

## Anniversary of IL special issue 2024

# Chasing information literacy into the wild: Questions for the Anthropocene epoch

<http://dx.doi.org/10.11645/18.1.569>

**Annemaree Lloyd**

Professor, Department of Information Studies, University College London. Email: [Annemaree.lloyd@ucl.ac.uk](mailto:Annemaree.lloyd@ucl.ac.uk). ORCID: [0000-0002-7835-8374](https://orcid.org/0000-0002-7835-8374).

## Abstract

In the context of information literacy (IL) research, the Anthropocene age offers an opportunity for researchers to explore to develop a more sophisticated understanding of the complexity of information literacy which result from rapid and complex social, political and economic change; to address the risk of societal fragmentation which is created by misinformation/disinformation; and to understand the risk to democratically encouraged information environments that will come with increasing incorporation of AI and opinion-driven social platforms into everyday life. For library practitioners who provide instruction or education, challenges exist in relation to scaffolding and encouraging sustainable, transferrable information and technological practices, not only in our own inward facing professional practice but in our outward facing practice with the myriad communities we support. Against this problematisation, this brief, but broad ranging paper aims to identify a range of questions for thinking about the practice of IL in the Anthropocenic age. No attempt is made to answer these questions, instead they act as an impetus for future researchers and practitioner researchers.

## Keywords

Anthropocene; information behaviour; information literacy

---

## 1. Introduction

The narrative of the Anthropocenic age<sup>1</sup> tells the story of the environmental impact of human

---

<sup>1</sup> Although not yet ratified (at the time of writing) by the Sub Commission on Quaternary Stratigraphy (SQS), the Anthropocene represents a significant event in geological history. This epoch differs from previous geologic periods because it is the first period to be the direct result of human activity on the

This [Open Access](#) work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#), allowing others to share and adapt this content, even commercially, so long as the work is properly cited and applies the same license. Copyright for the article content resides with the authors, and copyright for the publication layout resides with the Chartered Institute of Library and Information Professionals, Information Literacy Group.

activity on the planet and its systems. The backdrop for this new epoch is the description of rapid political, social, and economic change, conceptualised as the Great Acceleration, which references the dramatic transformations within society, since 1945. These transformations have been driven by rapid and intensive technological/ digital, communication and demographic expansions (Zalasiewicz et al, 2015; Wajcman & Dodd, 2015). The impact of this period fuse together human and non-human action, interaction and history, materiality, and agency, and necessitate a reappraisal of the 'human subject that begins and ends with itself' (Löwbrand et al, 2015, p.213; Wakefield, 2014). It is the impact of the Great Acceleration upon the information needs of workers, that led to Zurkowski's original call for the need for information literacy (Zurkowski, 1974).

From a societal perspective, the Anthropocenic age continues to shift what it means to be human and shifting our place and our capacity to exert our agency in the world. It will also shift our thinking about information production, reproduction, circulation, and question the truth of knowledge claims. This results in a need for agile and malleable approaches to IL practices to accommodate both transdisciplinary and fragmented ways of thinking that have emerged because of greater information production, circulation and dissemination which address questions that challenge the complexity of human impact on the earth and as equally important, technological impact upon social and cultural systems.

In the context of IL research, the Anthropocenic age offers an opportunity for researchers to explore to develop a more sophisticated understanding of the complexity of IL which result from rapid and complex social, political and economic change; to address the risk of societal fragmentation which is created by misinformation/disinformation; and to understand the risk to democratically encouraged information environments that will come with increasing incorporation of AI and opinion driven social platforms into everyday life. For library practitioners, who provide instruction or education, challenges exist in relation to scaffolding and encouraging sustainable, transferrable information and technological practices, not only in our own inward facing professional practice but in our outward facing practice with the myriad communities we support. Against this problematisation, this brief, but broad ranging paper aims to identify a range of questions for thinking about the practice of IL in the Anthropocenic age. No attempt is made to answer these questions, instead they act as an impetus for future researchers and practitioner researchers.

## **2. Reading the Anthropocene from an information perspective**

In the Anthropocene, the landscape of information creation, production, circulation, access, and use is becoming incredibly rich, nuanced, complex and at times uncertain. The tensions created by misinformation and disinformation, coupled with the challenges being presented by AI in terms of understanding accuracy and being able to critique and therefore trust information provision or infrastructure systems, highlights the need to develop IL practices that are robust and sustainable, requiring knowledge of what work this type of information practice does in

---

earth, rather than by nature. The Anthropocene epoch start date has been debated and determined as the dropping of the first atomic bomb (1945), however there is argument to suggest that multiple human related events contribute. (Subramanian, 2019)

enabling or constraining people's active participation in the societal and community debates and citizenry.

