December 2017
Wed 13 AGM and Varsity Match

AGM and Varsity Match,
Wednesday 13 December

The AGM will start at noon, followed by lunch and a showing of the Varsity matches. The notice of the AGM was sent out to members early in November together with nomination and proxy forms. If you have mislaid these, they may be found on our website under ‘Events’.

This will take place at the Savage Club in Bank Place at 12 noon for 12.30pm. The Club is at 12 Bank Place (off Collins Street) in the City. Cost is $55 including drinks. All guests are most welcome; the more the better. Would you please advise Peter Baines at lunches@cambridge society.org.au or on 9820 2334 by latest Monday noon, 11 December, if you will be coming (and dietary requirements). Those emailing their intention to attend should ring Peter to confirm if they receive no email confirmation from him within 24 hours of booking.

Diary dates

| 12 Feb | Lunch with Michelle Cooper |

Last month

Lunch with Tony Klein,
Wednesday 15 November

Eyes of animals: the physics of vision

Tony is a physicist who got into the field of vision by having to teach medical students. His instructions were to ‘teach them something reasonably interesting and keep them amused.’

He explained the hierarchy of vision where even a single-cell organism has a rudimentary eye with a single receptor that enables it to move upwards toward the light rather than sink into the abyss.

The use of multiple receptors enhances direction finding capability. By the time we reach the nautilus a camera obscura device enables the generation of a picture on the receptor surfaces, but it is not certain what the nautilus does with this image as its nervous system is not well developed.

Insects developed eyes in a quite different form, with individual receptors connected by fibres to the brain. Some insects have multiple ‘eyes’, some of which generate images but others are merely used to detect motion.

The function of eyes develops according to the situation in which the owner finds itself. As animals move out of the forest the brightness of the available light increases, the pupils become smaller and the range of vision, or depth of focus, increases. Deep sea fish have more active retinas to enable vision in the low light levels available. The same is true of owls, which can see well in low light but have a very narrow field of view, hence the head swiveling common to owls. Birds have a large number of receptors and have the most developed acuity and angle of vision, the latter being partly because of the location of the eye on the side of the head instead of the front as in most mammals.

An eagle can see at 7 metres as clearly as humans can see at 2. The range of vision is also relevant. Human infants can adjust their eyes to see over a wide range of distances, the facility being expressed as 15 dioptres. Above the age of 50 adult humans have a range of nearly zero dioptres. The change in focus in a human infant can take place in a few hundred milliseconds. These results are compared to the darter, closely related to the cormorant. This bird must be able to see in the air when flying and then adapt almost instantaneously to seeing underwater as it chases fish. The darter’s visual range is 70 dioptres.
Eyes only develop as needed and no more. Central vision is used for fine reading and detail while peripheral vision is more sensitive to movement. We look upon many developments such as the iPhone camera and fibre-optics as recent developments of great ingenuity but, when we look at the organs of sight, we find that many of these ‘inventions’ are already employed in the natural world.

**New Vice Chancellor for the University of Melbourne**

University of Melbourne Chancellor Allan Myers AC QC has announced the appointment of Professor Duncan Maskell as the next Vice-Chancellor, commencing in October 2018. Prof. Maskell is the Senior Pro-Vice-Chancellor at Cambridge University, responsible for Planning and Resources. From 2013 to 2015 he served as Head of the School of the Biological Sciences. He has also worked in industry and has been a co-founder of biotech spin-out companies. Prof. Maskell has been instrumental in founding several biotech companies and has extensive experience of advising companies on science and innovation. In the past, he has worked on new vaccines against salmonella and bordetella at Wellcome Biotech and on bacteria that cause childhood meningitis at the Institute of Molecular Medicine, University of Oxford.

**A novel scam – a warning**

Your treasurer recently received, through the generic treasurer’s email address, an email purporting to come from your esteemed president. All was in first name terms and the name of origin was Chris Briggs. The subject of the email was the need to transfer some money to cover an expense incurred by the president. Only after a couple of exchanges did it become obvious that this was far from genuine. Floating the cursor over the name Chris Briggs revealed the email address infopresident991@gmail.com. It seems that it is quite a common scam in the business world with apparently senior executives asking junior accounts payable clerks to transfer confidentially large sums for ‘secret projects’. The status of the purported sender is sufficient to pressure the recipient junior into compliance without checking. The implicit trust placed by your treasurer in your esteemed president was sorely tested.

The names and generic addresses are all available on our website so some effort had been gone into to try and fool us by creating a novel presidential email account in the correct name.

No money changed hands.

