

# Telling data stories in the digital university

Jen Ross, University of Edinburgh  
Anna Wilson, University of Stirling

# Sensibilities of surveillance

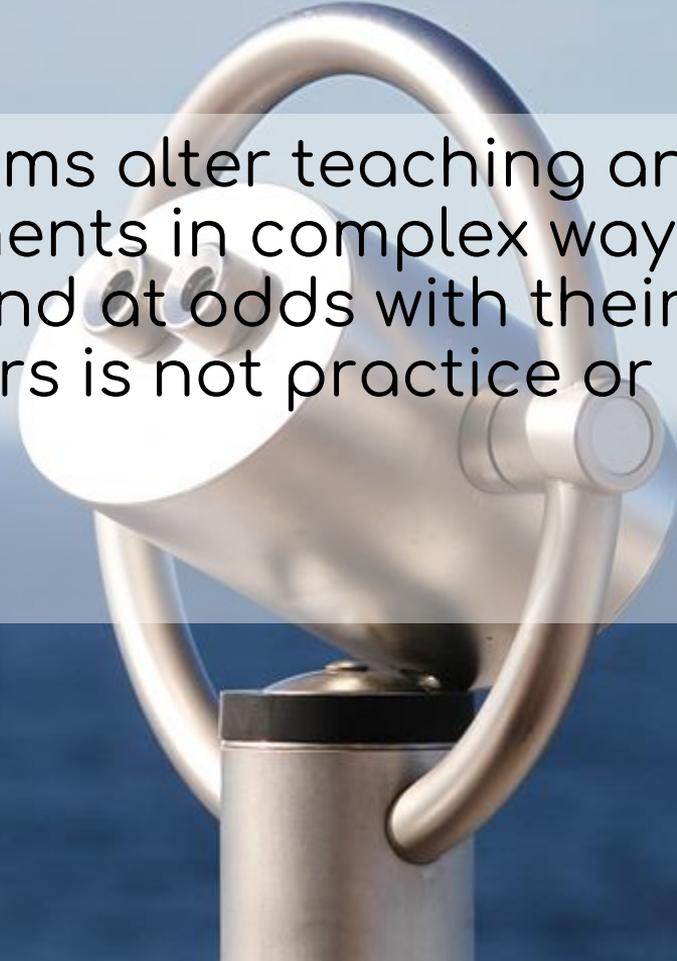
learning technologies help us communicate, collaborate and create, as well as store data, keep track of activities, assess performance, remind us of due dates, check for plagiarism, and more.



WE'RE HERE TO  
**HELP**

many of these technologies offer the capacity for increased surveillance, and some are already being used to monitor and/or quantify some of our activities.

surveillance is a culture (as Lyon (2017) says) or a 'sensitivity' (Ross & Macleod 2018). Not just top-down, not necessarily malicious... but...



“surveillance systems alter teaching and learning environments in complex ways that are often surprising and at odds with their original intent. what matters is not practice or purpose, but presence.”

– Dan Knox, 2010

we should pay attention to cultures of surveillance in the university, and address how technology is implicated in these cultures.



# Why stories matter

- We need to talk. But there is no time to talk. And some kinds of speech feel dangerous.
- Stories can be a way of talking without constraint – anonymous, fictional.
- “the best time to plant a tree...”. If we want to reconfigure the future of surveillance, we should start now.
- Story methods as underpinning principle for the creation of a higher education surveillance observatory.

The background of the slide is a photograph of a large, multi-paned window with dark wood frames. The window is set in a room with a red brick floor. The window looks out onto a green, hilly landscape under a bright sky. The window has several decorative circular elements with intricate patterns. The text is overlaid on the window and floor.

## Ed-tech imaginaries

technology use in education is often tied to what Audrey Watters (2019) calls the 'ed-tech imaginary' – stories that we tell about the role that educational technology plays in preparing students for the future.

teachers, learning technologists and others receive *and* create these ed-tech imaginaries.

