

Hype and The Need for Responsible Compute

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Introduction

Hypes come and go, and in their aftermath we are left with rubbish and confusion. We are aware of physical trash in landfills, but rapid technological change also leads to inequality, injustice, and unhelpful social patterns. It is like technical debt (the price we pay later for poor and short-sighted technological decisions now), but on a social level. It is something we can't responsibly ignore as educators and humans.

It's very relevant now that we are in the midst of (another!) AI hype. And if history taught us anything, after summer will come winter, with its sloppy sludge of half-melted mess to deal with. Disturbingly, current narratives of this hype are written by tech bros with a strong (self-serving) agenda. The chorus of this song is 'growth, growth, growth', but growth where and why? We were sold on the dream of machines doing the dishes so that we can write poetry... but instead machines write poetry and we are left with a pile of dirty dishes. Can we afford for art and critical thinking to become on-demand paid subscriptions ('brain as a service') as we outsource our criticality like we delegate our driving to Uber? Is it good for society to replace human companionship with chatbot 'partners'?

“how do we guarantee that computers and other cultural products are not so pleasurable that they discourage us from engaging in absolutely necessary forms of social engagement?”
(Golumbia 2009)

As educators, our responsibility is not to prepare students for the grim post-brain-apocalyptic future, but to inspire them to create a better, sustainable world.

The worst that can happen, is that we educate another generation of self-serving tech bros, who will ruin the world and humanity further. It's irresponsible to teach any skill without

also teaching the ethical, social, economical or political context, especially when topics we teach have strong creative and destructive potential (martial arts, nuclear physics, programming). But how do we make these responsibility topics 'not skippable'? In a university setting, ethics can't just be an optional elective subject, or even just a week of content within a core compulsory subject. We need 5 mins of ethics in every hour of teaching, we need a thought about ethics in every sentence. We do not need ethical bits in our yoghurt, we need ethics-flavoured yoghurt.

In this chapter, we look at a number of topics where sustainability, AI, and education (or even wider culture) overlap. We will structure our thoughts around the international framework suggested by the United Nations: the [UN Sustainable Development Goals](#)¹⁷. Join us on this exploration of what is possible, but also of what went terribly wrong in the past. We will look especially at purposefully forgotten (or swept under the carpet) aftermaths of previous technological hypes.

At the end of this chapter, we will bring it back to education and share some practical resources you can use. You will find classroom activities that support responsible computing interspersed throughout, as well as a reading list (see "Summary" below) of our favourite articles and books. Feel free to pick some of them and plant them straight into your own curriculum. And weather-allowing, from these seeds we will watch the growth of a new, curious and slightly more sustainable generation of students and future teachers.

¹⁷ <https://sdgs.un.org/goals>

Responsible Compute and the UN Sustainable Development Goals

In this section, we will introduce a number of the key issues relating to responsible compute through the lens of the UN Sustainable Development Goals, an outcome of the 2025 [UN 2030 Agenda for Sustainable Development](https://sdgs.un.org/2030agenda)¹⁸. These are a series of 17 goals that address a number of key international issues.

Engineering Inequities



Failure to consider all members of society in the design and development of products can lead to technologies that privilege some but are not fit for purpose for others. Examples of this include near infra-red automatic soap dispensers, which do not “see” darker skin tones due to their lower reflectivity, and “Shirley” cards in photography, which were designed to help colour balance films but were entirely based on white models (Benjamin 2019). Despite known issues with the film itself and how the printing machines were configured, a diverse “Shirley” card was not introduced until the mid-1990s.

These inequities in film photography have been echoed in facial recognition technologies. For over 50 years, the standard reference image used in image processing papers was “Lena”, a cropped image from a November 1972 issue of Playboy. As a result, this image

also appears in many course materials and textbooks on image recognition. Use of the image in academic articles has since been banned, due to ethical issues relating to its provenance. In 2015, an issue was reported with the Google Photos app labelling black people as gorillas. Google claimed that this is due to a lack of diverse images of people in its training set, and that the label “gorilla” would no longer be applied to groups of photos while an alternative solution was developed. In 2023, the New York Times reported that the issue was still yet to be resolved, and was also impacting Apple’s image recognition (Bandara n.d.).

