

Information literacy and abstracting: interdisciplinary issues for linguists and information professionals

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Abstract

Information literacy is a complex phenomenon that requires a multifaceted interdisciplinary approach as it is related to verbal communication, literacy, functional literacy and academic literacy, including issues of plagiarism. It also includes text authoring in a full range of genres, among others abstracts. Abstracting is a well-known act of verbal communication, and abstracts are a genre of written communication. The essence of abstracting is summarizing information making use of critical reading. Abstracting thus can be regarded as one of the instances of exercising information literacy on a higher level. Both information literacy and abstracting are of prime professional interest for linguists (among others in the field of ESP) and information professionals.

Keywords: information literacy, abstracting, information professionals, critical reading, critical writing.

Resumen

Competencia informativa y creación de resúmenes: cuestiones interdisciplinarias para lingüistas y profesionales de la información

La competencia informativa es un fenómeno complejo que requiere la adopción de un enfoque interdisciplinar al tratarse de un asunto que guarda relación con la comunicación verbal, la alfabetización, la alfabetización funcional y la alfabetización académica, incluidos aspectos relativos al plagio. Asimismo, abarca la autoría de los textos dentro de un amplio espectro de géneros, entre los cuales figuran los resúmenes. La elaboración de resúmenes puede considerarse un acto de comunicación verbal bastante conocido, y los resúmenes constituyen un género dentro de la comunicación escrita. La creación de resúmenes consiste

fundamentalmente en resumir información mediante el uso de una lectura crítica, con lo que puede entenderse como uno de los ejemplos de materializar la competencia informativa a un nivel superior. Tanto la alfabetización de la información como la elaboración de resúmenes adquieren un interés primordial para los lingüistas (entre otros, dentro del IFE) y para los profesionales de la información.

Palabras clave: competencia informativa, creación de resúmenes, profesionales de la información, lectura crítica, escritura crítica.

Introduction

The study of information literacy (IL) requires a multifaceted interdisciplinary approach as it is a complex phenomenon. It is related to verbal communication, literacy, functional literacy and academic literacy, including issues of plagiarism. Most of these issues are of interest both for linguists and information professionals. One of the important aspects known for the majority of the latter is that IL is much more than acquiring the skills needed for using computers and the Internet. It is however, not self-explanatory, although true, that IL goes beyond the abilities of finding information. It requires communication skills related first of all to verbal communication. It is precisely this quality that represents the major interest for linguists.

In this regard I will point out that information literacy has numerous ties with literacy, functional literacy and academic literacy, including issues of plagiarism, and I will also try to show that it includes text authoring in a full range of genres, first of all abstracts. The second part of the paper briefly addresses the issues related to writing abstracts in the context of information literacy. I will argue here that abstracting is a well-known act of verbal communication, and abstracts are a genre of written communication. Abstracting however can be regarded as one of the instances of exercising information literacy on a higher level as its essence is summarizing information using critical thinking. A final argument will be that both information literacy and abstracting are of prime professional interest to linguists (among others in the field of ESP) and information professionals.

What is information literacy?

According to a well-known definition of IL, information literate people are able to recognize when information is needed. They are also able to identify, locate, evaluate, and use information to solve a particular problem (ALA, 1989). This definition directs our attention towards the active use of information. “Greater expectations”, a national panel report issued by the Association of American Colleges and Universities defines the nature of active use clearly by stating that information literate people are, among others, required to effectively communicate verbal information in oral and in written form, in their native language and in a second (foreign) language (AACU, 2002). As just defined, information literacy includes critical thinking but as reported in the *Information Literacy Competency Standards for Higher Education* (ACRL, 2000), critical thinking, in its turn, is closely related to critical reading, an issue that I will later address in detail.

Information literacy is closely connected to information seeking, the essence of which is finding texts that answer our information needs. Information seeking can be put into the context of writing, as writing is amongst the most common tasks within which information seeking is embedded (Attfield, Blandford & Dowell, 2003). Information literate people are required to do the following:

- Choose a communication medium and format that best supports the purposes and the intended audience;
- Use a range of information technology applications in creating the product or performance;
- Incorporate principles of design and communication;
- Communicate clearly and with a style that supports the purposes of the intended audience. (ACRL, 2000: 13)

All the above skills build a foundation for higher level abilities that can be summarized as follows:

- Recognizing, understanding, and analyzing the context within which language, information and knowledge are communicated and presented;
- Understanding the relationships among language, knowledge, and power;
- Using appropriate technologies to manage information collected or generated for future use;

- Learning to critique our own and others' works. (D'Angelo & Maid, 2004: 217)

In accordance with this, "Greater expectations" requires the learner to show extensive and sophisticated intellectual and practical skills in "transforming information into knowledge and knowledge into judgment and action" (AACU, 2002: 22).

