

Postdigital Memory



Tim Fawns 

Monash Education Academy, Monash University,
Melbourne, VIC, Australia

Abstract

The term ‘postdigital memory’ encapsulates views of memory that involve a critical perspective on the intersection of digital technology and media, and different forms of human and technological memory. This entry draws on accounts from psychology, media studies, cultural studies, distributed cognition and sociomateriality to position memory as a complex phenomenon that combines social, material, digital individual and collective activity, and is entangled in issues of biology, politics, economics, the environment, and social justice. This conception supports critical perspectives on the datafication and commercialisation of memory, and highlights the relevance of transdisciplinary and more expansive understandings of memory work.

Keywords

Postdigital memory · Remembering ·
Datafication · Lifelogging · AI

Introducing Postdigital Memory

A postdigital view of memory involves a critical perspective on the intersection of digital technology and biological (usually, human) memory. So far, there has been limited explicit application of postdigital concepts to memory in academic literature. Some, such as Hroch (2020), have written of memory in a postdigital ‘era’ or ‘age’, in which digital media have become so pervasive as to be inappropriate to separate from ‘normal’ life. Andersen et al. (2014) have used the label ‘postdigital’ in relation to memory to signify the entanglement of old and new that is part of all technologies. Similarly, Merrill (2025) has argued for a focus, in the ‘postdigital age’, on memory as a hybrid of digital and non-digital, human and non-human, individual and collective, retrospective and prospective. Elsewhere, Merrill refers to ‘postdigital’ to mean that memory-related digital technologies are ‘simultaneously digitally and non-digitally constituted’ (Merrill et al. 2020: 5; see also Merrill and Lindgren 2021). Meehan (2022) provides a related example, questioning the separation of digital and physical in relation to museum artefacts.

Jelevska (2024) proposed a ‘postdigital collective memory’ that is embedded in or connected by media and media design practices. Parui and Raj (2024) draw on sociomaterial and posthuman perspectives from Barad (2007) and Hayles (1999) to describe postdigital memory ecologies made up of ‘assemblages’ of human and non-human elements,

where the focus shifts beyond individual memory to collective, emergent remembering shaped by relationships between people, technologies, media, and culture.

The emerging field of ‘hybrid memory’ studies (Ekelund et al. 2025) builds explicitly on post-digital ideas of memory-related technologies as always ‘more than digital’. Fawns’ (2020a, 2023) ‘blended memory’ addresses similar ideas, focusing more closely on autobiographical remembering and photography practices, and rejecting the separation of digital and non-digital, and of human thinking and technology. As Merrill et al. (2025) note, a tension within both of these terms is that their definition depends on the same categories of digital and non-digital that they are trying to reject.

As Knox (2024: 1) argues, postdigital thinking is not derived from a ‘predefined position or philosophical commitment’, but brings together research communities with a shared interest in troubling boundaries, assumptions, and philosophical positions that are often found within disciplines. Beyond the small but expanding pool of memory research that is explicitly post-digital, or focused on the hybridity of digital and non-digital or human and technological remembering, there is a rich and growing body of scholarship that can be drawn on to further outline what might constitute a postdigital view of memory and memory studies.

Crossing Disciplines and Theoretical Lenses in Postdigital Memory Studies

Multiple theoretical lenses can be employed for understanding memory in ways that might be described as postdigital (Macgilchrist and Metro 2020). Examples include transactive memory (Wegner 1987), collective memory (Hirst and Manier 2008), prosthetic memory (Landsberg 2004, 2018); postmemory (Hirsch 1997); distributed cognition (Sutton 2010, Menary 2010); and sociomateriality (Macgilchrist and Metro 2020; Parui and Raj 2024; Prezioso and Alessandrini 2023). These lenses show not only the intricate and diverse ways digital technology is woven into

memory practices but also how technology and media have always played a role in remembering. Each new digital innovation is simply the latest chapter in a long, interconnected history (Donald 2010).

Wegner’s (1987) transactive memory describes the way groups create and reshape memories together through social processes. Hirst and Manier (2008) note that memory exists both individually and collectively at the same time. Landsberg’s (2018) prosthetic memory explains how mass media enables individuals to form vivid memories of events beyond their direct experience, that are shared across social and cultural boundaries. Similarly, Hirsch’s (1997) work on ‘postmemory’ examines how later generations connect deeply to past traumas through objects and stories.

A distributed cognition view of memory proposes that remembering happens through a combination of brains, bodies, and world. Scholars such as Sutton (2010) and Dahlbäck et al. (2013) have employed a distributed cognition lens to argue that remembering is simultaneously internal and external. This manifests in various kinds of cognitive integration or partnership, including people and notebooks (Clark and Chalmers 1998), aircraft (Hutchins 1995), computers, digital systems and services (Clowes 2013), the Internet (Heersmink and Sutton 2020), and Artificial Intelligence (Fawns and Schuwirth 2024; Smit et al. 2024). Distributed cognition can be extended beyond single uses of a technology to incorporate complex sets of practices, such as taking, viewing, organising and sharing photographs (Fawns 2020a, 2023).