In 2018, Michael Rosen received a standing ovation at the last ever National Union of Teachers conference after reciting his poem [The Data Have Landed](#)²⁰. The poem concludes with pupils becoming data, reflecting concerns over the datafication of compulsory education, reiterating sentiments in his previously published short story [Alice in Dataland](#)²¹. Social inequities have long been highlighted in popular culture, for example the hip-hop classic White Lines and Bret Easton Ellis’ novel American Psycho. In the lyrics to White Lines a business man is treated more favourably than a young black man, despite being arrested for the possession of significantly more illegal drugs. In American Psycho, the wealth and power of the main protagonist leads to them literally getting away with murder. Some are repeated in the data driven decision making systems that influence all dimensions of our daily lives, multiple examples of which are highlighted in Virginia Eubanks’ 2018 book Automating Inequality (Eubanks 2019).

The free website inequalities.ai²² provides maps that show how ChatGPT 4o-mini rates regions by comparative properties. The default map shows how it compares countries by “is smarter”, placing Europe, North America, China, India and Australasia as “smart”, and much of central and western Africa as

“not smart” by comparison. This illustrates how bias continues to be an issue with modern, popular “AI” tools.

Classroom Activities: Facial Recognition Workshop

The Programming Historian lesson [Facial Recognition in Historical Photographs with Artificial Intelligence in Python](#)²³ introduces key concepts of facial recognition. This tutorial can be expanded to introduce key issues related to inequalities.

• **Example: Blackish, Series 5 Episode 10.** In this episode Diane is “invisible” in her class photo. This can be a starting point to discuss engineered inequity.

• **Example: Lena and Google Photos.** An opportunity to discuss the culture of the research labs where image recognition technologies were developed, how this became part of the “canon”, and issues with inadequate training data.

For an example of how these resources can be included, see Ahern (n.d.).

Hardware and the Environment



Most environmental discussions relating to data-intensive computing are focused on the direct power costs of running increasingly large and dense collections of compute and storage, with increasing concerns relating to water use in cooling systems.

¹⁸ <https://sdgs.un.org/2030agenda>

¹⁹ <https://sdgs.un.org/goals/goal10>

²⁰ <https://michaelrosenblog.blogspot.com/2018/02/the-data-have-landed.html>

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<https://www.theguardian.com/education/2017/dec/19/alice-in-dataland-original-story-education-michael-rosen>

²² <https://inequalities.ai/>

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<https://programminghistorian.org/en/lessons/facial-recognition-ai-python>

²⁴ <https://sdgs.un.org/goals/goal8>

²⁵ <https://sdgs.un.org/goals/goal12>

However, the main environmental harms relate to the acquisition of the raw materials required and the embedded carbon in the manufacturing process. **Tantalum, tin, gold**, and other elements are all essential to the production of modern microelectronics. Their minerals are often located in regions with a history of conflict — most notably the Democratic Republic of Congo (DRC) — where demand results in neocolonial forces driving further instability on top of the existing legacies of colonial pasts (Batha n.d.). A rush for gold has led to deforestation in the Amazon and increasing concern about the safety of workers in artisanal mines (“BLOOD GOLD — Is Your Cell Phone or Electric Car Stained with Indigenous Blood from the Amazon?” 2022). Blood gold, which is illegally mined, finds its way into legitimate supply chains with false documentation (Federl, n.d.).

The brine beneath Bolivia’s salt flats contain rich deposits of lithium, an essential component in electric batteries. As this is becoming industrialised, there are concerns about who really benefits — the local communities or the companies involved — and about the proposed process and the levels of water required which may impact on neighbouring settlements.

