

*Post-Event Summary of the Presentation by Professor Viktor Mayer-Schönberger to the IIEA on 25 October 2011*

In his presentation, Professor Mayer-Schönberger undertook a summation of the argument detailed in his book, *Delete: The Virtue of Forgetting in the Digital Age*. The subsequent "meditation on remembering and forgetting" began with some illustrative examples of persons affected by what the Professor referred to as our "vast digital memory", such as the case of Stacy Snyder, an aspiring young teacher who was refused her teaching certificate by her university, not because she had failed to complete her coursework, but due to a photograph of the young woman posing as a 'drunken pirate' posted on myspace.com. This photograph had come to the attention of the university's Dean of Studies, who considered this to be behaviour unbecoming of a teacher. The Professor noted that Ms Snyder was unable to remove all traces of the offending picture, as it had already been indexed and archived on the web.

While there is a responsibility on the individual to act prudently as to what information to make available about him/herself online, Professor Mayer-Schönberger pointed out that one can hardly know every time information about oneself is being collected, stored and made accessible. For example, Google has the capacity to analyse search terms through trend lines, detailing by whom, where, when and in what language specific searches are made - and this capacity exists because Google 'remembers' every search query received and every result clicked-on for as long as the search engine has been in operation.

Professor Mayer-Schönberger reflected on how, throughout history, humans have sought to overcome the limitations of biological memory, without ever altering the fact that remembering is difficult, while forgetting is easy. Remembering remained the exception, so to speak. Today, entities such as Google, Amazon, Facebook etc. have moved to a state of "comprehensive remembering." This is the result of (i) digitisation and (ii) a storage capacity which has matched the increase in processing power foreseen by Gordon Moore, founder of Intel, in the 1960s. In the past, secret police agencies such as the Stasi kept billions of facts on millions of people in its files, but because of the elaborate system of pseudonyms and codes and the paper-based filing system utilized, they had difficulty recovering information "in time." Today, a few minutes are sufficient to circulate a document, even accidentally, across the world - the Professor offers the example of the Air Force 1 operating manual leak (not unlike Stacy Snyder, once the mistake was realised, it was too late to undo).

While to an extent our vast digital memory is a reason for celebration, Professor Mayer-Schönberger reminded us that power over information results in power over the individual, citing the manner in which the Catholic church formerly held sway over the lives of its congregation, particularly before the emergence of the centralised nation-state and its secular bureaucracy. Recalling utilitarian philosopher Jeremy Bentham's concept of the 'Panopticon' - the prison in which inmates could be watched at any time without their knowing for certain whether they were at that moment being so watched - Professor Mayer-Schönberger described the internet as a 'global' Panopticon. Indeed, the web had created a *temporal* Panopticon also, with information remaining available for years or even decades, something Professor Mayer-Schönberger feared may cloud our ability to evaluate and to decide.

Professor Mayer-Schönberger cited the example of "AJ", a person who due to a medical condition remembers every detail of every day of her life, leaving her haunted by the past and incapable of making decisions. This, in the Professor's view, is a fate we may all face with comprehensive digital memory, which has the potential to turn us into an "unforgiving society." Indeed, going further, the Professor asked 'what if' we began to *disregard* our recollections and relied on Google (etc.) instead, giving them, in effect, the power to change history? He recalled how in the Soviet Union there was an entire department whose responsibility it was to re-touch photographs in order to eliminate images of people who had fallen out of favour with the regime - a service, he added as an aside, offered by private companies to consumers in the US today.

Turning to what responses there are to the threat inherent in comprehensive digital memory, the Professor adverted to a number of potential antidotes:

- Data protection rights. This is a simple idea, giving people the power to fight for their rights. However, it contains at least one serious inherent weakness, the lack of interest among citizens to take action in defense of those rights. Professor Mayer-Schönberger noted that Europeans, notionally the most privacy-conscious of individuals, have barely used the significant information privacy rights extended to them over the past decades.
- 'Information ecology'. This is the conscious regulatory restriction of what personal information can be stored and for how long. This requires costly government compliance activity, but has the advantage of not requiring individuals to pursue cases before the courts. Professor Mayer-Schönberger spoke of the harrowing lesson to be drawn from the case of the Dutch citizen register started in the 1930s to regulate social security, subsequently used by the Nazis to identify Dutch Jews (leading to the murder of more Dutch Jews, proportionally, than any other group). The Professor noted, however, that since September 11, data retention laws have limited the scope for information ecology.
- 'Digital abstinence'. Looking beyond laws and regulations, Professor Mayer-Schönberger considered the response of 'digital abstinence', whereby users would simply act less recklessly as to what information they share on the web, so far as is in their power. He dismissed this, however, as unrealistic.
- 'Full contextualisation'. Perhaps the crucial problem with digital memory is that it does not properly convey the full *context* surrounding a particular piece of information, restricting one's ability to think "in time" with the information at hand. Again, he questioned the feasibility of such a development in the short or medium term.
- 'Cognitive Adjustment'. A related response, though from the perspective of human interaction with the information, is cognitive adjustment, whereby we might learn to devalue older information. While approving of this in theory, the Professor noted that cognitive psychologists are sceptical of our ability to re-wire a change in how we process distant memories, not to mention the question of what the appropriate mechanism would be.

- Technological Change. Finally, Professor Mayer-Schönberger considered a change in technology, whereby only those who have received permission from an individual are given the ability to process that individual's personal information, a kind of copyright in effect. However, this would necessitate a comprehensive surveillance system to guarantee privacy, potentially defeating the purpose of the response.

Concluding his presentation, Professor Mayer-Schönberger acknowledged that there is no silver bullet, so we may need to mix the above and add "something else." That 'something else' might involve mechanisms that make remembering that bit more strenuous, that "ease forgetting", shifting the incentives of remembering and forgetting back to what we are used to. He offered one example of this, namely expiry dates for information: when storing information, the user would enter the date until which they wanted the information to be stored, after which it would be automatically erased from the system.