Sociomaterial approaches understand remembering as happening through material encounters with objects and things around us (Prezioso and Alessandrini 2023). As with distributed cognition, this view sees remembering not as something that happens just inside our heads, but through our bodily actions and practices. A sociomaterial lens looks at how the material aspects of digital technologies become woven into our social lives and activities (Macgilchrist and Metro 2020), and remembering emerges from the coming together

of people, objects, and surroundings that form remembering ‘assemblages’ (Parui and Raj 2024).

A postdigital view of memory also aligns with certain posthumanist traditions (Barad 2007; Bayne 2018) that reject the idea of individual humans as the central focus and instead see human agency as relational, shaped by connections with animals, materials, and social contexts. Such views differ from transhumanist views (confusingly, sometimes, also called ‘post-humanism’) that focus on enhancing human memory through technologies such as neural implants or forms of cyborgism (e.g., Cummings 2022). Transhumanist narratives, by prioritising cognitive or bodily enhancement while overlooking the complex interplay of social, economic, political, and environmental factors that influence everyday memory practices and cultures, contrast with postdigital views of memory.

An important premise of a postdigital view is that the digital is not separate from our material and social lives (Jandrić et al. 2018; Fawns 2019). It follows that a postdigital perspective would be unlikely to locate memory entirely within the brain, or position it as something affected by digital media in a linear way. Rather, memory and remembering are more likely to be seen as emergent phenomena that are produced through activity, in which particular instantiations of technologies are influenced by wider contextual factors (Fawns 2020a). A postdigital view would see both that which is remembered (i.e., memory content) and that which remembers (i.e., the remembering system) as emergent blends of biology, media, technology, and context (Fawns 2020a; Landsberg 2018). A postdigital perspective would recognise that engagement with media is not something that affects memory but rather is a fundamental condition of remembering itself.

Seeing remembering as more than just internal mental processes marks a key difference between traditional psychology and broader memory studies in fields like sociology, media studies, and history (Wang and Hoskins 2025). However, postdigital views of memory can still work with psychological perspectives. The constructive view of memory, developed by James (1890), Bartlett (1932), and others, sees remembering as shaped

by our engagement with technologies, materials, people, and environments. This view, along with attention to real-world contexts (Neisser 1978) and Tulving’s (1985) idea that environmental cues interact with internal memory traces, helps us understand how engagement with digital technologies becomes part of our memory practices.

Postdigital Critique of the Effects of Technology on Memory

An important role for postdigital memory is to challenge common assumptions about technology and memory. Terms like ‘digital memory’ (Dobbins et al. 2013) or ‘e-memory’ (Bell and Gemmell 2009) suggest a clear divide between biological and technological memory, often leading to oversimplified claims. For instance, some argue technology harms memory (e.g., Carr’s 2010 claim that ‘Google is making you stupid’), while others see it as enhancing memory (e.g., Bell and Gemmell’s 2009 utopian vision of ‘total recall’). Both views ignore how the specific contexts of memory and technology interaction shape remembering practices. Similarly, postdigital memory critiques studies that assume technology has uniform effects on memory. For example, research on ‘cognitive offloading’ (Risko and Dunn 2015) treats memory as something that can be outsourced to technology, often at the cost of ‘real’ human memory. Other studies try to isolate memory from external influences, such as Sparrow et al.’s (2011) ‘Google effect’ or Henkel’s (2014) ‘photo impairment effect’.

In contrast, a postdigital perspective sees the impact of technology as emerging through diverse, situated practices, contexts, and personal meanings. A related example is Reading’s (2022) concept of ‘rewilding memory’, which reimagines memory through a lens of neurodiversity, proposing a ‘more-than-human memory’ that highlights the role of the living world in memory formation and challenges traditional assumptions about how memories are created and preserved.

By questioning the assumed boundaries between technology and ‘real’ or ‘human’ memory, as well as between individual and collective

memory, postdigital views of memory might explore how remembering practices extend beyond the brain and digital tools into the complex interplay of social, material, and digital activity (Heersmink and Sutton 2020; Macgilchrist and Metro 2020). From this perspective, computers, the Internet, and social media, are not just digital archives but integral parts of dynamic processes of remembering (Merrill 2025), and the confounding variables that researchers attempt to control in memory experiments are deeply interconnected elements of context that form part of the broader process of remembering (Fawns 2022).

At the same time, an appreciation of context can be very challenging when it comes to digital media. Some argue that digital media create a ‘context collapse’ (Wesch 2009; Merrill 2025) in which different times, spaces, and realities are blended together. A postdigital perspective might see these contexts of remembering as becoming more complex and dynamic, but not disappearing. Indeed, this is, often, an important function of postdigital approaches—to support a critical examination and navigation of such complex and dynamic contexts.

Datafication, AI, and Algorithmic Governance

Postdigital approaches to memory can help researchers to make sense of the increasing datafication of aspects of lived and remembered life. Digital cameras, for instance, convert scenes into digital information while framing and excluding certain sensory and emotional details, such as taste, smell, and touch. Lifelogging takes this further, aiming to datafy all aspects of life, making memories searchable and accessible through digital functions (Sellen and Whittaker 2010). Similarly, in what has been called the ‘quantification of self’, personal experiences are datafied in ways that reinforce individualistic notions of isolated humans, even as they are merged with population-level technical representations of themselves (Moore and Robinson 2016). This datafication feeds further practices of algorithmic

governance, in which remembering practices are shaped by data-driven selectivity and curation.

