ENDNOTES

[1]Mell, P., & Grance, T. (2009). *The NIST definition of cloud computing.* Washington, DC: National Institute of Standards and Technology. Retrieved from https://www.nist.gov/sites/-default/files/documents/itl/cloud/cloud-def-v15.pdf. Accessed on July 8, 2017.

[2]Anderson, C. (2008). The end of theory: The data deluge makes the scientific method obsolete. *Wired*, June 23. Retrieved from www.wired.com/2008/06/pb-theory. Accessed on June 1, 2017.

[3]Martin, T. W., & Jeong, E.-Y. (2017). In the chips: Tech's sleeping giant becomes a $352 Billion cash cow. *The Wall Street Journal*, April 26. Retrieved from https://www.wsj.com/articles/chips-ahoy-techs-sleeping-giant-becomes-a-352-billion-cash-cow-1493217440. Accessed on June 12, 2017.

[4]U.S. Government, Subcommittee on Networking and Information Technology Research and Development. (2016, May). *Federal big data research and development strategic plan* (p. 1). Washington, DC. Retrieved from https://www.nitrd.gov/PUBS/bigdatardstrategicplan.pdf. Accessed on June 15, 2017.

[5]U.S. Government, The Department of Commerce Internet Policy Task Force & Digital Economy Leadership Team. (2017, January). *Fostering the advancement of the internet of*

things (p. 1). Washington, DC. Retrieved from https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf. Accessed on June 15, 2017.

[6]Harris, K. (2015). Killer robots pose risks and advantages for military use. *CBC News*, April 10. Retrieved from http://www.cbc.ca/m/touch/politics/story/1.3026963. Accessed on June 15, 2017.

[7]Bradsher, K. (2016). When solar panels become job killers. *The New York Times*, April 8. Retrieved from https://www.nytimes.com/2017/04/08/business/china-trade-solar-panels.html?_r=0. Accessed on June 15, 2017.

[8]Daod, E. (2016). Control your mobile through the Duoskin 'Smart' Tatoo. *news.com.au*, August 18. Retrieved from http://www.news.com.au/technology/innovation/control-your-mobile-through-the-duoskin-smart-tattoo/news-story/5588c792f1754d0d2d5b973b16342d03. Accessed on June 15, 2017.

[9]Payne, S. (2015). Stockholm: Members of epicenter workspace are using microchip implants to open doors. *International Business Times*, January 31. Retrieved from http://www.ibtimes.co.uk/stockholm-office-workers-epicenter-implanted-microchips-pay-their-lunch-1486045. Accessed on June 16, 2017.

[10]*Ibid*.

[11] Solon, O. (2017). Facebook is hiring moderators: But is the job too difficult for humans? *The Guardian*, May 4. Retrieved from www.theguardian.com/technology/2017/may/04/facebook-content-moderators-ptsd-psychological-dangers. Accessed on June 18, 2017.

[12]Menegus, B. (2016). Lyft thinks it's 'exciting' that a driver was working while giving birth. *Gizmodo*, September 22. Retrieved from www.gizmodo.com/lyft-thinks-its-exciting-that-a-driver-was-working-whil-1786970298. Accessed on June 18, 2017.

[13]Tolentino, J. (2017). The gig economy celebrates working yourself to death. *The New Yorker*, March 22. Retrieved from www.newyorker.com/culture/jia-tolentino/the-gig-economy-celebrates-working-yourself-to-death. Accessed on June 18, 2017.

[14]Daugman, J. (1990). Brain metaphor and brain theory. In E. L. Schwartz (Ed.), *Computational neuroscience* (p. 15). Cambridge, MA: MIT Press.

[15]U.S. Government, Defense Advanced Research Projects Agency. (2016). Bridging the bio-electronic divide. Washington, DC: DARPA. Retrieved from www.darpa.mil/news-events/2015-01-19. Accessed on June 19, 2017.

[16]Anthony, A. (2017). Yuval Noah Harari: 'Homo sapiens as we know them will disappear in a century or so'. *The Guardian*, March 19. Retrieved from www.theguardian.com/culture/2017/mar/19/yuval-harari-sapiens-readers-questions-lucy-prebble-arianna-huffington-future-of-humanity. Accessed on June 19, 2017.

[17]O'Gieblyn, M. (2017). God in the machine: My strange journey into transhumanism. *The Guardian*, April 18. Retrieved from www.theguardian.com/technology/2017/apr/18/god-in-the-machine-my-strange-journey-into-transhumanism. Accessed on June 19, 2017.

