

**Works in Progress • Digital Social Reading**

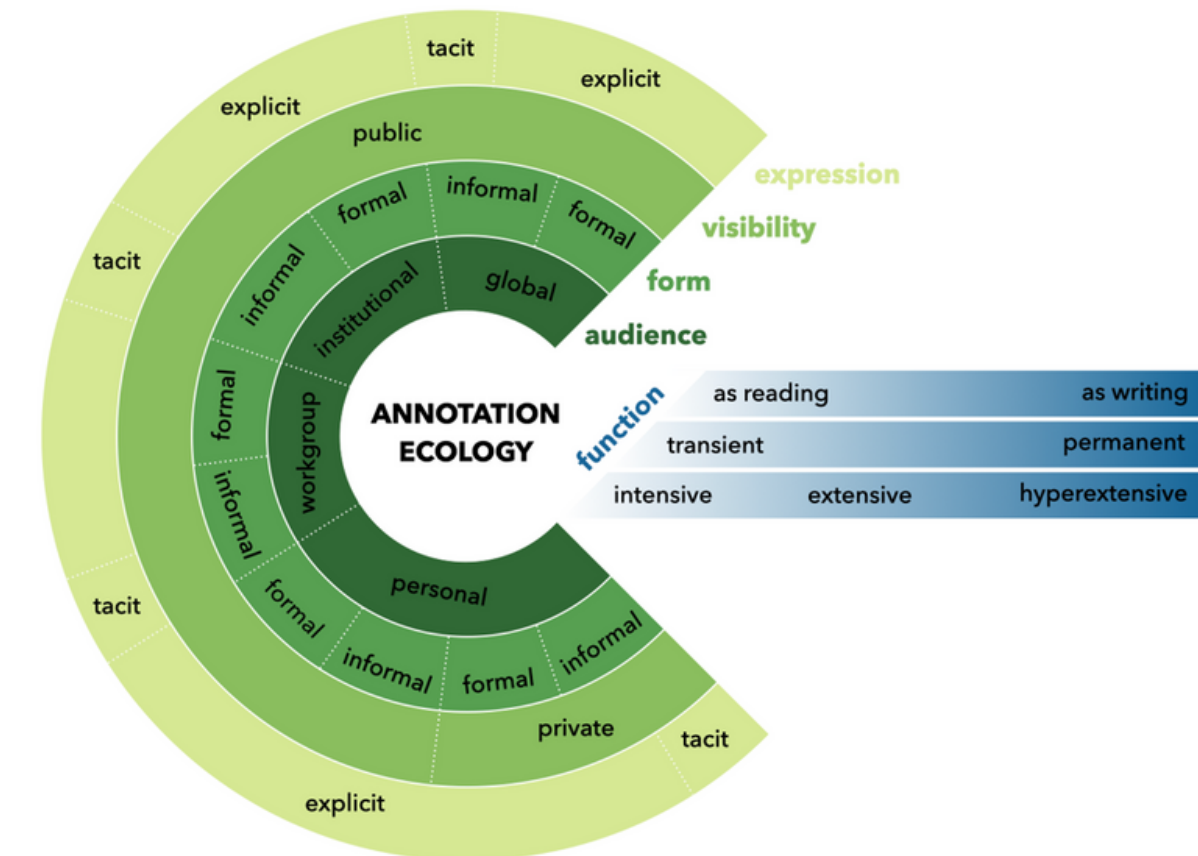
# Chapter 2. The variety of digital social reading

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## 2.1 Social annotation

The first attempts aimed at individuating the core features of social reading have been done in research about annotation. Catherine Marshall identified two main types of annotation: tacit and explicit. Tacit annotation is all kinds of markup – like highlighting, underlining, and arrows, but also letter and words – whose meaning is not self-evident. Explicit annotation includes all kinds of verbal communication in which readers articulate their thoughts and emotions in response to the text. Starting from this basic distinction, Marshall outlined a broader annotation ecology taking into account also the degree of formality of the annotation, the visibility it has, and the audience to whom it is addressed (Figure 2).



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Source: Marshall, Catherine C. 'Toward an Ecology of Hypertext Annotation'. doi: 10.1145/276627.276632

Figure 2: Visualization based on the annotation ecology developed by Marshall (1998), with some minor variations.