Recent advances in AI have sparked debates about memory and agency. Some highlight benefits, like organising personal archives (e.g., Bergman et al. 2023), while others warn of risks, such as AI transforming fragmented personal data into unreliable blends of human-machine memory, creating ‘a past that was never encoded into memory’ (Hoskins 2024). Merrill (2023) highlights the vulnerability of our datafied society to ‘AI-controlled access’ to information, including AI-generated deepfakes of people and events (Liv and Greenbaum 2020; Murphy and Flynn 2022) and chatbots that mimic real or imagined individuals (Richardson-Walden and Makhortykh 2024; Hoskins 2024).

A postdigital perspective might examine these challenges as part of a longer history of technological entanglement, echoing earlier issues around the unintended proliferation of digital photographs (Fawns 2014). Further, a postdigital perspective on memory might reject ideas of AI as an independent force, instead viewing it as relational, and its influence as context-dependent (Bearman and Ajjawi 2023). While algorithms shape which media users are exposed to, digital platforms also enable meaningful connections, communication, and memory cues. Thus, a postdigital view of memory should consider harms, risks, benefits and possibilities, all of which stem not from technologies themselves but how they are embedded within dynamic contexts.

Commercialism, Control and Creative Possibility in Memory and Technology

An important function of postdigital approaches to memory is to critique simplistic ideas of technologically enhanced memory, as well as the related commercialisation of memory. For instance, multi-billion-dollar venture Neuralink’s development of brain-computer interfaces, while ostensibly aimed at restoring brain function, reflects its founder Elon Musk’s broader vision of achieving ‘symbiosis with artificial intelligence’ (Ferris 2017), continuing a broader, long-

standing pursuit of brain-machine integration (Pisarchik et al. 2019). By focusing on increasing neural connections through electrodes (Musk and Neuralink 2019), memory enhancement is positioned as primarily a technical challenge, overlooking harms, risks, and ethical concerns (Higgins et al. 2023).

Such discourses often ignore critical questions about control and security. Vos (2020) highlights problematic assumptions that users will retain control over brain-computer interfaces, despite evidence from other digital technologies showing vulnerabilities to hacking or corporate interference. Drew (2023) describes the brain as an emerging battleground for neurotechnology, prompting calls for ethical limits on neurological implants (Lavazza 2021). The expanding memory industry raises important questions about political economy, particularly regarding the unprecedented accumulation of memory-related data and its material and ecological consequences (Reading and Notley 2017).

A related rhetoric of technological solutionism underpinned Gordon Bell's MyLifeBits project (Bell and Gemmell 2009), which sought to enhance memory through comprehensive data capture. The project was abandoned due to the overwhelming volume of data generated by new technologies, though some suggest lifelogging initiatives might be revived through AI processing capabilities (Elgan 2016, 2024). From a postdigital perspective, both Musk's and Bell's visions rely on the flawed assumption that memory enhancement is primarily about increasing data storage or transfer capacity, overlooking how memory emerges through selective interactions between brains and machines (van Dijck 2008c).

Postdigital views of memory also have a role to play in analysing the ways in which digital technologies create new possibilities for memory preservation and memorialisation. As Pogačar (2016) observes, digital media enable collaborative creation of historical narratives, supplementing conventional memory practices while also fundamentally reshaping our understanding of how memories persist beyond individual experiences. While photographs and monuments have long helped us to preserve memories, emerging

technologies are transforming how we think about memorialisation. The growing 'digital afterlife industry' (Bassett 2022; Kasket 2019) exemplifies these issues. For example, Meitzler et al. (2024) explore AI-based digital afterlives where the departed live on as AI-generated chatbots or avatars, which Hoskins (2024) describes as 'deadbots' that allow conversations with the deceased. This is just one form of what Savin-Baden and Burden (2019) call 'digital immortality,' to include the various ways in which the dead continue to resonate and act through digital traces.

A postdigital perspective would examine how these technologies intersect with issues of economy, social justice, and other contextual issues. For instance, paid digital afterlife services reflect the broader commercialisation of memory, driven by hype around AI (Merrill 2023), lifelogging (Bell and Gemmell 2009), and transhumanism (e.g., Dragomir et al. 2023). This commercialisation often relies on 'sociotechnical imaginaries' (Doll 2023). However, from a postdigital perspective, both techno-optimistic visions of enhanced memory and apocalyptic fears of technological takeover (e.g., Cernat et al. 2023) promote a problematic separation of human and machine. Instead, resisting imaginaries and critically examining how remembering practices actually emerge through complex negotiations of social, material, digital, and economic elements will be crucial to the work of postdigital memory research.

Doing Postdigital Memory Research

Whilst explicit references to 'postdigital memory research' are currently scarce, Jandrić et al. (2024) note that research can embody postdigital principles without directly using the term. Following Knox (2024), postdigital memory studies might focus on challenging binary distinctions—such as between technology and human or social memory—while fostering open, inclusive dialogue. Rather than prescribing specific methods, postdigital approaches adopt a critical stance, tracing connections between technology, digital activity, and situated social and material practices, potentially introducing novel compositional

methods or ‘hybrid methodologies’ (Merrill 2025) that examine both specific technologies and their broader contexts (Fawns et al. 2023).

