



InCognito

For your monthly study-related needs and feeds.

June 2015

Suggestions, feedback or comments? Let us know at newsletter.cognito@gmail.com.

Verena Sommer in Boston

Hi everyone!

I arrived in Boston just a day before one of the many blizzards that roared across the East Coast this winter. Campus closed, no cars, no public transportation, but I needed food and other things I didn't bring! So I tried to fight my way through piles of snow higher than myself and temperatures colder than -20°C . I hadn't gotten far before an off-road police car stopped next to me and the officer asked me what the hell I was doing. He gave me a lift to the next grocery store and I was lucky it was opened at all. I also felt lucky he did not shoot me (it might have turned out differently if I were black). That was the first adventure of my first day abroad, and many more cold and snowy days followed. Luckily I also got the chance to go on various ski and snowboard trips to Maine and New Hampshire, so the snow had its upsides, too.

By now the snow is finally gone, and with it, the everyday uncertainty of whether I will make it to my lab before I quick-freeze or not.



Top: view from Verena's living room on downtown Boston and the frozen Charles river. Bottom left: lab building designed by Frank Gehry. Bottom right: no cycling possible in these weather conditions.

My research project takes place in the Computational Perception & Cognition group at the Computer Science and Artificial Intelligence Lab of MIT and involves investigation of the neurodynamics of Braille, visual, and auditory letter perception in blind and sighted humans. I learned a lot, including how to scan MEG and analyze the data using fancy machine-learning techniques. I am in general very happy with my project. My labmates are very nice and helpful, working with blind people is fun and interesting, and so is the experience of scientific work in such a rich and well-equipped research environment (they recently bought a second fMRI machine because they did not know what else to do with the money...). There are many fun and geeky things happening at MIT and I enjoy it a lot. Plus there is free food and drinks somewhere everyday!

Besides my work, I also have a social life. This is worth mention-

ing because many people here do not (and some have no life at all anymore - there have been already three suicides during the time I have been here). And for me I have a lot less free time than I used to have in Amsterdam. Working till late at night and on weekends and holidays is no exception. However, together with my housemates and other friends, we manage to still have a lot of fun and explore the Boston area. And now that spring is coming it can only get better.

All in all, I am having a great time in Boston. I work a lot but it is largely fun and very rewarding. There is still a lot to see and do in the city and its surroundings and I am looking forward to the next months I will spend here!



AGENDA

Drinks @ CREA

Every Tuesday, 21:00-late

Summer school lunch

18 June

Between lectures and workgroups, some time has to be reserved for fun stuff as well! Provided that the weather works along as well, a sunny lunch in the park will take place on 18 June. It will be close to Roeters Eiland, to enable all summer school-ers to come. Clearly, no excuses to not be there!

Cognito's end of year BBQ

26 June, more details to follow

To finish the summer school and the entire academic year in style, Cognito organises an end of year BBQ on 26 June.

End of year Science Park party

26 June, more details to follow

Many different activities at the Science Park during the day, such as open air cinema (free entrance!), nerf guns at the sports center (>17:00), bands, music, etc. Topped off with a party (Flux Teslafest) at the Oerknal (entrance 5 euros). More details will follow later, the schedule will be published officially on the 1st of June.

ABC Frijda Lecture by Mark Wallace

25 June, 16:00-17:30, De Brakke Grond

Neural bases of multisensory integration, how multisensory representations develop, multisensory plasticity during development and adulthood, and clinical implications for neurodevelopmental disabilities.

Alumnus profile: Daan van Es

What is your current occupation?

I'm a PhD student with Tomas Knapen and Jan Theeuwes at Cognitive Psychology, Vrije Universiteit.

What do your daily activities consist of?

Currently, I've just entered the second year of my PhD. So far, my activities have mainly consisted of learning and developing new analysis techniques. The project has a high technical focus, where we do all the steps of our model-driven fMRI and eye-movement data analysis in custom written python scripts. When I started, I had not worked with python before (although I did know matlab), and actually had little to no experience with mathematical modeling. My daily activities have therefore mainly consisted of programming. At first to get to know python and the software that was already written - and later to help developing the analysis pipeline. Now, we're recording new fMRI data which I will soon start converting into a paper.

