Chapter 4. Learning with fiction, together

Published on: May 03, 2021

License: Creative Commons Attribution 4.0 International License (CC-BY 4.0)

4.1 Reading and distributed social learning

The evolutionary benefit of fiction is the simulation of experience, i.e. we can test how it feels to live experiences that otherwise would require time and exposure to risk or social judgement that we cannot always afford. By reading fiction we can learn something about living in this world and interacting with other humans, improving, consolidating, or revising our existing knowledge about it. In experiences not mediated by technology or fictionality, if we face something unusual or controversial, like a behavior we do not understand, we often ask trusted others for clarification or we discuss the details of the experience with someone else, in order to receive a second opinion and evaluate the goodness of our interpretation by confronting it with that of others. When we simulate an experience by reading about it, there is no reason why we should not be inclined to do the same things: talking to others about what we read, and better learn how to make it fit into our knowledge of the world.

The only reasons why we would not share our reading experience with others are related to potential social risks (e.g. shame for the kind of content read, or lack of intellectual ability) or to scholarization, since there may be some advantages in keeping our processes of knowledge acquisition a solitary and silent activity (cf. Robinson 2010). But avoiding social reading, for many centuries we also limited one of the most powerful survival strategies: social learning (M. S. Reed et al. 2010; R. Boyd, Richerson, and Henrich 2011). Individual learning is no doubt important in our societies and it has been crucial for the democratization and massification of education. Indeed, this option was needed when more people started to have access to school education (19th century) and it was not possible – and not even desirable for the ruling class – to create classroom settings for small group discussion, like it used to happen in the old centers of culture, e.g. medieval and Renaissance *scholae*, literary circles, learned societies (Chartier 1994). Moreover, teachers had to be relieved from the burden of transferring their knowledge to increasingly bigger groups of students, and students needed to be free to learn from more than one source. Learning to read individually is very effective in this regard. But nowadays peer and group discussion have been progressively reintroduced in many educational contexts, based on the evidence that teaching activities more similar to spontaneously occurring social learning are a powerful strategy (van Zee and Minstrell 1997; Topping 2005).

If we look at an influential model of contemporary pedagogy, the *connected learning framework* (Ito et al. 2013), we can see characteristics that perfectly fit the DSR

practices discussed so far. Connected learning is defined by three core properties: learners come together around a shared purpose; a focus on production; and openly networked infrastructures.

- Shared purpose: social media and web-based communities provide unprecedented opportunities for cross-generational and cross-cultural learning, and connection to unfold and thrive around common goals and interests.
- Production-centered: digital tools provide opportunities for producing and creating a wide variety of media, knowledge, and cultural content in experimental and active ways.
- Openly networked: online platforms and digital tools can make learning resources abundant, accessible, and visible across all learner settings. (Ito et al. 2013, 74)

Posting comments on Wattpad, writing fanfiction on AO3, reviewing books on Goodreads are all production-centered ways of elaborating on the experience of reading fiction, in a context in which other readers participate with the same purpose, and involve using digital tools and transmedia literacies to access and make use of interconnected information scattered across different places.

Mizuko Ito and colleagues also hypothesized the existence of four principles that guide connected learning, principles which I think underlie DSR practices as well. First, everyone can participate: DSR practices invite participation from anyone who reads, and provide many different ways for individuals and groups to contribute. Second, learning happens by doing: writing and engaging in discussion is part of the pursuit of meaningful activities and projects. Third, challenge is constant: interest or cultivation of an interest creates both a “need to know” and a “need to share.” Fourth, everything is interconnected**:** readers are provided with multiple contexts for engaging in DSR practices, in which they receive immediate feedback on progress, have access to tools for planning and reflection, and are given opportunities for mastery of specialist language and conventions (Ito et al. 2013, 78).

With respect to reading more broadly conceived, Kristen Hawley Turner and colleagues have adapted the connected learning model into a *connected reading framework*, characterized by three main processes: *encountering* a text; *engaging* with it, with other sources, and with other readers before, during, and after reading a text; and *evaluating*, i.e. the act of finding value in a text (Turner and Hicks 2015; Turner, Hicks, and Zucker 2020). All three processes are recursive and interconnected, since it is very common for digital social readers to encounter new texts while engaging with one or evaluating it, and when encountering a text they have to evaluate whether they

want to engage with it or look for a different one. Book recommendations and intertextual references are everywhere in DSR practices, making the discovery of new information provided by passionate peers a central form of learning.