“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” (Bayne et al 2019, p.104).



# The Data Stories project

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Team: Jen Ross, Anna Wilson, Amy Collier, Jane McKie, Pat Lockley

Funding from Edinburgh Futures Institute Research Award.

Questions:

- How can the role of surveillance in higher education be interrupted, reduced or reconfigured through speculative storytelling and co-design?
- What questions, narratives and issues will shape research in the ethics of data-driven higher education?

A third question, which developed along with the Data Stories creator:

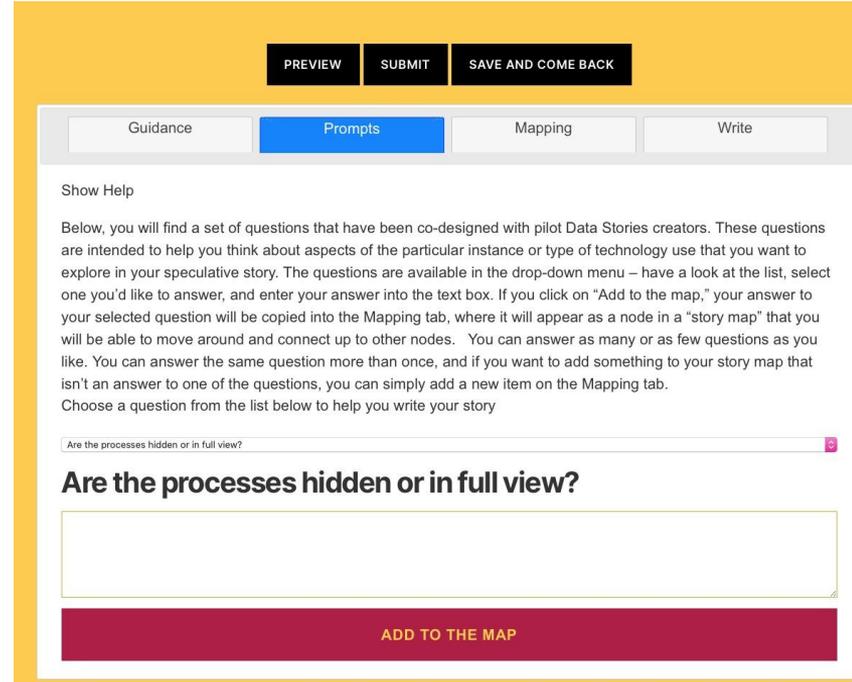
- What would people publicly imagine about surveillance if they were free to do so?



# The Data Stories Creator

An anonymous, scaffolded storytelling tool that uses fiction writing to explore aspects of an interaction with technology, and hopes or concerns it raises, by speculating about what could happen.

- built as a Wordpress plugin,
- short project involving a multidisciplinary research team (@ University of Edinburgh, Stirling and Middlebury College) & a web developer (@pgogy)
- three-part data storytelling tool: prompts; mapping and writing



The screenshot shows the 'Data Stories Creator' interface. At the top, there are three buttons: 'PREVIEW', 'SUBMIT', and 'SAVE AND COME BACK'. Below these is a navigation bar with four tabs: 'Guidance', 'Prompts' (which is highlighted in blue), 'Mapping', and 'Write'. The main content area is titled 'Show Help' and contains a paragraph of text explaining the purpose of the questions. Below the text is a dropdown menu with the text 'Are the processes hidden or in full view?'. The question 'Are the processes hidden or in full view?' is displayed in bold. Below the question is a large text input box. At the bottom of the interface, there is a red button labeled 'ADD TO THE MAP'.

