The Code Spaces of Higher Education (0219)

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Introduction

The geographies of the university are shifting as online, distance education, branch campuses, student and academic mobility and internationalisation agendas work to change our understanding of what it means to be 'on-campus' (Bayne, Lamb and Gallagher, 2013). At the same time, the growing field of software studies is presenting new theoretical frameworks which can help us understand how the university is being newly produced through the 'spatialities and software-sorted geographies' that alter the ways in which we think about society, control and governmentality (Kitchin and Dodge, 2011). Software is important because – in the algorithmic cultures and computational modes of the contemporary academy – it is shifting the means by which university, society and space are conceived.

This paper will report on the early findings of a research project which explores the new algorithmic spatialities of the campus and its 'code/spaces' (Kitchin and Dodge, 2011) through the study of the social media app Yik Yak. Over the last two years, Yik Yak has quickly become ubiquitously adopted by students on university and college campuses in the US and - increasingly - the UK, emerging as an often-controversial space in which candid, dynamic and sometimes taboo issues are raised and discussed by young users. Promoted by its developers as 'the new Twitter' (Digiday, 2014) and hailed as 'the dominant player in the anonymous geo-social mobile app space' (JISC, 2015), Yik Yak allows users located within close proximity to each other (usually 1.5 miles) to post and respond to short, anonymous text or image-based message threads. Universities and Colleges in the US have been actively debating the desirability and effects of Yik Yak for the last two years. Some have moved to ban it on the belief that it breeds harassment and hate speech, while others have actively partnered with the platform, hailing it as 'the new town square' for student communication (SproutSocial, 2016).

While online commentary and anecdote is plentiful, there is still very little evidence relating to the impact of Yik Yak on universities in the form of published research or usage data. An exception is a recent paper (Black et al, 2015) reporting on research conducted across 42 US campuses over a three-day period, which concludes that just under 30% of 4,000 captured yaks related specifically to 'student experience'-related issues. Concluding that the platform does not seem to pose 'a significant threat to young adults', this paper demonstrates the tendency of Yik Yak discussion to focus on the 'dangers' of anonymous social media and related imperatives for platform containment and control by universities.

This paper works against this normative way of understanding Yik Yak by considering it as a manifestation of the encoded campus, with implications for the ways in which we think about student mobility, the containment and control of campus space, and the still-dominant 'sedentarism' and territorialism driving the activities of the academy: perspectives which privilege proximity and co-presence and 'treat as abnormal distance, change, and placelessness' (Sheller and Urry, 2006: 208).

The research context

We know that Yik Yak is widely and energetically used at the University of Edinburgh. Survey data generated by the University of Edinburgh Digital Footprint project (2014-2015) indicated that by early 2015 it was being used by approximately 30% of undergraduates across all the main university campuses, and was also beginning to be taken up by some postgraduates. While usage data for Yik Yak is not publicly available from the platform itself, current levels of engagement are likely to be higher: by Spring 2016 100 original 'yaks' were being posted approximately every three hours in the main central campus area: this figure does not include the often significant numbers of posted responses.

An exploratory sampling of Yik Yak use over one week in January 2016 confirmed that students are using the platform not only to discuss sensitive issues such as mental health, sexuality and homesickness, but also to seek support and share experience of teaching and learning, assessment and feedback, university services and the student experience generally.

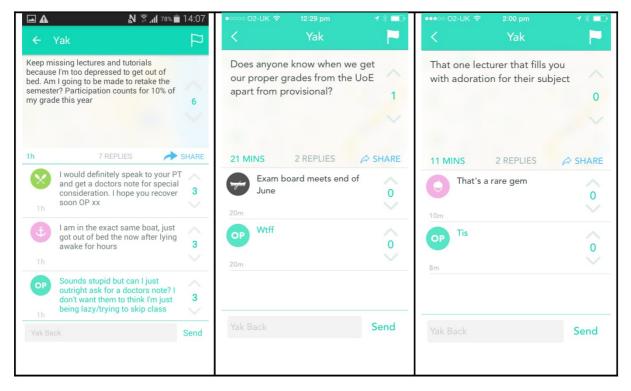


Figure: examples of student experience-related yaks from the scoping study

As a geosocial application with wide and growing popularity among undergraduates, Yik Yak is used for particular kinds of exchanges which are localised, community-specific and immediate; and as a pseudo-anonymous application, it encourages posts which address sensitive issues, or questions which might seem too embarrassing or trivial to raise in formal university spaces, or online environments where user profiles are required, such as Twitter, Instagram or Facebook . For these reasons, the view of university life gained through immersion in Yik Yak has a grittiness and currency that cannot be gained elsewhere: as one of its developers has claimed, it is "a live pulse – a real-time feed of what's going on." (Digiday, 2014)

Project methods

By viewing Yik Yak through the theoretical frame of code/space, the project we report on in this

paper will interrogate the ways in which the 'spatialities and governance of everyday life unfold in diverse ways through the mutual constitution of software and sociospatial practices' (Kitchin and Dodge, 2011: 16). We take the view that the space of the university becomes constituted in particular ways by Yik Yak, which has implications for the ways in which we understand and work with 'campus' space. For example, where other social media applications make connections across the various, distributed locations of the university, Yik Yak entrenches and re-constitutes material campus space in a newly discipline-oriented way: the yaks circulating around the central humanities campus at Edinburgh 'enact' a very different university from those exchanged in the vicinity of the medical school, for example, and a yak posted by a distressed student in the school of veterinary studies on the outskirts of the city would be unlikely to be picked up by a support service based on the central education campus. Spatial theory is still under-used in educational research: this project deploys it in order to better understand the influence of code and algorithm on higher education spatialities and practices.

The research is gathering computational data directly from Yik Yak at four 'critical' points in the academic year 2016/17, from three dispersed campus locations: mid-October, mid-December, mid-January and early May. Topic modelling (Blei et al, 2003) and sentiment analysis are being used to cluster and analyse these data programmatically (Liu and Zhang, 2012), enabling us to build an understanding of the proportion of total yaks generated during semester which relate specifically to learning, teaching and assessment issues and students' sentiment towards them. We are also interrogating the data to better understand which issues are being raised, whether there are any identifiable patterns and variations across locations, and with what intensity these issues are being discussed.

This computational data is being understood alongside qualitative data generated by three undergraduate research assistants to the project, who are manually collecting yaks and writing narrative ethnographic commentary on how they frame these critical moments in the year for students. Survey data from the university's annual Digital Footprint survey issued to a large sample of students will also be drawn on in the analysis.

For the SRHE presentation, we will draw together the early findings from this research, expanding the theoretical framework to be used and giving an early indication of how the themes of containment, control, anonymity and discipline are being played out in this new geosocial university code space.

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