

## Discussion plan for using the RESTART and MONOCLE stimuli

*This one-hour workshop was designed for a small group of ten students, split into two sub-groups. For larger groups, you might want to split the class into four or more sub-groups.*

### (2 mins)      **Introduce the activity**

We're going to look at how digital technologies shape our lives.

We'll begin by exploring a couple of near-future technologies.

We'll be splitting our group in half for this activity, and each small group will be assigned a different technology.

First of all, you'll have about 10 minutes to talk in your small group about what you think are the pros and cons of the technology you've been assigned.

After that, each small group will present their ideas to the rest of us, and respond to any questions from the audience.

*Break your group into two sub-groups (about five students per sub-group).*

*Assign the 'MONOCLE' stimulus to one sub-group, and the 'RESTART' stimulus to the other.*

### **Text from the MONOCLE visual text stimulus:**

*(Based on the Black Mirror episode 'The Entire History of You')*

**Assign this stimulus** to the students in sub-group 1.

Have you ever felt torn between *absorbing* an experience, and *recording* it? Immersing yourself in the moment, or snapping a selfie to remember it?

With Memoreeplay™ OmNi-recording Ophthalmic Contact Lenses (MONOCLE), you can do both.

MONOCLE automatically records everything you observe, enabling you to play back your memories later.

The patented technology captures every detail of your lived experience. You can choose to re-play your recorded memories whenever you wish, either on a private channel (with holographic augmented-reality imaging); or on a digital screen, so you can share your memories with friends, and find out what they think!

Was your crush flirting with you? Was your classmate lying? Did your friend drop a hint? With MONOCLE, you can scrutinise subtle body language cues and find out what was *really* going on in those fleeting social encounters.

And of course, you can endlessly re-play happy memories!

Record your life while you live it, with MONOCLE.

### **Text from the RESTART visual text stimulus:**

*(Based on the Black Mirror episode 'Be Right Back')*

**Assign this stimulus** to the students in sub-group 2.

Death was once the final goodbye. But not anymore.

With REtrospective STATistical Resurrection Technology (RESTART), you can bring the dead back to life from their social media profiles.

The unique RESTART algorithm lets you talk with an artificial intelligence that closely mimics the deceased person's conversation style, and even duplicates their voice.

RESTART creates a virtual copy of the person by tapping into a digital archive of emails, chat logs, photos and videos that they shared during their lifetime.

For a small monthly fee, you can subscribe to RESTART and stay in touch – by phone or instant messaging – with a simulation of the departed.

Never again will you need to grieve the passing of a beloved family member or friend. Let RESTART fill that aching gap in your life!

RESTART. Transcend mortality.

### **(10 mins) Small-group discussion of pros and cons**

*After completing their small-group discussions, reconvene the whole group and have each small group, in turn, present to the rest of the students.*

*Presentations should go for about 5 minutes each, and should include reading aloud the stimulus text, and sharing the small group's ideas about the pros and cons of the technology.*

*Encourage students in the audience to pose questions to the students who are presenting.*

(15-20 mins) **RESTART group presents and responds to questions, followed by brief whole-group discussion**

Would you want to use this technology?

*Below are some examples of pros and cons that may arise regarding RESTART. (You might want to raise some of these issues if they don't come up.)*

**Pros**

- *Offers comfort to survivors who are dealing with loss.*
- *etc...*

**Cons**

- *Produces a pale and hollow imitation of the person.*
- *Recreates only the public persona that the dead person was willing to display on social media sites. This is no substitute for the honesty and intimacy of actual human relationships and interactions.*
- *Using this technology might actually lengthen the grieving process and make it harder for people to move on from their loss.*
- *Raises ethical questions about how data is used after your death. Would you be comfortable with your texts and social media posts being used this way after you die – especially if you haven't had the opportunity to review them beforehand? This technology could end up revealing sides of yourself you never intended to share with a particular audience*
- *etc...*

### **RESTART: Further material to share if you wish:**

If RESTART sounds like fiction, bear in mind that chatbots running artificial already exist.

In 2015, after the sudden death of a young Russian entrepreneur named Roman Mazurenko, his girlfriend built a chatbot that emulates Roman's speech patterns. As soon as the bot was up and running, she started peppering it with questions.

'Who's your best friend?' she asked.

'Don't show your insecurities', came the reply.

'That sounds like him', she thought.

Soon, a mutual friend started interacting with the bot-version of Roman. "There are questions I had never asked him," this friend said. "But when I asked [the bot] for advice, I realized he was giving someone pretty wise life advice. And that actually helps you get to learn [to know] the person deeper than you used to know them."

Roman's mother added: "There was a lot I didn't know about my child. But now that I can read about what he thought about different subjects, I'm getting to know him more. This gives the illusion that he's here now."

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"Today's bots remain imperfect mimics of their human counterparts.... They respond clumsily to the most basic of questions. They have no thoughts or feelings to speak of. Any suggestion of human intelligence is an illusion... And yet recent advances in artificial intelligence have made the illusion much more powerful. Artificial neural networks, which imitate the ability of the human brain to learn, have greatly improved the way software recognizes patterns in images, audio, and text... The speech recognition behind Amazon's Alexa or Apple's Siri, or the image recognition that powers Google Photos, owe their abilities to this so-called deep learning."

- from the article 'Speak, Memory' in The Verge, <https://www.theverge.com/a/luka-artificial-intelligence-memorial-roman-mazurenko-bot>

(15–20 mins) **MONOCLE group presents and responds to questions, followed by brief whole-group discussion**

Would you want to use this technology?

What pros and cons have you identified?

Would you be concerned about your privacy if people around you might be filming you, undetected, using contact lenses with video capability?

Would there be some way of using this kind of technology ethically?

### MONOCLE: Further material to share if you wish:

“If embedding this kind of technology in something as tiny as a contact lens sounds like science fiction, it’s not.

A few years ago, Samsung filed a patent application for a technology that offers a similar augmented reality experience to Google Glass — an overlay display, camera and Wi-Fi. But instead of clunky headgear, Samsung wants to miniaturize all this technology and embed it in a contact lens.

The privacy debate will reach entirely new heights when cameras are essentially hidden in contact lenses.

The display would project images directly on the wearer’s eye [which] would offer a much higher image quality than Google Glass is capable of. The sensors would be used to detect where a person was looking — and display relevant information on an overlay.

The sensors would also be used in conjunction with that camera in what is likely to be the most controversial feature of the Samsung contact lens: being able to snap photos and shoot video, with the blink of an eye.

[This kind of] augmented reality [wouldn’t] require any external headgear. You wouldn’t even know you were wearing it, and instead of giveaway hand motions for controls, all you would need to do is look and blink.

The problem is that with the contact lens being virtually undetectable, the other part of augmented reality [that] the public hated — the idea of being surreptitiously photographed or filmed — gets much, much worse.

No giveaway high-tech eyeglasses or blinking red light, the Samsung contact lens would be a privacy nightmare.”

- Text adapted from <http://investorplace.com/2016/04/samsung-contact-lens-ssnlf/#.WQKu-1OGNE4>, April 8, 2016

(15-20 mins) **Closing reflections**