**Commercials**

If you have an offer, message or request of a personal or not-for-profit nature that you would like us to include in this section, please contact the editor at newsletter@cambridgesociety.org.au.

**Snippets**

We acknowledge our particular debt to Varsity and to the University News Release Service.

**Budget announces ‘ambitious’ infrastructure plans for Cambridge**

The government’s 2017 Autumn Budget, released on Wednesday, includes ‘an ambitious integrated programme of infrastructure, housing, business investment and development’ in the Cambridge – Milton Keynes – Oxford corridor. The programme comes less than a week after the National Infrastructure Commission released a report calling for such investment in the area.

Chaired by Labour peer Andrew Adonis, the commission called for the construction of several new towns to double the rate of housebuilding in the region. It also called for the acceleration of plans to build a rail link between Cambridge and Oxford, and proposed the construction of an expressway between the two cities.

The area, known as the ‘brain belt’, contributes significantly to the UK economy with its world-class universities and high concentration of high-tech and knowledge-based industries. That said, Lord Adonis stressed that its growth is hindered by ‘a lack of available homes and an infrastructure network that is feeling the strain’.

The commission found that its proposals have the potential to substantially increase economic output in the region from £90 billion per year to over £250 billion a year.

Lord Adonis stressed the need for cooperation between the national government and local leaders in order to turn these proposals into reality. James Palmer, the mayor of Cambridgeshire and Peterborough, echoed these sentiments: ‘The Greater Cambridge economy over the next decade is
predicted to create approximately 44,000 new jobs; it’s only through the government and local leaders working together in a creative way that we could put in place the housing and transport infrastructure to support this growth.’

The plan includes the construction of an additional train station near Addenbrooke’s hospital to the south of the city. This will be partly funded by the government, which ‘is starting a study on the enhancements needed to accommodate future rail growth across Cambridgeshire.’

The rail link would also pass through numerous towns that have not yet been built. These would contain 1 million new homes by 2050 and would be the first new towns built in half a century. Such new towns would play a crucial role in alleviating Cambridge’s housing shortage.

According to Hometrack, Cambridge has the second-highest house prices in the UK, after London. Oxford is third. ‘The ratio of median house prices to earnings is 13:1 in Cambridge and 12:1 in Oxford making them two of the least affordable cities in the UK.’ According to the report, this is a problem because ‘workers are being priced out of local housing markets, restricting firms’ access to labour and impacting on their competitiveness.’

Bridget Rosewell OBE, one of the commissioners, argued that the lack of affordable housing in Cambridge’s means that the city’s ‘long-term future is under threat’. The construction of new homes in nearby new towns should help alleviate this housing crisis, which could have a significant positive impact on Cambridge’s future.

The transportation links proposed would also facilitate transportation to the other major cities in the ‘brain belt’. Currently, Oxford can only be reached by a 3½ hour coach ride or a train ride via London. If these times could be cut, Cambridge could develop stronger economic connections with other cities in the region.

These transportation links would be built in parts, with a rail link between Bedford and Cambridge planned as the third and final phase. Plans for an expressway link between Cambridge and Milton Keynes is already underway, and will be expanded to Oxford later. The report calls for these links to be finished by 2030.

The ambitious vision laid out by the commission’s report has now been included in the national budget and can move towards implementation.

I’m loving my year abroad, despite Cambridge’s lack of student support

Rewind two months. The prospect of having to start the big year abroad, which fills languages students with unabated excitement until they actually have to do it, was suddenly a reality. Time to buckle up and be an adult for the year. But not yet. For the first week, I was staying with my parents in an Airbnb, whilst I looked for permanent accommodation. Much to their, and indeed my, distress, I’d spent the summer in China instead of house-hunting in Paris. I scoured accommodation sites and found a limited selection within my budget, mostly undesirable ‘chambres de bonne’ – tiny attic rooms that used to be servants’ quarters – in which you can sleep, defecate and boil pasta within a two-metre radius. Even after cockroach-ridden rooms in China had vastly lowered my expectations, things were looking far from my classy Parisian fantasies.

Fast-forward to November and I’m living in a lovely apartment with Jacques and Hélène, who have essentially become my cool French parents. Because it’s their actual home, it’s not a hole, there’s always somebody around to chat with, and the kitchen is equipped with an ungodly number of tarte tins for all my pastry-baking needs. So, other than Jacques breaking several bones in a moped accident a week after my arrival, his son following suit mere days later, and subsequent accusations that I might be the Omen, all is well. I feel settled, so much so that I almost forget I’m here, and am looking forward to the next nine months. Even Tripos isn’t managing to tarnish my experience, as the Year Abroad Project allows you to write on anything, as long as it’s relevant to the language or culture. I’ve chosen a 19th-century prostitute, meaning my research consists of 200-year-old gossip. That doesn’t necessarily mean I don’t have off-days, but ‘I’ve had fewer breakdowns than I expected’ is my standard response when people ask how Paris is going. But the whole idea is to actually live abroad, not just be a tourist for a year, and that does include having rough patches and binging on Netflix. Surprisingly, I’m not swanning down the banks of the Seine in an Instagrammable Parisian dream every weekend.

