DIGITAL TEXTS FOR LEARNING FINNISH: SHARED RESOURCES AND EMERGING PRACTICES

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Recent studies in the field of new literacies have indicated that a remarkable change in the way we access, consume, and produce information has taken place. The boundaries between concepts such as authorship and ownership have become blurred. This paper will deal with using digital texts in teaching reading comprehension on a university-level course with a special focus on Finnish as a second language. Furthermore, the benefits and challenges of teaching L2 reading comprehension in a multimodal learning environment will be discussed. The three main perspectives utilized are meaningfulness, sharing, and adaptivity. The students attending the course described in the paper were advanced university students from various European countries, who studied Finnish as a second language. The study examines the literacy practices that take place when learners of Finnish as a second language engage in reading and writing blogs in a reading comprehension course. The results of this study indicate that sharing, meaningfulness and adaptivity promote learners' engagement with reading as a social practice and thus support the claim that using blogs represents opportunities to enhance L2 reading comprehension skills.

Keywords: Digital Texts, Literacy, Reading, Multilingualism

INTRODUCTION

Recent research has produced widely varying accounts of literacy practices and the contexts in which they occur. Today, our textual and media landscape is considerably more multifaceted than it used to be: texts are significantly more multilingual and multimodal, integrating different ways of creating meaning (Pennycook, 2010; Gee, 2004; Kress, 2003, 2010; Lankshear & Knobel, 2006). With regard to literacy practices, this means, for example, that social media has assumed a central role. Furthermore, new literacy practices are typically part of a culture of participation and sharing (Jenkins, 2006). Emerging technologies enhance language learning experiences by providing the possibility to use language in situations where technology is an artifact that mediates activity (Thorne & Reinhardt, 2008; Thorne, 2009; Lund & Hauge, 2010).

The present study examines the literacy practices that take place when learners of Finnish as a second language (FSL) engage in reading and writing blogs in a reading comprehension course (for comprehensive overviews of blog use in language learning and teaching, see Sun and Chang, 2012; Yang, 2011). The study relies on literacy research theories that view literacy skills as social practices. The paradigm is grounded in the socio-cultural idea of language and its respective processes (Lantolf, 2000). Instead of an individual's activities, the focus is on interaction and social activities. Particular attention is paid to literacy that has been shaped by the emerging technologies (Kress, 2003; Lankshear & Knobel, 2006).

Finnish as a Target Language

Approximately 5.3 million people speak Finnish as their mother tongue (Statistics Finland, 2012), making it one of the less-commonly-taught languages in the world. However, the increase in immigration over the past two decades has dramatically increased the instruction of Finnish as a second language (FSL). Approximately three percent of Finland's population are immigrants (Statistics Finland, 2012), most of whom are provided with language instruction. In compliance with their internationalization strategies,

universities have also increased the volume of Finnish language courses provided for both exchange and degree students. Outside of Finland, Finnish is taught as a foreign language at approximately one hundred sites in different parts of the world (Centre for International Mobility, 2012).

Research Scope in FSL Research

In the field of Finnish as a Second Language, research has been mainly concerned with speaking and interaction (Kurhila, 2003; Suni, 2008; Lilja, 2010), writing (Kalliokoski, 2005; Tarnanen, 2002) and structures (Martin, 1995; Kaivapalu, 2005). Thus, reading comprehension and literacy skills have received less attention (Vaarala, 2009). Many of the studies focus on language development at an early stage of learning a new language (Suni, 2008), whereas more advanced language learners (or, preferably, language users) have not been an area of research concentration. Moreover, the pedagogy of FSL has not been sufficiently explored.

Some literacy research on FSL has been carried out, but it has mainly focused on traditional literacy skills; this approach has been relevant until recently. In the context of Finnish language, digital texts have so far received only sparse research attention (see Vaarala & Jalkanen, 2010, 2011). Even so, changes in the surrounding textual world have generated the need for new initiatives in research as well. In other words, there is an obvious research gap concerning the pedagogy of multiliteracies (Cope & Kalantzis, 2000) in the field of Finnish as a Second Language.

CONCEPTUAL FRAMEWORK FOR DIGITAL TEXTS IN LANGUAGE LEARNING

New Dynamics of Reading

Reading is in a profound state of change. The Internet has reshaped our mode of reading from a linear to a more multimodal approach that requires new kind of competences (Burke & Rowsell, 2008; Leu et al., 2008; Coiro & Dobler, 2007). The traditional text is not the only constructor of meaning; videos, music, social media, and multidimensional hypertexts also carry the reader along paths of meaning-making during which the reader is an active agent. These processes, in which texts are mixed and reconstructed, blur the boundaries of textual ownership and authorship. This kind of change encourages a pedagogical shift of focus from content-based to activity-based design, where the learner's ability to transform the activity into a meaningful one is key (Blin & Jalkanen, 2012). Through the transformation process, learners manifest their agency and ownership of the learning process.

There has been a conceptual change from reading as a psycholinguistic concept to a wider understanding of literacy both as individual and social practice (Lankshear & Knobel, 2006). Nowadays, the concept of literacy refers to a broad utilization of texts that encompass both reading and writing (Barton, 1994) as well as the aspect of multimodality (Kress, 2010), for instance, the reading of images and video clips and commenting online on one's own and other people's texts. The process of reading more and more incorporates a variety of material and social resources, such as videos, images and other people. From the pedagogical perspective this means that the focus is on the activities stimulated by texts rather than on measuring or evaluating an individual reader's ability to understand an individual text.

