

Surfacing the body: Embodiment, Site and Source

Professor Annemaree Lloyd

Introduction

What happens when bodies are foregrounded as information sources and brought into thinking about information literacy? In what ways do theories of embodiment and of the body disrupt current discourses and practices about information literacy and help to shape a deeper understanding of the complexity of the practice? What do we gain when we bring the body into view?

Embodiment represents knowledge that is acquired by doing and by subjecting or being subject to experiences with knowledges (our own and others) derived from enculturation, encoding, or embedded performance (Blackler, 1995). Embodied knowledge is only partially explicit but nonetheless important as it references our tangible interactions and developing experiences with practices, performances, and others over time and space. Embodiment represents the enmeshment of the corporeal, emotional, sensory, and sentient dimensions of the lived experience. Upon this view embodiment is a construction that is subject to the various discourses that construct, deconstruct, emplace, and disrupt the body in-practice and as-it-practises. To put this in another way, embodiment *is* informational.

The centrality of the body to our everyday practice should not, therefore, be relegated or reduced to secondary knowledge in the library and information science (LIS) field. Our bodies act as site and source for our inward reflection and reflexivity and outwardly as site and source for others. As we reflect upon and 'read' embodied performances, we access the trajectories and history of the lived experience. The increasing enmeshment of our information culture with digital platforms and technologies further means that theories of embodiment and corporeality are required to ensure the centrality of the body as site and source is foregrounded and not silenced or relegated to secondary knowledge.

An argument for the body

A claim for the inclusion of the body and embodiment in information literacy research and, more broadly, in LIS, is woven through this chapter. Primarily this claim proposes that disassociating information literacy from the corporeal and embodied experience will lead to an incomplete understanding of the complexity of the practice. This, in turn, diminishes the field's understanding of the central role that information, in all its manifestations, plays in practice.

In the field of LIS, the body as an information source/site and embodiment or the corporeality of experience remains a contested ground, particularly (and ironically)

in human information behaviour, where there is still a tendency to funnel the concepts of corporeality and embodiment through a cognitive lens. Researchers such as Hartel (2018) have recently questioned whether the LIS field would be diminished if it failed to enter the domain of corporeal/embodiment research and instead, remained focused on the unanswered questions related to documentary practice and established LIS themes. Hartel (2018) asserts that research that moves into areas of embodiment and corporeality would place LIS researchers at a disadvantage and could be unproductive because of the established and mature research being conducted in other disciplines. Hartel has gone as far as to suggest that a corporeal/embodied line of enquiry is largely unnecessary in a field that has an established research tradition focusing on documents. This is a short-sighted position given that the LIS field is generally devoid of a breadth of theories which explain how people operate with information.

Hartel's position neglects the pivotal and obvious point that we are our bodies, and our bodies are awash with knowledge and information that documents and informs our own internal reflexive practices and externally, informs the practices of others (Bates, 2018; Lloyd, 2007; Lueg, 2020). The histories and trajectories of our lived experiences are inscribed onto our bodies and reference our access not only to privilege, but also to information and knowledges that have been denied (rights, education, health) resulting in an unequal politics of knowledge and terrain of struggle. When we read the body as source and site, we are reading histories, trajectories, and terrains of embodiment.

It is axiomatic to say that bodies are centrally positioned in any information experience. This includes recorded /documentary practices, which in themselves emerge because of the performances of the body. While not all documentary focused research silences the body (see for example Lindh, 2015; Pilerot & Söderholm,2019), positions which have traditionally adopted a cognitive focus or which solely focus on text as the primary thing can often negate the broader understanding that what constitutes information as any 'difference which makes a difference in some later event' (Bateson, 1972, p 315) is situated and dependent on contextual fields for understanding and operationalisation. It also continues the practice of privileging certain types and forms of information and knowledge over others (e.g., epistemic/written knowledges over displayed or oral knowledges). The dualism of this privileging disenfranchises and excludes the ways of knowing that are fundamental to non-western cultures.

As information culture transitions towards becoming predominately digital, theories of embodiment are required to reinsert the body back into LIS as a significant source and site of knowledge and one that is central to becoming informed.

This chapter draws from several established fields (sociology, anthropology, psychology, philosophy) for its theoretical and analytical depth. It is within those fields that we find a deeper and established tradition of corporeal research and embodiment thinking that can be employed to frame and enrich our understandings of how people interact with information.

An argument is presented for the importance of corporeality and embodiment in LIS. The underlying premise being that continued emphasis on text impoverishes the field by failing to acknowledge the rich and complex layering of information on and through the body, which, in turn, enriches our information landscapes. This continues previous analysis and theorising (Lloyd, 2010a, 2010b, 2014, 2017) about the centrality of the body and embodiment. It will contend that including the body and related theories enriches and deepens our understanding of interaction with information and knowledge which, in turn, deepens our understanding of the sociology of information literacy practice and how it happens. Themes central to the thesis of information literacy and embodiment - the body as absent presence, as inscribed, as unfinished state, and the body that matters - will be considered. Ontological and epistemological points of departure that influence methodological choices, position, enable or constrain the body (as site, source, and performative object) are interrogated. A focus on the body disrupts documentalist advocacy for LIS (Hartel, 2018) and the reductionist discourse of dualism by surfacing the body as an information source that matters and is pivotal to meaning making that is essential in all forms of human existence.

