



PTAS Project Report (for REGULAR PROJECT GRANTS)

Project Title: “A live pulse”: Yik Yak for understanding teaching, learning and assessment at Edinburgh

Project type (delete as appropriate) :

A Research Project (research focus on particular dimension of teaching, learning, assessment)

Principal Investigator : Professor Sian Bayne

Schools/department : School of Education

Team members (including Schools and Departments) :

Dr Bea Alex

Informatics

Dr Louise Connelly

Royal (Dick) School of Veterinary Studies

Dr Claire Grover

Informatics

Nicola Osborne

EDINA/Creative Informatics

The team also included three colleagues employed as Research Fellow and Research Associates:

Dr Richard Tobin – Research Fellow, Informatics

Lilina Rouhani – Undergraduate student in Psychology

Emily Jane Beswick – Undergraduate student in Psychology

For further details, please contact: Sian Bayne

Project teams must submit a report within 4 months of the conclusion of their project.

Copies of dissemination material (eg journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count). The brief report will be published on the IAD web pages.

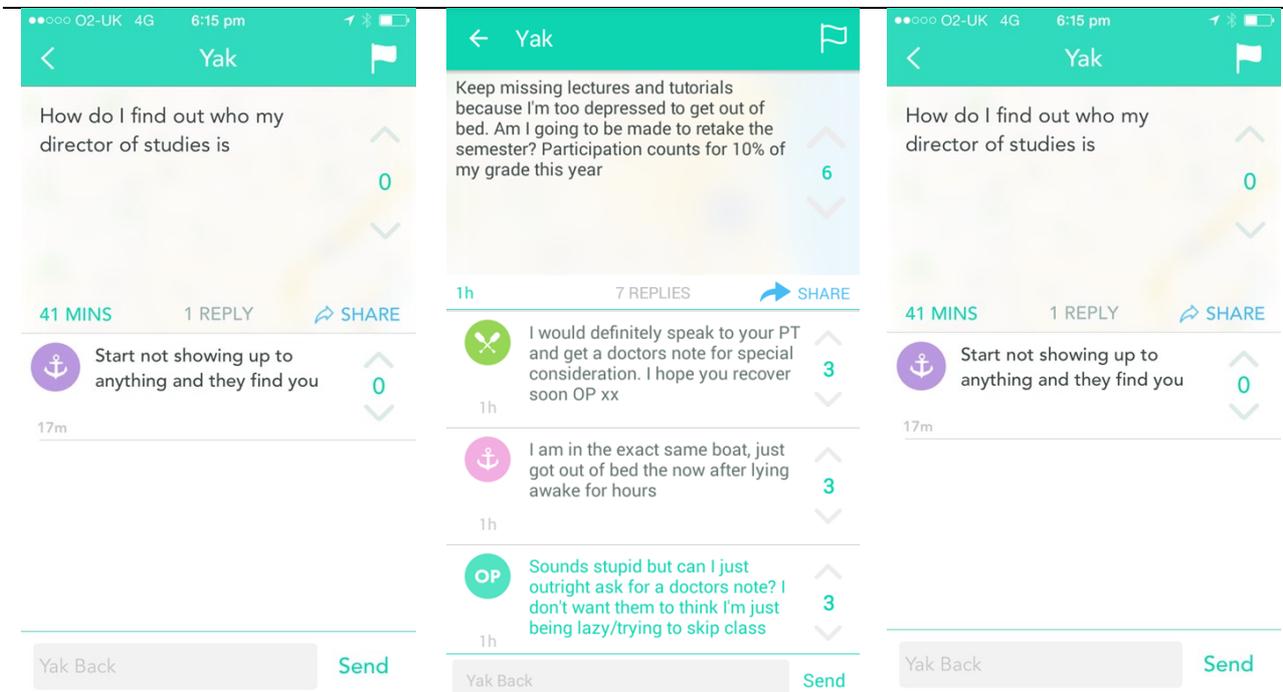
Report (maximum 1500 words)

The project conducted a mixed method study of the social media app Yik Yak, over the final year of its existence. Yik Yak was an anonymous, geosocial mobile application launched in 2013 which, at its peak in 2014, was used by around two million students in the US and UK, including large numbers of undergraduates at the University of Edinburgh.

