Alternatives to being information literate

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Abstract. In contrast to the relative abundance of conceptualisations of
"information literacy", the earlier research has put considerably less attention to
what are its alternatives. The findings show that there are shades in being less and
non-literate beyond a mere lack of necessary skills or engagement in
inappropriate practices. Information illiteracy can be experienced as a problem
but it can also represent a conscious choice for delimiting and organising
information practices. From a theoretical and practical perspective, this study
suggests that both information literacies and information illiteracies should be
taken into account in information literacy research and education, and when
developing and deploying information systems and services to compensate for
the lack of literacies.

Keywords: information literacy, information illiteracy, information anxiety,
satisficing

1 Introduction

There are several competing views of what information literacy is. The approaches
range from treating information literacy as one skill, or a set of skills or competences to
conceptualising it as a socially enacted practice and as a capability enacted through
situationally and contextually conditioned practices [1-4]. Even if there are specific
areas and aspects of information literacy that have considered under-researched [5-6],
there is a serious dearth of systematic work on the lack of information literacy, or in
broader terms, alternatives to being information literate.

The aim of this article is focus on that particular gap and to extend the understanding of
the alternatives to being information literate by explicating nuances and dimensions of
'information illiteracy' beyond simple binaries. Unlike the earlier literature seems to
suggest both explicitly and implicitly, it is suggested that there are much more shades
of being less and non-literate than a mere lack of necessary skills or engagement in
inappropriate practices.

2   Literature review

Information literacy has been conceptualised in the literature from several competing metatheoretical perspectives [4][7]. In contrast to the earlier conceptualisation of information literacy as a generic acontextual skill, the more recent research has tended to emphasise it as a social and situated (or sociotechnical, [3]) phenomenon rather than an individual trait, and stressed the plurality of information literacies and information literacy practices [8]. Limberg, Sundin and Talja, who define information literacy as "purposeful information practices in a society" [7, p. 95], note that within the newer research in the area, it is possible to identify at least three different meta-theoretical approaches, which all in a broad sense, belong to the "alternative approaches" [8] that contest the idea of information literacy as one generic skill. However, instead of having led to paradigmatic changes in the field, it seems that the new perspectives have increased the diffusion of views and created fault lines between different professional and scholarly schools in the information literacy community [4][7]. Whereas the competence oriented perspectives tend to be based on the assumption that information literacy can be graded (e.g. [9]) and it is possible to create instruments for measuring the level of information literacy [10-11], the practice-based approaches have focused on explicating the contextual and situational fit, appropriateness and purposefulness of information literacy practices [7-8].

In contrast to the abundance of literature and perspectives to what information literacy is, there has been significantly less attention to the alternatives of being information literate, or to counter-paraphrase Lloyd [12], practices within which information literacies are not enacted. This is conspicuous especially because the idea of the lack or inadequacy of information literacy in general or particular information literacies permeates the literature independent of its underlying metatheoretical assumptions. In some cases, authors have referred to different levels of information literacy ranging, for instance, from low to high (e.g. [9]) and in quantitative levels, it is not uncommon to use scales to measure levels of information literacy [13]. Socioculturally and, for instance, phenomenographically oriented research use different vocabulary and are less inclined to measure the 'level' of information literacy but also these types of studies embrace the idea of grading in their pursuit of improving information literacies or to make them more purposeful [7][14].

The literature contains also somewhat sporadic references to information illiteracy. It is typically portrayed in the context of skills-based approaches as a state of lacking information literacy (skill or skills) [15-18]. Both Green [15] and Lin [16] criticise the dichotomy literacy/illiteracy. Lin [16] notes that the term information literacy itself is problematic in that it may lead to assuming information illiteracy in people. A common trait of the conceptions of information illiteracy is that they fall within the much-criticised derogatory discourse of the information poverty of 'needy users' [19-21]. In contrast to the assumptions embedded in this discourse, unorthodox information practices [22], or as Green [15] emphasises, non-participation in information literacy education, does not (automatically) make anyone an incapable information illiterate.

3 Methods and material

The empirical material consists of sixteen qualitative interviews of archaeology professionals from a Nordic country with special interest in issues pertaining to the archiving and preservation of archaeology. The groups of informants represent a convenience sample. Following the convention of information literacy research in a workplace context where the term is not used by the informants themselves, the interviews and analysis of transcribed interview records focused on the analysis of the "application of information literacy" [23], and particularly, in the context of this study, on the application of information illiteracies. All interviews were conducted by the author, taped and transcribed by a professional transcriber. The interviews lasted in average 60 minutes. The interviews focussed on the interviewees' professional work, their views on the current state and future prospects of archaeological information management. For reporting purposes, the interviewees were assigned false names (Table 1). The analysis of the interview transcripts was based on close reading [24] of the interview transcripts. A detailed description of the empirical approach and its limitations has been presented in two earlier texts [25-26].

