

Science, Literariness and Thinking With the Machine

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Abstract

An important aspect of studies into reading over the past 40 years has been the use of empirical research methods. This has enabled researchers to identify important features of the reading process, along with differences between reading in a first language (L1) and in a second language (L2). Some differences between L1 and L2 studies are discussed with a particular focus on literary reading and the concept of *literariness*. Although literary reading and *literariness* have been explored in a number of L1 studies, a smaller number of studies refer to literary reading in an L2. Some reasons for the discrepancy are suggested and following this ideas about how further insights into reading research in can be gained in the future.

Introduction

“A book is a machine to think with”. This opening line from Ivor A. Richards’ book “Principles of literary criticism” (Richards, 1924) was intended to provoke reaction. The impact on a reader from the time can only be imagined now that 90 years have passed since its publication. In the immediate aftermath of WW1, a machine was something to be feared, conjuring up mental representations of the tools of war and destruction. Along with this image a further, opposite nuance is also implied. That is, reading has power, it moves on with continuously, and that it makes the human brain stronger. Richards could hardly have predicted some of the changes in reading to have taken place since 1924, and the types of reading which now take place around the

world. In this age of technology, with greater communication between languages than ever, it is ever more important to consider the power of reading.

What is reading?

Any study of the process of reading should begin with a definition. The problem with reading, however, is that it defies a single definition. Instead reading must be viewed as a complex process, or set of processes. It is also research into the “unobservable” (Candlin, 1983, p.xiii), because it cannot be known what goes on inside an individual’s mind while reading. Basic elements in the reading equation are viewed very differently by different researchers, posing questions about reading which resist simple answers. One typical examples of this would be the following: “In learning to read, what is it that one learns?” (Perfetti & Dunlap, 2008, p.13). In answering this suitably, in the first instance the idea of context, participant and variation between readers would be essential. Some researchers agree that reading involves primarily the reader and the text and helpfully suggest that reading is about process as much as product (Alderson & Urquhart, 1984). Others argue that the writer is also vitally important too and cannot be ignored in any description (Widdowson, 1984). For these reasons, a simple definition may be impossible to find, and a complex definition too often disputed.

Another way of seeing reading is to view it as a larger educational experience, not distinct from the other aspects of literacy. As part of the “literacy experience” (Koda, 2008, p.10) reading can be seen as a cognitive process which requires a set of skills and sub-skills, and is affected by factors such as social context and environmental constraints. Looking at reading from the perspective of context and participant is helpful in framing understanding. Whether considering a child learning to read in the L1 or an adult learner approaching the reading in the L2, reading varies according to

a wide range and number of factors. This could be their use of cognitive processes or knowledge of metalanguage and use of strategies, for example.

Some have suggested that across languages there is a “Universal Grammar of reading” (Perfetti & Dunlap, 2008) which links reading in any language together by its connection to a script. A growing body of research suggests that there is barely any reading experience which is wholly or purely a monolingual experience (Koda, 2008). Any language with loan words such as Japanese or English commonly features reading which can be described as multilingual. Increasingly, there is no such thing as a pure L1 reading experience, particularly for older readers. Now that multilingual texts pervade our globally connected world (see the edited collection in Koda, 2008 for a look at cross-lingual literacy development, for example) it seems more important than ever to see reading as a fluid, ever-changing experience.

Empirical methods in reading research

This section frames the types of studies referred to as empirical research, with a focus on reading and literary reading. Simply put, empirical research reports on actual observable phenomena, rather than theory and belief: “Empirical: Research that is based on data.” (Mackey & Gass, 2005, p.355). In empirical, experimental and quasi-experimental studies a laboratory setting is used and conditions are set up which show the effects of a particular treatment. In the case of looking at acts of reading, two separate conditions for reading may be compared, or one treatment compared with a control group. One example of this might be to take a literary text and manipulate it in a way which changes its form, function or other features. In some studies student volunteers are used, while in others members of the general population become the participants. In various studies comparisons between experienced and inexperienced readers may be compared, sometimes considered

novice/expert.

Empirical studies into literary reading have been conducted by researchers across disciplines, from the humanities, psychology and fields of linguistics and stylistics. In some fields, such as psychology, there seem to have been more studies into reading and literary reading (looking at empathy, emotion and affect) than in education. This narrows still further when looking at studies in literary reading. What makes these types of studies important is their “serious commitment to the examination of reading and the testing of hypotheses about reading with real readers” (Miall, p. 307). Overall, the use of empirical methods assists researchers in their search for greater understanding of the reading phenomenon.