Living in the Anthropocenic epoch, means additions and revisions to the types of literacies that enable and facilitate access to knowledges embodied in everyday actions of making and remaking. This new 'awareness' of the conditions that will affect us, alerts us to the knowledges that might be lost as the composition and the conditions for everyday life change or that information literacy may be unevenly experienced by diverse groups (social, economic and historic minorities) within the community. Potential questions include:

1. What new information practices and ways of knowing are responsive to new material and cultural changes being born through social media practice?
2. What is the impact of AI on questions of veracity and truth setting?
3. How do researchers, librarians, and information specialists accommodate and support information practices of people with societally shifting boundaries, created by migration movements due to climate change?
4. How do we prepare citizenry to deal with the outcomes of the impact of government agendas which are capable of weaponising information or have the capacity to fracture established information landscapes?

### **3. Chasing IL into the Anthropocenic wild**

Gaining clarity about the importance of IL practice in this epoch will never arise from an educational setting. This is primarily because in this setting IL is studied as it is delivered or experienced being delivered by a system bound by a 'standardised' set of guidelines, or by structural discourses and tensions which are less than flexible and responsive to changes and this limits what can be done with information literacy in an educational setting.

With this in mind, I argue that the future challenge posed for IL researchers is to chase "information literacy practices into the wild" (Hutchins, 1995) to observe how IL is played out in everyday contexts as a response to Anthropocenic and social pressures and opportunities as an embodied agentic enactment (at cultural, societal, and agentic levels) to understand the forms of knowledges which are acceptable, and the ways of knowing which are developed in response to the social conditions and arrangement which shape the practice.

This does not mean undertaking short one-off studies, but detailed in-depth programs of research over several years which focus on how information culture is enabled and constrained and the societal or communal practices through which IL is enabled or constrained.

#### **3.1 Deep diving into the site of the social**

The practice and performance of IL is deeply enmeshed in the site of the social, which represents the place where human activities and performances emerge and are negotiated. The social represents the field of embodied, materially interwoven practices centrally organised around shared practical and teleoaffective understandings about the practice (Schatzki, 2002). When viewed from an information perspective, deep diving into the "site of the social" allows researchers to drag up to the surface the intricate patterns and webs of connection that enable "knowing" (what, why, and how) to occur in its embodied, social, and epistemic forms (Lloyd,

2010). In arguing for the contextualisation of knowledge in an academic sense, but equally relevant to all contexts, Hall and Sanders (2015, p.454) observe that:

Knowledge does not float free from their contexts of production and cannot arrive any old way. They travel well-worn paths and are preconditioned by other academic knowledges, knowledge producing apparatuses and institutional arrangements.

As a way of knowing (Lloyd, 2003) the work of IL practice is to connect us with the contextual, content, and competency knowledges of a particular site, thus allowing people engaged in site specific performances to map the paths nodes and edges of information and knowledge.

Against a backdrop of rapid changes being experienced by communities, researchers should centre questions about what type of information practices are enacted to accommodate a rapidly accelerating, complex, and sometimes isolating dimension of the fourth revolution, where information is embedded in natural and cultural objects, and embodied in actions (Floridi, 2014), where the idea of text has become uncoupled from traditional versions of print to accommodate bodies artifacts/objects, sites, and discursive practices and spaces.

In this context, the Anthropocene represents an ecologically induced crisis which has social and material implications for all disciplines and fields of study, including the information science field. For information science/studies, these responses will take many forms of actions related to the sustainability of resources and information practices, to the need to capture and maintain community produced records which capture the divergent interests of fringe groups, and the need to capture and maintain knowledge related to embodied ways of knowing which will become lost and missing unless captured through research and recording; and to develop IL practices which can prepare people for a myriad of literacies of information and new forms of culture that will emerge to influence and mediate our complex, information-rich lives.

This leads to the following questions:

1. How can we develop IL practices and strategies that are sustainable and responsive to the demands of the fourth revolution?
2. How can IL researchers engage with the powerful narratives of this emergent field of research in productive ways and thus contribute to the scholarship of the Anthropocene?

At this stage there is little academic writing or research that has tackled or problematised the idea of Anthropogenic change from an information perspective. To reiterate the question asked earlier:

How can IL researchers engage with the powerful narratives of this emergent field of research in productive ways and thus contribute to the scholarship of the Anthropocene?