Based on interviews (n = 23, a balanced sample out of 804 teenagers surveyed across the USA; age range: 13-18), Turner et al. identified more specific practices related to each of the three processes. Among these, curating for later reading is very relevant for DSR practices, and it is something made easier and encouraged by the affordances of digital media: opening new tabs of the browser in order to switch between several texts, adding a story to one's own Wattpad library, or bookmarking a fanfiction work are all forms of curating a personal bibliography. Thinking about my high school years, I think I have never done it myself on a regular basis, except for sporadic class assignments. Using DSR platforms afford readers to engage with evaluation and eventually learn how to make more informed decision related to reading, more often than what they would normally do with print books. However, digital reading also occurs in many other forms that do not involve DSR platforms, and adolescents are often not aware of the existence of external curating tools (Turner, Hicks, and Zucker 2020). In a digital landscape populated by a wealth of textual information, being curators and teaching how to be good curators is one of the most important tasks for educators and literary critics. But not in an elitist way, dismissing popular culture as something separate from literary classics and not worth being included in the same list of books. Rather, a more fruitful approach would be to explain the processes and motivations for evaluation, selection, and presentation of texts grouped according to common characteristics, themes, audiences, etc.

Teaching how to be curators is an active pedagogical task but there are many other learning processes spontaneously emerging in DSR contexts. One of the most frequent – and also one of the most meaningful for the impact it can have on literacy skills – is "distributed mentoring" (Aragon, Davis, and Fiesler 2019), a form of social learning I briefly introduced before (section 3.3.2) and is worth discussing in more detail. According to social learning theory, individuals learn by observing others and copying what they do (Bandura 1977). A narrower definition conceptualizes it as "a process of social change in which people learn from each other in ways that can benefit wider social-ecological systems" (M. S. Reed et al. 2010). In this sense, the occurred change "goes beyond the individual and becomes situated within wider social units or communities of practice; and […] occurs through social interactions and processes between actors within a social network."

Social learning may not be activated for people who engage occasionally in DSR practices, but it surely become relevant for readers continuously exposed to reviews, comments, interpretations, and transformations of stories by other readers. Aragon et al. (2019) quantified this as an increase in lexical diversity predicted by the number of comments previously received, but other aspects could be taken into account to investigate whether there is any kind of improvement concerning the majority of the people using a DSR platform, e.g. possible variations in length of reviews and comments, as well as in their rhetorical structure and usefulness for other readers. This is currently an underexplored area of research that would deserve more attention.

Besides its quantification, Aragon et al. were able to describe the characteristics of distributed mentoring thanks to insight gained from interviews. The features identified are closely related to the socially networked and digitally connected nature of distributed mentoring, thus making it a perspicuous example of social learning. In my view, their model can be extend to many DSR practices and qualified as a broader form of *distributed social learning*, to borrow a term proposed in Information Theory (Lalitha, Javidi, and Sarwate 2018; Yuan et al. 2020), and influenced by theories of distributed cognition and the extended mind (Hutchins 1995; A. Clark and Chalmers 1998).

In synthesis, digital and social media afford readers to learn in non-linear and non-systematic ways by cumulatively assembling bits of imperfect information from various sources (comments, reviews, etc.) produced by many different agents (other readers and recommendation algorithms). Distributed social learning is different from usual conceptualization of distributed cognition inasmuch as there is not necessarily any shared task or coordination among individuals. When engaging with DSR, each reader enters a contact zone where they can meet other readers sharing the same interest, but each individual contribution can be motivated by different purposes. Some reader may look for book recommendations, others may need help with a school assignment, others may just want to chat about a controversial issue addressed in a book, and some others may be “here for the comments,” i.e. they enjoy reading or watching others discussing. Nevertheless, this constellation of centripetal motivations is orbiting around a shared affinity which is the core of DSR, namely an interest in books and reading as a source of knowledge, entertainment, or wellbeing. In this light, DSR practices always afford some sort of learning about books and reading, even though this is not always an explicit or conscious goal. Moreover, its specific quality of being a form of *social learning* is due to the fact that it brings about a change in

understanding, situated within wider social units or communities of practice, and occurring through social interaction (M. S. Reed et al. 2010).

To better describe how distributed social learning occurs, I will draw on the features of distributed mentoring presented by Aragon et al. (2019) – as well as on the theories of the extended mind, distributed affect (Aragon and Williams 2011), and cultural evolution (Mesoudi and Thornton 2018).