In the following section the Theory of Information Literacy is briefly described, followed by a succinct but incomplete overview of corporeality and embodiment in social theory. The second section will discuss and consider how the theories of the body and embodiment operate ontologically, epistemologically, and methodologically. Both sections consider the ways in which theories of embodiment or corporeality enable or constrain our understanding of information literacy. What aspects or dimensions are highlighted; what aspects are ignored? How does the theory we use shape our methodological choices?

<h2>Theory of information literacy

Central to this chapter is the thesis that humans are located at the centre of a swirling maelstrom of information environments and constructed landscapes in which our bodies play a central role. Information environments represent larger sites of stable instrumental / rational knowledge (Lloyd, 2006, 2017, 2021). Information landscapes are constructions that emerge from interaction with information environments and are shaped by the modalities of information that represent ways of knowing about collective forms of knowledge. The modalities of information may be social, epistemic, or corporeal. Coupled together, these modalities shape the enactment of information literacy practice specific to that setting (Lloyd, 2017, 2021).

To buy into and become positioned as an insider within a landscape requires access to information that is relevant to people engaged in joint enterprise within that space. To have the capacity to navigate the paths, nodes, and edges of a landscape (Lloyd, 2003) requires an ability to enter and understand the discourses, narratives, and performances - to be able to act and interact and to read the inscriptions of the landscape upon the body or the doings and nuances of practice. In this respect, it is necessary to acknowledge and interrogate the corporeal experience that leads to embodiment. To fail to do so means that the body remains disassociated from the information experience, which, in turn, means that understanding of this experience remains incomplete (Lloyd, 2010a).

The theory of information literacy (ToIL) (Lloyd, 2017) states that:

Information literacy is 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.

Lived bodies, embodiment and embodied knowledge play a pivotal role in this theory of information literacy. Centring the body as a significant site and source of information counterbalances the established Cartesian dualism that silences the body by asserting that information and knowledge are something that simply resides in the head. In making this point, Gherardi (2008, 517) argues that:

Knowledge is not what resides in a person's head or in the books or in databanks. To know is to be capable of participating with the requisite knowledge competence in the complex web of relationships among people, material artefacts, and activities.

In the practice of information literacy, requisite knowledge about ways of knowing and how these knowledges are enacted are central to practice and practising. Research (Lloyd, 2006b) has demonstrated that information literacy is a multimodal practice, comprising textual, social, and epistemic modalities and is shaped by and through interaction with cultural discursive, material economic and historic preconditions (social / political) through which power and social conditions of the lifeworld are established (Habermas, 1987; Lloyd, 2011).

<h2>Bringing the body into view: Themes and theories of embodiment

Recent theorising of the body has produced a suite of themes that have surfaced and privileged analysis of the body, corporeality, and embodiment. These themes advance a critical view of the body, while at the same time working to reduce the

dualist reductionism that relegates the body to a secondary site and source of knowledge.

Absenting the body: Privileging the mind in early theory

Descartes' prioritisation of rational thought and the privileging of mind over body is articulated in the dictum that I am only a vessel that thinks - *Cogito ergo sum* (I think therefore I am) (Descartes [1634] 1974; 105, 156). Similarly, the Enlightenment thinker, Kant (1964 [1785]), raised rational epistemic thought above that of the sentient body and desire. The impact of these early philosophical thinkers was to evaluate and create 'opposition positions between cognitive thought over the material body' (Shilling, 2009; 251) or a conceptual hegemony that has remained unchallenged until recently. In social theory, this early thinking led to an avalanche of literature that privileged rationalisation, normativity, and the mind over the body, drawing on the assumption that the social world operates upon us 'intellectually and consensually rather than directly upon our bodies' (O'Neill, 1985, 48).

In social theory, early theorists continued to prioritise the mind over the body. The early work of Parsons (1937), a structural functionalist, downgraded the body and emphasised the importance of culture and information-rich values in steering human behaviour, which did little to emphasise or reclaim the body (Shilling 2009,440). Weber (1968) argued that all action was based on rational human thought while Durkheim (1938) contended that social and moral 'facts' were beyond the physical embodied individual. The sociology of Berger and Luckman (1966), often cited in LIS research, continued to reinforce the mind/body duality, and sequestered the body by suggesting that society was only meaningful when viewed in terms of cognitive process. Similarly in the influential structuration theory of Giddens (1986), there is an absence of the productive role for the body in mediating the formation of social structure (Shilling, 2009).

Bringing the body into view

In more recent history, a challenge was made to the downgrading and devaluing of the body as a minor player in rational thought. Social theorists and philosophers began to question this entrenched view and focus on the central role the body plays in 'becoming and being.' Four major factors noted by Shilling (2020) led to several distinct lines of enquiry. These are defined by Shilling (2020) as (1) consumer culture, which drew attention to the body as a performative self and symbol, (2) feminism's interrogation of the sex/gender divide, which focuses attention on the female body and corporeality, (3) control of the body via changes in governmentality, which attempted to create normative performance via rules and regulations, (4) doubt about the reality of the body (i.e. what is a body) in light of the development of constructionist theoretical enquiry.