How did you end up in your current job?

I had worked with Tomas during my literature thesis. When I learned he had a position free, I applied.

What do you like about it?

The things that I like about research in general are the freedom, the fact that it's very mentally challenging and also that it gives me the feeling that what I'm doing is contributing to the world in some (although perhaps very small and vague) way. I'm very motivated by contributing to processes that have long term goals. While this is exactly what frustrates some people about research, it is exactly this that gives me the feeling that I might be doing something meaningful, instead of hopping from one thing to the next. These pretty ideals only stay alive however, when your day to day work is stimulating. What is very important for me in that respect is the collaboration with my supervisor. He's an assistant professor now, and I'm his only direct PhD. That means that he's very engaged in my project

and its process. We have pretty heavy email contact about lots of small and large challenges that arise. This back-and-forth is very constructive in helping to keep the project moving, but it is also very motivating, as it makes me feel that my efforts are being appreciated.

What do you dislike about it?

At the moment I must say that I actually don't have any clear negative points about my work... I can honestly say that I really have enjoyed every day so far! (Yes, I do realize how horrible that sounds)

Did you feel prepared by the master, and do you still regularly use things you've learned in the master?

I feel the master was one of the best preparations for a PhD in Cognitive Neuroscience that you can achieve. Especially the skills learned during data analysis and programming courses and the experience gained during the internships.

Looking back, what would you've done differently in order to end up where you are now?

Before I decided on where to do my second internship, I was approached by a senior researcher to apply for a research talent grant (NWO) together. At the moment it felt like a great opportunity, and so I did my second internship with her. Because we wanted to get a publication out before the submission, we decided I would not embark on a hefty project. Although this did lead to a submission of a (small) publication in time for the grant application, I did not get as much out of my second internship as I would have liked. I did a fairly simple reaction time experiment, while I actually really wanted to learn more in depth about neuro-data analysis. Although it is easy to judge in hindsight, I could have learned more by pursuing the motivating rather than the opportune.

What is your ultimate advice to the current students?

I hear many people worrying about the infamous crazy heavy workload



Name: Daan van Es
Graduated from MBCS: February 2014
Track: Cognitive Neuroscience

in science. I think that this is a bias that arises from the fact that we as MBCS students are simply over-exposed to the practices of a scientific working life. Science is indeed an example of a workplace with high competition, but it is definitely not the only one. No matter which other workplace you end up working at, if you pursue a challenging job (which you probably do, consider you're already enrolled in a challenging masters), you will meet this competitive atmosphere anywhere. In consultancy, finance, politics, data analysis, where ever. I would therefore recommend to not let this influence your decision. It is always up to you to keep looking after yourself. Make sure you set work times that work for you. For me, I work from about 9-18, giving me my evenings and weekends off. Sometimes, when there is some deadline or other concrete event that requires the extra mile, I don't mind to put in that extra effort. This is also highly dependent on how much you enjoy your work ofcourse, but I guess that my main message here is that I'd recommend everyone to pursue whatever it is that they love to do. Don't worry too much about the future and other secondary specifics.

What are your next plans?

First and foremost I'm focused on my current projects of my PhD. Thereafter, I don't really know what comes next. At this point, I think I would really like to pursue a post-doc position in a stimulating lab (perhaps somewhere abroad).

BIRTHDAYS

Gabriëlle Davelaar
4 June

Michelle de Haan
5 June

Pia Haver
8 June

Bastijn van den Boom
11 June

Vincente Soto
23 June

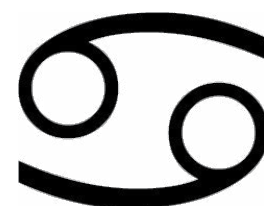
Skylar Blake
24 June

Peter Saalbrink
26 June

Ania Szmuksta
Diane Roozendaal
29 June

Chaimae Chomrikh
30 June

HOROSCOPE



Cancer
June 21-July 22

As a Cancer, you are unpredictable, needing frequent time alone but still feeling highly sensitive to the emotional waters around you. You oftentimes give people a shoulder to cry on, but also retreat into concerns about yourself. This month, beware of a dangerous conflict between the impulse to care for others and the impulse to dig your own hole. A loved one will approach you for support during a difficult time, but your absorption in your own existential crisis will interfere with your ability to help. If you do not overcome your longstanding inner turmoil over why the hell some people pronounce the words "Old-timer's Disease" and "carpool tunnel syndrome", you may lose someone dear to you by neglecting their desperate search for meaning, in favor of your own.