Mining of **coltan**, the dominant source of tantalum (and niobium), is infamous for being deeply exploitative, with hard manual labour the dominant process used in the DRC. As the drive to build data centres has led to natural land being displaced in North America, China, and Europe, so has coltan mining led to deforestation, the near eradication of endangered species (gorillas, in particular, hunted for bushmeat to also feed the miners), and water pollution from dust spoil. There are significant health implications for the workers themselves, with elevated respiratory problems due to that same dust pollution (Leon-Kabamba et al. 2018), and ionising radiation doses approaching the annual exposure limits for UK nuclear industry employees

(Mustapha, Mbuzukongira, and Mangala 2007; Agency n.d.).

Classroom Activities: Exploring the Impact of Mining

Current business models are based upon planned obsolescence. This could lead to a discussion of the sustainability of this business model — why the hardware cannot just be manufactured and why computational hardware has a short supported lifespan compared to its actual usable lifespan.

• Example: River of Gold.

- Watch the documentary [River of Gold](https://riverofgoldfilm.com/about-the-film/)²⁶

- Explore how the [Amazon Aid Be a Better Guide](https://amazonaid.org/be-a-better-consumer/)²⁷ relates to the production of electronic hardware

- **Example: Simon Reeve’s South America, Episodes 3 & 4.** Episode 3 is in the Andes and features a high altitude gold mine and the working conditions of employees. Episode 4 features the salt flats and lithium extraction.

These issues can also be discussed in workshops relating to code optimisation and green compute. Reasons for optimisation may be for decreasing time to result, or to optimise the amount of social good for the environmental harms.

Data Acquisition and Workforce Exploitation



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In 2019, the IBM corporation was criticised for using Flickr photos in a facial-recognition project without obtaining the consent of those who had

created or were featured in the images (Solon n.d.).

As most images used for machine learning are scraped from the internet and are not well tagged, a large workforce is needed to create this additional metadata. Similarly, tagging of content as illegal or otherwise problematic requires a large amount of initial training data which is manually tagged by humans. To do so at scale, at an affordable cost, AI companies employ outsourcing partners such as Sama, which pay workers in Kenya, Uganda and India a pittance (typically \$2/hr) for this work (Perrigo n.d.). This is true even when the content being labelled is known to be obscene and/or deeply distressing — graphic descriptions of sexual assault, for example, or images depicting abuse. To their credit, eventually Sama cancelled some of their worst contracts with AI companies, but other outsourcing companies exist and still perform similar work.

The recent AI boom and the [Data Workers Inquiry](https://data-workers.org/)³⁰ have highlighted these issues, but concerns regarding Amazon’s Mechanical Turk (MTurk) and its workers were being raised back in 2015, and again in 2024 (Dholakia n.d.; Klovig Skelton n.d.). Despite these concerns, MTurk is still used by many researchers across multiple domains.

²⁶ <https://riverofgoldfilm.com/about-the-film/>

²⁷ <https://amazonaid.org/be-a-better-consumer/>

²⁸ <https://sdgs.un.org/goals/goal3>

²⁹ <https://sdgs.un.org/goals/goal8>

³⁰ <https://data-workers.org/>

Classroom Activities: Data Sources for Training Models

- **Example: Data Workers Inquiry.**

Explore “[Data Workers in Europe Speak Out](#)”³¹. Do these experiences align with notions of decent work? What are the harms?

- **Example: [Hugging Face RAG tutorial](#)**³². In this part of the tutorial, you could discuss the source of the file contents for the RAG training. This could then lead into discussions around access and licensing.

Surveillance, Sousveillance, and Civil Liberties



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In 2018, the British Council published an article based on a letter by Tim Berners-Lee (Berners-Lee, n.d.), where he raised concerns about the dark side of the web, alongside his hopes for the future. Specifically, he raised concerns around the concentration of power and the gatekeeping effect which enables a “handful of platforms to control which ideas and opinions are seen and shared”.

These fears are now being realised. According to the Fortune 500 Global rankings (Fortune.com 2023), Amazon is the second largest grossing organisation in 2025 and has been in the Fortune 500 Global rankings list for 17 years. Apple is 8th, Alphabet 13th, Microsoft 22nd and Meta Platforms 41st. These companies rely heavily on our data for their platforms and services, producing tools and platforms that shape our everyday lives.