Differences and similarities: L1 reading and L2 reading

Second language literacy research has been conducted in a variety of contexts in keeping with the growing demand for language minority education worldwide. L1 reading research has provided a way in to L2 studies, and many principles from L1 studies have been applied or adapted L2 researchers. Many researchers have emphasised that fundamental differences between L1 reading and L2 reading exist (Davis & Hulstijn, 1991; Grabe & Stoller, 2002; Grabe, 2008; Koda, 2005). It is particularly useful to have an awareness of these differences regarding a review of reading studies (see Table 2).

A number of problems exist when trying to apply L1 reading principles to the L2 setting. A simple illustration of this would be to consider a typical L1 reading situation, the elementary school classroom. Not only does a young learner spend large amounts of time, repeatedly, and with specialist help, on the act of learning to read. Along with this is additional support entirely focused on the goal of L1 reading from parents and from society. The L1 learner has already mastered the main

aspects of spoken grammar in the first four or five years of childhood, and reading is added to this. The length of time to learn this skill is measured in the length of elementary school, which is to say that learning to read in the L1 is something of a long-term project. In contrast to this is typical L2 language learning situation, in which the older learner has to fit L2 learning in alongside study of speaking, writing and listening. Learning to read in the L2 is usually done when the learner has less than a full grasp of the spoken elements of the L2. It is likely that the L2 reader is beginning at a different point from a) another similar reader in the same class and b) how he/she began reading in the L1.

Although beyond the scope of this short article to discuss these in detail, reading research has resulted in a number of models of the reading process. The Model of Text Comprehension (van Dijk & Kintsch, 1983, discussed in Grabe & Stoller, 2002 and Grabe, 2008) is perhaps the most well known of these, although other models appeared through the 1980s and appeared to be popular for a time.

Table 2: Major types of differences between L1 and L2 reading studies

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| <ol style="list-style-type: none">1. Linguistic and processing differences2. Individual and experiential differences3. Socio-cultural and institutional differences |
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(from Grabe, 2002. p.40)

There are a number of reasons why L1 and L2 studies differ in their purpose and scope. One reason is that L1 studies are different in their goals and expectations. Another is that conclusions from L1 studies cannot simply be re-applied to L2 studies. A third reason for making a distinction between the two types of reading is that this allows for a clearer understanding of topics special to the L2. (Grabe, 2002 summarises these points concisely). Looking at reading in general and literary

reading in particular, it can be argued that the L1/L2 distinction is too great to allow comparisons between the two. A different view is presented by researchers such as Koda who looks at the multilingual features of all types of reading.

Davis and Bistodeau (1993) investigated L1 and L2 reading processes using think-aloud methods. The first problem they perceived is that an oversimplified view of the process of L2 reading exists. Two opposing ideas about how an L2 reader processes text are that a) the L2 reader has only a small number of strategies in place and 2) the L2 reader has the same number of top-down and bottom up strategies as the L1 reader. To investigate this think-aloud protocols were used (using Olson, Duffy and Mack's method). The results indicating that statistically, the only differences in response came from the type of text. Differences between elements such as vocabulary, grammar, knowledge of the learning process, and types of linguistic transfer make linguistic processing different for the L1 and L2 reader. Finally, some problems with L2 literacy studies include unequal balance between studies in different languages, overemphasis on phonological awareness and decoding rather than looking at reading sub-skills (Koda, 2008 looks at this in some detail). Overall, although some studies have looked at key issues of L1 and L2 reading, the balance of the types of studies conducted is more weighted in favour of the fields of psychology and cognitive sciences than in other relevant fields such as language teaching. This is an issue that researchers in the field could seek to address in the future.

Over 40 years of research, some simple questions have remained problematic, not least the simple query posed in this opening chapter title from the edited volume *Reading in a Foreign Language*, published in 1984: "Reading in a foreign language: a reading problem or a language problem?" (Alderson & Urquhart, 1984, p.1). This question, getting to the a core language teacher's dilemma about what and how to teach reading, is not a simple one to answer. It is as valid today as it was when it first appeared.

Literary reading and *literariness*

In the same way that reading research has explored numerous avenues, the sub-field of literary reading has also been researched in different ways. Literary reading involves reading any kind of classic Literature as well as literature with a small ‘l’ (MacRae, 1991). Literature with a small ‘l’ includes other types of creative texts, simplified learner literature, children’s books, and popular songs. Although MacRae was writing about the problem that the narrow view of the classics of literature in education was not aimed at the ELT field only, his arguments are convincing in this area also. For example, in encouraging contemporary and new texts to be viewed as literature, this allows greater appreciation of literature amongst novice readers, removing the expert view of the teacher for interpretation of a text. In general, *literariness* is the degree to which a text draws attention to itself through the use of literary devices, such as metaphor, repetition, alliteration, and so on. The existence of literary language, being everywhere from daily speech to advertising slogans, makes this skill in reading a useful one to notice and pay attention to. Carter (2004) goes further and suggests that the use of literary vs. non-literary is not a useful distinction and that all language is creative in some way. Given that literary texts including short poems and song lyrics are on this cline or scale, it follows that so are student responses to poetry. Reading and responding to this broad range of literature can include anything from advertisements, to blogs to students’ writing. This is because some see reading literature as a way of allowing experience of gaining competence at interpretation which is important. Terry Eagleton suggested that “Anything can be literature, and anything.... can cease to be literature” (Eagleton, 1996, p.9). This has led to the continued work of researchers such as David Miall, who still proposes that an important question is this: “What is literary reading, and is it possible to distinguish it from other kinds of reading?” (Miall, 2006, p.1.)