Lucky cutlery: banana hammer
Lucky day: Saturday
Lucky hipster sandwich: peanut butter & Sriracha

FOOD FOR THOUGHT: PAD THAI

Thai recipe by Lionel Newman.

Pad Thai is a noodle dish that isn't difficult to make, but it's worth traveling far for a really good one. In Thailand, my uncle would take me to a floating market, just outside of Bangkok, called Ampawa, which had the best Pad Thai known to humankind. When Thai people cook, they usually don't measure the ingredients (they just feel the amounts... and they become one with the chili peppers), so here is an adapted recipe that should make it easy to follow, with clear instructions and measurements!

Ingredients (serves 2)

Package of wide flat rice noodles
60 ml fish sauce
60 ml tamarind water (you can also use a little tamarind paste/concentrate, diluted with water)
60 g palm sugar
Pinch of chili powder
3 cloves of garlic

100 g extra-firm tofu, chopped into small cubes
8 prawns
2 eggs
1 tbsp small dried shrimp
50 g peanuts, roughly chopped
1 lime
A couple stalks of chives

Procedure

To cook the rice noodles, you can either boil or soak in cold water for about 30 minutes until somewhat softer but still al dente (some people swear that soaking is the only good way).

Make the sauce by combining the fish sauce, tamarind, and sugar. Put on low heat to dissolve the sugar, and add some chili powder to your taste.

Heat oil in a pan and add garlic, then the noodles and a splash of water. Stir fry until the water evaporates, then add the sauce, and fry until almost soft enough to eat (but still chewy). Add

some more oil, then the tofu and prawns.

When the tofu begins to color, add the eggs and scramble them around so that there are small pieces of egg throughout the dish. Finally, add the dried shrimp, chives, and peanuts.

Serve with a squeeze of lime and some Sriracha if you like!

Advertisement



BOOK REVIEW: SCIENCE IN RUSSIA AND THE SOVIET UNION

Review by Artoghrl Alishbayli

Loren R. Graham (1993). *Science in Russia and the Soviet Union: a short history*. Cambridge University Press.

No matter at which side of the Iron Curtain your country used to be, the historical account of development of scientific institutions in Russian Empire and later, in Soviet Union is of importance for anyone with interest in discussions of various sociopolitical and economical aspects that play role in functioning and organization of academia.