Related literacies

In addressing the communicative aspects of information literacy some issues of literacy, functional literacy and academic literacy should be discussed. Literacy involves the integration of listening, speaking, reading, writing, and numeracy. It can be defined as an individual's ability to understand printed texts and to communicate through print. Functional literacy denotes most commonly the ability to read and use information essential for everyday life (Bawden, 2001). In any case, without being able to read continuously and correctly it is impossible to exercise information literacy (Frank, 2006). Reading and writing are not limited to the print medium, especially as the amount of textual information available on the World Wide Web is considerable.

Academic literacy is of special interest to IL and is defined by Elmborg (2006: 196) as follows: "If literacy is the ability to read, interpret, and produce texts, academic literacy is the ability to read, interpret, and produce information valued in academia". He goes on saying that this happens according to beliefs about how research should be done. Academic literacy thus involves the comprehension of the entire system of thinking, values and information flows of academia. All this is based on a cultural identity of academia in which professional language and literature play a key role. In this system, information has a grammatical dimension, that information literate academics must master and students must be taught (Elmborg, 2006).

Academic literacy includes the closely interrelated issues of citing and plagiarism, which acquire special importance by the fact that students often do not have the proper writing and citing skills to avoid plagiarism, first of all because they are not able to delineate their own contributions from someone else's (Loo & Chung, 2006). That is the reason why it is important for the students to learn to balance between the advantages of relying on the work

of others and the responsibility of doing their own part (D'Angelo & Maid, 2004). This latter statement especially shows that plagiarism is not only an issue for writing instruction, but an ethical concern that is in line with requirements towards information literate people to use information ethically (Bawden, 2001).

Digital literacy is even more closely associated with information literacy. Their relationship is, on the other hand, controversial and the terminology related to them is both confused and confusing. The phrase “digital literacy” is often used to denote the skills to use ICT effectively, usually named “e-literacy”. In this sense, the meaning of digital literacy is improperly narrowed down. There is, however, a much wider view introduced by Gilster (1997), according to which digital literacy denotes a broad concept that links together other relevant literacies, including information literacy and e-literacy (Bawden 2008).

Similarly to literacy, IL is a cultural knowledge which enables us to recognize and use language appropriate to different social situations (Bawden, 2001). IL is closely related to verbal communication. One of the reasons for this is that literacy is a way of functioning within complex communicative situations (Geisler et al., 2001). In consequence, there are several dimensions of information literacy. I will further address questions related to the interconnectedness of reading and writing, the abilities that information literate people have to be able to present and activities in which these abilities materialize.

Readers and writers

As seen from the definition, identifying, locating and evaluating information or, in other words, information seeking stands in the very heart of IL. Information seeking however is embedded in writing (Attfield, Blandford & Dowell, 2003). One of the consequences of this is that the increase in the speed of access to information has serious effects on writing (Chan & Foo, 2004). Quick information acquisition leads to the fact that communication increasingly involves finding or commissioning good texts (that is, selecting, arranging, filtering and recombining pre-existing information) instead of creating original texts (Geisler et al., 2001). The reasons for this are manifold. Besides the higher speed of information acquisition there is a more “traditional” cause: many of the writings involve reflection on written texts

as the thinking and research on the given subject have already been done (Knott, 2008). Despite of this, or rather as a consequence, information literate people are unavoidably writers as well as readers. This is especially true, as writing includes organizing, storing, designing and creating information as well as communicating and distributing it (Dashkin, 2003).

“Recreating” texts occurs despite the fact that writing enables the creation of new knowledge and the process of writing and editing develops the functions of analysis and synthesis (Sheridan, 1992). This is claimed by Beeson (2005: 215) as follows: “As well as developing their capacity to understand and evaluate the work of others, [students] should develop their skills of articulation and explanation”. This scholar continues that for information to be useful, “the information literate person must be able not only to navigate the Web effectively but also to integrate new information into a personal corpus which is communicable to others” (Beeson, 2005: 216). To this comes that (in contrast to the stability of the print environment) in the present-day information environment digital information can be modified, copied, duplicated and redeployed in different contexts easily. With the appearance of Web 2.0, tools for creating, seeking and managing information in a collective and dialogical fashion are widely used both by professionals and amateurs. All this makes the finding of reliable, authentic and authoritative texts difficult as there are fewer and less clearly defined contexts that would foster this (Tuominen, 2007).