This sentiment is also echoed by contemporary academics. Take David Golumbia, who in the introductory chapter of *The Cultural Logic of*

Computation, asks (Golumbia 2009) “what happens when powerful institutions — corporations, governments, schools — embrace computationalism as a working philosophy”. It entrenches power and enmeshes instrumental reason with neoliberalism, despite being framed in terms of distributed power and democratic participation.

In surveillance and sousveillance, the same technologies are used by both those in positions of authority and those wishing to hold them to account. The majority of public spaces are fitted with cameras and other monitoring equipment, many of which have been introduced as public safety initiatives; the few watching the many. There have been concerns related to privacy associated with these technologies — most recently, an [audit by the Information Commissioner’s Office](#)³⁴ on the use of facial recognition technology by South Wales Police and Gwent Police. Sousveillance is a form of inverse surveillance, “watching the watchers”, facilitated by mobile digital camera technologies and high speed mobile data connections, which has steadily been growing. It can be used either for recording personal experiences, or for the monitoring of authority figures (hierarchical sousveillance) (Reilly n.d.), and can have both positive (e.g. the recording of the George Floyd incident) and negative impacts on individuals (e.g. cyber harassment) and organisations.

Classroom Activities: Responsible AI

- **Example: [Datopolis — The Open Data Board Game](#)**³⁵. This board

game from the Open Data Initiative is available to play online. It introduces key ideas around why data may be open or closed, and longer versions of the game introduce different perspectives on how data can be used. This helps learners to understand that decisions around data use are political and opens up the idea that data itself may not be neutral.

- **Example: Explore whether AI smart glasses should be a consumer technology.** In 2013, Google launched its Google Glass smart glasses. Due to resistance and concerns over use, these were withdrawn from the market in 2015. However, this technology has seen a resurgence. Meta launched AI enabled smart glasses in the autumn of 2025, and Google are considering re-entering the market. However, there are already rising concerns over how these devices are being used.

A number of campuses in the USA have issued guidance to students over use on campus and threats to safety (Clack n.d.). Smart glasses also pose risks to their wearers: a recent expose revealed that all video recorded on Meta smart glasses is reviewed by data annotators employed by Sama (see “[Data Acquisition and Workforce Exploitation](#)”). This is not made clear to users of the glasses, who often record intimate parts of their lives on their product. The Information Commissioner’s Office has written to Meta about concerns (Vallance n.d.).

Students may discuss what the benefit is for Meta and Google in providing smart glasses. Should they be an industrial or a consumer product? This can lead into discussions about corporate responsibility and “surveillance capitalism”.

³¹ <https://data-workers.org/>

³²

<https://huggingface.co/blog/ngxson/make-your-own-rag>

³³ <https://sdgs.un.org/goals/goal16>

³⁴ <https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2025/08/ico-steps-up-scrutiny-of-police-use-of-facial-recognition->

[technology-with-audit-of-south-wales-police-and-gwent-police/](https://sdgs.un.org/goals/goal16)

³⁵ <https://datopolis.theodi.org/>

• **Example: Explore the AI Incidents Database**³⁶. This website is a project of the Responsible AI Collective, an archive of actual harms or near harms of deployed AI systems. The taxonomies of [Goals, Methods, and Failures \(GMF\)](#)³⁷ and the [MIT AI Risk Repository](#)³⁸ are particularly interesting and could be used when discussing a particular technology or potential for harm.

Cultural Colonialism



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A related problem to inequity in “AI model training” is inequity in generated content.

Large Language Models generate “plausible” text based on the patterns found in the material they are trained on. However, this material is overwhelmingly English-language, and written by US or British citizens, introducing a cultural bias into the responses from the models themselves (Tao et al. 2023; Jakesch et al. 2023).