Textual activities are practices rather than skills or competences. These practices are related to a certain way of thinking and talking, as well as to a certain set of values and beliefs. They link an individual to a specific social group, family, workplace community, or school class. Literacies are thus seen as something done by a group of people, and accordingly, are the opposite of an individual's process (Scribner & Cole, 1981; Barton, Hamilton, & Ivanic, 2000).

Teaching reading comprehension in a foreign or second language (L2) context typically begins with lexically and syntactically simple texts. The traditional mindset has been that one must master the system of a language before processing and understanding entire texts. Learners with reading difficulties are also frequently offered easier texts. This is inconsistent with the fact that learners continuously run into

complex texts in their everyday activities and actually need strategies for dealing with these texts. Literacy plays a crucial role, particularly in the context of L2 learning.

The fundamental change in reading poses multiple challenges to the pedagogy of L2 literacy. It urges us to reflect from a new perspective on the criteria for a good assignment (for instance, how to create an assignment that genuinely encourages learners to interact). Learners today also have easier access to texts that they find meaningful; taking this into account in teaching typically dismantles the roles of teacher and learner.

Affordances and Language as a Local Practice

Many of the contemporary views on language and language use posit that language practices are situated and local. According to Pennycook (2010), language emerges from the activities it performs. What this means is that "...grammars and structures of language, from this point of view, are always emergent rather than predefined" (p. 129). Consequently, "once we accept that language is a social practice, it becomes clear that it is not language form that governs the speakers of the language but rather the speakers that negotiate what possible language forms they want to use for what purpose" (Pennycook, 2010, p. 129). This kind of approach puts the concept of competence in a new light. Citing Canagarajah (2008), he further suggests that "if we want to retain a notion such as competence, it refers not so much to the mastery of a grammar or sociolinguistic system, as to the strategic capacity to use diverse semiotic items across integrated media and modalities" (Pennycook, 2010, p. 129).

Language as emergent can be perceived as an ecological system that affords language users the ability to act on it, both globally and locally. Drawing on Gibson's (1986) legacy, many studies that examine language learning from an ecological viewpoint make use of the concept of *affordance*. Following Gibson (1986), for instance, van Lier (2000) defines an affordance as "a particular property of the environment that is relevant—for good or for ill—to an active, perceiving organism in that environment" (p. 252). However, as van Lier further notes, "an affordance affords further action (but does not cause or trigger it)," (p. 252) which means that "what becomes an affordance depends on what the organism does, what it wants, and what is useful for it" (p. 252). While being aware of the purpose(s) for which a certain tool can be used (e.g., blogs for reflection), it is good to bear in mind that affordances are situational and mediated through cultural and historical development. This is reflected by Gibson (1986), who points out that perceiving an affordance is not the same as classifying an object:

> The fact that a stone is a missile does not imply that it cannot be other things as well. It can be a paperweight, a bookend, a hammer, or a pendulum bob. It can be piled on another rock to make a cairn or a stone wall. These affordances are all consistent with one another. (p. 134)

This is the case with many technological innovations that over time can be used to do something entirely different than what they were designed for. In other words, "it is the activity that determines what is picked up, not the complex environment" (van Lier, 2004, p. 93). Framing this in terms of learning, van Lier rightfully remarks that "a simple learning activity is possible in a complex environment (given appropriate guidance), and the environment remains there as a potential proximal source of instigative processes" (p. 93). He also describes how affordances are "those relationships that provide a 'match' between something in the environment […] and the learner" (p. 96). Thus, it is the enacted pedagogical design that either affords or constrains these relationships.

Reading as a Social Practice

A great body of research on literacies holds the view that literacy is a social practice that takes place within a social group, a community. This view is based on an assumption that through learning the practices of a community, learners gradually become acknowledged members of the community (Lave & Wenger, 1991). However, in participatory endeavors in social media, the typical features of a community,

such as membership and belonging, are situated and fluid. This is reflected by Thomas and Brown (2011) in their attempt to define a new culture of learning, which makes a distinction between a community and a collective:

> We call this environment a *collective*. As the name implies, it is a collection of people, skills, and talent that produces a result greater than the sum of its parts. For our purposes, collective is not solely defined by shared intention, action, or purpose (though those elements may exist and often do). Rather they are defined by an active engagement with the process of learning. [...] In communities, people learn in order to belong. In a collective, people belong in order to learn. (p. 52)

According to Jenkins (2006), "[A] participatory culture is also one in which members believe their contributions matter, and feel some degree of social connection with one another (at the least they care what other people think about what they have created)" (p. 3). The same spirit is echoed by Gee (2004), who argues that "people learn best when their learning is part of a highly motivated engagement with social practices which they value" (p. 77). Thus, the activity is meaningful to them.

Our textual and media landscape is considerably more multifaceted than it used to be. Texts are significantly more multimodal and integrate different ways of creating meanings. With regard to textual activities, this means, for example, that social media has assumed a central role. Furthermore, textual activities are typically part of a culture of participation and sharing (Jenkins, 2006). Let us use a small vignette to illustrate this: A Facebook user recommends a journal article, either by reading an online journal and then clicking on the *Share on Facebook* button or by posting a direct link to the article on their Facebook Wall. Facebook users can then comment on the recommendation—it can be "liked" and forwarded to other people. In addition, the reader can go to the journal's website and take part in conversations pertaining to the article. A blog or social bookmark may also function as a channel for sharing such material. The writers of different blogs and microblogs can communicate with their readers online. Never before has such a close relationship between the reader and the author been possible.

The reading process no longer needs to end with reading and discussing a text. Instead, the output can be a video, in which the reader responds with his or her own interpretation of the text. A video uploaded to YouTube may receive a momentary burst of attention in the form of views and comments. The video might even go on to be disseminated via other social media channels, and new versions thereof may be created.