Table 1. Interviewees.

Interviewee	Description
Mohamed	Finds information administrator at a national institution
Travis	Administrative director of a contract financed archaeological department a regional museum
Eunice	Archivist, information manager at a national institution
Faunia	Administrative director of a contract financed archaeological department a regional museum
Liesel	Finds administrator at a national institution
Bentley	Coordinator at a private archaeology consultancy
Precious	Researcher in archaeology at a Swedish university
Zero	Field archaeologist at a private archaeology consultancy
Hamish	Archivist at a national institution
Delia	Coordinator at a contract archaeology department at a regional museum
Jeremiah	Archivist at a national institution
Hanna	Data archivist working at a data archive
Sam	Administrator at a county administrative board
Nombeko	Researcher in archaeology at a Swedish university
Park	Information manager at a national institution
Baines	Researcher in archaeology at a Swedish university, data archivist working at a data archive

4 Analysis

An analysis of the interview record exposed examples of practices or competences that can be classified as different alternatives to being information literate. The breakdown is not suggested to be exhaustive of all possible practices, but rather a first step towards developing a broader understanding of how to conceptualise and explicate the

phenomenon of not being information literate, and its implications to the information literacy field.

4.1 Barrier to purposeful information practices

The analysed interview record contained several references to classical 'information illiteracy' cited in the literature, a lack of abilities and capabilities to engage in purposeful information practices in a particular situation. The interviewees made remarks both of their own lack of information literacy and that of others, and how their and others' information literacy has positive and negative implications on the information work of the both parties Interviewee Nombeko discussed in detail the inadequacy of the information literacy practices of her colleagues (i.e. others) by noting that archaeological documentation, which is produced in field as a part of excavations and surveys is not adequately standardised to be easily reused at a later stage by researchers (e.g. herself) and, for instance, by land-owners with an interest in knowing the limits of archaeological sites on their property. In contrast, for instance, Bentley expressed his frustration that he (i.e. himself) did not know how to manage and what to do with the large number of digital photographs taken at an excavation, how many of them should be archived and included in the excavation report, and what should be done with the "remaining 90 percent, what do we do with them for example?". Instead of being an example of an individual inability of the particular interviewee, comments made by others (e.g. Mohamed, Travis, Hanna) it was apparent that the practices of archaeological information management in the studied country as a whole were not information literate enough to deal with digital photographs. Different interviewees described various types of *ad hoc* strategies that themselves could be described as innovative information literacies but that in the end, especially in the societal context (cf. [7]) clearly lacked purposefulness.

4.2 Opportunity to avoid information interactions

Simultaneously to causing anxiety, the lack of abilities and capabilities provided interviewees opportunities to legitimise their avoidance of engaging in specific information interactions and in a broader sense, in particular information practices. Bentley describes that the inability to produce perfect documentation of archaeological sites gives archaeologists a relative freedom to do as they feel best: "the priority is that something gets done". Another example, that recurred in several interviews (e.g. Mohamed, Eunice, Faunia, Liesel, Sam), were comments that 'we' cannot undertake a particular (information) task like appraising or deaccessioning a particular document or a set of data, because 'we' were not there when the document was created or data was collected, and implicitly, in practice, because we lack (or can be argued to lack) an adequate competence to do so. Eunice gave a more explicit example of this when he described how, according to her, archivists have a tendency to come and "point to the laws and regulations saying that we have to do it like this, because it is the directive" ending the discussion of different alternative approaches to manage information and archival records.

4.3   Opportunity for alternative information (literacy) practices

In contrast to being a barrier, the analysed data contains also examples of how the lack of particular information literacy could become an opportunity to engage in alternative information practices. Liesel describes that the difficulty to find and obtain documents from the archive located at her own institution means that she often searches and retrieves them online whenever they can be found on the webpages of the organisations that originally produced them. On a more general level, Zero noted that the lack of routines opens up possibilities to engage in information practices that are relevant for the situation.

Travis described a relatively extreme situation with close to a complete dearth of information literacy with a specific type of information. According to him, his organisation was more or less lacking any functional practices to work with the management of any type of digital information. Instead of seeing this a mere problem, he commented that in the end, it gives him a close to a complete freedom to start to develop purposeful information practices (i.e. information literacy) as he and his organisation considers best without a need to take into account legacy practices and literacies that could hinder the process.