The aim of the study was to work with the gritty immediacy, anonymity and informality of comments posted on Yik Yak to build an understanding of our students' perspectives on learning, teaching and assessment. The type of discussion and engagement seen on Yik Yak functioned as a kind of



'live pulse' through which we hoped to build deeper understanding of the experience of students at Edinburgh. Some examples of the kinds of exchanges seen on Yik Yak are shown below.



What did you do?

We used a combination of computational, survey and ethnographic methods to try to understand how students talked about teaching and learning issues at the University on Yik Yak. Computational methods (including topic modelling) processed data from over 46,000 yaks posted within the university's central area to help us understand the level and type of use of Yik Yak by students. Ethnographic immersion (including participant observation and interviews) helped us understand the more detailed technosocial aspects of Yik Yak use specifically within the context of the University of Edinburgh: two undergraduate researchers (Lilnaz Rouhani and Emily Beswick) were employed by the project to conduct this ethnographic element. Survey data from the university's Digital Footprint project gave us contextual information about the broader social media ecologies of students.

What did you find out?

Some weeks into the project, Yik Yak's developers radically altered the design of the app, effectively removing the anonymity which had been core to its function and to the ethos of the student community using it. This led to a rapid decline in usage, and Yik Yak's eventual closure toward the end of our project. This meant that, while we were not able to gather data on student experience at the level we had intended, we were in the position of having a team of excellent researchers gathering data at a unique moment when the app pivoted from popularity to decline and closure.



This required us to shift our focus slightly, allowing us to address a different set of questions of equally significant value. Having gathered data which led us to suspect that the anonymity of Yik Yak had significant social value for students, we used the project to interrogate students' perspectives on this change. We were interested in what it told us about the reduction of anonymity through the normalisation of surveillance and data extraction in the wider society, on social media and – in some instances – on campus. We asked the question, '**what might be at stake in the loss of anonymity within student communities in a datafied society?**'.

Countering the most common argument made against online anonymity – its association with hate speech and victimisation – we drew on recent work on the social *value* of anonymity to argue that in this context it had significant value for the communities that used it. In our study of a now-lost social network, we had a valuable portrait by which we might better understand our current predicament in relation to anonymity, its perceived value and its growing impossibility.

We therefore used our empirical study of the decline of Yik Yak to theorise the ways in which anonymity can be productively engaged within university networks, and to argue for an opening-up of discussion within higher education of the potential social value of anonymity in university online communities. All our data – quantitative and topic analysis of yaks posted in our field site, content analysis of yak content, undergraduate researchers' reflective reports and interviews – converged clearly on the finding that anonymity was a major source of the social value of the app to its users (Bachmann et al 2017).

We drew on Helen Nissenbaum's well-known paper 'The Meaning of Anonymity in an Information Age' (1999), to argue that anonymity constitutes the ability for individuals to be 'unreachable' and has significant value in certain contexts, particularly when it protects individuals from risk of ridicule, enables them to seek help for 'socially stigmatized problems' such as sexual issues, suicidal thoughts or domestic violence, and where it provides space away from 'commercial marketeers' (142):

Being unreachable means that no one will come knocking on your door demanding explanations, apologies, answerability, punishment, or payment. Where society places high value on the types of expression and transaction that anonymity protects..., it must necessarily enable unreachability. (142)

We found evidence in our study that while Yik Yak at Edinburgh was for the most part used for social banter, humour and informal discussions about student life, it was also very often used as a space where students could seek anonymous peer support for socially difficult issues around health, sexuality, gender, and failure – or the risk of it – in their studies. The figure below gives an overview of the main topics that were discussed according to our data.