Aggregation

Distributed social learning is different from social learning in that individuals do not copy the behavior of another specific individual selected as a source worth of attention because of some characteristics (e.g. prestige, success, popularity, etc.). Rather, in distributed social learning individuals copy partial behaviors/contents from many different other individuals, artificial agents, or cultural artefacts with which they interact. This is the main feature of *distributed* social learning: the aggregation of scattered and fragmentary information into new knowledge, content, or behavior. For instance, the progressive homogenization of discourse about literary genres in Goodreads reviews (section 3.4.2) is a process emerged from the continuous reading and writing of reviews by readers that subtly influenced each other to the point that they developed a seemingly more similar understanding of genres, even though this was not their intention in the first place.

Complex processes are involved in the selection of the sources, some related to the social status of the creator, like in traditional social learning, but the architecture and design of the mediating platform play an important role. Inadequate technological interfaces or overly complex ones can limit the user experience in finding and sharing information related to books, their effects on readers, and interpretations of them. The feedback, comment, rating, or review provided independently by each participant may not be sufficient in either depth or longevity to be considered learning on its own. Instead, readers learn because they are exposed to aggregated content by and interactions with many other agents. Algorithms partly automate this process by offering readers information that is already the aggregated output of many other readers' responses but, in turn, this kind of single aggregated information may not be enough, neither to persuade someone to read or buy a book, nor to elicit a formed evaluation or reflection on it. It is the combination of words, sentences, ratings, popularity, tags, etc. that can induce learning and a subsequent new behavior. Note that among the possible bits of content scattered on DSR platforms there are also the affective valence and intensity of the secondary thematization of primary user-

generated content, namely replies to comments, reviews marked as useful, “likes,” and so on (cf. section 2.2).

Accumulation (accretion)

Besides enabling the creation of content and the interaction between readers, DSR platforms are also persistent archives of material related to reading experiences and practices, which can be easily accessed from remote thanks to an internet connection. In some cases, the business-oriented nature of DSR platforms brings to their disappearance after a startup phase, if they do not become financially sustainable. Therefore, when this happens, a lot of user-generated content gets lost. However, this only affects the local level of each single infrastructure and each reader who created the content; in the whole DSR system – conceived as a new persistent cultural apparatus in the digital literary sphere – content accumulates incrementally. Not only the sheer number of DSR content increases, also its variety accumulates, creating over time a reservoir of more and more diverse stories, perspectives, interpretations, platforms, i.e. there is accumulation of cultural traits (Pianzola, Acerbi, and Rebora 2020; Acerbi 2020; cf. section 3.3.2). As a consequence, the learning opportunities increase and diversify, making it more likely that more readers will find content and services that meet their preferences, and help them to learn more effectively, to connect with peer learners, or to increase their intrinsic motivation for reading and reflecting about it.

Availability over time, asynchronicity, and abundance

Reviews and other kinds of DSR content published in print or in digital venues that replicate print-like formats – like digital magazines or newspapers – normally receive attention only for a short time span after they are published or if someone does a specific search on a certain topic or book. Most of the time they are scattered across various publishing locations and archives, often behind a paywall, making it difficult for common readers to find and read them. On the contrary, the persistent and public nature of most DSR platforms ensures that a lot of content related to books and reading experiences is available indefinitely, not only immediately after it is written, but for months or years into the future. This availability over time, in turn, makes it possible for readers to find a lot of content about the books they are interested in and facilitates long-term exchanges and relationships between them. Readers can read comments or reviews written years earlier, reply to their author, who will be probably notified and will have the chance to continue the asynchronous conversation. An effect of aggregated content that accumulates and is available over time is that it allows for

the emergence of distributed social learning. By themselves, a shallow comment, a single rating, a “like,” or a one-line review are relatively meaningless, but if a reader sees hundreds of such bits of content, the mere presence of positive ratings/comments/reviews in large quantity can influence their opinion about a story. Additionally, the existence and availability of multiple types of DSR content, and the possibility of taking part in many forms of interactions between readers, contribute to the abundance of distributed social learning opportunities.

Acceleration

The collective intelligence typically at work in convergence culture (Jenkins 2006; Deng et al. 2019) accelerates the creation of content about books and reading experiences, since readers can rely on material previously shared by other readers, actively discuss with them, and work out possible conflicts in interpretation. In primary-thematization-content readers can encounter various perspectives and find out what the majority thinks, but in secondary-thematization-content they can observe the processes that led to consensus or conflict. In this way, they can learn not only about books themselves but also about how people discuss about books, witnessing a complex and nuanced body of interconnected comments, feedback, and reviews, which provides extra knowledge about argumentation skills and elaboration of thoughts and emotions. The connectedness of content and people creates the conditions for a faster learning than how it occurs with solitary reading and confrontation only with teachers or locally accessible interlocutors.