The various dimensions of annotation are conceived as part of a continuum, rather than as dichotomies, e.g. annotation can be more or less formal, or the same annotator can combine different styles in their set of notes. Marshall's conception of annotation is very broad, including all sorts of paratextual additions to a text. For instance, metadata are one of the most *formal* kinds of annotation, since they are supposed to be very *explicit*, codified according to specific *writing* rules, and linking a text *hyperextensively* to other documents in the catalogue, because they are intended for *permanent public* use – knowledge management – by *institutions* and a *global audience* of readers. On the opposite side of the spectrum there are words written in the margins of a text (e.g. “No!”, “1997”), a kind of *informal tacit expression* whose meaning is often clearly understandable only by the person who wrote them during a *personal intensive reading* of a single text, probably as an immediate and *transient* reaction to it.

Following Marshall's ecology, only annotations that have public visibility can potentially be part of social annotation and DSR activities. Research on social annotation has grown a lot in the last ten years, mainly with respect to its application in learning contexts (Novak, Razzouk, and Johnson 2012; Krouska, Troussas, and Virvou 2018; Ghadirian, Salehi, and Ayub 2018), so I will discuss it in more detail in Chapter 4, talking about the learning potential of DSR. In this chapter I will consider how this particular perspective on DSR can contribute to systematize the various kinds of social reading practices. For instance, Megan Winget noted that Marshall's

augmented taxonomy illustrates the differences between social-reading platforms and social-reading tools. Social-reading tools typically support tacit, reading-based interactions with a text, and can be shared widely or not at all. Social-reading platforms support explicit, thought-based interactions. To simplify further, the platforms are an attempt to support purposeful, meaningful reading. They seem to be an attempt to translate the formal book club or classroom discussion atmosphere to the online environment, with a focus on line-by-line close reading of the text. The tools, on the other hand, seem to have been developed out of a particular user need: users wanted to highlight passages in the Kindle. (Winget 2013, 12)

Winget underlines a pertinent distinction, but it is a very broad one and not particularly useful for understanding the impact DSR has on the reading experience. However, linking technical features to expressive and social functions is a good strategy to start mapping the variety of DSR uses. Combined with considerations on

the different kinds of content (see section 2.2), this strategy has been the most widely used to create DSR taxonomies (see section 2.3). But before broadening the scope of my theory, let me consider some useful categories that have been highlighted by social annotation research.

Monica Brown and Benjamin Croft (2020) identified four key technical affordances that enable “thoughtful implementation” of social annotation, to which I added some more general remarks:

- **Social Engagement Options.** Annotation tools can provide the flexibility to participate independently, collaboratively, privately, within the classroom community, or publicly. This includes a variety of private and social engagement options. Knowing which audience will be able to read the annotations can influence the kind of content shared, its degree of formality, the intensity of the reader’s response presented, etc.
- **Anchored and Dialogical.** Annotations can be anchored to a specific part of the text allowing engagement with specific textual elements. The anchoring of annotations also enables a more granular opportunity to respond to various arguments and ideas. If annotations are not readable in the proximity of the source text, it is likely that the dialogue would occur more between readers and *about* the text, rather than *on* the text.
- **Intertextual and Multimodal.** Through hypertext, annotation tools can provide the opportunity to make connections across different texts to create richer meanings. In addition, the annotation tool provides for multiple modes of communication beyond text. Digital media enable a new range of options compared to print-based annotation, including embedding of images and videos, notes hovering over the text, etc.
- **Privacy and Ownership of Data.** Annotation tools can allow students and educators to access their data without extensive technical expertise. In using an appropriate annotation tool, student-generated data would not be privately-owned. Privacy protection measures should be available to readers in order to protect their personal data.

These four features are certainly relevant for many DSR platforms, not just for annotation, but they cannot be assumed to be central to all of them, since DSR is a broader phenomenon. A reflection on the technical affordances of DSR needs to be expanded with respect to the content of annotations – or other kinds of DSR user generated content – and its affordances.