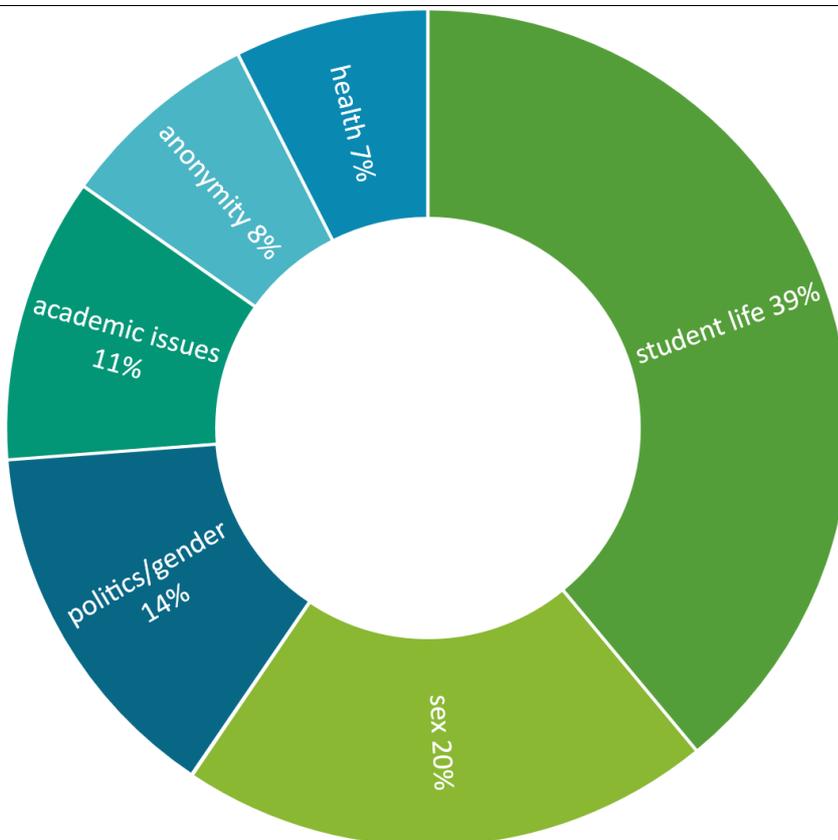


Figure: Topics in the 7,497 Yik Yak conversations identified in this study

That anonymity online can amplify hate speech and victimisation is a major issue, identified within the research as well as the popular discourse around apps like Yik Yak. However, while hate speech and trolling are a feature of life on social media (as well as off), recent research asks us to take a more nuanced perspective on anonymity as something which is often productive and valuable to individuals and to communities. For example, Haber (2017) has spoken of 'the complex desire among groups for diverse temporalities of interaction — different speeds of communication at varying levels of intimacy and exposure' (no page), while Schlesinger et al (2017) have helpfully described the social value of Yik Yak as lying in its bringing together of anonymity with ephemerality and hyper-locality, with the resulting 'situated anonymity' being key to its success and vibrancy as an online community.

It is debatable whether, despite recent regulatory changes such as the European General Data Protection Regulation, the data societies of wealthy nations have genuinely re-learned to value the capacity for individuals to be sometimes unreachable. In fact, our data society is one in which surveillance and the routine plundering of personally-identifiable data has become normalised for most users of social media (Hargittai and Marwick 2016). As the Facebook/Cambridge Analytica scandal of 2018 revealed, the dominant business models of the new capitalism are highly dependent on data extraction, data profiling and still largely unregulated trading in the personal data of individually-identifiable users (Srnicek 2017; Zuboff 2015). Newer technologies currently touted as becoming mainstream in education (facial recognition, internet of things, neurotechnology) only promise an acute intensification and amplification of this lack of unreachability (Williamson 2018), and a growth in the sophistication of the architectures of



surveillance we are subject to on campus (Ross and Macleod 2018; Hyslop-Margison 2016). In this context, we might see the simplistic moral panic evident in media responses to anonymous social media like Yik Yak working not only as a refusal to engage with these more intractable issues, but as a something of a moral blind for the normalisation of surveillance capitalism.

In summary then, our study provided evidence on the way students used Yik Yak at Edinburgh by using an original methodological mix, generating a rich dataset through which we were able to build an understanding of the social value of anonymity for students using this particular social network. From this, we were able to draw empirically-based conclusions about how, as a university, we might approach the question of surveillance, datafication, ephemerality and anonymity in our online social and learning spaces.