Postdigital memory research opens critical lines of inquiry about contemporary remembering practices and their implications, such as: how material devices, interfaces, social media dialogue, and technological elements, combine in ways that are shaped by economic, technological, social, and cultural forces (Lupton 2015); what aspects of the past are captured or excluded in digital data; how algorithmic platforms and data governance shape remembering (Falci 2013; Hoskins 2024; Merrill 2023); and how AI technologies integrate into already more-than-human memory systems (Ekelund 2024). Such inquiry is likely to benefit from interdisciplinary or transdisciplinary approaches (Jandrić and Knox 2022; Sutton 2010; Brown and Reavey 2015) that generate novel methods while maintaining openness to alternative and multiple ways of understanding the place of the digital in a complex world (Fawns et al. 2023).

A postdigital perspective on memory might look not only at risks, harms, and ethical implications but also explore the possibilities of structuring remembering practices, recognising that media ecologies are shaped both intentionally and unintentionally, by both individuals and external forces. For example, Dahlbäck et al. (2013) showed how people with cognitive impairments, like dementia, can improve their distributed remembering functions through deliberate configuration of their material environment, such as consistently placed objects and strategically positioned memory aids. This more nuanced view moves beyond simplistic accounts of technology’s effects on memory to consider remembering as a broader, collective practice in which outcomes emerge through complex, distributed or sociomaterial arrangements (Fawns 2020a).

In considering such questions, postdigital memory can and should build on (and, perhaps, contribute to) established lines of inquiry that position memory in a complex relationship with a range of interconnected factors. For example, prosthetic memory (Landsberg 2018) emphasises the ethical implications of the potential for media to foster

connections across diverse groups. Other research is exploring how new technologies like AI (Gensburger and Clavert 2024) and virtual reality (Kazlauskaitė 2023) create new possibilities for collective memory while raising important questions about agency, authenticity, and control. In particular, researchers are increasingly examining the role of AI technologies within conversations and experiences that contribute to collective remembering (Richardson-Walden and Makhortykh 2024).

The special issue of *Memory Studies Review*, edited by Gensburger and Clavert (2024), asks whether ‘Artificial Intelligence is the Future of Collective Memory’, raising questions about social justice and human agency amidst increasing datafication and algorithmic governance. A postdigital perspective can contribute to such research, in part by also recognising that memory has always incorporated and been shaped by media, narratives, and artefacts created by others. What may be novel from a postdigital perspective is AI systems’ increasing capacity to actively participate in remembering practices, automated organisation of media and media practices, and the creation of new architectures of memory that work in different ways from traditional selection processes.

Postdigital memory research requires us to think carefully about how both digital technology and memory work within specific contexts, including research settings. Fawns’ (2020b) work on photo-elicitation as a method for studying media and autobiographical memory practices provides an example of such reflexivity, showing how participants actively shaped their memory narratives together with researchers and the research setting. Similarly, postdigital memory research might raise important questions about what can be meaningfully captured and represented through data, and how the datafication of remembering practices shapes what is remembered and what it is like to remember (Jacobsen and Beer 2021).

Summary

Postdigital memory involves critical views of the relationship between human memory and digital media and technologies. It recognises that digitally-mediated remembering practices are always social and material, and shaped by complex relationships with political, economic, environmental, and biological factors. This entry considers how postdigital memory, as an emerging area of research and scholarship, can draw on accounts from psychology, media studies, cultural studies, distributed cognition, and sociomateriality to position memory as a complex phenomenon that combines social, material, digital individual, and collective activity. Interdisciplinary and transdisciplinary approaches, and the generation of new methods for the study of remembering as a complex phenomenon in which technology and contextual factors are constituent parts, can support further exploration through critical perspectives on the instrumentalisation, datafication, and commercialisation of memory.

Cross-References

- [Postdigital](#)
- [Postdigital Afterlife](#)
- [Postdigital Agency](#)
- [Postdigital and The Incomputable](#)
- [Postdigital Artificial Intelligence](#)
- [Postdigital Biopolitics](#)
- [Postdigital Collective Intelligence](#)
- [Postdigital Data](#)
- [Postdigital Education](#)
- [Postdigital Educational Futures](#)
- [Postdigital Educational Technology](#)
- [Postdigital Embodiment](#)
- [Postdigital Epistemology](#)
- [Postdigital Ethics](#)
- [Postdigital Ethics of Care](#)
- [Postdigital Knowledge Ecologies](#)
- [Postdigital Learning Analytics](#)
- [Postdigital Literacies](#)
- [Postdigital Practices](#)
- [Postdigital Research](#)
- [Postdigital Thinking](#)

- [Postdigital Time](#)
- [Resistance to the Postdigital](#)

Competing Interest Declaration The author(s) has no competing interests to declare that are relevant to the content of this manuscript.