In this way, new media forms facilitate a dialogue in which different languages and cultures mix and go on to form new operational cultures. This kind of intercultural dialogue is particularly interesting from the perspective of language teaching, but adopting new textual syntheses in the classroom also calls for new pedagogical practices. Teachers are in fact faced with the challenge of students' increasingly varied backgrounds in terms of culture, identity, prior knowledge, and ways of thinking and behaving. This is the new setting in which learners develop their language skills, identities and new ways of thinking and operating.

RESEARCH DESIGN

This qualitative study employs a *critical design ethnography* approach (Barab, Thomas, Dodge, Squire, & Newell, 2004). Critical design ethnography is "a process that sits at the intersection of participatory action research, critical ethnography, and socially responsive instructional design" (p. 254). Contrasting this approach with traditional ethnographic research "in which the researcher seeks primarily to understand (not change) the conditions of the community being studied," (p. 254) the authors claim that "participatory action research assumes a critical stance, in which the researcher becomes a change agent who is collaboratively developing structures intended to critique and support the transformation of the communities being studied" (p. 254–255). Implementation of the critical design ethnography method can

assist the researcher in developing an understanding of the use of blogs from the perspective of language as a situated practice, as well as in development of the course.

Multimodality of the new literacies is the point of departure for the analytical framework developed in an earlier stage of this study (Vaarala & Jalkanen, 2011). In this framework, literacy events are seen as social sites for being, doing, and learning. The analytical framework aims at explaining the dynamics of reading as a social practice in a digital environment by providing an ethnographic account of the literacy practices that take place when learners engage in reading and writing digital texts (in this case, blogs). Through three dimensions—namely sharing, meaningfulness and adaptivity—this study attempts to capture the diversity of the ways in which students operate in the digital text and media environment using the target language (that is, Finnish). We pose the following research question: How are the dimensions of sharing, meaningfulness, and adaptivity reflected in the multimodal literacy practices of Finnish language learners?

Study Context and Participants

The course considered in this article is part of the Finnish as a Second Language (FSL) curriculum offered at the University of Jyväskylä Language Centre. The course's intended learning outcome is for students to have more confidence in reading Finnish texts and finding information even in difficult texts, as well as to develop their reading strategies. Moreover, students can expect to improve their knowledge of Finnish structures and vocabulary. The pedagogical challenge stems from the short duration of each course (12 in-class sessions, 4 ECTS credits), which is why it is particularly important to build a pedagogical progression that extends across course boundaries.

The course included twelve FSL students (n = 12) from across Europe and Japan. Their language proficiency levels varied, but broadly corresponded to the B1–B2 levels of the Common European Framework of Reference for Languages (2003). Some of the students were in Finland for a six-month exchange period, whereas others had lived in the country for several years. The proficiency levels of the students were also affected by how long they had previously studied Finnish and how many Finnish-speaking contacts they had. The major subjects of the students varied from economics, educational science and intercultural communication to different languages.

Data Collection and Analysis

Data collection is described in Table 1. Blog posts written by the students comprise the main data source of this study.

Table 1. *Data collection of the study.*

Content of Data Sources	Data Source
Literacy practices	Assignments
	Reading diaries
	Blog posts
	Class discussions
Experiences, perceptions	Survey
	Feedback form

In an earlier cycle of the course, students read digital texts (including blogs) and kept a reading diary. To analyze data from that cycle, an analytical framework consisting of three dimensions (namely sharing, meaningfulness and adaptivity) was developed (Vaarala & Jalkanen, 2011). In this cycle, the same analytical framework was used to analyze the students' blog writings. The analysis was conducted in two stages.

Observing the students' blog writing activity was an ongoing process. During the course, the two researchers met each week to discuss the students' blog posts on the basis of observation notes that they made independently from one another.

After the course, the dataset—consisting of all blog posts produced by the students—was analyzed qualitatively. Data was processed as follows: First, the researchers read all the students' blog entries separately, making notes. Second, based on the notes, the content of blogs was divided into three categories drawn from the analytic framework mentioned above. Third, the categorized data was studied in relation to the research question. To increase the validity of the research, all interpretations were compared and discussed by the researchers.