There is arguably an expectation that every day has to be an extraordinary journey of self-discovery. Whilst this is garbage, I do think that, at the very least, the year abroad provides a welcome break from the Cambridge slog; it’s easy to fall into a
monotonous routine when everything is provided for you, and you spend most of your waking hours working or knowing you should be. Since arriving in Paris, I have discovered the elusive ‘healthy sleep pattern’ and ‘weekends’ that come with a standard 9 to 5, which I heartily recommend. The project still lingers, but it’s only a third of the work I’d do in just one term at Cambridge.

Nobody’s ever fully prepared for the year abroad, but I think it’s fair to say that Cambridge does not help. Practical advice is evasive: I found myself seeking advice on renting and opening bank accounts from other universities’ guides. Cambridge provides nearly no advice on welfare or mental health. As a result, a group of students are working to fill this gap through collating student experiences in the hope of expelling myths and offering student contacts to whom the ‘stupid questions’ can be directed.

Furthermore, God forbid we should be taught anything practical on the academic side. A friend at another university had an oral exam in her second year in which she had to role-play a situation in an airport. Cambridge doesn’t even have any oral classes for second years! I can dissect a medieval French lai with relative ease, but faced with ‘did you do much at the weekend?’, find myself resorting to ‘j’ai joué au foot dans le jardin. J’aime le foot’.

Despite being slightly embittered by Cambridge’s failure to acknowledge the real world, I do feel a strange nostalgia for a Cambridge that seems dead and gone. Most of my friends will have graduated when I come back, whilst I shall still be clinging on with MML and NatSci stragglers, and whoever I can convince to stay on to do a Masters. Fourth-year Cambridge will be a very different place to what I knew before and will seem even more alien after having spent a year away from the bubble. But when the idea of this starts to get me down, I just remember I’m in Paris, and everything feels a little bit better.

**On my changing accent**

My first conversation in Freshers’ Week went something like this:

‘Excuse me, where can I buy a gown?’
‘I’m sorry?‘
‘Oh – erm, where can I buy a gah-own?’

A whole year later, I’m still working out how to navigate the murky waters of Cambridge accents. I hail from Northern Ireland, and, as much as we may claim to be part of the UK, our accent is stubborn. It refuses to conform to what is seen as the typical English accent.

That first day in college reminded me that, despite our similarities, there are still things that separate us: the way I say ‘cow’ and ‘gown’. Or, perhaps the most famous of all - ‘power shower’. I’ve been involved in enough misunderstandings by now to make me want to avoid saying these words entirely. I am faced with a dilemma: should I give in and anglicise my words, or should I stick to my natural accent and risk being misunderstood? It feels too much like a betrayal of my roots to go ‘fully’ English, so I tend to hover somewhere ambiguous, producing a strange kind of blend.

In contrast, some Northern Irish friends of mine find that their accent becomes stronger when they come to England – an ironic nod to the famous Unionist slogan ‘No surrender’. I’ll admit that I don’t think the Northern Irish accent is the most attractive accent out there – though Jamie Dornan has certainly worked wonders on that front. Despite this, I can’t help but feel a warm glow of solidarity when I hear those familiar tones in a lecture or a study group. When I meet someone from Northern Ireland, I immediately relax, knowing that I can embrace the full roundness of words like ‘hour’ without feeling self-conscious.

The ability to rapidly change accents simultaneously delights and frustrates me. When I return home, everyone comments on how posh I sound. After a few weeks the English accent disappears – but, as I discovered on a recent summer phone call, this creates confusion for my Cambridge friends. ‘Is that really Emma?’ a friend asked me. ‘You sound like a completely different person!’ We laughed about it, but it struck a chord. How much does an accent define who you are? Quite a lot, it seems. And when your accent changes every few months, how does that affect your identity? It’s the whole issue of the Cambridge/home persona again – which one is the real me?

Cambridge needs to live up to its own diversity and inclusivity standards.

That’s the key, really. Just like we have the right to change how we style our hair, we also have the right to speak how we want to, without fearing judgement.

We talk a lot about embracing diversity in Cambridge – why not try and embrace diversity in accents, too?