#### **4. A theory of IL**

Theories which are drawn from research provide intellectual and analytical scaffolding to understanding about IL. While as researchers we draw from a myriad of social theories to sensitise our analysis of IL, there are still few theoretically informed theories which are grounded in the research into IL.

A theory of IL first introduced by Lloyd (2017; 2021), which focuses on information and its relation to people as a central element, acts as a catalyst and example of how chasing IL into the wild can equip us with a deeper set of understandings about the challenges we will face with information practice in the coming decade. This ideological view was constructed after 23 years of research and analysis with a wide range of workplace and community groups. The evidence from this body of work counters the instrumental/rational view of IL, focusing instead on the primacy of the social as central to IL practice and of understanding IL as a practice.

Based on this body of research Lloyd redefined IL as “a practice that is enacted in a social setting. It is composed of a suite of activities and skills that reference structured and embodied knowledges and ways of knowing relevant to the context. Information literacy is a way of knowing” (Lloyd, 2017, p.94).

In this theory, IL is viewed as a way of knowing and is presented in the broadest sense as a “situated practice that is shaped by the conditions, arrangements and discourses of the social site...” (2021, p.2). The practice of IL connects people with epistemic/instrumental ways of knowing, local, nuanced contingent and embodied forms of knowledge that reference the contexts in which people operate (Lloyd, 2005; 2006). In this respect a way of knowing references the conditions, arrangements, materiality, interrelation dimensions and the structural and infrastructural dimensions that constitute and shape the information life and culture of the site of the social.

An information landscape (or multiple landscapes) is an outcome of developing a way of knowing about the layers of information required to “learn to go on” in a setting (Lloyd 2017). Three modalities, corporeal, social, and epistemic are central to developing an information landscape. Epistemic modality refers the objective rules and regulations which structure practice. The social modality references the interrelations between people, where information is often nuanced. The corporeal modality describes the body as an information source, while this information is often only available at the moment of practice but is central to expertise and reflection. The corporeal modality couples the epistemic and social modalities. Together the three modalities are central for understanding the context in which people locate themselves. Away from the safety of the cloisters of the education setting, we might refer to this as information in the wild.

## 5. What is missing from the IL research agenda?

Research on IL has benefitted but also been disadvantaged by a western view of information and knowledge and methods of delivery which establish barriers to a deeper level of understanding or reflexivity thus precluding the capacity to think critically. As it stands, IL as it is currently presented is an anglicised concept which centralises power and the construction of authority within a western system, which by virtue accommodates a primarily western-informed view of what constitutes information and knowledge and methodologies which are authorised for teaching and learning.

Acknowledging that our current understanding of IL is influentially western dominant is the first step to recognizing the bias in our entrenched approaches to IL. The premise of this argument originates from Lloyd’s argument that IL has different concepts, contexts, and truths (2005). This idea originates from research into the workplace and community settings and groups where IL was identified as having social, embodied modalities in addition to epistemic/instrumental. An

important challenge which emerges from these earlier studies is to identify what is absent or silent in research and analysis.

## 6. Recognising absence: What is missing in the IL agenda?

Where are the silences within IL research? The current suite of research being published has a strong focus on students and the development of skills, which promotes a deficit view of students (Hicks and Lloyd, 2022) while promoting the status and need for librarians.

Researching IL in an educational setting will never provide answers to the challenge of absence. This is because of the systematic and standardised instructional practices and associated discourses, and stakeholder interests which homogenise IL within this setting and fail to take into the account the messy and complex nature of information dissemination, circulation, production, reproduction and use in the workplaces and community settings.

As Lloyd (2017) has argued previously, educational systems are preparatory, so it is therefore incumbent upon educators to ask what this preparation is for? For IL instructors, librarians, and educators, this implies the need to understand how IL practice “plays out” in the wild (in non-academic settings) which is imperative to develop given that the majority of students do not remain in academic settings after graduation.

Researchers should turn their attention towards what is absent, silent, unspoken or contested when considering IL a researchable subject. It is therefore imperative to encourage IL practices that are transferrable into the wild and can accommodate information challenges which arise from interaction with fast capitalism (the acceleration of production and consumption), societal and climatic transformation, and the inculcation of AI into everyday life coupled with continued increasing technological dependence. In addition to these challenges, it is also imperative that research programs in IL target ways to capture and analyse the more embodied and nuanced needs which are emerging as people change their focus towards questions and challenges of the Anthropocene.