References

- Andersen, C. U., Cox, G., & Papadopoulos, G. (2014). Postdigital Research. *APRJA*, 3(1). <https://doi.org/10.7146/aprja.v3i1.116067>.
- Barad, K. M. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Bartlett, F. C. (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge: Cambridge University Press.
- Bassett, D. J. (2022). *The Creation and Inheritance of Digital Afterlives: You Only Live Twice*. Cham: Springer. <https://doi.org/10.1007/978-3-030-91684-8>.
- Bayne, S. (2018). Posthumanism: A Navigation Aid for Educators. *Journal for Research and Debate*, 2(1), 1–7. https://doi.org/10.17899/on_ed.2018.2.1.
- Bearman, M., & Ajjawi, R. (2023). Learning to Work with the Black Box: Pedagogy for a World with Artificial Intelligence. *British Journal of Educational Technology*, 54(5), 1160–1173. <https://doi.org/10.1111/bjet.13337>.
- Bell, C. G., & Gemmell, J. (2009). *Total Recall: How the e-Memory Revolution Will Change Everything*. New York: Dutton.
- Bergman, O., Gutman, D., & Whittaker, S. (2023). It's Too Much for Us to Handle—The Effect of Smartphone Use on Long-Term Retrieval of Family Photos. *Personal and Ubiquitous Computing*, 27(2), 289–298. <https://doi.org/10.1007/s00779-022-01677-x>.
- Brown, S. D., & Reavey, P. (2015). Turning around on Experience: The “Expanded View” of Memory within Psychology. *Memory Studies*, 8(2), 131–150. <https://doi.org/10.1177/1750698014558660>.
- Carr, N. (2010). *The shallows: What the Internet is doing to our brains*. New York: W. W. Norton.
- Cernat, M., Borșun, D., & Matei, C. (2023). Human-Computer Interaction: Ethical Perspectives on Technology and Its (Mis)Uses. J. Filipe, M. Śmiałek, A. Brodsky, & S. Hammoudi (Eds.), *Enterprise Information Systems* (pp. 338–349). Cham: Springer. https://doi.org/10.1007/978-3-031-39386-0_16.
- Clark, A., & Chalmers, D. (1998). The Extended Mind. *Analysis*, 58(1), 7–19. <https://doi.org/10.1093/analys/58.1.7>.
- Clowes, R. W. (2013). The Cognitive Integration of E-Memory. *Review of Philosophy and Psychology*, 4(1), 107–133. <https://doi.org/10.1007/s13164-013-0130-y>.
- Cummings, C. (2022). Transhumanism: Morality and Law at the Frontier of the Human Condition. *Ave Maria Law Review*, 216, 216–259.