As a major area of education research, first language reading has been explored by researchers in a variety of contexts. These include early reading in childhood, studies looking at dyslexia and reading studies from the perspective of psychology. In attempting comparison with L2 studies it is important to consider that many studies come from outside the applied linguistics field, have been conducted in laboratory settings, and as such can have limited application in the classroom.

When considering the smaller focus of literary reading, three main areas of research have been followed by researchers (see Table 1). These are 1) investigation of foregrounding, based on the work of Russian Formalist Sklovsky, amongst others 2) examination of aesthetic features such as perception of beauty (Oatley, 1994) and 3) exploring emotion and response in the field of literary reading (Miall & Kuiken, 1999).

Table 1: Examples of studies looking at the notion of literariness

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| <ul style="list-style-type: none">➤ Tracing the effects of particular aspects of the reading process➤ Examining the influence of literary style on the reader➤ Investigating the effects of empathy in reading narrative➤ Looking at ways in which literary reading differs (if at all) from other types of reading➤ Showing the significance of reading experiences on memory➤ Determining difference between expert and novice readers➤ Finding potential for literary reading as a tool in cultural understanding, and in moral teaching➤ Answering questions about how types of reading vary depending on context, reading goal and reading experience➤ Evaluating the effect of reading on identity and self |
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(Adapted from Miall, 2006, p.307)

Existing studies have looked at reading from the perspective of what reader does, usually through think-aloud protocols or paired readings (for an overview of think-aloud protocols using L1 and L2 reading, see Bistodeau, 1993, and examples of paired reading in Hanauer, 2001). Listing the features of skilled reading yields terms such as rapid, efficient, interactive, strategic, evaluative (Grabe, 2008, p.14). This, it should be emphasised, is the fluent, skilled reader working successfully with an appropriate text. Reading must be seen within the context of participants' characteristics, which include age, language background, ethnicity and educational background.

Recent research in the field of cognitive science and psychology has suggested that reading deeply and thoughtfully can change the way the reader sees the world. The type of reading that is required when reading literature as opposed to non-fiction makes use of particular resources in the brain that other types of reading does not. This is not simply a matter for literature students, but is relevant across disciplines. In short, literary reading not only assists with linguistic development, but also social cognitive development also.

Another consideration in this discussion is contextualising literary reading in the L2 and the issue of discourse knowledge. For example familiarity with particular types of genre and expectations associated with these can be very different across different languages. Certain types of texts such as fairy tales, ghost stories or narratives such as biographies may be more or less familiar to the L2 reader depending on educational background and cultural expectations. Imagining how this works in reality can assist in conceptualising the particular difficulties in L2 reading. In the case of Japanese language learners accessing literary texts in English, their familiarity with Japanese stories and narratives may assist partially, but could hinder when expectations of the text differ. This is because difficulty related to topic type,

genre, L2 knowledge and reading experiences will be different for each learner. It is not enough to simply say that a particular text will be difficult for all learners, if it may be on a familiar topic for some, and therefore easier. Returning to Alderson's question about the reading problem or the language problem, it would seem that the answer is both factors are equally important to think about and consider. In order to encourage more teachers to consider reading literature in the language classroom, addressing problematic questions such as this can only be thought of as useful.

Some options for further studies in literary reading

In the digital age where more and more demands are being placed on the reading brain, stating clearly what literary reading is and how it can be identified could be one of the most valuable ways of looking at the future for literary reading. Linking literary reading to other types of linguistic input (and output), including multimedia forms, aural storytelling and social media interaction brings into focus numerous ways to see the way ahead for reading research. Finding a useful place for literary reading and tying it to real world skills for educational purposes will be a constant challenge for the reading researcher and teacher.

A growing focus on real readers is shaping the reading research landscape as reading itself is being reimagined. Internet based-book clubs, reading circles, online study and group or paired responses to reading can look at reading from different perspectives. These studies tend to use mixed method approaches rather than empirical methods but are more firmly placed in real world settings. The real readers in these emerging types of studies help show different aspects of the reading experience, in both L1 and L2 studies.

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