In a general sense all theories of embodiment (the emplaced corporeal body) recognise and acknowledge that the body has become decoupled and disassociated in interpretations and representations of everyday life. Embodiment theories draw from a constellation of social and cultural perspectives, and all centrally position the body and bodily experience in the construction of understanding. How the term and its theories are understood is contingent on discipline (philosophy, psychology, or sociology). In general, the concept references the body via its interactive processes and relationships with the physical experience. This interdependency emphasises meaning making activities through bodily experience, such as gaze, gesture, posture, expression, and movement, which shapes interaction with the environment. The central gaze therefore turns to concepts such as the lived body, power, identity, position, signification and references to action and community.

<h2>Key theorists

While there is no unified social theory of embodiment, several key theorists have been influential in their rejection of dualism and centre the lived experience of the body, corporeality, and embodiment as sites for research. In this section, several themes that have contributed to theorisation in LIS are identified.

<h3>*The Lived Body: Merleau Ponty*

Merleau Ponty (1962) rejected dualism and asserted that the mind and body were not discrete entities. This position challenged the Cartesian idea of *res extensa* (body as an extended thing) and established a phenomenological view of the body, embodiment, and corporeality, which contributes to the ontological idea of the lived body as a locus of experience (Leda, 1991) and the self as integrated being. According to Merleau-Ponty, the body is both lived from within and an object of the external gaze. It has two sides - the sentient (it sees) and the sensible (it is seen), which Crossley (1995,47) argues positions it in relation to the world. The concern of phenomenology is the essence of the thing, and our perception of the world situates us through our bodies and affords opportunities to act and become. In early accounts of the lived body, Merleau Ponty argued that all human perception is embodied, and knowledge is rooted in experience that is always embodied (Lloyd, 2010a). Bodies therefore act as an experiential conduit through which we exist in the world, interacting with other body subjects and materials temporally and spatially (Crossley, 2001; Nettleton and Watson, 1998; Howson and Inglis, 2001; Shilling, 2001; Wacquant, 2004). This view of the lived body and experience challenges notion of objectivity and rationality by advancing the idea that the body is situated in the world with the capacity to enable the interpretation of events to occur in multiple ways.

Bodies as inscribed by culture: Foucault, Goffman

The plasticity of the body and role of power constituted a major theme in the work of Foucault who viewed the body (ontologically and epistemologically) as a discursive product constructed by social factors. According to Foucault, the body represents the inscribed surface of event (Foucault, 1984, 83; Shilling, 2021):

The body is the inscribed surface of events (traced by language and by ideas), the locus of a disassociated self (adopting the illusion of a substantial unity), and a volume in perpetual disintegration.

In relation to power, Foucault (1977, 25) asserted that:

The body is . . . directly involved in a political field; power relations have an immediate hold upon it; they invest it, mark it, train it, torture it, force it to carry out tasks, to perform ceremonies, to emit signs . . . power is not exercised simply as an obligation or prohibition on those who “do not have it”; it invests them, is transmitted by them and through them; it exerts pressure upon them, just as they themselves, in their struggle against it, resist the grip it has on them.

The interest, for Foucault, rests on understanding how power becomes inscribed upon the body. The socially inscribed body, according to Foucault, references power relations of gender and cultural discourses. This view has led feminist authors such as Davies (2000, 55) to argue that the body is always spoken into existence within the terms of the available discourse. An epistemological view of the body is not without challenges and has led to claims of discursive reductionism where the body is no longer present as ‘lived experience’ but disappears as a ‘material and phenomenological entity’ and its existence and experience vanishes behinds the grids of meaning that are imposed upon it by discourse (Butler, 1990, 195)

Goffman (1983) emphasises the body in social interaction where it plays a central role in the generation of meaning, providing visual clues about roles, practices and activities that lead to the establishment of shared vocabularies and meanings that enable embodied knowing. In this respect, the way in which we handle the lived experiences of bodies in action and interaction is centrally important to self and identity. The body is therefore socially inscribed and central to the generation of meaning. This idea was taken up by O’Loughlin (1998, 279) as the communicative body as ‘that for which gesture, body orientation and proximity are the vehicle through which meanings are expressed. Thinking is undeniably embodied’.

Bodies that matter: Butler

By asserting that bodies matter, Butler (1990, 8) critiques Foucault’s discursive determinism, whereby the corporeal is ‘inscribed on the surface of the event, traced

by language, and dissolved by ideas.’ According to Butler, the Foucauldian representation of the body references an unagentic powerless body that is acted upon and subject to coercion and manipulation. In response, Butler introduces the concept of embodiment by arguing gendered identity is embodied action (1993) that ‘does not exist outside its doings; rather its performance is also a reiteration of previous doings that become intelligible as gender norms’ (Nayak and Kehily, 2006, 467). In effect, when we perform (in our professional or vocational life or in education at any level), we enact and do gender. The body according to Butler acts a medium where acts or desires are created on the surface of the body (Butler, 1990, 136) where they are read by others.

<h3>Bodies that practice: Schatzki, Reckwitz

The practising body is a present theme in practice theories, which acknowledge that the body both references and expresses the conditions of life, serving as both actor and medium. This theme is located in the work of Schatzki (1996; 2002; Reckwitz 2002) and the epistemologically oriented work of Gherardi (discussed in a later section).