Critical reading

As stated above, information literacy requires critical reading that is based on critical thinking. Critical reading acquired especial importance with the growing number of writers on the Web and is required by the above circumstances. The Association of College and Research Libraries states explicitly that the information literate person “evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system” (ACRL, 2000: 11). According to Jones (1996), the criteria of critical thinking are:

- Differentiating between fact and opinion;
- Examining underlying assumptions, including our own ones;
- Looking for explanations, causes and solutions;

- Being aware of fallacious arguments, ambiguity, and manipulative reasoning;
- Focusing on the whole picture, while examining the specifics;
- Looking for reputable sources.

Gilster (1997) puts this on a different level by saying that critical thinking means distinguishing between content and its presentation. Lynch (1998) adds two more features:

- Assessing bias;
- Assessing accuracy.

And Knott (2008) presents a slightly different list of criteria:

- Determining the purpose of the text and assessing how the central claims are developed;
- Making judgements about the intended audience of the text;
- Distinguishing the different kinds of reasoning in the text;
- Examining the evidence and sources of the writing.

It is to be added that critical thinking in the new information environment mentioned above has to be employed when creating documents, or describing them with abstracts, keywords, tags, etc. (Beeson, 2005).

Information literacy and genre knowledge

Information literacy includes text authoring in a full range of genres including visual and multimedia communication (Lynch, 1998) –thus, genre knowledge plays an important role.

Genre knowledge builds on basic rhetorical issues like purpose, audience and tone (Ahmad & McMahon, 2006) and it is a knowledge of conventions that is closely tied to rhetorical situations. Rhetorical situations consist of interactions between the writer, the purpose, the audience, the subject and the context. If writers do not understand or simply neglect what is required by a given rhetorical situation, they lose their ability to reach and influence the intended audience. This means that it is not enough to have knowledge about the topic one is writing about.

Writers should also know how to communicate the message to the intended audience in the most appropriate way and most effectively. In other words, they have to possess knowledge about how to communicate strategically within a discourse community. In this way “the concepts of discourse community, rhetorical situation and genre knowledge are bound together when writing a text” (Andersen, 2006: 218). Scholarship requires genres because they provide us with

(...) explicit patterns for creating academic work - the ways we construct our identities as writers and researchers, the ways we construct and interpret our major statements and use evidence, and the ways we conceive of the communities we address with our scholarship. (Elmborg, 2006: 197)

Information literacy in abstracting

An abstract is “a concise and accurate representation of the contents of a document in a style similar to that of the original document” (Rowley, 1988: 10). Abstracts are complete and self-contained. This means that they have to be understandable without consulting the original (Rowley, 1988). The most important aspect of abstracting is representing the content of knowledge recorded in documents in natural language form (Cleveland & Cleveland, 1983). If we agree with the statement that abstracts have to be self-contained, there is only one meaningful interpretation of this requirement: abstracts are natural language texts.

Abstracts are important for both linguists and information professionals for many reasons. One of the most important ones is the fact that abstracts help to overcome the language barrier as they are written in the users’ language and can serve as a key to understanding fully the argument of the original (Cross & Oppenheim, 2006). Linguists and information professionals share interest in abstracting, because they recognize the fact that abstracts are important tools in the decisions about the relevance of information (Pinto, Fernández-Ramos & Doucet, 2008). These relevance decisions are based on determining what the essential content of a text is and this problem is central to all language processing (Mathis & Rush, 1975: 449).

The interdisciplinary nature of abstracting is one of its most distinguishable characteristics and the role of linguistics in the study of abstracting is unquestionable as the processing of information is essentially conditioned by language (Pinto, 1995). Extraction and summarization of information

that form the core of abstracting play an important role in many forms and phases of communication (Loo & Chung, 2006; Eisenberg, 2007). These processes are based on analysis and synthesis and build, among others, the foundation of classification, subject indexing and abstracting that are widely used in library environments.

The importance and the usefulness of abstracting from the viewpoint of IL is based on the fact that abstracting employs not only decoding and encoding, but critical reading as well (Guinn, 1979). Critical reading is central because the most important activity in abstracting is making decisions about what is really important in a text. In this sense abstracting is a special case of eliminating details from a complex perceptual field to reveal underlying structures (Root-Bernstein, 1991). An important part of information literacy is to be able to judge the relevance of information found with reasonable speed and accuracy and in a way that corresponds to the circumstances and requirements of today's information environment (Beeson, 2005).