PREVIEW SUBMIT SAVE AND COME BACK

Guidance Prompts Mapping Write

Show Help

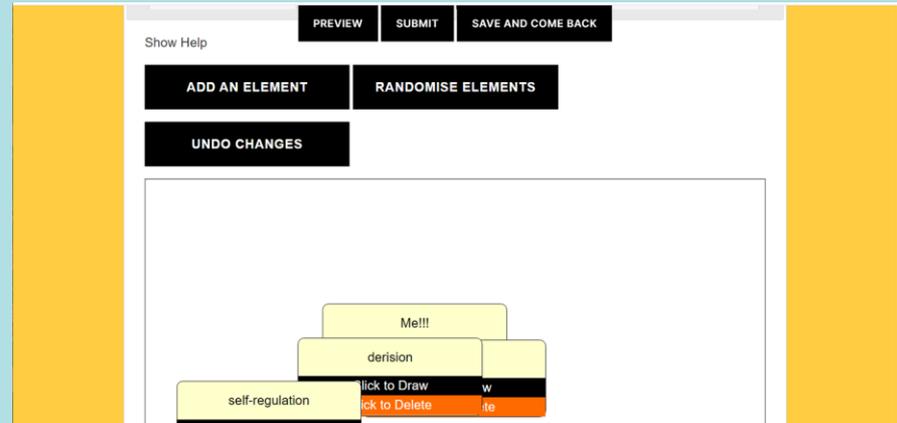
Below, you will find a set of questions that have been co-designed with pilot Data Stories creators. These questions are intended to help you think about aspects of the particular instance or type of technology use that you want to explore in your speculative story. The questions are available in the drop-down menu – have a look at the list, select one you'd like to answer, and enter your answer into the text box. If you click on "Add to the map," your answer to your selected question will be copied into the Mapping tab, where it will appear as a node in a "story map" that you will be able to move around and connect up to other nodes. You can answer as many or as few questions as you like. You can answer the same question more than once, and if you want to add something to your story map that isn't an answer to one of the questions, you can simply add a new item on the Mapping tab. Choose a question from the list below to help you write your story

Are the processes hidden or in full view?

**Are the processes hidden or in full view?**

ADD TO THE MAP

- Prompts - think of a situation and choose some questions to answer
- Mapping - make and break relationships between the answers you provided
- Writing - use the questions and/or mapping process, or write a completely different story.



# Stories overview

So far: 26 published stories on the site.

- interplay of present concerns and issues, trajectories and imaginings
- tendency towards dystopian visions
- main characters mainly students or teachers
- familiar platforms, and a mix of 'mundane' (present day) surveillance, and unfamiliar or future technologies, data forms and uses.

# Stories of subversion and governmentality

The stories present a range of imagined responses to different future surveillance practices:

- acquiescence
- obfuscation
- resistance
- enculturation/adoption



# Acquiescence (and governmentality)

*First Year Student Experience* imagines a student's interaction with Mirror, a system that reminds, monitors and records.

- The university has an oversight system relating to well-being activities, including citations and penalties.
- The student actively submits to this, dutifully reporting their recent exercise and diet and looking forward to receiving more “wellness tips”
- Finally, we see that the student chooses to turn off (and presumably turn on) this intrusion into what we might see as personal, rather than educational, choices.



# Obfuscation (and governmentality): deepfaking ourselves?

*Content is King* imagines a future in which Schools and Departments (and by implication individual academics) are judged by the number of “views” and “likes” recorded for the digital content they produce.

- Schools and departments compete with each other in an annual “celebration” event
- Teaching staff “frantically email links to their friends and family”
- Academics view their own content from many devices and browsers