RESULTS

The results have been divided into three sections: sharing, meaningfulness, and adaptivity of digital texts. The concretization of these three components in the learning situation is illustrated by the following figure:
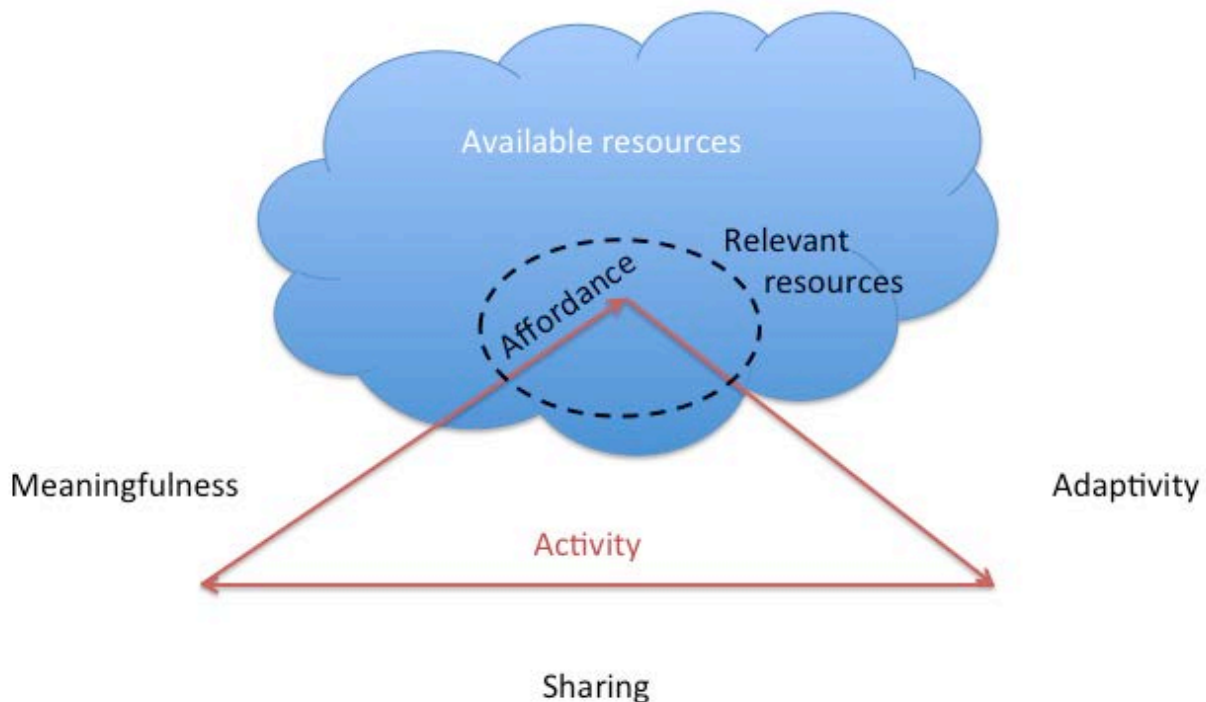
Figure 1. Sharing, meaningfulness, and adaptivity in a learning situation.

In the figure above, the cloud illustrates the available resources for meaning-making and learning. As discussed in the section on affordances, it is the activity that determines what is picked up in the environment (i.e., what becomes a relevant resource (affordance) for the learner). In the process of appropriating these resources for the meaning-making activity, the learner constructs a new semiotic item that has a new meaning. These processes are shaped by the sharing of cognitive and material artifacts, meaningfulness of the activity, and adaptivity of the digital environment.

Sharing

New forms of participatory publishing are continuously developed in online environments based on sharing, collaboration, feedback, increased interaction and evaluation. Blogs are a form of participatory

publishing clearly associated with the revolution taking place in media culture. The author's ownership is concretized in blogs in various ways: for instance, authors are free to modify the blog's layout and user settings to suit their personal preferences.

From the viewpoint of sharing, the blog is a particularly interesting type of text. Images and text are circulated in blogs in the form of quotations and hyperlinks. Blog texts can be shared within a limited group or even with the whole world. Experiences and perceptions are shared in blogs, and readers can take part in the writing process by commenting on the blog texts.

Blogs were included in the course texts because of their multifaceted nature in terms of content and language. The students both wrote and read blogs in the course. In the blog assignments, students were asked to choose a blog written in Finnish that interested them personally, and to explore it over a one-week period. They were also advised about where to find blogs, for example, depending on the topic. After the week was over, they were assigned to answer some questions about the blogs. These questions were related to the blog's theme, style, content and visual aspects. The answers provided a basis for the discussions held in class, in which each of the students could present the blogs they had been reading. We were astonished to hear that only a few of them had ever read blogs before.

In addition to familiarizing themselves with other blogs, we asked the course participants to keep a "reading blog", a record in their own blog space of what they had been reading that week. The purpose of this was to increase the students' awareness of their individual reading practices, to give the participants the opportunity to see each other's reading blogs and, above all, for the course teachers to find out what the participants read in their leisure. The reading blogs indicated that the students mainly read digital – usually shared – texts in their free time.

Two types of content could be identified in the students' blogs: "what am I doing now?" (i.e., *lifecasting*, in which authors tell about the things they see or experience at that very moment) and "what am I thinking now?" (i.e., *mindcasting*, in which authors share their thoughts and reflect on matters more profoundly. For more on lifecasting and mindcasting, see Jay Rosen's http://jayrosen.tumblr.com/post/110043432/mindcasting-defining-the-form-spreading-the-meme).

Lifecasting

In the following example of lifecasting, the author describes her own course activities in the context of a Finnish poet's commemoration day and the tarts traditionally served then. She also linked to a picture of the food and its recipe in the blog. We have translated student grammar errors into the English gloss.

Nyt istun tekstejä suomeksi-2:n kurssilla ja kirjoitan tätä tekstiä.	Now I'm sitting in Texts in Finnish 2 course and writing this text.
En ole varma voinko jatkaa kirjoittaa jotain suomeksi pitkään aikaan...katsotaan.	I am not sure if I can continue write something in Finnish since long.. let's see.
Tänään on 18. tammikuu ja se tarkoittaa, että meidän vain noin vain 20 päivää kunnes tämän vuoden Runebergintorttun 'sesonki' menee loppuun.	Today is 18 January and it means that our only about only 20 days until this year's Runeberg tarts 'high season' goes to an end.

5.helmikuu on Runebergin päivä joka vuosi, tietysti.

5 February is Runeberg's Day every year, of course.

Suomessa se voidaan ostaa vain tammikuusta helmikuun viides päivään asti.

In Finland it can be bought only from January to day fifth of February.

Tämä oli aika yllättävä juttu minulle ja kysymys 'miksi näin?' oli ja on vielä mysteeri.

This was quite a surprising thing for me and the question "why like this?" was and still is a mystery.

Muuten, tämän ajan voidaan maistaa sitä joka päivä jos haluamme.

By the way, during this time it can be tasted every day if we want.

Reseptin mukaan, ainet näkyvät tosi yksinkertaisia, vaikka jauhetta, sokeria, munaa ja hillo.