Full details of the methods and findings are available in the published article (open access) linked below.

How did you disseminate your findings?

One open access, peer-reviewed article in a high impact journal:

Bayne, S., Connelly, L., Grover, C., Osborne, N., Tobin, R., Beswick, E. and Rouhani, L. (2019) The social value of anonymity on campus: a study of the decline of Yik Yak. *Learning, Media and Technology*. <https://doi.org/10.1080/17439884.2019.1583672>

One guest blog (WonkHE) (Bayne):

Digital sanctuary and anonymity on campus. 11 September 2017. <https://wonkhe.com/blogs/digital-sanctuary-and-anonymity-on-campus/>

Two keynote presentations (Bayne):

September 2017. Keynote: *The death of a network: data and anonymity on campus*. Association for Learning Technology annual conference, University of Liverpool.

June 2017. Keynote: *The death of a network: Yik Yak and the value of anonymous social media in universities*. CALRG Conference, Open University, Milton Keynes.

One seminar for Edinburgh students and staff (Bayne):

February 2018: Seminar: *Controversies in the data society – the future of anonymity*. University of Edinburgh EFI seminar series.

One training session (Osborne)

October 2018: Half day training workshop: *Working with Social Media Data: Ethics and Good Practice around Collecting, Using and Storing Data*, Digital Scholarship Training Programme.



One conference presentation for Edinburgh students and staff (Bayne):

December 2018: IT Futures conference – *Educating against psychic numbing*. University of Edinburgh.

One information session for Edinburgh staff (Connelly and Osborne)

Feb 2017: Social Media Community Meet-up – *Overview of the project*. University of Edinburgh

Project social media activity, including two substantive blog posts:

Project blog: <http://yikyakresearch.blogs.edina.ac.uk/>

Project hashtag: #UoELivePulse.

Osborne. July 2017: Addressing ethics of research in anonymous online spaces.

<http://yikyakresearch.blogs.edina.ac.uk/2017/07/13/addressing-ethics-of-research-in-anonymous-online-spaces/>

Rouhani. July 2017: The Quirks of dynamic social spaces – reflections from student research

assistant Lilinaz Rouhani. <http://yikyakresearch.blogs.edina.ac.uk/2017/07/14/view-from-our-student-research-associates/>

What have been the benefits to student learning?

How could these benefits be extended to other parts of the university?

Benefits to students and to the university are around future planning and the articulation of the values we bring to educational technology and related student experience.

Our project provided us with a perspective which allows us to push back on the assumption that surveillance technologies which write out the possibility of anonymity within the education community are somehow inevitable. Some of these technologies *are* already mainstream (plagiarism detection, for example). Others are emergent within the sector though not at Edinburgh: for example, facial and emotion recognition has already been posited as a means for measuring student attendance and engagement (D'Mello et al 2017), sensor-based technologies are increasingly used in institutions for managing space and measuring movement around campus (Atif et al 2015), and research on educational neurotechnology is being funded globally on the basis of its potential to scrape brain data from students in the interests of measuring and 'enhancing' student learning and engagement (Williamson 2018). The extent of this amplification of surveillant uses of individuals' data has led human rights researchers to argue the need for new protections which go far beyond the protection of personal data: Ienca and Adorno (2017) argue for the right to cognitive liberty, the right to mental privacy, the right to mental integrity and the right to psychological continuity. The solutionist promises of surveillance ed-tech need to be countered by programmes within universities – including ours – which directly address and counter their likely long-term effects on trust, reciprocity and academic freedom on campus.



To work against these potentially dystopic trajectories of surveillance technology, universities need to re-visit anonymity, and put into place principles and frameworks which respect its social value.

Our project suggests there is scope, as we move further into the data age, to normalise alternatives by recognising the value of the sensibilities of anonymity, ephemerality and unreachability within our learning community at Edinburgh.



Financial statement (please delete as appropriate):

This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

References

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