If the IL agenda is to progress, then practitioners and researchers need to understand more about the complexity of the practice. IL is more than just skill but is a construction which is influenced and shaped by the contexts through which it is practised. There is a depth and complexity to this statement, that IL is a product of people in interaction together, sharing, negotiating, and agreeing upon information that makes a difference to their performances. Adopting a people-in-practice perspective (Lloyd, 2012) and drawing from the ideological view of IL opens up the field to develop a more anthropological approach to understanding how information is experienced and a more sociological view of how people’s relationship with each other and information is constructed. This raises several more questions for research:

1. What is the goal of IL practice?
2. What is the impact of IL in social, economic, and political terms?
3. What narratives can be established that speak to non-LIS researchers and practitioners?
4. How does the practice of IL manifest across a range of settings, and what voices are practices are absent?

## 7. Where to for IL? The question of disciplinarity

As IL celebrates 50 years, it is prudent to consider how the concept has travelled within the field of LIS and to where it might travel in the future. Amidst the information challenges facing the deeper growth of understanding IL practice within the Anthropocenic epoch, comes a call for the practice to become a discipline (Webber & Johnstone, 2005; Maybee Kaufmann, Tucker, & Budd, 2023).

While some elements of disciplinarity are present in this call, the argument fails in other aspects of the criteria, like: the existence of independent academic departments (IL is a subject taught in some LIS course programmes), graduate students (doctoral students do not graduate with a PhD in IL as say a geologist or archaeologist might) (Lenior, 1996), identification with a distinct discipline (LIS is considered be the associated discipline), distinctive language as IL continues to lack its own suite of theories, a substantive knowledge base, and consensus on theory (much of IL research is practitioner based – see for example the number of academic research projects reported in the annual library instruction and information literacy review published in the *Reference Services Review*).

According to Foucault who was interested in power relations and boundaries, “The disciplines characterize, classify, specialize; they distribute along a scale, around a norm, hierarchize individuals in relation to one another and, if necessary, disqualify and invalidate” (Foucault, 1975, p.223). This leads to the following question:

Where do the boundaries of IL lie that would enable it to be described as a separate discipline?

While there are journals and conferences dedicated to IL, a scan of publications suggest that IL continues to remain trapped within the discursive practice which anchors it to deficit views of student learning, measurement, skills and librarians as stakeholders (Hicks & Lloyd, 2022) with little recognition of the practice’s reach outside the boundaries of the LIS field (Inskip, Hicks, McKinny, Walton & Lloyd, 2023). The recent proposal that IL be considered a “soft” discipline (Maybee Kaufmann, Tucker, & Budd, 2023) appears to be premature and leads to questions about what constitutes a discipline and a research field. This leads to further questions:

1. If disciplinary status of IL is to be claimed, then where does the ontological epistemological, and methodological elements of the disciplinary core lie?
2. What specific bodies of knowledge, theories, and terminology are specific to IL?

These crucial questions, which are central to identifying disciplinarity, remains unexplored or even acknowledged by advocates who are keen to ascribe disciplinary status upon IL.

While this may appear to be a less than positive outlook for IL, it does in fact highlight the opportunity for IL to grow conceptually, theoretically, and methodologically into the future and towards a more substantive future (and perhaps discipline status).

## 8. A final set of questions for future IL research in the Anthropocene

Numerous questions have been asked in this brief account based on the author's deep understanding of IL. However, many more exist, and draw from the theory of IL described in this paper. These are listed here in the hope that new researchers may take up this work:

1. How does IL unfold for the novice, learner, instructor/mentor/expert in context? How does IL manifest as teaching in real world contexts?
2. What enables or constrains the construction of IL landscapes (intersubjectively and subjectively)? How is the enactment of the practice enabled and constrained?
3. What role does the corporeal play in practising IL? In what ways does the body act as a site and/or source of information?
4. How does the body enact the coupling of IL in relation to social, instrumental, or rational sources of information?

These questions target a much deeper dive into information literacy in order to understand the key aspects of the social practice as it is embodied, enacted, and experienced contextually. It could be argued that IL is a privileged practice that is played out in western educational settings, therefore:

1. What role does privilege play in constructions of IL and information instructional practice? How do we create IL practice that respectfully considers and accounts for Indigenous and marginalised voices?
2. How are power relations "played out" to shape IL practice?
3. What voices are predominant, and which are silent?

An important take-home is that IL is largely unknown or considered irrelevant beyond the library and academic research walls. Studies of how information has been leveraged (Hicks et al, 2023) into other fields demonstrates a lack of urgency or understanding about the importance of the practice to all aspects of working and community life. How do we then make the practice of IL visible and relatable to stakeholders outside the LIS field? How do we write about IL impact at a societal level?