As pressure is placed on educational institutions to include “AI” in teaching-related roles, this brings the risk that students learn homogeneous values, potentially those of foreign cultures. This extends not merely to values, but also styles of writing: the “distinctive” tone of an LLM-generated piece of text is a distillation of the dominant styles in its training set (Agarwal, Naaman, and Vashistha 2024). Writers relying on LLMs to “co-develop” essays tend to defer to the LLM’s style suggestions relative to their own, even when these

stylistic differences are those of culture, not correctness. The effect begins with normative suggestions from spell- and grammar-checkers in text editing software since the 1980s — British English speakers often being “corrected” by default US English software — and also introducing unique cases of language drift when the software encountered words that were not in its dictionary (Zimmer n.d.).

This inhibition of local culture in favour of a “preferred” culture is that of cultural colonisation. This pattern is seen historically in the behaviour of many empires. For example, the British occupation of Ireland during the 16th to early 20th centuries was associated with a suppression of Irish culture and language (Rodriguez and Sojan n.d.), something mirrored in the suppression of Scottish Gaelic and Lowland Scots in Scotland, Welsh in Wales, and the replacement of local languages by English across the British Empire (Lucas n.d.). Cultural homogenisation also occurs within countries (e.g. France (Grégoire, n.d.), Japan (NationCymru n.d.), Turkey, Spain, and many others). Often, these processes are associated with an attempt to impose a dominant culture or politics via language substitution — consider Catalan independence movements in Spain, for example.

With technological promotion, the increased danger is that suppression no longer needs to be forced; instead, the “modernity” and ease of use of the tool acts as a vector to cause adoption. Before LLMs, we saw, and continue to see, “social bubble” effects where online groups iterate themselves into extreme viewpoints (“Social Bubble - ECPS” n.d.); LLMs worsen this by increasingly also homogenising those perspectives in other directions, and by producing content faster than a human can.

Indeed, even before LLMs, the ease with which Internet-based technologies has allowed us to publish content to the entire world has allowed unwitting

damage to minority cultures. An American teenager with no Scots knowledge single-handedly degraded much of the Scots language Wikipedia during the late 2010s, with knock-on effects in media representation of the language and culture worldwide (Brooks and Hern n.d.).

Classroom Activities: Generative AI and Homogenisation

• **Example: Volume of content generation.** A Graphite study (Paredes et al. n.d.) shows that LLMs now generate more content on the internet than humans. Students can discuss what this might mean about unique perspectives and the place for human voices and thought. Students may be prompted to consider the danger of conformity in general, and how much we can trust online content without provenance! Educators might discuss the Scots Wikipedia scandal mentioned above as an example of how, even without LLMs, technology amplifies the actions of individuals in potentially harmful ways.

• **Example: Essay “help”.** Students almost certainly have used LLMs to generate or “help” with essay writing or editing. Discuss, with prompting an LLM in class, where individual style may be a matter of taste — and how the style biases of the LLM are themselves obvious. Compare to the diverse range of styles found in (English) literature — do the students think that an LLM would have allowed James Joyce to write *Ulysses*? Or William Shakespeare to write his plays, given his invention (or at least promotion) of many new words in the English language? (This can become a discussion about the need for critical thinking, creativity and analysis in any text.)

• **Example: Homogenisation beyond text.** Image generation models, such as DALL-E, Stable Diffusion, etc., exhibit biases in the way they respond to prompts (Park 2024). With reference to the images in the linked article, students can discuss the biases they see, or do not see, in the responses; and link them to their own self-image.

³⁶ <https://incidentdatabase.ai/>

³⁷ <https://incidentdatabase.ai/taxonomies/gmf/>

³⁸ <https://incidentdatabase.ai/taxonomies/mit/>

³⁹ <https://sdgs.un.org/goals/goal4>

⁴⁰ <https://sdgs.un.org/goals/goal10>

Summary

In this chapter, we have raised a number of repeating socio-technical issues and linked these to the UN Sustainable Development Goals. We have also provided examples of how these topics could be introduced to learners. These examples are directly linked to the [QAA Computing Subject Benchmark](#)⁴¹ statement 1.17 regarding sustainability and 1.14 regarding equality, diversity and inclusion, specifically the consideration point: “demonstrating areas in software engineering and application development that require a professional and reflective approach to addressing bias and lack of diversity in data and design of computing solutions, systems and protocols.”