Working from a theoretical perspective, Schatzki (2002, 3) brings the body into play in practice theory and provides a context for the composition of the body by noting that practice is an ‘embodied materially mediated array of human activity centrally organised around shared practices and understanding.’ By Schatzki’s (2002) account, bodies; are always present and central to intelligibility, reference the conditions and struggles of life and bring the discourse and relationships of the social site into discursive visibility. It is through the performance of bodily actions that the performance of other actors is constituted or effected (Schatzki, 1997, 44). The body in this version of practice theory is located not only in the practical sense of ‘doings’ but also through the concept of ‘general understandings’ that establish a contextually nuanced ambience in relation to ‘senses of the worth, value, nature, or place of things, which infuse and are expressed in people’s doings and sayings’ (Schatzki, 2012, 16).

Reckwitz’s (2002, 250) view of practice situates bodies as a ‘routinised way in which bodies are moved, objects are handled, subjects are treated, things described, and the world is understood’. According to Reckwitz (2002, 251), practice theory views and positions bodies in a different way:

Practices are routinized bodily activities; as interconnected complexes of behavioural acts they are movements of the body. A social practice is the product of training the body in a certain way: when we learn a practice, we learn to be bodies in a certain way (and this means more than to ‘use our bodies’). A practice can be understood as the regular, skilful ‘performance’ of (human) bodies. This holds for modes of handling certain objects as well as

for 'intellectual' activities such as talking, reading, or writing. The body is thus not a mere 'instrument' which 'the agent' must 'use' in order to 'act', but the routinized actions are themselves bodily performances (which does not mean that a practice consists only of these movements and of nothing more, of course). These bodily activities then include also routinized mental and emotional activities which are – on a certain level – bodily, as well.

Body as an unfinished state: Shilling

Shilling's body of work posits that due to its participation in society, the body is always in an unfinished state and is therefore always in a state of becoming, leaving the possibility for identity to be in continual flux. Pointing to the relationship between technology and the body, Shilling (1993, 5) argues that the relationship between the two act to transform bodies and the more that knowledge and expertise are expanded then the more uncertain we become as to what the body is and what its boundaries are.

Theorising the body in Library and Information Science

In LIS, there are currently no theories of corporeality or embodiment that are derived from an information perspective. However, a growing number of researchers working in the information practice area are interrogating the enactment of embodiment and the body as information source by drawing from philosophical, psychological, and social theory literature to make claims about embodiment. Literature associated with this field has been reviewed by Lloyd (2006, 2017), Lloyd and Olsson (2021) and Cox (2018), which while identifying the potential areas for research also highlight that embodiment and the body as research object continues to remain an absent presence within this field. Research that is currently drawing from social theories of embodiment and the body includes Lloyd's research with firefighters (2006), ambulance officers (2009), nurses (Bonner and Lloyd, 2011), refugees (Lloyd, 2017) and, most recently, the COVID-19 pandemic (Lloyd and Hicks 2021), Olsson's study of theatre professionals (2010), and Veinot's (2007) study of hydroelectric vault inspector's embodied information practices. The role and relationship between information literacy and the embodied experiences of sadomasochist and live action role play community (LARP) was explored by Harviainen (2014). This research led to the finding that actors in this specialised setting develop highly refined information literacy practices, thereby enabling a high-level skill that, in turn, ensures safety in practice. Embodiment, meaning-making and transgender experiences have recently been investigated by Huttunen and Kortelainen (2021). This was followed by Huttunen's (2022) doctoral work which focused on embodied information and the experiences of transgender people in Finland. A study of the information practices of the Ballet Folklórico de México highlighted the role of sociocultural information that is displayed while dancing, something that supports novice learning and enables embodiment of both expert

and novice through repeated enactment and interaction with ambient information (Vamanu and Terronez, 2022).

LIS researchers have also drawn upon a psychological perspective and the concept of embodied cognition in their work on information behaviour. Embodied cognition rejects the dualism of the mind/body split. In critiquing the tendency to generalise or minimise the role of the body in understanding information behaviour and information practice, Lueg (2014, 2015) attempts to bring the body and corporeal information into dialogue with LIS, which has traditionally relegated the body and corporeal information to a secondary site and source. The importance of corporeal information in ultra-marathon running and embodied cognition was identified by Gorichanaz (2015). Emotional and embodied needs and desires have been highlighted by Keilty and Leaser (2014) whose work recognises that the body remains secondary and largely absent in research that focuses on information need. Polkinghorne's (2021) doctoral research explored embodied information practices in everyday food activities, leading the author to propose embodied mutual constitution as a theoretical concept.

<h2>Theoretical Questions

The concept of embodiment and inclusion of the body as source and site challenges the dualism established by earlier theorists and shifts the focus towards the interrelatedness of bodies intra and interaction qua society. The impact of this idea positions the body and bodily experiences centrally by drawing attention to action and interaction- our bodies in reflection and in relation to other bodies and materiality. Thus, making the body a site of knowledge and source of information from which we read the body and learn from it as it references lived experience (Merleau-Ponty, 1962). The interdependence between physical experiences, material practices, resources, practice, and social spaces is pivoted around the body, which couples together the social and epistemic modalities (Lloyd, 2010). This view enables ontological, epistemological, and methodological questions about information, knowledge, and ways of knowing to be asked.