According to the recipe, the ingredients show really simple, as some powder, sugar, egg and the jam.

MUTTA, maistuu hirveästi ihanaa!!!

BUT, tastes awfully of wonderful!!!

Tänä vuonna, yritetäänkö leipoa sitä itse, miksi ei??

This year, we'll try to bake it ourselves, why not??

Runebergintorttu-resepti

Runeberg's tart recipe

(18.1.2011, babochan)

On the following day, the student tells that she has baked the delicacy described in her blog text. She also links to a photo of her tart in this blog post.

Muuten, leivoin runebergintorttua. Siitä tuli aika kuivempi kuin toivoin, mutta maistuu ihan hyvältä. Toivittavasti, siitä tulee parempaa seuraavana kokeiluna.

By the way, I baked some Runeberg's tart. It became rather drier than I hoped, but tastes quite good. Hopofully it will be better as the next experiment.

(19.1.2011, babochan)

In the context of language learning, an activity like this indicates that the student has understood the Finnish text she has read on the Internet and acted accordingly, but it also indicates that the student is willing to share her own text and activity with the other course participants. In addition, the learner refers to "the next experiment," which indicates that she is going to read the text again, and consequently, the learning activity is likely to continue.

In this case, the learner has utilized a semiotic item (recipe) to conduct an activity (baking). She then reports the activity by elaborating on the description with another semiotic item (image) and a link to the original recipe that breaks the convention of a linear text. This process of action can be seen as the strategic capacity to make meaning as described by Pennycook (2010). Moreover, language can be seen as (social) action. In other words, language emerges from the process of activity, starting from reading the

recipe and moving to reporting it in social media. This activity is a potential site for learning.

Mindcasting

The following extract exemplifies mindcasting. The student reflects on the Eurovision Song Contest and invites others to join the discussion both via the interrogative heading and the questions at the end of the post. She also gives a link to a video of the Finnish participant's performance in her blog post, with the intention of introducing others to the issue.

Tykkäätkö Euroviisuista ?	Are you into the Eurovisions?
Tänä vuonna oli ensimmainen kerta kun minä katsoin Euroviisujen karsintakilpailut. Katsoin niitä Jyväskylässä suomalaisen ystävän luokse, muiden Erasmusten kanssa. Suomalainen finaali pidettiin viime lauantai-iltana. Suomalainen voittaja on Paradise Oscar, joka lauloi "Da Da Dam". Minusta tâmä laulu on yksinkertainen, mutta on miellyttävää kuulla sitä koska se on rauhallinen. Mutta, voi ei kun laulaja laulaa englanniksi!!	This year vas the first time I watched the Eurovision national finals. I watched them in Jyväskylä to a Finnish friend's house, with other Erasmuses. The Finnish final was held last Saturday night. The Finnish winner is Paradise Oscar, who sang "Da Da Dâm". I think this song is simple, but it is pleasant to hear it, because it is peaceful. But, oh no why the singer sings in English!
Minusta on tosi tyhmää se, että Euroviisuissa on paljon englannin-kielellä lauluja. No ok, englannin ansiosta on helpompi ymmärtää sanat, mutta sitten, lauluissa ei enää ole sitä jotakin eritysta ja eksoottista. Euroviisujen ansiossa voisimme kuulla "tuntemättomia" kieliä. Esimerkiksi tykkään kuulla turkkilaista kieltä koska en ole tottunut siihen. Mutta jos kaikki laulaa englanniksi ei ole mitään omaperäistä...	I find it real stupid that the Eurovisions have lots of in-English songs. But ok, thanks to English it is easier to understand the words, but then, the songs no longer have that something specil and exotic. Thank to the Eurovisions, we could hear "unknown" languages. For example, I like to hear the Turkish language, because I'm not used to it. But if everybody sang in English there is nothing original...
... Entä sinä? Oletko katsonut Euroviisut? Mitä sä ajattelet siitä? Oliko sinulla lempilaulu?	What about you? Have you watched the Eurovisions? What do u think of it? Did you have a favorite song?

<p align="center">http://www.youtube.com/watch?v=Wx5KvnpCjpY</p>

Suomen voittaja Paradise Oskar laulamassa hänen laulua.	Finland's winner Paradise Oskar singing the song of his.
(18.2.2011, emilie89)	

In the extract above, the learner makes use of the affordances of the digital environment by using audiovisual components (video), which enable the interaction between learners in a different way than a situation where sharing of video was not possible. In other words, sharing the video creates a shared ground for interaction.

Meaningfulness

The utilization of authentic texts in teaching a second or foreign language is a much-debated topic (see Gilmore, 2007). Instead of focusing on text authenticity, we would like in this article to pay attention to the meaningfulness of the activities around texts. In this context, we refer to meaningful activities associated with situations and tools of language use outside of the classroom. These activities have a genuine purpose and audience.

Individual Perspective

How is meaningfulness related to the instruction of reading comprehension? We can illuminate the question by means of two examples: A student who has not had problems with reading has a hard time understanding why one should learn reading strategies. Conversely, a student may find reading a text meaningless if it requires prior knowledge of the topic, which the student does not have, or if he or she is not interested in the theme. This is evident in the following student's blog text:

> Toisaalta lopetan nopeasti lukemista, kun huomaan sen olevan tylsä eli se ei kiinnostaa mua ja vielä nopeammin kun teksti on monimutkaisempi. Hyvä esimerki on SANEn sähköpostit, usein aiheet eivät kiinnostaa mua ja sitten en edes avaa sitä, vaikka siinä olisi mahdollisuus lukea jotakin suomeksi. Muutamat tekstit, jotka ehkä eivät kiinostaa mua, mutta on luettava, saan aina oppettajiltani kursseilla.
>
> On the one hand, I quickly stop read, when I notice it is boring or not interests me and even more quickly when the text is more complicated. A good exampl are SANE's emails, often the topics not interest me and then I don't even open it, even if it would be a chance to read something in Finnish. A few texts that maybe don't intrest me, but must be read, I always get from my teacchers in the courses.
>
> (pikkumaja, 23.2.2011)