- Dahlbäck, N., Kristiansson, M., & Stjernberg, F. (2013). Distributed Remembering Through Active Structuring of Activities and Environments. *Review of Philosophy and Psychology*, 4(1), 153–165. <https://doi.org/10.1007/s13164-012-0122-3>.
- De Vos, J. (2020). *The Digitalisation of (Inter)Subjectivity: A Psy-Critique of the Digital Death Drive*. London: Routledge. <https://doi.org/10.4324/9781315167350>.
- Dobbins, C., Merabti, M., Fergus, P., Llewellyn-Jones, D., & Bouhafs, F. (2013). Exploiting Linked Data to Create Rich Human Digital Memories. *Computer Communications*, 36(15–16), 1639–1656. <https://doi.org/10.1016/j.comcom.2013.06.008>.
- Doll, M. (2023). The Specters of (Sociotechnical) Imaginaries. Oppressed Futures of the Past. *Navigationen - Zeitschrift für Medien- und Kulturwissenschaften*, 23(2), 30–40. <https://doi.org/10.25969/MEDIAREP/21643>.
- Donald, M. (2010). The Exographic Revolution: Neuropsychological Sequaelae. In L. Malafouris & C. Renfrew (Eds.), *The Cognitive Life of Things: Recasting the Boundaries of the Mind* (pp. 71–79). Cambridge: McDonald Institute.
- Dragomir, B., Soria-Frisch, A., Gheorghiu, R., Kruusmaa, M., Heyen, N., & Blasco, M. (2023). Transhumanist Revolutions. In M. Weber (Ed.), *Foresight on Demand: "Foresight towards the 2nd Strategic Plan for Horizon Europe"* (pp. 164–207). Brussels: European Commission. <https://doi.org/10.2777/77971>.
- Drew, L. (2023). Decoding the Business of Brain–Computer Interfaces. *Nature Electronics*, 6(2), 90–95. <https://doi.org/10.1038/s41928-023-00929-9>.
- Ekelund, R. (2024). Finding and Sorting in Hybrid Memory Practices: “Doing Memories” in Connection with the Logic of Facebook. *Memory, Mind & Media*, 3, e21. <https://doi.org/10.1017/mem.2024.17>.
- Ekelund, R., Guðmundsdóttir, G., Merrill, S., & Sindbæk Andersen, T., (Eds.). (2025). *Hybrid Memory: Mnemonic Practices and Agencies in a Post-Digital World*. Leiden: Brill.
- Elgan, M. (2016). Lifelogging is dead (for now). *Computerworld*, 4 April. <https://www.computerworld.com/article/1663309/lifelogging-is-dead-for-now.html>. Accessed 7 March 2025.
- Elgan, M. (2024). The rebirth of lifelogging and the death of Gordon Bell. *Computerworld*, 28 March. <https://www.computerworld.com/article/2121672/the-rebirth-of-lifelogging-and-the-death-of-gordon-bell.html>. Accessed 7 March 2025.
- Falci, C. H. (2013). Metadata and New Architectures of Memory in Programmable Environments. In T. Fawns (Ed.), *Meaning and Memory: Digital Differences* (pp. 55–74). Oxford: Inter-Disciplinary Press.
- Fawns, T. (2020b). The Photo-Elicitation Interview as a Multimodal Site for Reflexivity. In P. Reavey (Ed.), *A Handbook of Visual Methods in Psychology* (pp. 487–501). Routledge. <https://doi.org/10.4324/9781351032063-3328>.
- Fawns, T. (2023). Cued Recall: Using Photo-Elicitation to Examine the Distributed Processes of Remembering with Photographs. *Memory Studies*, 16(2), 264–279. <https://doi.org/10.1177/17506980211073093>.
- Fawns, T. (2014). Photography and the Disruption of Memory and Meaning. *Ubiquity*, 3(1–2), 3–14. <https://doi.org/10.1386/ubiq.3.1-2.3>.
- Fawns, T. (2019). Postdigital Education in Design and Practice. *Postdigital Science and Education*, 1(1), 132–145. <https://doi.org/10.1007/s42438-018-0021-8>.
- Fawns, T. (2020a). Blended Memory: A Framework for Understanding Distributed Autobiographical Remembering with Photography. *Memory Studies*, 13(6), 901–916. <https://doi.org/10.1177/1750698019829891>.
- Fawns, T. (2022). Remembering in the Wild: Recontextualising and Reconciling Studies of Media and Memory. *Memory, Mind & Media*, 1, e11. <https://doi.org/10.1017/mem.2022.5>.
- Fawns, T., & Schuwirth, L. (2024). Rethinking the Value Proposition of Assessment at a Time of Rapid Development in Generative Artificial Intelligence. *Medical Education*, 58(1), 14–16. <https://doi.org/10.1111/medu.15259>.
- Fawns, T., Ross, J., Carbonel, H., Noteboom, J., Finnegan-Dehn, S., & Raver, M. (2023). Mapping and Tracing the Postdigital: Approaches and Parameters of Postdigital Research. *Postdigital Science and Education*, 5(3), 623–642. <https://doi.org/10.1007/s42438-023-00391-y>.
- Ferris, R. (2017). Elon Musk thinks we will have to use AI this way to avoid a catastrophic future. *CNBC Science*, 31 January. <https://www.cnn.com/2017/01/31/elon-musk-thinks-we-will-have-to-use-ai-this-way-to-avoid-a-catastrophic-future.html>. Accessed 7 March 2025.
- Gensburger, S., & Clavert, F. (2024). Is Artificial Intelligence the Future of Collective Memory? *Memory Studies Review*, 1(2), 195–208. <https://doi.org/10.1163/29498902-202400019>.
- Hayles, N. K. (1999). *How We Became Posthuman*. 74th Ed. Chicago, IL: University of Chicago Press.
- Heersmink, R., & Sutton, J. (2020). Cognition and the Web: Extended, Transactive, or Scaffolded? *Erkenntnis*, 85(1), 139–164. <https://doi.org/10.1007/s10670-018-0022-8>.
- Henkel, L. A. (2014). Point-and-Shoot Memories: The Influence of Taking Photos on Memory for a Museum Tour. *Psychological Science*, 25(2), 396–402. <https://doi.org/10.1177/0956797613504438>.
- Higgins, N., Forlini, C., Butorac, I., Gardner, J., & Carter, A. (2023). Anticipating the Future of Neurotechnological Enhancement. In F. Jotterand & M. Ienca (Eds.), *The Routledge Handbook of the Ethics of Human Enhancement* (pp. 237–250). New York: Routledge. <https://doi.org/10.4324/9781003105596-23>.
- Hirsch, M. (1997). *Family Frames: Photography, Narrative, and Postmemory*. Cambridge, MA: Harvard University Press.
- Hirst, W., & Manier, D. (2008). Towards a Psychology of Collective Memory. *Memory*, 16(3), 183–200. <https://doi.org/10.1080/09658210701811912>.
- Hoskins, A. (2024). AI and Memory. *Memory, Mind & Media*, 3, e18. <https://doi.org/10.1017/mem.2024.16>.