Information is viewed as 'any difference which makes a difference' (Bateson, 1972, 459) and to make sense, information must be referenced against the ontological and epistemological settings of the context in which people position and are positioned. Ontologically, against the knowledges that shape the setting and ways of knowing, and epistemologically, in relation to interaction with others who are co-present and co-participating in the ongoing performances and the material objects of the setting (Lloyd 2014, 87). It has been suggested by Barad (1996, 179) that knowledge is always a view from somewhere which suggests that bodies work at both ontological and epistemological levels, and this has implications for understanding and researching how information literacy happens in practice.

Knowledge is grounded in an ontological belonging in terms of what is known and how it is known and what is possible to know (i.e., what is sanctioned and what ways of knowing are legitimised). Ontologically, the body represents a site of corporeal knowledge that reflects how actors understand the nature of the reality that connects them to truth claims of the social site and a shared semantic space of language. Ontology is tied to claims of truth about the nature of reality which means that, in terms of information literacy research, it is critical to acknowledge there are numerous ways of understanding how ontologies operate. The ontological space may reference anti-positivist /anti-foundational reality as it is subjectively and intersubjectively experienced. Alternatively, it may represent an objectivist/positivist ontology where reality is understood to exist independently. In this respect, engaging with the concept of embodiment and corporeality open us up to questions about how the body is situated and understood reflexively and reflectively as a source.

Embodiment is the enmeshment of the corporeal, emotional, sensory and sentiment dimensions of the lived experience. In relation to information literacy, embodiment operates ontologically by drawing attention to questions about the nature of knowledge as it emerges in the context of specific practices or communities. This opens us up to questions that explore the nature of information and knowledge such as what information / knowledge counts in this setting. Many theorists question what exactly the body is, arguing that the body represents a social construction and is, therefore, ontologically open to interpretation (Nettleton, 2001). In this respect, the body operates ontologically by referencing the nature of being, becoming, and reality, which are inscribed upon the body and become central to embodied performances associated with social and cultural values.

Epistemologically, we know the world through bodies that interact with circulating discourses and power relations that constitute and shape the social. The concept of embodiment operates epistemologically by drawing attention to questions of how we know, and what is worth knowing. Gherardi (2009) links bodies via the practice/knowledge nexus. The body acts to capture and disseminate knowledge: 'knowledge is not an object captured by means of mental schemes; rather it is a practice and collective activity, and is acquired not only through thought, but also through the body and sensory and aesthetic knowledge' (Gherardi, 2009, 354). The epistemological position opens information literacy research up to questions about the ways of knowing that are privileged, prioritised, and operationalised within the setting at both subjective and intersubjective levels.

Methodologically, the theme of absence, which has predominated in the embodiment literature, has become an avenue of both ontological and epistemological enquiry, and has led to questions about the importance of embodied

knowledges to an understanding of the lived experience (Leder, 1991). Until we understand absence and make it part of our research agenda, we will continue to marginalise the information experience. This, in turn, has implications for understanding the myriad of cultural ways in which information literacy practice emerges for individuals and communities - and whom information literacy practice privileges when it is delivered in an educational setting. Acknowledging the ontological and epistemological dimensions of the lived experience enables researchers to make methodological choices that foreground new versions of information literacy practice.

Recognising the primary contribution of embodiment and the body in the lived experience allows researchers to move beyond the boundaries of a focus on textual practices, which prioritises structural considerations over agentic and experiential concerns, towards a remit that recognises that knowledge and information are not solely the privilege of the epistemic modality. Instead, they emerge through interactions, actions, reactions, doings and undoing that form part of the rich and complex experience of everyday life. Broadening the remit acknowledges that bodies matter as site and source of knowledge and information that may not be articulated but is, none the less, important to understanding how people develop ways of knowing that inform their information literacy practice. Embodiment also reminds us that information literacy practice is not generic but has spatial and temporal elements (i.e., it is contextual and situated and emerges over time).

Focusing on the ontological and epistemological dimensions enables researchers to deepen their understanding of the complex layering of knowledge and information in everyday life and the role that information literacy practice plays in (1) weaving the paths, nodes, and edges (Lloyd, 2003) that constitute information landscapes, and (2) the performance of the practice as it untangles complex information environments. The depth of this approach to untangling information literacy practice moves researchers closer to understanding the role that information and knowledge play in the shaping of identity and the role of inscription in shaping the bodies as they practise. Acknowledging corporeality and embodiment also leads to distinct theoretical questions about how the body operates ontologically and epistemologically as a site of knowledge and source of information. How is embodied knowledge developed over time and then operationalised internally and externally? How does this impact on learning and instructional practices?

<h2>Surfacing the body: Doing body work in information literacy practice

To return to the questions posed at the beginning of this chapter- in what ways do theories of embodiment and of the body disrupt current discourses and practices about information literacy and help to shape a deeper understanding of the complexity of the practice? What happens when bodies are foregrounded as

information site and source and brought into thinking about information literacy?
What do we gain when we bring the body into view?