Meaningfulness may thus be learner-based. This is the case, for instance, when a student's life circumstances make something meaningful. Particularly in education, one should consider that making something meaningful sometimes requires a process that consists of various phases, by means of which the student is led to understand the meaningfulness of the issue at hand. Based on the data, it seems that meaningfulness of the course texts was crucial for the students:

> Toisaalta luulen, että on vaikea löytää tekstiä, joista kaikki on kiinnostnut, mutta totta kai on helpompi lukea teksti, kun se kiinnostaa mua.
>
> On the other hand, I think that it's hard to find a text which would intrest [sic] everybody, but of course it's easier to read a text when I'm interested in it.
>
> (andin blogi, 21.3.2011)

As seen in both examples, there seems to be a discrepancy between the texts that are perceived as meaningful by the learner and those seen as meaningful by the teacher. In the first example, the learner argues that it is the teacher that chooses the most uninteresting texts. This suggests that texts chosen by the learner are more meaningful than the texts chosen by the teacher. However, the second extract indicates that learners also understand the difficulty of choosing meaningful texts.

Social Perspective

A digital learning environment offers excellent opportunities for the implementation of spontaneous meaningfulness. Instead of static groups, it could be more useful to speak about dynamic spaces, in which people with similar interests form momentary affinity spaces (see Gee, 2004). When building a learning environment, we have tried to offer spaces for these kinds of encounters. For instance, the blogs

constituted a space for sharing different multimedia elements (e.g., links, videos, graphics) for writing about topics that one finds meaningful and for commenting on other students' entries.

It is interesting to observe how students utilize these spaces. It very often seems that when students comment on each other's blogs, they address topics that the author has explicitly presented as meaningful. In the comment threads of blog texts, students form temporary affinity spaces, in which they discuss meaningful themes and consequently improve their mastery of vocabulary and reading comprehension through reactions to the asynchronous dialogue.

One of the students kept a reading journal in her blog. In one of her entries, she writes about various topics, linking related articles, images and videos to the blog. The second paragraph of the entry—concerning the aurora borealis—seemed to distinguish itself as meaningful for the other students:

> Eilen juoksin kaverin luo joka asuu 9. kerroksessa. Se kertoi, että voi nähdä sieltä revontulia. Kello oli jo 23.59 mutta ei se ollut ongelmaa, juoksin. http://www.iltasanomat.fi/ulkomaat/Valtava%20auringonpurkaus%20-%20luvassa%20revontulia%20ja%20uhkaa%20radioliikenteelle/art-1288369815886.html - Tämän kirjoituksen mukaan uskoimme, että ehkä tapahtuu jotain :) Valitettavasti ikkunasta näimme vain sumua ja oranssi taivasta, mutta ehkä toisella kerralla tulee se ihme. Sanotaan, että Lapissa ilmestyy useammin, mutta koskaan ei voi tietää.
> (meriloma, 18.2.2011)

> Yesterday I ran to a friend who lives on the 9th floor. This guy told that he can see the aurora borealis from there. It was already 23.59 but it was of no problem, I ran. http://www.iltasanomat.fi/ulkomaat/Valtava%20auringonpurkaus%20-%20luvassa%20revontulia%20ja%20uhkaa%20radioliikenteelle/art-1288369815886.html - According to this writing, we believed that something perhaps happens :) Unfortunately from the window we saw only mist and orange sky, but maybe another time that miracle will come. They say that in Lapland appears more often, but one can never know.

The student's entry elicited the following comment thread:

> pikkumaja kirjoitti...
> voi ei, varmasti näet joskus revontulia!!
> Niin kuin kerroin sulle jo, näin niitä Lapissa perjantaina. Mutta! Eras ranskalainen poika kertoi mulle, että hän näki revontulia maanantaina illalla myös Jyväskylässä!!!
> 20. helmikuuta 2011 9.16

> pikkumaja wrote...
> oh no, certainly you will see the aurora borealis some time!!
> As I told u before, I saw them in Lapland on Friday. But! Ä French boy told m' that he saw the aurora borealis on Monday evening also in Jyväskylä!!!
> 20 February 2011 at 9:16 a.m.

> meriloma kirjoitti...
> Niin Maja, olen tosi kateellinen :)!
> Maanantaina? Oliko se oikeasti revontuli?
> Kaverikin luuli, että kyllä se on, mut sanoin hänelle et se on vain oranssi sumu =)
> 20. helmikuuta 2011 9.41

> meriloma wrote...
> Well Maja, I'm real jealous :)!
> On Monday? Was it really an aurora borealis?
> The friend also thought it was, but I said to 'm it's just the orange mist =)
> 20 February 2011 at 9:41 a.m.

> pikkumaja kirjoitti...

> pikkumaja wrote...
> hahaha I don't believe he only saw mist...,

> hahaha en usko, että hän näki vain sumua..., mutta oli poika..siis...kaikki on mahdollista!! XD
> 28. helmikuuta 2011 0.57
>
> Hanna kirjoitti...
> kyllä, sehän oli mahdollista kun sinä viikonloppuna oli mahdollsita nähdä revontulia jopa Puolassa, koska sitä auringonsumua (vai mitä se oikeesti on) oli siihen aikaan todella paljon ja se levisi etelään. harmi kun mä itse en nähnyt mitään jyväskylässä :(
> 12. maaliskuuta 2011 23.44

> but the boy was...altogether...everything is possible!! XD
> 28 February 2011 at 12:57 a.m.
>
> Hanna wrote...
> yes, it was possible indeed as that weekend it was possible to see the aurora borealis even in Poland, because then there was really a lot of that solar nebula (or what is it actually) and it spread to the south. it's a pity I personally saw not a thing in jyväskylä :(
> 12 March 2011 at 11:44 p.m.