The categories I presented above have been inductively inferred from ethnographic work (Campbell et al. 2016) and longitudinal studies (Aragon and Williams 2011), they are thus grounded in observed practices. However, in order to test their broader validity, more empirical research in different settings is needed, both quantitative and qualitative. The analysis of aggregated data – like the cases studies in chapter 3 – can be informative only to a certain extent when it comes to evaluate learning, and research on DSR is no exception. It was ethnographic work that allowed Aragon and colleagues to outline the characteristics of distributed mentoring; likewise, in order to better understand what happens when readers meet and read together on large-scale digital platforms, it can be useful to look at activities organized with smaller groups using similar tools.

4.2 DSR in educational contexts

An important factor in all forms of communication is the "degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships," in other words, "social presence" (J. Short, Williams, and Christie 1976, 65). More specifically, the impact of social presence on learning has been studied for many decades and a recent meta-analysis of 26 studies showed that there is a moderately large positive correlation of social presence and satisfaction ($r = .56$), and of social presence and perceived learning ($r = .51$) (Richardson et al. 2017). This is quite relevant for digital social reading, since the interaction with other readers is a substantial part of the activities happening on DSR platforms. Since the focus of this book is on reading fiction, I would like to look at education research about fiction read digitally and socially.

The largest body of research in this field concerns the use of social annotation tools, especially in the context of second language (L2) learning, but research about narrative texts is scarce, and they are normally not fiction (Thoms and Poole 2018; 2017; Thoms, Sung, and Poole 2017; Blyth 2014). Social annotation in the context of L2 courses does not necessarily mean that the narrative text is a mean to the end of learning a foreign language. In some cases, social annotation has been used in university literature classes as a tool to enhance students' engagement with poetry, because literary knowledge (of Spanish and French poems) was part of the curriculum (Blyth 2014; Thoms and Poole 2018). However, in such cases the fictional and time-lasting narrative dimensions are absent, as well as the activation of absorbing states typical of fictional narrative reading (Hakemulder et al. 2017). One study used excerpts from novels (L2 English students in Turkey and Spain) (Solmaz 2020), and a few projects focused on the social annotation of whole fictional texts, namely with Italian, Turkish, Portuguese, and Indonesian students (Bal 2018; Rahman 2019; Taddeo 2019; Pearson Italia 2019; 2020). The educational potential of the social annotation of fictional text is an extremely underexplored topic.

Despite the scarcity of evidence for fiction, research on the social annotation of poetry can offer some useful perspectives. Thoms and Poole (2017) found that, even in the context of a L2 literature class (USA), the wide majority of comments on poems were of two kinds, literary and social, rather than linguistic, like one would probably expect from students who are learning a foreign language. Literary annotations (65%) are insights related to textual analysis, such as an interpretation of the meaning of a text or a comment related to rhetorical devices used in the text. Social annotations (54%)

display emotional response, provide encouragement, express one's opinion about another's comment (e.g., signaling agreement or disagreement), or provide a comment not directly related to the text under analysis. Soliciting someone else's opinion or asking for help count as social annotation. Overall, there was a balance between the number of original comments and the replies. Linguistic annotations explicitly providing or asking for information regarding grammatical structures or lexical meaning amounted only to 8%.

Interestingly, Thoms and Poole note that there seems to be an inverse relationship between literary and social annotations, namely a rise in the number of one kind of annotations is sometimes correlated with a lower number of annotations of the other kind. The provided explanation is that

> Perhaps this is a natural phenomenon in that the more social students are when commenting in this kind of online, community-like environment, the less inclined they are to focus on the task at hand—in this case, making literary-based comments and annotations. Similarly, it is also possible to speculate that as more students provide more thought-provoking literary analysis via literary annotations, the entire group may become less inclined to inject socially oriented annotations for some reason. (Thoms and Poole 2017, 149; cf. 2018)