The theory of information literacy practice (ToIL), which was proposed in 2017 (Lloyd, 2017), operates both ontologically and epistemologically by foregrounding the influences of the social and corporeal upon information, knowledge, and ways of knowing. The concept of embodiment is central to the theory of information literacy because it is through the body that information literacy is enacted as a practice inherent in the site of the social (Schatzki, 2002) connecting people to the social, epistemic/instrumental, and corporeal dimensions that reference being in the world (Lloyd, 2021). The theory originated to disrupt dualist discourses in the information literacy field that privilege textual representation of knowledge and ways of knowing related to information literacy while absenting other forms - and to reorient researchers towards understanding the ontological and epistemological elements of the practice. To unpack the theory in relation to embodiment:

Information literacy is:

1. A practice that is enacted in a social setting. The practice is shaped by the sayings, and doings of the setting that enable it to come into view physically through action and semantically through discourse and language about why things (practices, skills, activities) happen. The enactment of information literacy emerges as people in practice connect with embodied knowledges afforded to them by the setting via knowledges that are enculturated, encoded, embedded, emotional, sentient, or sensory (ontological view).
2. Composed of a suite of activities and skills that reference structured and embodied knowledges and ways of knowing relevant to context (an epistemological view). The operationalisation of information literacy is enacted by doing the practise of information literacy (e.g., accessing specific types of information, evaluating information according to the sanctioned pathways agreed by the community or by reflexively or reflection upon action.) Successful enactment of information literacy practice is dependent on access to embodied knowledges that reference the history and trajectory of developing knowledge and expertise temporally and spatially.
3. The development of information literacy practice occurs when actors engage with information environments that shape their contexts, reflect, and draw upon their embodied performances and the performances of other actors engaged in the same project. Drawing from the knowledges afforded by context coupled with sentient and sensory knowledges, actors construct their information landscapes by establishing the paths, nodes, and edges of ways of knowing. The practice of information literacy is therefore the performance of emplacement.

The aim of the Theory of Information Literacy (Lloyd, 2017) is to disrupt the established reductionist documentary discourses of information literacy by surfacing the body and corporeality as a significant source of information and knowledge from lived experience that is required to make sense of people and materiality that constitute the world. A feature of this disruption is the recognition that sentient and sensory information/knowledge are intricately enmeshed with encoded, enculturated, and embedded knowledges. Embodiment is therefore informational, and bodies offer up critical often unarticulated or expressed sources of information and knowledge that emerges only at the moment of practice (Bonner and Lloyd 2011) to inform practice and practising and reveal the histories and trajectories that shape the lived experience.

Embodiment represents knowledge that is acquired by doing and by subjecting or being subject to experiences with knowledges (our own and others) derived from enculturation, encoding, or embedded performance (Blackler, 1995). It is only ever partially explicit but references our tangible interactions with practices and performances over time and space. Embodiment is the enmeshment of the corporeal, emotional, sensory and sentiment dimensions of the lived experience. Upon this view embodiment is a construction, and subject to the various discourses that construct, deconstruct, enplace, and disrupt the body in-practice and as-it-practises.

When foregrounded in research, theories of the body and embodiment become central to a richer understanding of information literacy as a practice that is enacted in social setting and composed of activities and skills that enrich a 'way of knowing' (Lloyd, 2017). It is the corporeal modality that enables the coupling of the epistemic and social modality. Acknowledging the active presence and contribution of the body as site and source, Leder (1992, 35) reflects:

...in a significant sense, the lived body helps to constitute this world as experienced. We cannot understand the meaning and form of objects without reference to bodily powers through which we engage them- our senses, motility, language, desires. The lived body is not just one thing in the world but a way in which the world comes to be

Employing theories of embodiment as a lens from which to understand information literacy draws attention to the body and makes it and the knowledges, trajectories, histories, and privileges inscribed upon it visible. In this respect, research into embodiment and corporeality draw attention to the inscription of power, of privilege and how access to information is often predicated on unequal ways of knowing (e.g., refugees, women, the information poor, marginalised and disabled groups).

Ontologically, as site and source about the nature of reality as it is referenced, and epistemologically, the body acts as a source of performative knowledge. Acknowledging that embodied knowledge references tangible practices or actions over time and space but is only every partially explicit (Blackler, 1995, 1024) alters us, methodologically, to consider ways to capture the enmeshment of the corporeal, emotional, sensory, and sentient dimension of the lived experience. This acknowledgement alters the nature of information literacy research and widens the scope of situational research to include the intangible outcomes derived from tangible practices, performances or actions over time and space. Embodiment is, therefore, subject to the various discourses that construct, deconstruct, emplace, and disrupt the body in the practice. Moreover, these theories broaden the boundaries of the information practices discourse 'by demonstrating that embodied practices, like linguistic ones, are products of social construction' (Olsson and Lloyd, 2017, para. 38), thus referencing the socio-cultural discursive communities through which they are enacted.

<h2>Conclusion

Humans are their bodies and bodies are storehouses of knowledge and information that can be known inwardly and represented and referenced outwardly. Bodies are therefore important sites of knowledge and sources of information that must be surfaced when attempting to understand the complex social practice of information literacy.

However, the notion of the absent presence is reflected in the corporeal gap, which continues to exist while embodiment and corporeality are reduced to secondary knowledge and bodies remain largely invisible in the LIS field. Theories have the capacity to enrich our narratives about information literacy practice. Embodiment can act as a theoretical lens that alerts researchers to the complex ways in which the body acts spatially and temporally as an information source and site of knowledge. This, in turn, contributes to a deeper understanding of how and why information literacy happens and the contribution this practice makes to the construction and enactment of our everyday lived experience. An embodied approach does not detract from a centralising documentary discourse for the field. Instead, it acknowledges that by nature, the ubiquity of information places demands on the field which, in turn create challenges to develop a broader understanding of social life and how its enactment is made visible.