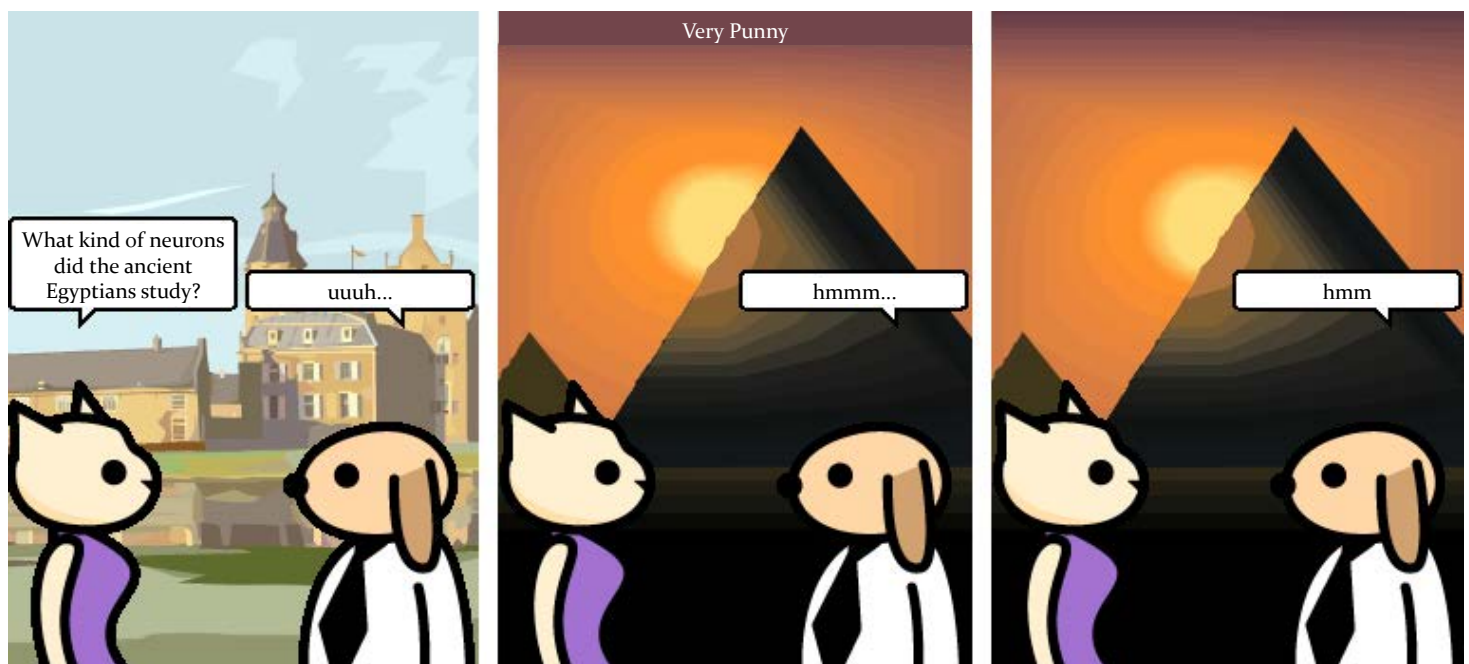
The appeal of Russian and Soviet science comes from the unique environment in which

it has developed and became one of the most influential in the world. However, the story is not that of all-around success, and the points of failure in this history, as well as those of success, are great sources of lessons for relationship between science and power, especially during these times of renewed discussions of what the roles of scientific institutions in the society are. Starting with the emergence of first scientific institutions during eighteenth century Russian Empire, Loren Graham of Massachusetts Institute of Technology and Harvard University, takes us through a highly socially embedded history of science up until the dissolution of the Soviet Union in 1991. In the last chapter on

the organizational features of Soviet science, he sketches the multitude of choices that Soviet administrators were faced with after the October Revolution of 1917. Questions such as should science have very strong links to industry, how is it to be governed, how should research be funded, etc. that frequently spring up in the discussions of academia nowadays, were among the ones that Soviet authorities faced.

Therefore, the book can be read as a case study of how science as a phenomenon can adapt to the social, political and economical conditions that are radically different from conditions that prevail across most Western societies.

COMIC



Words inCognito: cryptic crossword

A cryptic crossword is somewhat like a normal crossword puzzle, except all clues are riddles in themselves. An example of a typical cryptic crossword clue is "Disguised as a newsletter," which would be 'in cognito', the title of this newsletter and a synonym for 'disguised'. Good luck on this MBCS-themed brain teaser!

And the winner of last month's puzzle is: Steven Miletic! We will be in touch with you about your prize: *The Man Who Mistook His Wife for a Hat*.