[18]Barnouw, E. (1968). *The golden web* (p. 234). Oxford University Press.

[19]Levin, S. (2017, April 7). Google accused of 'extreme' gender pay discrimination by US Labor Department. *The Guardian.* Retrieved from www.theguardian.com/technology/2017/apr/07/google-pay-disparities-women-labor-department-lawsuit. Accessed June 19, 2017.

[20]Naughton, J. (2017, April 23). How Facebook became a home to psychopaths. *The Guardian* , Retrieved from www.theguardian.com/commentisfree/2017/apr/23/how-facebook-

became-home-to-psychopaths-facebook-live. Accessed on June 19, 2017.

[21]Bergen, M. (2017, April 3). Google updates ads policies again, ramps up AI to curtail YouTube crisis. *Bloomberg Technology*. Retrieved from www.bloomberg.com/news/articles/2017-04-03/google-updates-ads-polices-again-ramps-up-ai-to-curtail-youtube-crisis. Accessed on June 19, 2017.

[22]Alba, D. (2017, April 21). The hidden laborers training AI to keep ads off hateful YouTube videos. *Wired*. Retrieved from www.wired.com/2017/04/zerochaos-google-ads-quality-raters/. Accessed on June 19, 2017).

[23]Cadwalladr, C. (2016, December 4). Google, democracy and the truth about Internet search. *The Guardian*. Retrieved from www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook. Accessed on June 19, 2017.

[24]Greenspon, E., & Owen, T. (2017, May 29). 'Fake News 2.0': A threat to Canada's democracy. *The Globe and Mail*. Retrieved from www.theglobeandmail.com/opinion/fake-news-20-a-threat-to-canadas-democracy/article35138104/. Accessed on June 19, 2017.

[25]Bell, E. & Owen, T. (2017, March 29). *The platform press: How Silicon Valley reengineered journalism*. Report of the Tow Center for Digital Journalism, New York. Retrieved from https://www.cjr.org/tow_center_reports/platform-press-how-silicon-valley-reengineered-journalism.php. Accessed on June 19, 2017.

[26]Gusterson, H. (2015). *Drones: Remote control warfare* (p. 1). Cambridge, MA: MIT Press.

[27]U.S. Government, Department of Commerce (2017, January). *Fostering the advancement of the Internet of Things*, Washington, D.C. p. 10. Retrieved from https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf. Accessed on June 20, 2017.

[28]Steckel, J., Edenhofer, O., & Jakob, M. (2015). Drivers for the renaissance of coal. *Proceedings of the National Academy of Science* 112(29), E3775−E3781.

[29]Mills, M.P. (2013). *The cloud begins with coal: big data, big networks, big infrastructure, and big power*. Digital Power Group, p. 3. Retrieved from www.tech-pundit.com/wp-content/uploads/2013/07/Cloud_Begins_With_Coal.pdf. Accessed on June 21, 2017.

[30]Cullinen, M. (2013). *Machine to machine technologies: Unlocking the potential of a $1 trillion industry*. Carbon War Room. Retrieved from http://www.grahampeacedesignmail.com/cwr/cwr_m2m_down_singles.pdf. Accessed on June 21, 2017.

[31]Leach, A. (2016, October 18). The E-waste mountains. *The Guardian*. Retrieved from https://www.theguardian.com/global-development-professionals-network/gallery/2016/oct/18/the-e-waste-reduce-waste-old-technology-mountains-in-pictures. Accessed on June 21, 2017.

[32]Hague, M. (2017, April 18). Stupid homes: Experts suggest people create space without technology. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/life/home-and-garden/stupid-homes-experts-suggest-people-create-space-without-technology/article34734653/. Accessed on June 21, 2017.

[33]Powles, J. (2015, July 15). Internet of Things: The greatest mass surveillance infrastructure ever? *The Guardian*. Retrieved from https://www.theguardian.com/technology/2015/jul/15/internet-of-things-mass-surveillance. Accessed on June 21, 2017.

[34]Hadhazy, A. (2017, April 18). Biased bots: Artificial-intelligence systems echo human prejudices. Princeton University. Retrieved from https://www.princeton.edu/news/2017/04/18/biased-bots-artificial-intelligence-systems-echo-human-prejudices. Accessed on June 22, 2017.