We hope that these examples, alongside the [QAA and AdvanceHE Education for Sustainable Development Guidance](#)⁴², will help embed these key ideas throughout our curricula. In addition, we have provided a list of recommended further reading that will expand on the ideas introduced more fully, and provide inspiration for how we can introduce these key topics to our students and lead to a more sustainable, and ethical, future for all.

Further Reading

- Eubanks (2019), **Automating inequality: how high-tech tools profile, police, and punish the poor**. This is a USA focused book. It discusses a range of issues related to algorithmic decision making that have negatively impacted on less privileged areas of society. The spur for writing the book was Eubanks’ partner falling foul of a health insurance algorithm and being denied funding for health care.
- Benjamin (2019), **Race after technology: abolitionist tools for the New Jim Code**. History is littered with technologies that “other”; in this book, Benjamin explores how technologies have the ability to entrench existing inequities whilst appearing at a surface level to be neutral.
- Mejias and Couldry (2024), **Data grab: The new colonialism of big tech and how to fight back**. This book explores data acquisition as a colonial act, comparing it to the land grabs during the age of Empire. It introduces and discusses key topics such as data ownership and individual data rights.
- Jasanoff and Kim (2019), **Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power**. Sociotechnical imaginaries are transnational concepts, this was the first text to explore this concept in depth. It introduces the implicit ideas about public purposes, collective futures, and the common good in scientific and technology progress.
- Zuboff (2023), **The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power**. This book discusses the business models behind big tech, and how

convenience has been traded for privacy. How we have gotten to where we are with data driven technologies and industries in the 21st century.

- Doctorow (2025), **Enshittification: Why Everything Suddenly Got Worse and What to Do About It**. This book more generally discusses the modern phenomenon of “Big Tech” and hypothesises a common pattern to unethical behaviour, whilst suggesting an anti-capitalist response. (Note: this book is available in electronic form, DRM-free, from [Doctorow’s own web-store](#)⁴³.)
- Black (2012), **IBM and the Holocaust: The Strategic Alliance Between Nazi Germany and America’s Most Powerful Corporation – Expanded Edition**. A meticulously researched piece covering the knowing involvement of IBM (and its German subsidiaries) in the actions of Nazi Germany. A good example of where prioritising profit over ethics once led us, and can lead us again.

References

- Agarwal, Dhruv, Mor Naaman, and Aditya Vashistha. 2024. “AI Suggestions Homogenize Writing Toward Western Styles and Diminish Cultural Nuances.” In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. Yokohama Japan: ACM. <https://doi.org/10.1145/3706598.3713564>.
- Agency, UK Health Security. n.d. “Ionising Radiation: Dose Comparisons.” *GOV.UK*. UK Government. Accessed March 18, 2026. <https://www.gov.uk/government/publications/ionising-radiation-dose-comparisons>

⁴¹

https://www.qaa.ac.uk/docs/qaa/sbs/sbs-computing-22.pdf?sfvrsn=ebb3dc81_4

⁴² <https://www.advance-he.ac.uk/knowledge-hub/education-sustainable-development-guidance>

⁴³ <https://shop.craphound.com>

[comparisons/ionising-radiation-dose-comparisons](#).

Ahern, Samantha. n.d. "Image Recognition - History, Ethics and Moral Dilemmas. Workshop Session Plan."

Bandara, Pesala. n.d. "Google's Photos App Is Still Unable to Find Gorillas." *PetaPixel*. Accessed March 18, 2026. <https://petapixel.com/2023/05/22/goo-gles-photos-app-is-still-unable-to-find-gorillas/>.

Batha, Emma. n.d. "How Murky Gold Trade Fuels Wars, Gangs and Terror Attacks Context by TRF." Accessed March 18, 2026. <https://www.context.news/money-power-people/how-murky-gold-trade-fuels-wars-gangs-and-terror-attacks>.