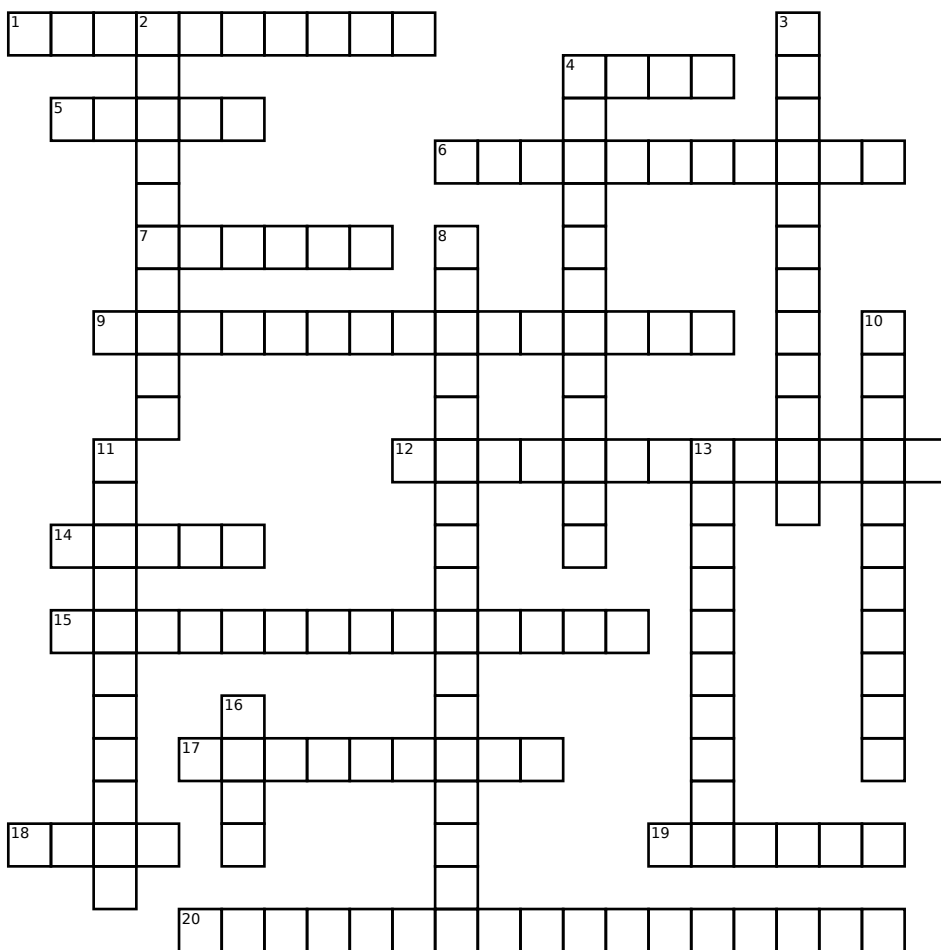
Have you always wanted to make an authentic Pad Thai, or another Thai dish, yourself? Did the recipe make you crave for some? Well, then this month you're in luck! The winner for this month's puzzle will be invited to a 'curry class' where our very own Lionel Newman will teach you the ins and outs of Thai food.

Across

- 1 The branched movie was processed in the cerebellum (4,2,4)
- 4 The rock band says a Love Song would be the best remedy (4)
- 5 The publication is printed on one single sheet (5)
- 6 Those two inheritability papers are identical! (4,7)
- 7 This season involves calculations (6)
- 9 Time is a living thing as well! (10,5)
- 12 The consequences are not related to their causes (6,7)
- 14 Programmed to strike a pose (5)
- 15 Asymmetry of the brain shows that we don't respond the same to porn (3,11)
- 17 Mortality on a microscopic scale (4,5)
- 18 In a pine tree, on the road or inside your eye? (4)
- 19 This programming language is Parseltongue to me (6)
- 20 Sets your brain to fire (17)

Down

- 2 Metaphoric gene transcription (10)
- 3 Game that usually curls limbs in knots, takes thought for a spin (5,7)
- 4 The team that checks your assignments by comparison (7,5)
- 8 It is normal to differ from the norm (8,9)
- 10 Those interfering stimuli keep you from working on your report (11)
- 11 The forecasts communicate via beamer images (11)
- 13 Not on a date with your Mom? (7,3)
- 16 On average, people aren't nice to each other (4)



Answers to last month's puzzle:

Across: 3. MEG, 5. Liberation day, 9. brain drain, 10. eye tracking, 12. elevated plus maze, 13. impact factor, 15. neurotransmitter, 17. western blot, 19. pattern analysis, 20. social committee, 21. normal distribution, 22. blue spot.

Down: 1. insula, 2. guilty pleasures, 4. may, 6. amygdala, 7. synaptic strength, 8. brain trust, 11. association cortex, 14. pentecost, 16. cinco de mayo, 18. harm.