References

- Barad, K (1996) Meeting the Universe Halfway. In *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Duke University Press.
- Bates, M. J. (2018) Concepts for the Study of Information Embodiment. *Library Trends*, 66,3, 239–266.

- Bateson, G. (1972) *Steps to an Ecology of Mind*, Jason Aronson Inc.
- Berger, P. L. and T. Luckman (1966) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor Books.
- Blackler, F. (1995) Knowledge, Knowledge Work and Organizations: An Overview and Interpretation, *Organization Studies*, **16**,6, 1021–1046.
- Bonner A. and Lloyd A. (2011) What Information Counts at the Moment of Practice? Information Practices of Renal Nurses, *Journal of Advanced Nursing* **67**, 1213–1221.
- Butler, J (1990) *Gender Trouble*, Routledge.
- Butler, J (2002) Bodies and Power, Revisited, *Radical Philosophy*, **114**, 12-19.
- Cox, A. M. (2018) Embodied Knowledge and Sensory Information: Theoretical Roots and Inspirations. *Library Trends*, **66**, 3, 223-238.
- Crossley, N (1995) Merleau-Ponty, the Elusive Body and Carnal Sociology. *Body & Society*, **1**, 1, 43–63.
- Descartes, R. ([1634] 1974) *Discourse on the Method and the Mediations* (trans F.E. Sutcliffe), Penguin.
- Davies, B. (2000) *A Body of Writing, 1990-1999*, Rowman & Littlefield.
- Durkheim, E (1938) *The Rules of Sociological Method*. Macmillan.
- Foucault M. (1977/1995) *Discipline and Punishment*. Trans. Alan Sheridan, Vintage Books.
- Foucault, P. (1984) Nietzsche, Genealogy, History. In: *The Foucault Reader*. Paul Rabinow, (ed.) Pantheon Books.
- Gherardi, S. (2008) Situated Knowledge and Situated Action: What do Practice-based Studies Promise? In D. Barry and H. Hansen (Eds), *The Sage Handbook of New Approaches in Management and Organization*, Sage Publications Ltd, 516-527.
- Gherardi, S (2009) Knowing and Learning in Practice-Based Studies. An Introduction. *The Learning Organisation*, **16**, 5, 352-359
- Giddens, A. (1986) *The Constitution of Society: Outline of the Theory of Structuration*. Polity Press.
- Goffman, E. (1983) The Interaction Orders. *American Sociological Review*, **48**, 1–17.
- Gorichanaz, T. (2018) Understanding and information constellations in ultrarunning, *Library Trends*, **66**, 3, 329-350.
- Habermas, J. (1987) *The Theory of Communicative Action: Lifeworld and System: A Critique of Functionalist Reason: Vol. Two*. Beacon Press.
- Hartel, J. (2018) The Case against Information and the Body in Library and Information Science, *Library Trends*, **66**, 4, 585–588.
- Harviainen, J. T. (2015) Information Literacies of Self-Identified Sodomasochists: An Ethnographic Case Study. *Journal of Documentation*, **71**, 3, 423–439.
- Huttunen, A. (2022) *Friction and Bodily Discomfort: Transgender Experiences of Embodied Knowledge and Information Practices*. University of Oulu, Finland.
- Huttunen, A and Kortelainen, T. A. (2021) Meaning-making on Gender: Deeply Meaningful Information in a Significant Life Change among Transgender People. *Journal of the Association of Information Science and Technology*, **72**, 7: 799-810.
- Howson, A. and Inglis, D. (2001) The Body in Sociology: Tensions Inside and Outside Sociological Thought. *The Sociological Review*, **49**, 3, 297-317.