Benjamin, Ruha. 2019. *Race After Technology: Abolitionist Tools for the New Jim Code*. Cambridge, UK Medford, MA: Polity.

Berners-Lee, Tim. n.d. "The Web Is Under Threat": Tim Berners-Lee on Making the Web Work for Everyone." *British Council*. British Council Worldwide. <https://www.britishcouncil.org/anyone-anywhere/explore/dark-side-web/tim-berners-lee>.

Black, Edwin. 2012. *IBM and the Holocaust: The Strategic Alliance Between Nazi Germany and America's Most Powerful Corporation – Expanded Edition*. Dialog press.

"BLOOD GOLD — Is Your Cell Phone or Electric Car Stained with Indigenous Blood from the Amazon?" 2022. *The People's Forum*. <https://peoplesforum.org/events/blood-gold/>.

Brooks, Libby, and Alex Hern. n.d. "Shock an Aw: US Teenager Wrote Huge Slice of Scots Wikipedia." *The Guardian*. Accessed March 18, 2026. <https://www.theguardian.com/uk-news/2020/aug/26/shock-an-aw-us-teenager-wrote-huge-slice-of-scots-wikipedia>.

Clack, Erin. n.d. "University Issues Warning After Reports of a Man Using Ray-Ban Meta Sunglasses to Record Women on Campus." *People.com*. Accessed March 18, 2026. [https://people.com/university-issues-](https://people.com/university-issues-warning-after-reports-of-man-using-ray-ban-meta-sunglasses-to-record-women-on-campus-11824196)

[warning-after-reports-of-man-using-ray-ban-meta-sunglasses-to-record-women-on-campus-11824196](#).

Dholakia, Utpal. n.d. "My Experience as an Amazon Mechanical Turk (MTurk) Worker Psychology Today United Kingdom." Accessed March 18, 2026. <https://www.psychologytoday.com/qb/blog/the-science-behind-behavior/201507/my-experience-as-an-amazon-mechanical-turk-mturk-worker>.

Doctorow, Cory. 2025. *Enshittification: Why Everything Suddenly Got Worse and What to Do about It*. Verso Books.

Eubanks, Virginia. 2019. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. First Picador edition. New York: Picador St. Martin's Press.

Federl, Fabian. n.d. "Investigating How Illegal Gold Gets Into the Legitimate Supply Chain." *Global Investigative Journalism Network*. <https://gjin.org/stories/investigating-illegal-gold-mining-legitimate-supply-chain/>.

Fortune.com. 2023. "Fortune Global 500." *Fortune*. <https://fortune.com/ranking/global500/2023/>.

Golumbia, David. 2009. *The Cultural Logic of Computation*. Cambridge, Mass: Harvard University Press. <https://doi.org/10.5860/choice.47-2615>.

Grégoire, Henri. n.d. "Rapport sur la nécessité et les moyens d'anéantir les patois et d'universaliser l'usage de la langue française — Convention nationale, 1794." *Wikisource*. <https://w.wiki/KrJV>.

Jakesch, Maurice, Advait Bhat, Daniel Buschek, Lior Zalmanson, and Mor Naaman. 2023. "Co-Writing with Opinionated Language Models Affects Users' Views." In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. Hamburg Germany: ACM. <https://doi.org/10.1145/3544548.3581196>.

Jasanoff, Sheila, and Sang-Hyun Kim. 2019. *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. University of Chicago Press.

Klovig Skelton, Sebastian. n.d. "Amazon Mechanical Turk Workers Suspended Without Explanation Computer Weekly." *News. ComputerWeekly.com*. Accessed March 18, 2026. <https://www.computerweekly.com/news/366612812/Amazon-Mechanical-Turk-workers-suspended-without-explanation>.