The aurora borealis arose as an important, meaningful topic for the learners in the discussion. Their language skills are demonstrated even by the use of *revontulet* (aurora borealis, or the northern lights), an uncommon Finnish word which some of the learners had discovered and employed as part of their personal expression. The participants also expressed their emotions, which is something known to strengthen vocabulary acquisition and retention. Conveying cultural information—such as where the aurora borealis can actually be seen—was also one of the discussion themes. The appearance of all of these elements in the same comment thread suggests learning.

The extracts above illustrate the formation of momentary affinity spaces is something typical for digital text environments and the social aspect (i.e., sharing and interaction) highlights even more the meaningfulness of these spaces for the learners. These affinity spaces, however, do not usually last for long periods of time, but their evolution can be seen in an ad hoc fashion.

Adaptivity

The ubiquity of technology has altered many of our everyday practices to a great extent. Here we are not only talking about technology meant for language learning or teaching, but also about the presence of different technologies in many of our daily activities—often without us paying particular attention to their use (see Cope & Kalantzis, 2009).

We stated earlier that the digital environment casts the concepts of second and foreign languages into a new light: on the Internet, learners can operate in the target language environment and surround themselves with target language resources (Vaarala & Jalkanen, 2011) as if they were operating in a country in which the target language is actually spoken. Target language resources can include multilingual websites, social media, dictionaries and translation software, which especially promote comprehension of the target language.

Digital Multilingual Competence in Adaptive Environments

When analyzing the data, we noted the interesting ways in which the learners commented on their own ways of utilizing social media. Here one of the participants reflects on her own multilingual textual worlds through an example of her Facebook use in the studied language:

> Tietysti käytän facebookia ja olen vaihdellut kieli suomeksi jo kauan aika sitten.
> (pikkumaja, 13.2.2011)

> Of course I use facebook and I have switched language to Finnish already long time ago.

This kind of activity advances the learner's receptive skills and promotes the development of functional language competence. The ability to operate in different languages in a digital environment does not necessarily mean that the learner is able to use these languages in the same way in other contexts (for example, face-to-face communication).

The process of moving between texts is typical of online environments. This feature is also interesting in the context of L2 learning. The learner can easily change, for instance, the language of a website:

> Kun käytän wikipediaa teen sen kahdella tavalla, toisaalta etsin sana saksaksi ja vaihtan sitten suomeen kielteen tai etsin heti suomeksi. (pikkumaja, 23.2.2011)

> When I use the wikipedia I do it in two ways; on the one hand, I search for a word in German and then chanqe to Finnish lanquage or immediately search in Finnish.

The students' activities indicate that multilingualism can—from the perspective of a digital environment—be examined in a new light. This digital multilingual competence represents the ability to operate in various languages in digital environments. In other words, learners have the capacity to make use of available resources in their learning environment that become affordances as the activity unfolds.

The development of various web applications has considerably increased the number of available resources. In addition to different mobile devices, we have access to online dictionaries and translation tools that facilitate operation between languages. The learner can translate texts quickly. Even though these translations aren't always completely accurate, we can say that the existing tools significantly affect reading comprehension in digital environments. Because the digital environment can be adapted to meet the learners' needs, the environment can thus be said to be adaptive.

Adaptive Assignments

The digital texts and assignments used in the course allowed for flexibility in terms of the students' language skills and the demonstration of different competence levels. Both the texts read in the course and the assigned tasks were flexible and enabled learner participation. The aim was naturally to achieve the course objectives, but these can and even should be achieved at different levels.

If learners personally select their meaningful texts, upon doing so they will probably also consider how the texts are suited to their respective levels of language proficiency. Students can introduce into the formal learning environment texts that they find interesting in an informal environment. This can be illustrated with another blog assignment. Students were assigned to find and read an interesting blog in the blogosphere. They then analyzed the blog based on, for example, the following open-ended questions:

- What do the blog title and the author's name (or username) tell about the content?
- How has the author presented him/herself?
- How often is the blog updated?
- What topics are addressed in the blog?

The blogs chosen by the participants differed considerably from each other. All of the learners found relevant information with which they could respond to the questions, but their outputs still varied a great deal: one of them reported in very simple language, another one posted almost nothing original and was content to merely copy from the blog suitable answers to the questions, and a third one clearly understood the content of a challenging folklore blog and took risks with language use when reporting her observations.

Another example of the assignment's adaptivity was an information retrieval assignment. One of the key skills in operating within the world of digital text is the ability to find information quickly. When information is searched for in a target language environment (in this case a Finnish environment), data

collection includes an additional challenge factor. The students were assigned to look for information on the topic *uni voimavarana* (sleeping as a human resource) (Kiili, Laurinen, & Marttunen, 2008). The exact phrase does not yield results in search engines (for example, Google). The students thus had to be able to parse the topic in segments: What does *resource* mean? And what about *sleep as a resource*? The type of information needed by each learner is determined by his or her individual views and prior knowledge of the topic, and the end result in an assignment like this can thus be very unpredictable. Precisely because students can arrive at a final point via very different paths, we wanted to phase the assignment so that these paths, or at least some points of reference, became visible. The assignment had three phases, in which the participants had to stop and specify what they were going to do next and why.