- Hroch, M. (2020). Not Out of Date, but Out of Time: The Materiality of Zines and Post-Digital Memory. *Forum Historiae*, 14(1), 17–27. <https://doi.org/10.31577/forhist.2020.14.1.2>.
- Hutchins, E. (1995). How a Cockpit Remembers Its Speeds. *Cognitive Science*, 19(3), 265–288. [https://doi.org/10.1016/0364-0213\(95\)90020-9](https://doi.org/10.1016/0364-0213(95)90020-9).
- Jacobsen, B., & Beer, D. (2021). *Social Media and the Automatic Production of Memory: Classification, Ranking and the Sorting of the Past*. Bristol: Bristol University Press.
- James, W. (1890). *The Principles of Psychology*. New York: Holt.
- Jandrić, P., & Knox, J. (2022). The Postdigital Turn: Philosophy, Education, Research. *Policy Futures in Education*, 20(7), 780–795. <https://doi.org/10.1177/14782103211062713>.
- Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital Science and Education. *Educational Philosophy and Theory*, 50(10), 893–899. <https://doi.org/10.1080/00131857.2018.1454000>.
- Jandrić, P., MacKenzie, A., & Knox, J. (2024). Postdigital Research: Genealogies, Challenges, and Future Perspectives. *Postdigital Science and Education*, 6(2), 409–415. <https://doi.org/10.1007/s42438-022-00306-3>.
- Jelewska, A. (2024). Postdigital Collective Memory: Media Practices Against Total Design. *Postdigital Science and Education*, 6(1), 259–278. <https://doi.org/10.1007/s42438-023-00421-9>.
- Kasket, E. (2019). *All the Ghosts in the Machine: Illusions of Immortality in the Digital Age*. London: Robinson.
- Kazlauskaitė, R. (2023). Virtual Reality as a Technology of Memory: Immersive Presence in Polish Politics of Memory. *Memory, Mind & Media*, 2, e7. <https://doi.org/10.1017/mem.2023.9>.
- Knox, J. (2024). Postdigital Research. In P. Jandrić (Ed.), *Encyclopaedia of Postdigital Science and Education*. Cham: Springer. https://doi.org/10.1007/978-3-031-35469-4_61-1.
- Landsberg, A. (2004). *Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture*. New York: Columbia University Press.
- Landsberg, A. (2018). Prosthetic Memory: The Ethics and Politics of Memory in an Age of Mass Culture. In P. Grainge (Ed.), *Memory and Popular Film*. Manchester: Manchester University Press. <https://doi.org/10.7765/9781526137531.00014>.
- Lavazza, A. (2021). Technology Against Technology: A Case for Embedding Limits in Neurodevices to Protect Our Freedom of Thought. In M. J. Blitz & J. C. Blitz (Eds.), *The Law and Ethics of Freedom of Thought* (pp. 259–289). Cham: Springer. https://doi.org/10.1007/978-3-030-84494-3_9.
- Liv, N., & Greenbaum, D. (2020). Deep Fakes and Memory Malleability: False Memories in the Service of Fake News. *AJOB Neuroscience*, 11(2), 96–104. <https://doi.org/10.1080/21507740.2020.1740351>.
- Lupton, D. (2015). *Digital Sociology*. Abingdon, Oxon: Routledge. <https://doi.org/10.4324/9781315776880>.
- Macgilchrist, F., & Metro, R. (Eds.). (2020). *Trickbox of Memory: Essays on Power and Disorderly Pasts*. Santa Barbara, CA: Punctum Books. <https://doi.org/10.2307/j.ctv1jf2c49>.
- Meehan, N. (2022). Digital Museum Objects and Memory: Postdigital Materiality, Aura and Value. *Curator: The Museum Journal*, 65(2), 417–434. <https://doi.org/10.1111/cura.12361>.
- Meitzler, M., Heesen, J., Hennig, M., & Ammicht Quinn, R. (2024). ‘Digital Afterlife and the Future of Collective Memory’. *Memory Studies Review*, 1(2), 274–291. <https://doi.org/10.1163/29498902-202400013>.
- Menary, R. (2010). Dimensions of Mind. *Phenomenology and the Cognitive Sciences*, 9(4), 561–578. <https://doi.org/10.1007/s11097-010-9186-7>.
- Merrill, S. (2023). Artificial Intelligence and Social Memory: Towards the Cyborgian Remembrance of an Advancing Mnemo-Technic. In S. Lindgren (Ed.), *Handbook of Critical Studies of Artificial Intelligence* (pp. 173–186). Cheltenham: Edward Elgar Publishing. <https://doi.org/10.4337/9781803928562.00020>.
- Merrill, S. (2025). Hybrid Methodologies for Studying Social and Cultural Memory in the Postdigital Age. In Q. Wang & A. Hoskins (Eds.), *The Remaking of Memory in the Age of the Internet and Social Media* (pp. 225–240). Oxford: Oxford University Press.
- Merrill, S., Ekelund, R., Guðmundsdóttir, G., Sindbæk Andersen, T. (2025). The Foundations and Futures of a Hybrid Memory Studies. In R. Ekelund, G. Guðmundsdóttir, S. Merrill, & T. Sindbæk Andersen (Eds.), *Hybrid Memory: Mnemonic Practices and Agencies in a Post-Digital World*. Leiden: Brill.
- Merrill, S., & Lindgren, S. (2021). Memes, Brands and the Politics of Post-Terror Togetherness: Following the Manchester Bee after the 2017 Manchester Arena Bombing. *Information, Communication & Society*, 24(16), 2403–2421. <https://doi.org/10.1080/1369118X.2021.1942957>.
- Merrill, S., Sumartojo, S., Stephens, A. C., & Coward, M. (2020). Togetherness after Terror: The More or Less Digital Commemorative Public Atmospheres of the Manchester Arena Bombing’s First Anniversary. *Environment and Planning D: Society and Space*, 38(3), 546–566. <https://doi.org/10.1177/0263775819901146>.
- Moore, P., & Robinson, A. (2016). The Quantified Self: What Counts in the Neoliberal Workplace. *New Media & Society*, 18(11), 2774–2792. <https://doi.org/10.1177/1461444815604328>.
- Murphy, G., & Flynn, E. (2022). Deepfake False Memories. *Memory*, 30(4), 480–492. <https://doi.org/10.1080/09658211.2021.1919715>.
- Musk, E., & Neuralink. (2019). An Integrated Brain-Machine Interface Platform With Thousands of Channels. *Journal of Medical Internet Research*, 21(10), e16194. <https://doi.org/10.2196/16194>.
- Neisser, U. (1978). Memory: What Are the Important Questions. In M. Gruneberg, P. E. Morris, & R. N. Sykes