While I agree that this situation is plausible, I also suggest being wary of this inverse association, because the category "social annotation" used by Thoms and Poole is quite broad, including both emotional response to the text and general replies to someone else's comments. Therefore, it is difficult to assess whether a body of comments with a "literary" tone – in a literature course – discourages the expression of emotions only (cf. section 3.4) or social interactions, as well. Indeed, the authors also note that literary and social annotations co-occurred more often (27% of all comments) than any other pairing with linguistic annotations (Thoms and Poole 2018). I have noted a similar pattern in an ongoing experiment with Italian undergraduate students attending a literature class and using the digital tool Hypothesis to annotate some short stories. Since the activity is part of a course assignment, I was expecting the tone of the conversation to be quite literary – in comparison to annotation in more "naturalistic" contexts, like Wattpad – so I wrote some informal comments as a prompt, e.g. association to a personal experience or a simple emotional reaction to the text. Nevertheless, the majority of students' comments is focused on literary interpretation and intertextual connections, and around 20% of all annotations are social

interactions, a value in line with DSR on Wattpad or Twitter (Pianzola, Rebora, and Lauer 2020; Pianzola, Toccu, and Viviani 2021).

The distinction between literary, linguistic, and social affordances in the social annotation of texts is quite broad. Carl Blyth (2104) interviewed instructors who used the digital social annotation tool *eComma* in their classes, individuating the following perceived affordances: evaluating the meanings of foreign words; reflecting upon cultural differences; interpreting the meanings of textual features; connecting reading to personal experience; and co-constructing meaning. According to Blyth, these affordances can be synthesized in five categories:

- Creating a zone of proximal development (ZPD; Vygotsky 1978) for less expert readers: readers who encounter difficulties can seek assistance from others; DSR platform creates a co-constructed scaffold to assist students while reading.
- Distributing the cognitive load: “usually students are expected to perform the same activity, that is, to read a given text in the same manner. However, in the context of eComma, different students were allowed to make different contributions to the group” (220). When reading becomes a group activity, individual readers feel free to read in different ways.
- Synthesizing several activities (prereading, reading, and postreading) into a single activity: by reading alongside the students, instructors can guide the reading process moment-by-moment.
- Aggregating behavior: “Because eComma records and displays interpretive behavior such as annotations and comments, students and teachers can analyze how texts are interpreted at the group level. This allows teachers to discuss reading behavior in terms of the longitudinal process of an interpretive community, that is, a patterned way of interpreting a text” (221). This is another way of looking at the features of distributed social learning discussed in section 4.1: aggregation, accumulation, and availability over time offer the chance to study how the collective reception of texts changes because of social interactions.
- Blending different types of digital reading: different texts and different assignments prompt different types of digital reading (e.g. hyper-reading, or machine-reading).

An increasing amount of evidence about DSR in education shows that, when reading socially on digital media, readers activate cognitive and affective processes related to various skills, both personal and social. There is much more than the development of competences related to reading comprehension, critical analysis, or memory. A pedagogy of multiliteracies seem to be the best way to describe this learning scenario

(New London Group 1996), a context that “emphasizes textual interpretation and transformation, the interdependence of language modalities, and interactions among language forms, social context, and communication” (Paesani 2016, 270). Such interconnection of literacies as multiple, dynamic, dialogic, and situated (Ware, Kern, and Warschauer 2016, 308) offers several benefits to learners and can be broadly characterized into three subcategories: social benefits, pedagogical benefits, and performance benefits (Thoms and Poole 2017).

Reading together for a shared assignment can bring about a sense of community, companionship, and kindness expressed by students in public one-to-one interactions in the margins of texts. Moreover, digital platforms remove the possible embarrassment and self-censorship of talking while looking someone in the face, and also allow to read *all* the contributions of the other students. In turn, this can lead to some students opening up and participating more when provided the opportunity to discuss in a digital environment. Last but not least, by identifying textual parts with unanswered questions or with many/few comments, teachers can choose to intervene – online or in class – and focus on them, if appropriate.

More broadly, beside leveraging the potential of DSR, two important things to remember for educators is that they also have to nurture the pleasure of reading, and acknowledge that probably students know much more than they do about digital media, participatory culture, and online communities. Accordingly, I agree with Turner and colleagues that:

> Rather than teaching a single, static approach to students or preparing them to apply a strategy at a predictable, given moment, the teaching of connected reading recognizes and prepares teen readers for complex and dynamic practices, such as creating one’s own reading path, multitasking, and managing distractions. (Turner, Hicks, and Zucker 2020, 15)

One of the best ways to help young readers grow is to listen to them and acknowledge their reading practices as valuable, without judging their taste for books or the interference between reading and other online activities. Every chance they have of reading and sharing with others their experience with books is an opportunity to become more skilled readers and media users, in a landscape much more complex and rich than what many teachers imagine.