[35]Hinchliffe, E. (2017, March 14). Edward Snowden explains exactly how the CIA would hack your Samsung TV. *Mashable*. Retrieved from http://mashable.com/2017/03/14/wikileaks-snowden-interview/#f.Hgb5cIYOqB. Accessed on June 22, 2017.

[36]McKendrick, J. (2013, February 19). In the rush to cloud computing, here's one question not enough people are asking. *Forbes*. Retrieved from https://www.forbes.com/sites/joemckendrick/2013/02/19/in-the-rush-to-cloud-computing-heres-one-question-not-enough-people-are-asking/#4a9a017d7194. Accessed on June 22, 2017.

[37]Dignan, L. (2011, October 24). Cloud computing's real creative destruction may be the IT workforce. *ZDNet*. Retrieved from http://www.zdnet.com/article/cloud-computings-real-creative-destruction-may-be-the-it-workforce/. Accessed on June 22, 2017.

[38]*Ibid*.

[39]Dignan, L. (2011, October 18). Analytics in 40 years: Machines will kick human managers to the curb. *ZDNet*. Retrieved from http://www.zdnet.com/article/analytics-in-40-years-machines-will-kick-human-managers-to-the-curb/. Accessed on June 22, 2017.

[40]See endnote 37.

[41]McKendrick, J. (2014, August 11). We're all outsourcers now, thanks to cloud. *Forbes*. Retrieved from https://www.forbes.com/sites/joemckendrick/2014/08/11/were-all-outsourcers-now-thanks-to-cloud/#2f101e5b67aa. Accessed on June 22, 2017.

[42]Turkle, S. (2015). *Reclaiming conversation: The power of talk in the digital age* (p. 3). New York, NY: Penguin.

[43]Engler, M., & Engler, P. (2016). *This is an uprising* (p. 114). New York, NY: Nation Books.

[44]Bergstein, B. (2017, April 10). We need more alternatives to Facebook. *MIT Technology Review*. Retrieved from

https://www.technologyreview.com/s/604082/we-need-more-alternatives-to-facebook/. Accessed on June 24, 2017.

[45]Kerstetter, J. (2017, May 19). Daily report: Europe gets tough on Facebook. *The New York Times*. Retrieved from https://mobile.nytimes.com/2017/05/19/technology/daily-report-europe-gets-tough-on-facebook.html. Accessed on July 18, 2017.

[46]Mortished, C. (2017, May 14). The totalitarian capitalism of tech giants should trump your fears of populism. *The Globe and Mail*. Retrieved from https://tgam.ca/2s4kazR. Accessed on June 24, 2017.

[47]Simon, M., & Carlsen, W. (2004, June 6). Hard line helped him win, flexibility helped him stay / Ability to compromise replaced his tough stance against UC student protests. *San Francisco Chronicle*. Retrieved from http://www.sfgate.com/news/article/Hard-line-helped-him-win-flexibility-helped-him-2751983.php. Accessed on June 24, 2017.

EPIGRAPH REFERENCES

Schwartz, A. The Art and Activism of Grace Paley. *The New Yorker*, May 8, 2007. Retrieved from http://www.newyorker.com/magazine/2017/05/08/the-art-and-activism-of-grace-paley. Accessed on August 1, 2017.

Williams, R. (2015). *Keywords* (p. xxxv). New York, NY: Oxford University Press.

Le Guin, U. K. (2004). A Rant About 'Technology'. Retrieved from http://www.ursulakleguin.com/Note-Technology.html. Accessed on August 1, 2017.

Mortished, C. The Totalitarian Capitalism of Tech Giants Should Trump Your Fears of Populism. *The Globe and Mail*. Retrieved from https://beta.theglobeandmail.com/report-on-business/economy/economic-insight/the-totalitarian-capitalism-

of-tech-giants-should-trump-your-fears-of-populism/article3498
3932/. Accessed on August 1, 2017.

Shapin, S. (2017, July 13) The Superhuman Upgrade. *The London Review of Books* (Vol. 39, No. 14). Retrieved from https://www.lrb.co.uk/v39/n14/steven-shapin/the-superhuman-upgrade. Accessed on August 1, 2017.

Baumann, Z. (1998). *Globalization: The Human Consequences* (p. 4). London: Polity.

Silva, D. (2009). Internet Has Only Just Begun, Say Founders. *Phys.Org*, April 22. Retrieved from https://phys.org/news/2009-04-internet-begun-founders.html. Accessed on August 1, 2017.