## Resistance

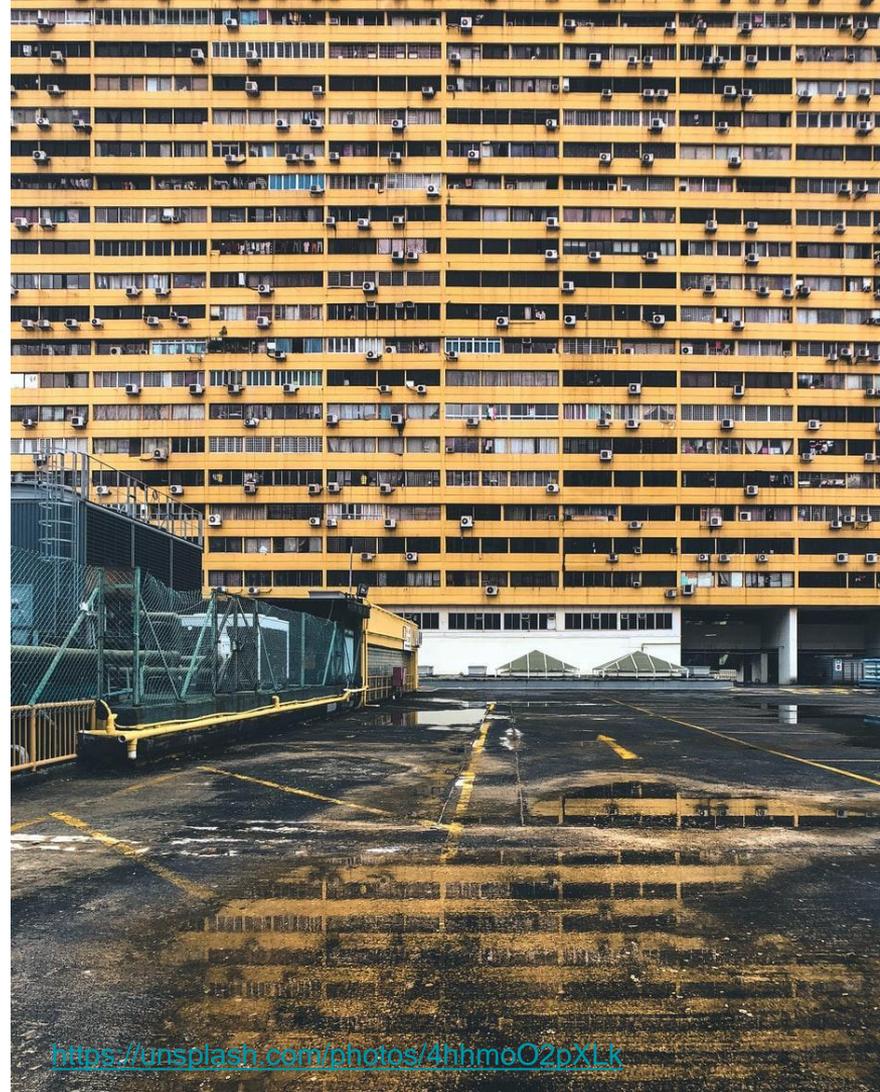
In *Altruistic Academics*, a group of “democracy activists” initially seek to avoid exposure by not publishing a recording of a panel discussion at a conference:

- But they realise more active resistance is possible that will enable their voice to be heard
- They achieve this through hacking and de-identifying/anonymising everyone’s contributions
- “Knowledge ... flowed openly ... unencumbered by individual egos, career ambitious, and disciplinary boundaries.”

# Enculturation/adoption

In *A Motorboat in Ireland*, a beleaguered MOOC tutor uses their expertise to fight back against a troll:

- but they do this by adopting the surveillance mentality
- using their special knowledge and skills to effectively but perhaps unethically stalk the troll
- and ultimately publicly naming them, embracing the power conferred by surveillance/tracking capacity, rather than seeking to subvert it.



# What can these stories do?

Counter digital resignation  
(Draper and Turow, 2019).

Give accounts of how  
personal, educational and  
institutional values intersect  
& glimpses into different  
positions and relationships.



“the affects of dystopia do not work in predictable ways – they seem to indicate that hope and despair are not clearly separable in the monstrous, and that there is something to be gained from knowingly engaging with such visions of the future”

Priyadharshini 2019 p.7

“Cultures of surveillance, whether critical or complacent, are socially constructed and can thus be challenged and reconstructed.”

– David Lyon, 2017, p.835



thanks!

<http://datastories.de.ed.ac.uk>

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