- Kant, I ([1785]1964) *Groundwork on the Metaphysics of Morals*, Harper and Row.
- Keilty, P., and Leazer, G. (2014) What Porn Says to Information Studies: The Affective Value of Documents, and the Body in Information Behavior. *Proceedings of the American Society for Information Science and Technology*, **51**, 1, 1–11
- Leder, D. (1992) Introduction. In Leder, D (Ed) *The Body in Medical Thought and Practice*, Kluwer Academic.
- Lueg, C. (2014) Characterisations of Human Perception and their Relevance When Studying Information Behaviour. *Journal of Documentation*, **70**, 4, 562-574.
- Lueg, C. (2020) To Be or Not To Be (Embodied): That is Not the Question. *Journal of the Association for Information Science and Technology*, **71**, 1, 114–117.
- Lindh, K. (2015). Breathing Life into a Standard : The configuration of resuscitation in Practices of informing. Doctoral Thesis (monograph), Division of ALM and Digital Cultures.
- Lloyd, A. (2003) Information Literacy: The Meta-Competency of the Knowledge Economy? An Exploratory Paper. *Journal of Librarianship and Information Science*, **35**, 2, 87–92.
- Lloyd, A. (2006) Information Literacy Landscapes: An Emerging Picture. *Journal of Documentation*, **62**, 5, 570-583.
- Lloyd, A. (2007) Learning to Put out the Red Stuff: Becoming Information Literate through Discursive Practice. *The Library Quarterly*, **77**, 2, 181-198.
- Lloyd, A. (2007b) Recasting information literacy as sociocultural practice: implications for library and information science researchers. *Information Research*, **12** (4).
- Lloyd, A. (2010a) Corporeality and Practice Theory: Exploring Emerging Research Agendas for Information Literacy. *Information Research*, **15**, 3.
- Lloyd, A. (2010b) Framing Information Literacy as Information Practice: Site Ontology and Practice Theory. *Journal of Documentation*, **66**, 2, 245–258.
- Lloyd, A. (2010c) Lessons from the Workplace: Understanding Information Literacy as Practice. In *Practising Information Literacy: Bringing Theories of Learning, Practice and Information Literacy Together*. Centre for Information Studies, 29-49.
- Lloyd, A. (2011) Trapped between a Rock and a Hard Place: What Counts as Information Literacy in the Workplace and How Is It Conceptualized? *Library Trends*, **60**, 2, 277–296.
- Lloyd, A. (2014) Informed Bodies: Does the Corporeal Experience Matter to Information Literacy Practice? In *Information Experience: Approaches to Theory and Practice*, Emerald Group Publishing Limited.
- Lloyd, A. (2017) Information Literacy and Literacies of Information: A Mid-Range Theory and Model. *Journal of Information Literacy*, **11**, 1, 95-105.
- Lloyd, A., and Hicks, A. (2021) Contextualising Risk: The Unfolding Information Work and Practices of People during the COVID-19 Pandemic. *Journal of Documentation*, **77**, 5, 1052–1072.
- Lloyd, A., and Olsson, M. (2019) Untangling the Knot: The Information Practices of Enthusiast Car Restorers. *Journal of the Association for Information Science and Technology*, **70**, 12, 1311-1323.
- Merleau-Ponty, M. (1962). *Phenomenology of Perception*. Routledge & Kegan Paul.

- Nayak, A., and Kehily, M. J. (2006) Gender Undone: Subversion, Regulation, and Embodiment in the Work of Judith Butler, *British Journal of Sociology of Education*, **27**, 4, 459-472.
- Nettleton, S. (2001) The Sociology of the Body. In Cockerham, W. (ed.) *The New Blackwell Companion to Medical Sociology*, 43-63.
- Nettleton, S. and Watson, J., (1998) Nettleton, S., and Watson, J. (Eds.) *The Body in Everyday Life*. Psychology Press.
- O'Loughlin, M. (1998) Paying Attention to Bodies in Education. Theoretical Resources and Practical Suggestions, *Educational Philosophy and Theory*, **30**, 3, 275-297.
- O'Neill, J. (1985) *Five Bodies: The Human Shape of Modern Society*. Ithaca, Cornell University Press.
- Olsson, M. and Lloyd, A. (2017) Losing the Art and Craft of Know-How: Capturing Vanishing Embodied Knowledge in the 21st Century. *Information Research*, **22**, 4.
- Parsons, T. (1937) *The Structure of Social Action*. Free Press.
- Pilerot, O. and Maurin Söderholm, H. (2019). A conceptual framework for investigating documentary practices in prehospital emergency care. In *Proceedings of the Tenth International Conference on Conceptions of Library and Information Science, Ljubljana, Slovenia, June 16-19, 2019*. *Information Research*, 24(4), paper colis1931. Retrieved from <http://InformationR.net/ir/24-4/colis/colis1931.html> (Archived by the Internet Archive at <https://web.archive.org/web/20191217180352/http://informationr.net/ir/24-4/colis/colis1931.html>)
- Polkinghorne (2021) Exploring Everyday Information Practices: Embodied Mutual Constitution of People's Complex Relationship with Food. Swinburne University, Melbourne.
- Reckwitz, A. (2002) Toward a Theory of Social Practices: A Development in Culturalist Theorizing, *European Journal of Social Theory*, **5**, 2, 243-263.
- Schatzki, T. (1997) Practices and Actions: A Wittgensteinian Critique of Bourdieu and Giddens. *Philosophy of the Social Sciences*, **27**, 3, 283-308.
- Schatzki, T. R. (2001) Subject, Body, Place, *Annals of the Association of American Geographers*, **91**, 4, 698-702.
- Schatzki, T. R. (2002) *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*, Pennsylvania State University Press.
- Shilling, C. (2001) *Embodiment, Experience and Theory: In Defence of the Sociological Tradition*. *The Sociological Review*, **49**, 3, 327-344.
- Shilling, C. (1993) *The Body and Social Theory*. Sage.
- Shilling, C. (2009) The Embodied Foundations of Social Theory. In Ritzer, G and B Smart (eds.) *The Embodied Foundations of Social Theory*, SAGE, 439-457.
- Shilling, C. (2020) Embodiment. In *The Cambridge Handbook of Social Theory*, Cambridge University Press, 249-271.
- Vamanu, I., and Terronez, M. (2022) Our Ancestors Passed This Down to Us for a Reason: Information Practices of Ballet Folklórico Dancers in Mexican American Communities. *Journal of Documentation*.

Veinot, T. C. (2007). The Eyes of the Power Company, Workplace Information Practices of a Vault Inspector. *The Library Quarterly*, 77, 2, 157-179.

Wacquant, L. (2004) *Body and Soul*, University of Chicago Press.

Weber, M. (1968) *Economics and Society*, University of California Press.