions. Moreover, the impact of the 'novelty effect' cannot be excluded in this experiment. People - including the students who have been used in the study - are impressed by new technological gadgets, find this "totally cool" - and that counts. We try to take this into account as much as possible by using trained subjects. In fact, though, such a study should be repeated once a system has been totally accepted and the novelty has worn off."

"The new gaming technology provides additional opportunities for gamers as well as for us researchers. What once

used to be unaffordable is now within easy reach. So we ourselves use a sensor chair, containing the sensors from an unscrewed Wii Balance Board. It works brilliantly and is much more robust and affordable than earlier versions. I am also involved in a study into the use of motion-controlled games during rehabilitation tracks for young people with acquired brain injuries. They benefit greatly from motion control. They enjoy making the same movements that they would otherwise have to carry out in a much more boring therapy session. Motion control has a golden future for applications like these. This means that it is very useful that we try to make gaming experience measurable in order thus to gain the maximum benefit from a game ..."(NT)

1000th expat surprised

Last Tuesday, March 20, the Eindhoven Expat Center welcomed their **1000th expat**. The Brazilian Tulio Charles de Oliveira Carvalho will be starting at Electrical Engineering.

The center was founded in February of 2010, with TU/e joining in January of 2011.

Apart from TU/e, there are **37 other companies** in the Eindhoven region that make use of the Expat Center's accelerated procedures.

The past year, approximately **300 new expats** started working at TU/e.

Most expats are from China, constituting **12 percent**. Germany comes in second with **8 percent**, followed by Italy, India, Turkey, Belgium and Iran.

TU/e employs some **95 nationalities**. (HR)



Tulio, his wife Giselle and their son Pedro. Photo | Bart van Overbeeke

Fries and



TU/e: a daily home away from home for some ten thousand students and faculty. A relatively small community, its members linked on many levels - both in business and private. In 'Linked' we interview two of them about their relationship with each other and the university.

This week: Enitia Karijodinomo (22), student of Industrial Design at TU/e, and Jesse Chain (24), student of Industrial Design at the National University of Singapore. They met when Enitia was in Singapore on an exchange program; now it's the other way around, with Jesse staying in Eindhoven until July. It's a meeting renewed, with a focus on Asian food.

"I knew I wanted to visit an Asian country during my studies. I love food and during a previous trip to Indonesia we had a stopover in Singapore, an amazing country as far as its culture and food was concerned. I wanted more of that. It seemed too good to be true to be able to combine a visit with an ID exchange project: Food meets Design." Enitia's love for Asian cuisine has recently become clear to Jesse as well. "I've had to drag tons of culinary goodies over here: dried meat, green cakes and jars and jars of kaya, of course. "That stuff's amazing", Enitia interrupts. "It's sweet jam made from coconut and eggs - that combination might sound odd but trust me, you should try it. I've almost gone through my entire stash again already." Jesse nods in agreement. "I really miss the food from home. I've tried the Dutch mash pots a few times, but there's nothing like a good curry. So now I and a few fellow exchange students usually make our own meals." Enitia and Jesse meet in the summer of 2010, when Enitia is placed in Jesse's class. Jesse: "Our university knows a very different type of education. Students are put in classes of approximately thirty students who work their

way through the year's curriculum as a group. Because it's fairly small-scale, we're all quite close. On top of that, our university is open pretty much 24/7 - we absolutely don't work on a 9-to-5 basis. I really had to get used to the fact that at TU/e, people think 6pm is quite late enough, time to go home. In Singapore, we work long hours a lot of the time. Our department has it all: a kitchen to prepare meals together and hammocks in case it gets really late - sleeping over is no exception." It was quite a surprise for Enitia, though. "At times, we were on campus for forty hours straight, and I learned that's not really me. Sometimes I came in early, thinking I was the first to arrive, but no: students emerged from under tables where they had spent the night on sleeping mats. Bizarre. Despite their long hours, I still think time management is more efficient in the Netherlands."

"I've had to drag tons of culinary goodies over here"

The idea of study associations is shaped quite differently in Singapore as well, the current chairman of study association LUCID noticed. "We organize at least three activities a week, ranging from study-related events to socials and parties." Jesse: "I love the informal student get-togethers they have here. We do have a student organization in Singapore, but it's much smaller and is only focused on study. There's room for improvement there, I think."



chopsticks

According to the two ID students, a foreign internship or exchange program is an excellent opportunity to immerse yourself in another culture. A different university, a different student life, different customs - in short: lots of new impressions. Enitia: "When I first arrived, I thought Singapore was very hot. Another thing I noticed was that everything went very smoothly: no train delays, clear directions everywhere - very convenient when you find yourself in a new city."

"I've learned to count my blessings"

Jesse: "My first thought was the opposite; it was so cold! Getting off the plane all I saw was snow and while on the road I saw people ice skating everywhere. I can assure you that's quite odd for someone who's used to 25 degrees and sunshine. I think the Netherlands is very colorful with its wonderful old buildings. And I even prefer the sun here because it's less bright, which makes everything prettier. I also think the Dutch are very helpful. On the day of my arrival, someone saw me dragging along my heavy luggage and immediately offered their assistance." Enitia immediately opposes: "Well, that's never happened to me, neither here nor in Singapore. People over there are very helpful when it comes to providing information, but I really had to carry all my luggage on my own." Jesse: "Yes, but that's because they just don't notice. They're either too

introverted or too engaged with their cells..." Enitia: "Which makes them forget to hold the door for you. I bumped into quite a few doors because of that. But other than that, I have very fond memories of the place, and the food. I tried frog's legs, insect - everything. The only thing that's better in the Netherlands, are our fries."

"The most important thing I learnt from my exchange program in Singapore is to count my blessings. It's not that they're not well off over there, not at all. It's about respect. During one of the lectures, a professor showed this 3D design program and no one said a word. Over here, we'd all express our boredom by shouting we've seen it before." Jesse: "That's because you all display this extreme confidence, almost bordering on arrogance at times. 'Look what I can do!' We're much more reserved that way, almost shy. Still, I appreciate your open attitude and hope to learn from it." By the way, since all those jars of coconut jam are gone, there's extra room for luggage. What's definitely coming with you to Singapore? "I've already become a huge cheese fanatic, and I love 'stroopwafels' (syrup waffles) too. But my favorite has to be plain beer. It's good and affordable. In Singapore, a night out will hurt your wallet more than it will your liver."

Interview | Nicole Testerink
Photos | Bart van Overbeeke