5   Discussion

5.1   Beyond literacy/illiteracy dichotomy

The analysis revealed several noteworthy aspects of the lack of information literacy that warrant further consideration. Firstly, it is apparent that like information literacy, the lack or inappropriateness of information literacy is not a binary phenomenon. There are degrees and nuances of how purposeful certain information practices are in a specific situation. Similarly, there is individual variation in whether or how something is experienced as suboptimal and how it affects different individuals and groups that are engaged in particular information literacy practices. For someone, ambiguous information practices may appear as a form of information illiteracy whereas someone else might see the flexibility as a clever strategy. Therefore, also the outcomes of the alternatives of being information literate can be either positive or negative. Deficient information literacy can hinder purposeful information practices like reusing archaeological documentation but it can also help field archaeologists to produce documentation that is particularly relevant to the situation when the documentation is being created. In the analysis, it became especially apparent that information illiteracy in producing, organising and managing information is tightly intertwined with the problems of using information and vice versa. This observation highlights the significance of extending the inquiry of information (il)literacies enacted in the situation of seeking and using a particular piece of information to those playing out in the situation when it was created, organised and managed not only as important skills as Huvila [6] suggests, but also as two intimately related sides of the same constellation of practices.

The paradox of the contextual and situated nature of the lack of 'adequate' information literacy is similar to that of information literacy itself. However, an explicit consideration of the perplexity of their being and not-being as a double paradox can be helpful in bringing clarity both to the problematic dichotomisation of information literacy and illiteracy, and the similarly problematic allusions of the complete situatedness and contextuality of all information literacy practices that effectively negate the possibilities for any generalisations even on an analytical level.

Instead of considering information literacy alone, it could be useful to extend the perspective to the deficiencies of information literacies as well. The lack of particular information literacies and the presence of alternative information (il)literacies can be conceptualised as comparable scales that are similarly bound to situation and context as information literacies. It is further conceivable that in addition to multiple information literacies, individuals have also several information illiteracies intertwined with their information literacies. Elaborating the perspective makes it possible to extend analysis to understand the implications of the combination of these practices in relation to different implicit and outspoken purposes in a situation and context. Explicit consideration of illiteracies makes it also easier to appreciate why a person can be (from an information literacy educators' perspective) simultaneously information illiterate and competent (cf. [15]). Instead of being absolutely information illiterate, individual can be engaged in information illiteracy practices that makes an educator to perceive them as information illiterates whereas in practice, they are simultaneously enacting information literacies that make them capable of pursuing purposeful information work. From this perspective, it is apparent that information illiteracy is not necessarily a negative phenomenon.

A better understanding of how information literacies and illiteracies relate to and interact with each other could be suggested to be helpful in developing information literacy education, understanding of information practices and the situational purposefulness, to develop information systems that take both the competences and incompetences of their users better into consideration, and instead of necessarily eliminating all information illiteracies, to compensate a part of them with relevant information services, another legitimate strategy to help individuals in their information work, as Huvila [22] has suggested.

5.2 Literacy and illiteracy, or beyond

After criticising the literacy-illiteracy dichotomy and simultaneously using the two terms throughout this text, it is necessary to ask whether the terms are appropriate to use. It is possible to argue that the notions of information literacies and information literacy practices incorporate also illiteracies even if they would not have been discussed in explicit terms, or that the absence of information literacy in information practices is an indication of information illiteracy. For instance, the sociocultural perspective [7], which posits that information literacy is enacted as a part of certain practices [27-28], indirectly suggests that there are other practices within which information literacy is not enacted. To an extent these are, or incorporate information

practices (or as according to some researchers, all work and practices has an informational element e.g. [29-30]) and they do not incorporate information literacy, they can be conceived to enact information illiteracy.

In the present study, the references to the notion of information illiteracy and information illiteracies served a dual function. The use of an explicit term to refer to the lack or deficiency of purposeful information practices gives a possibility to explicate them in an analytical sense and to contrast practices with each other. At the same time, it opens up for an opportunity to discuss and nuance the earlier conceptualisations of information illiteracy. After having said that, a final question remains whether literacy-illiteracy is enough. A complementary notion missing from the spectrum and that makes at least some theoretical sense could be perhaps termed *information unliteracy* (ability to engage in counter-purposeful information practices). The question is, however, whether making such a further distinction is empirically useful. It could be enough to acknowledge that particular practices can be purposeful or unpurposeful in different contexts and appear as information literacies or illiteracies depending on the specific situations and purposes considered.

6   Conclusions

This study has shown that there are nuances in being information illiterate beyond a mere state of lacking. Information illiteracy can be related to avoidance of work and various strategies of evading the need of mastering work-related information and information work practices. Some of these practices can be negative from an individual and organisational workplace perspective whereas some of them have positive implications in one or both of the contexts. The present study posits that information illiteracy can have different nuances that partly come close to alternative forms and types of information literacies and partly to strategies of coping without self mastering necessary information and information work practices. The findings suggest that the lack of information literacy in general and specific types of information literacies in particular, can be experienced as a problem but they can also represent a conscious choice for individuals and groups to delimit and organise their information practices to better manage their everyday life. From a theoretical and practical perspective, this study suggests that both information literacies and information illiteracies should be taken into account in information literacy research and education, and when developing and deploying information systems and services to compensate for the lack of literacies.

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