- (Eds.), *Practical Aspects of Memory* (pp. 3–19). London: Academic.
- Parui, A., & Raj, M. S. (2024). Sustainable Memory Ecology, Entangled Environments, and Multimateriality in a Post-Digital Age: A Case Study of MemoryBytes. *Memory Studies Review*, 1(1), 137–156. <https://doi.org/10.1163/29498902-20240008>.
- Pisarchik, A. N., Maksimenko, V. A., & Hramov, A. E. (2019). From Novel Technology to Novel Applications: Comment on “An Integrated Brain-Machine Interface Platform With Thousands of Channels” by Elon Musk and Neuralink. *Journal of Medical Internet Research*, 21(10), e16356. <https://doi.org/10.2196/16356>.
- Pogačar, M. (2016). *Media Archaeologies, Micro-Archives and Storytelling: Re-Presencing the Past*. London: Palgrave Macmillan. <https://doi.org/10.1057/978-1-137-52580-2>.
- Prezioso, E., & Alessandrini, N. (2023). Enacting Memories through and with Things: Remembering as Material Engagement. *Memory Studies*, 16(4), 962–983. <https://doi.org/10.1177/17506980221108475>.
- Reading, A. (2022). Rewilding Memory. *Memory, Mind & Media*, 1, e9. <https://doi.org/10.1017/mem.2022.2>.
- Reading, A., & Notley, T. (2017). Global Memory Capital. In A. Hoskins (Ed.), *Digital Memory Studies: Media Pasts in Transition* (pp. 234–249). New York: Routledge. <https://doi.org/10.4324/9781315637235-11>.
- Richardson-Walden, V. G., & Makhortykh, M. (2024). Imagining Human-AI Memory Symbiosis: How Re-Remembering the History of Artificial Intelligence Can Inform the Future of Collective Memory. *Memory Studies Review*, 1(2), 323–342. <https://doi.org/10.1163/29498902-202400016>.
- Risko, E. F., & Dunn, T. L. (2015). Storing Information In-the-World: Metacognition and Cognitive Offloading in a Short-Term Memory Task. *Consciousness and Cognition*, 36, 61–74. <https://doi.org/10.1016/j.concog.2015.05.014>.
- Savin-Baden, M., & Burden, D. (2019). Digital Immortality and Virtual Humans. *Postdigital Science and Education*, 1(1), 87–103. <https://doi.org/10.1007/s42438-018-0007-6>.
- Sellen, A., & Whittaker, S. (2010). Beyond Total Capture: A Constructive Critique of Lifelogging. *Communications of the ACM*, 53(5), 70–77. <https://doi.org/10.1145/1735223.1735243>.
- Smit, R., Smits, T., & Merrill, S. (2024). Stochastic Remembering and Distributed Mnemonic Agency: Recalling Twentieth Century Activists with ChatGPT. *Memory Studies Review*, 1(2), 209–230. <https://doi.org/10.1163/29498902-202400015>.
- Sparrow, B., Liu, J., & Wegner, D. W. (2011). Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips. *Science*, 333 (6043), 776–778. <https://doi.org/10.1126/science.1207745>.
- Sutton, J. (2010). Exograms and Interdisciplinarity: History, the Extended Mind, and the Civilizing Process. In R. Menary (Ed.), *The Extended Mind* (pp. 189–225). Cambridge, MA: The MIT Press.
- Tulving, E. (1985). Memory and Consciousness. *Canadian Psychology*, 26(1), 1–12. <https://doi.org/10.1037/h0080017>.
- van Dijk, J. (2008a). Digital photography: communication, identity, memory. *Visual Communication*, 7(1), 57–76. <https://doi.org/10.1177/1470357207084865>.
- van Dijk, J. (2008b). Mediated memories: a snapshot of remembered experience. In J. Kooijman, P. Pisters, & W. Strauven (Eds.), *Mind the screen: Media concepts according to Thomas Elsaesser* (pp. 71–81). Amsterdam: Amsterdam University Press.
- van Dijk, J. (2008c). Mylifebits: the computer as memory machine. In A. Smelik & N. Lykke (Eds.), *Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology* (pp. 113–128). Seattle, WA: University of Washington Press.
- Wang, Q., & Hoskins, A. (2025). *The Remaking of Memory in the Age of the Internet and Social Media*. Oxford: Oxford University Press.
- Wegner, D. M. (1987). Transactive Memory: A Contemporary Analysis of the Group Mind. In B. Mullen & G. R. Goethals (Eds.), *Theories of Group Behavior* (pp. 185–208). New York: Springer. https://doi.org/10.1007/978-1-4612-4634-3_9.
- Wesch, M. (2009). YouTube and You: Experiences of Self-Awareness in the Context Collapse of the Recording Webcam. *Explorations in Media Ecology*, 8(2), 19–33. <http://krex.k-state.edu/dspace/handle/2097/6302>. Accessed 13 March 2025.