The need to revive national and international research agendas and collaborations is evident, however, word restrictions will prevent a detail response. It is hoped that these areas become revived as part of IL community conversations and that within the next 50 years we do indeed see deeper research agendas and programs and a developed "information focused" theory which specifically describes IL practice across a range of emergent settings, platforms, and social groups as they deal with complex, societal, and ecological issues which arise from the Anthropocenic age.

## 9. Conclusion

The Anthropocene has both environmental and social trajectories which impact the daily lives of people. While this concept might seem too abstract for IL researchers, its relevance lies in rapidly changing social, economic, and political environments which influence information production, reproduction, circulation, accessibility, and dissemination and create opportunities for disinformation and misinformation. The Anthropocene epoch created by humans and reflected in the Great Acceleration has irreversibly altered the way in which culture and society



operate. As Zurkowski understood, the need to become information literate is a foundational practice that people must develop, understand, and have the capacity to operationalise in information environments and platforms that are emerging to safeguard themselves against the information risks that arise when the concept of truth becomes weaponised.

The aim of the questions posed in this paper are to dive towards a deeper understanding IL and the role of the practice in safeguarding cultural, societal, and personal freedoms. The answers to these questions will emerge from research programs that seek out IL in the wild, to understand the inherent qualities and characteristics of the practice as it is played out in everyday settings. Herein lies the challenge for IL in the future.

## Declarations

### Ethics approval

Ethical review was not considered necessary in alignment with guidance at University College London on the conduct of ethical research.

### Funding

Not applicable.

### AI-generated content

No AI tools were used.

## References

- Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. Oxford University Press.
- Foucault, M. (1975). *Discipline and punish: The birth of the prison*. Vintage Books.
- Hutchins, E. (1995). *Cognition in the wild*. MIT Press.
- Hall, E.F. & T. Sanders. (2015). [Accountability and the academy: Producing knowledge about the human dimensions of climate change](#). *Journal of the Royal Anthropological Institute* 21(2), 438–461.
- Hicks, A., & Lloyd, A. (2022). [Relegating expertise: The outward and inward positioning of librarians in information literacy education](#). *Journal of Librarianship and Information Science*, 54(3), 415–426.
- Hicks, A., McKinney, P., Inskip, C., Walton, G., & Lloyd, A. (2023). [Leveraging information literacy: Mapping the conceptual influence and appropriation of information literacy in other disciplinary landscapes](#). *Journal of Librarianship and Information Science*, 55(3), 548–566.

- Lenoir, T. (1997). *Instituting science: The cultural production of scientific disciplines*. Stanford University Press.
- Lloyd, A. (2005). [Information literacy: different contexts, different concepts, different truths?](#) *Journal of Librarianship and information Science*, 37(2), 82–88.
- Lloyd, A. (2012). [Information literacy as a socially enacted practice: Sensitising themes for an emerging perspective of people-in-practice](#). *Journal of Documentation*, 68(6), 772–783.
- Lloyd, A. (2017). [Information literacy and literacies of information: a mid-range theory and model](#). *Journal of Information Literacy*, 11(1), 91–105.
- Maybee, C., Kaufmann, K.F., Tucker, V.M., Budd, J. (2023). [Recognizing information literacy as a discipline: Reflections on an ACRL 2023 panel discussion](#). *College & Research Libraries News*, 84(10), 363.
- Schatzki, T. (2002). *The site of the social; A philosophical account of the constitution of social life and change*. Pennsylvania State University Press: PA.
- Subramanian, M. (2019). [Anthropocene now: Influential panel votes to recognise earths new epoch](#). *Nature*, May 2019.
- Wajcman, J., Dodd, N. (2017). *The sociology of speed: Digital, organisational and social temporalities*. Oxford University Press.
- Zalasiewicz, J, Waters, C.N., Williams, M., Barnosky, A.D., Cearreta, A., Crutzen, P., Ellis, E., Fairchild, I.J., Grinevald, J., Haff, P.K., Hajdas, I., Leinfelder, R., McNeill, J., Odada, E.O., Poirier, C., Richter, D., Steffen, W., Summerhayes, C., Syvitski, J.P.M...Oreskes, N. (2015). [When did the Anthropocene begin? A mid-twentieth century boundary level is stratigraphically optimal](#). *Quaternary International* 383, 196–203.
- Zurkowski, P. ERIC Clearinghouse on Information Resources. (1974). *The Information Service Environment: Relationships and Priorities*. (Report No. 100391). National Commission on Libraries and Information Science, Washington DC.