1. Determining the keywords
2. Selecting the most important websites
3. Comparing the selected sites

The opportunity for sharing was present in the different phases. This is to say, when students defined their own keywords, they could share them with the other participants in the virtual learning environment. Even when defining their keywords, the learners headed off in different virtual directions: one of them used the keywords *article*, *research outcome*, and *sleep*, and ended up with scientific articles on sleep, whereas another utilized the keywords *sleep*, *rest*, and *sleep symbols*, and arrived at astrology.

The assignment allowed the students to demonstrate very different kinds of adaptive competencies. The learners' choices of links were extremely varied. They also presented diverse justifications for their choices, such as personal interest and adequate scientific nature.

DISCUSSION

In this study, it was our attempt to employ the categories (sharing, meaningfulness, and adaptivity) drawn from an earlier study to examine the literacy practices that occur when students read and write blogs as a part of a reading comprehension course. The results of this study indicate that sharing, meaningfulness, and adaptivity promote learners' engagement with reading as a social practice.

Reading as a social practice that takes place, for instance, as an active sharing of various semiotic artifacts (e.g., texts, images, videos, links) is an evident part of learners' activity within the digital environment. The data indicates that learners actively participate in Finnish society, as can be seen in the extracts from the students' blogs. Learners form temporary learning communities around blogs and discuss topics that are at the core of current discussions in various media in Finland. These shared resources become affordances for learning as learners find them relevant in terms of their interests and language skills. Thus, in van Lier's (2004) terms, as a mediating artifact a blog provides a match between something in the environment and the learner.

It is noteworthy that even though some students claim to be passive Internet users, they may actually be very active in digital environments. A reason for this may be that the use of social media like Facebook is an everyday practice for many students and, as was pointed out earlier, technology has become ubiquitous. However, some tensions between different mindsets of learning remain. Some of the learners were socialized to a certain culture of teaching and learning that does not entail sharing and learning from others. In addition, in the case of social media, students were concerned about privacy issues.

Meaningfulness of the activities around texts can be observed on two levels: individual and social. On the level of the individual, the meaningfulness of texts appears to be a key factor that increases one's motivation to read various texts. The students, for instance, pointed out that "boring" or uninteresting texts do not sustain enough interest to keep reading them. However, we argue that to a certain degree this is a question of pedagogical design, as sometimes students need guidance in order to understand the meaningfulness of issues that may not seem relevant to them at the time. On the social level,

meaningfulness becomes apparent in the blog posts and discussions that take place in the comment threads. These writings and comments deal with culture-specific themes and are often emotionally charged, an element that has been shown to strengthen vocabulary acquisition and retention.

Technologies have to a great extent changed the way we use language in terms of where, why and how. This is also evident in our data. Students use various artifacts (e.g., Facebook) with a target language interface and operate in online environments (e.g., Wikipedia) in multiple languages (for example, by changing the language of the environment while searching for information). Thus, environments provide affordances for language learning, despite the fact that these environments have not been designed for language learning purposes. In these artifact-mediated chains of actions, we may observe a new kind of literacy taking place. This literacy, or preferably literacies, is social by nature and it operates across different languages, spaces, and timeframes.

CONCLUSIONS

This study investigated what affordances digital texts provide for reading as a social practice. It focused on one part of a reading comprehension course (blogs), which were adopted in the second cycle of the course development.

It can be argued that a wide range of semiotic resources—both in physical and virtual environments—are available to learners, but only a small part of these function as affordances. What becomes an affordance is affected by the learner's preferences (i.e., what is meaningful for the learner). The kind of micro-level analysis that we have conducted in this study manages to only partially pinpoint the affordances for learning in these complex environments. It does, however, allow a more detailed analysis of the situations where affordances can be identified.

The results of this study support the claim that using blogs represents opportunities to enhance L2 reading comprehension skills. Blogs are environments for interaction, not only with other learners but also with a wider audience. In this interaction, students make use of vocabulary they have acquired to discuss issues that relate to Finnish culture. They express experiences, opinions, values and feelings in their own words. This brings us back to Pennycook's (2010) notion of speakers negotiating different language forms for different purposes.

From the perspective of course design, it can be argued that through adaptivity and sharing, students can transform the course activities into meaningful experiences. This does not mean that learners should be left on their own in complex environments. On the contrary, both the objectives and the means to achieve these objectives should be negotiated with the learners. This kind of negotiation promotes the learners' sense of ownership regarding their own learning. Language teachers should thus guide students to choose content that suits them and tools for operating with this content. By enabling different paths for learners, the focus shifts from content to learning processes (e.g., meaningful reading) and, in the ideal case, the learner can choose from texts in the learning situation that will be experienced as meaningful.

The digital, informal textual and media landscapes of learners essentially include lifecasting, which through sharing becomes a learning resource both for the learner him/herself and other learners. In order to offer linguistic as well as cognitive challenges to learners, it is important that instruction also encourages them to engage in mindcasting activities.

It would be of interest to find out through further research:

- how different formal and informal environments (online learning spaces, social media, etc.) can effectively be used in education, and what their interrelationship is;
- what kinds of communities are formed at the interface of different learning spaces and tools, and what promotes/prevents the creation of these communities;
- how the concept of privacy changes as the learners' formal and informal environments are

integrated; and

- how the emerging forms of language use (e.g., in digital learning environments) affect the learners' identities (the real and the virtual egos).

The realization of the aforementioned components in a learning situation presumes flexible course design, taking into account the dynamic nature of the digital environment. The learning space must be extended outside of the classroom, to informal learning milieus in which students' activities are not restricted and in which the end result is unpredictable. This is a new mindset for language teaching.

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