Leon-Kabamba, Ngombe, Nlandu Roger Ngatu, Sakatolo Jean-Baptiste Kakoma, Christophe Nyembo, Etongola Papy Mbelambela, Reiko Juliana Moribe, Stanislas Wembonyama, Brigitta Danuser, and Numbi Oscar-Luboya. 2018. "Respiratory Health of Dust-Exposed Congolese Coltan Miners." *International Archives of Occupational and Environmental Health* 91 (7): 859–64. <https://doi.org/10.1007/s00420-018-1329-0>.

Lucas. n.d. "How Colonialism Spread the English Language." *English Project*. Accessed March 18, 2026. <https://englishproject.org/how-colonialism-spread-the-english-language/>.

Mejias, Ulises A, and Nick Couldry. 2024. "Data Grab: The New Colonialism of Big Tech and How to Fight Back." In *Data Grab*. University of Chicago Press.

Mustapha, A O, P Mbuzukongira, and M J Mangala. 2007. "Occupational Radiation Exposures of Artisans Mining Columbite-Tantalite in the Eastern Democratic Republic of Congo." *Journal of Radiological Protection* 27 (2): 187–95. <https://doi.org/10.1088/0952-4746/27/2/005>.

NationCymru. n.d. "Japanese Language Subjected to 'Welsh Not'-Style Punishment Takes Inspiration from Cymraeg." *Nation.Cymru*. Accessed March 18, 2026. <https://nation.cymru/culture/japanese-language-subjected-to-welsh-not-style-punishment-takes-inspiration-from-cymraeg/>.

Paredes, Jose L., Ethan Smith, Gregory Druck, and Bevin Benson. n.d. "More Articles Are Now Created by AI Than Humans." Accessed March 18, 2026. <https://graphite.io/five-percent/more-articles-are-now-created-by-ai-than-humans>.

Park, Ye Sul. 2024. "White Default: Examining Racialized Biases Behind AI-Generated Images." *Art Education* 77 (4): 36–45.
<https://doi.org/10.1080/00043125.2024.2330340>.

Perrigo, Billy. n.d. "Exclusive: The \$2 Per Hour Workers Who Made ChatGPT Safer." *TIME*. Accessed March 18, 2026.
<https://time.com/6247678/openai-chatgpt-kenya-workers/>.

Reilly, Paul. n.d. "Sousveillance." In *The Routledge Encyclopedia of Citizen Media*, 1st ed. London: Routledge. Accessed March 18, 2026.
<https://www.taylorfrancis.com/books/9781315619811/chapters/10.4324/9781315619811-65>.

Rodriguez, Pamela, and Kiran Sojan. n.d. "How the English Erased Irish Kairos Magazine." Accessed March 18, 2026.
<https://kairosmagazine.rutgers.edu/killiing-off-irish/>.

"Social Bubble - ECPS." n.d. Accessed March 18, 2026.
<https://www.populismstudies.org/Vocabulary/social-bubble/>.

Solon, Olivia. n.d. "Facial Recognition's 'Dirty Little Secret': Social Media Photos Used Without Consent." *NBC News*. Accessed March 25, 2026.
<https://www.nbcnews.com/tech/internet/facial-recognition-s-dirty-little-secret-millions-online-photos-scraped-n981921>.

Tao, Yan, Olga Viberg, Ryan S Baker, and René F Kizilcec. 2023. "Cultural Bias and Cultural Alignment of Large Language Models." *PNAS Nexus* 3 (9).
<https://doi.org/10.1093/pnasnexus/pgae346>.

Vallance, Chris. n.d. "ICO Writes to Meta over 'Concerning' AI Smart Glasses Report." *BBC News*. Accessed March 18, 2026.
<https://www.bbc.co.uk/news/articles/c0q33nvj0qpo>.

Zimmer, Ben. n.d. "When Spellcheckers Attack: Perils of the Cupertino Effect." *OUPblog*. Accessed March 18, 2026.
<https://blog.oup.com/2007/11/spellchecker/>.

Zuboff, Shoshana. 2023. "The Age of Surveillance Capitalism." In *Social Theory Re-Wired*, 203–13. Routledge.