Abstracting operations are predominantly of linguistic nature and abstracting can be both intralingual and interlingual. Abstracting thus shows a number of similarities with translation. There is similarity in the process of communication as both processes require the presence of a mediating person, who has a mission to generate the required translation or abstract, respectively. The differences lie in the fact that translations are supposed to be equivalent to the original while abstracting is deliberately heterovalent both on the level of content and style. On the content level abstracting is characterised by the omission of content elements from the original that are judged to be less important. On the stylistic level the style displayed by the original text and the order of explanation do not have direct influence on the abstracted text (Pfeiffer-Jäger, 1982).

Summarizing can be done not only on the professional level but as a non-professional and semi-professional activity. We do non-professional, everyday summarizing when we tell the story of a recently seen movie. Among the semi-professional summarizing activities those related to teaching and learning foreign languages take a special position as they require the adherence to more explicit rules. Perhaps the best known example of such semi-professional summarizing is when students present shortened versions of different texts at foreign language examinations.

Professional summarizing results in written texts while the other levels tend to be oral activities. It demands high professional and communicative skills on

the summarizer and is essentially rule-based. For information professionals, summarizing (that is, abstracting) is a core qualification. The professional nature of this activity does not mean that all abstractors work full-time. On the contrary, most of them have no fixed employment as abstractors. They work in addition to other professional duties. Abstractors (at least ideally) are equipped with summarizing skills and knowledge and they have acquired an explicit methodology for summarizing (Endres-Niggemeyer, 1998).

The knowledge base of the abstractor consists of linguistic and non-linguistic knowledge. The source of linguistic knowledge is the text and it consists mainly of the ability to interpret the text. Non-linguistic knowledge can be:

- commonplace knowledge;
- technical knowledge (professional knowledge of the given field);
- knowledge of the users (recipients) of the given abstract (of the interests and needs of the audience);
- knowledge of the specifications and instructions regulating the abstractors' work.

Professional knowledge includes knowledge on the conditions and circumstances of how the source text came into existence. Abstractors have to be familiar with the given problem, the results achieved in the particular field and they have to be able to answer the question: What is important in the given field? (Pfeiffer-Jäger, 1982). Likewise, abstractors have to be aware of the communicative intention of the author of the source text in order to understand what the author regarded as important or noteworthy (Belkin, 1993). The knowledge base of the abstractor should thus be sufficient to answer a second question: What is important in the given context? (Pfeiffer-Jäger, 1982).

The interest of ESP in abstracting

As already mentioned, abstracts and abstracting represent interest for ESP practitioners, even though this genre has not been studied as extensively as for example the research article. The linguistic study of abstracts is a growing field motivated by the interest of linguists to understand the mechanisms which underlie these multifunctional texts (Lorés, 2004). As surveyed by Chan and Foo (2004), the main objectives of such studies are often genre-

based, that is their studies have been directed towards “identifying and assessing language conventions and rhetorical structures of abstracts in various disciplines, and on drawing implications for improving classroom practice and helping second language learners” (Chan & Foo, 2004: 102). One of the most popular practices in doing this was using the genre approach developed by Swales (1990).

There are differences in the approaches towards abstracting by ESP researchers and information professionals. The perspectives of the two disciplines however are not mutually exclusive (Chan & Foo, 2004). A different, though predominantly linguistic point of view can be found in a number of short online guides on abstracting usually prepared for university students in the United States of America. These guides are presented by writing centres or similar institutions associated with the departments of English and often address abstracting from an ESL perspective and usually treat abstracting as a practical writing issue. Writings from all perspectives can be useful for those who are interested in abstracting, even though the terms used in some of the guides and technical writing sources reflect that the terminology in this field lacks of regulation and consequent usage. The examples of this are when the terms “abstract” and “summary” are used as synonyms or when indicative abstracts are called “descriptive”. There is no place however to discuss these issues in detail. The problem nonetheless exists (Koltay, 1997).

The approaches of information professionals do not necessarily exclude linguistic study. The reason of this lies in the nature of library and information science (LIS) which is the underlying discipline that supports the work of information professionals. LIS is heavily interdisciplinary (Saracevic, 1999). It is a professional domain that draws on many kinds of knowledge, among others language and communication skills (Hjørland, 2000). This is not by accident. Many activities of information professionals result in linguistic artefacts (Bade, 2007). The reason for this is that library and other information processing uses knowledge in the form of predominantly (although not exclusively) verbal texts. Texts are not only subject to analysis, but they are the source of those intellectual tools that are used in library work. Text undergoes not only analysis but in most cases the final goal of library activities is generating texts (Horváth, 1999).

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