## 2.2 Content types

To map the types of content that can be found in annotations, reviews, and comments in the context of DSR, it can be useful to begin by distinguishing between primary and secondary thematization (Kuhn 2016; Kutzner, Petzold, and Knackstedt 2019). Content created in response to the text is a primary thematization, whereas interactions with and replies to such user-generated content are secondary thematizations. Note that secondary content can be as rich and complex as primary content, but the fact that it originated in reply to something written by another user forces us to read it also considering its intertextual relation to both the text and the user-generated paratext. The distinction primary/secondary thematization applies to social annotation but not to private annotation, since it is an affordance enabled by the easy access to social communication. Moreover, it is relevant not just for annotations but also for other kinds of DSR content, like reviews and social media posts. In [Table 1](#), I listed the most common types of digital content, in order of decreasing proximity to the source text, also specifying the kind of relation existing between source text and user-generated content. All the listed types of content can be subject to secondary thematization by other readers.

**Table 1.** Common categories of digital social reading content

	Macro-category of DSR content	Relation to source text
1	Highlight/underlining	Visible over the source text
2	Tooltip/hoverbox	
3	Comment in the margin	Boundary of the source text: the source text is displayed on the same page, but a quotation can also be included
4	Comment in footer	
5	Rating	External to the source text: can include quotation or visual display of the source text
6	Review	
7	Discussion forum	
8	Social media post	

9	Tag	Metadata (boundary/external): can describe an aspect of the source text
10	List/bookmark/shelf	

The first macro-category of DSR content regards the **highlight** or **underline** functionality, which is present on almost all e-readers, it can be built in in web pages or software, but it is also available for any type of content that can be displayed in a web browser and has an URL, e.g. thanks to a web app like Hypothesis (*Hypothesis/h* 2012). Digital media have introduced a big change for this kind of markup, in comparison to print formats: it can be made invisible on many digital platforms, if the reader prefers so, e.g. by turning it off, on the Kindle e-reader. Thus, digital social reading allows for greater flexibility in matching the reading situation and the attitude of the reader. Simon Rowberry (2016) looked at Kindle highlights of English-language public domain books (n = 34,044) and observed that the most frequently highlighted passages contain either expression of values, namely related to morality and spirituality, or pivotal narrative moments. Other frequently highlighted parts are inspirational statements, plot summaries, famous lines, and romantic sentiments (Barnett 2014).

The second macro-category includes **tooltips** and **hoverboxes** ('Hoverbox' 2017), brief texts that appear hovering over the source text when a pointer (e.g. the mouse cursor) passes over a word or phrase. The difference is that a tooltip is usually a short note – e.g. a bibliographic reference (like in Wikipedia pages) or a term definition (like the dictionary functionality present in many e-readers) – whereas a hoverbox can contain HTML elements and, thus, multimedia content, a preview of another webpage, or a hyperlink (like the words appearing in blue in Wikipedia pages). In many cases, these popups are created by the author of the text or webpage, or by philologists curating digital editions.

The third macro-category is that of **comments in the margins**, also known as *marginalia*. They are text written in a column displayed beside the source text, either always visible to the reader or in a sidebar panel that can be hidden. The comments' infrastructure of digital-born texts also influenced the digital editions of manuscripts and printed texts: the standards developed by the Text Encoding Initiative – the organization responsible of standardizing the digital editions of books – represent marginalia as an additional paratextual element, which can be hidden (TEI Consortium 2021). Moreover, nowadays texts can be displayed through graphic user interfaces that are responsive to the device screen size and adapt the typesetting to the dimension of

the window in which the text is displayed (“flowing text”). For this reason, it is possible that text which is displayed as marginalia on a laptop completely covers the source text when displayed on a smartphone. In other cases, it could be transformed into a tooltip, thus rendering the threshold between macro-categories 2 and 3 movable. The dynamic reshaping of text and paratext – like the visibility of highlights – has consequences for the reading experience. Being able to see a comment beside the phrase to which it is anchored makes reading faster than if I need to open a sidebar to be able to read it. And if I am absorbed in a story, it is more likely that I will notice the paratext if I see a part of text highlighted as a signal of the presence of a note (e.g. with Hypothesis), rather than if there is only a tiny balloon on the side with the number of comments to a paragraph (e.g. on Wattpad). For these reasons, the page layout has to be carefully considered when planning or analyzing DSR activities. A technical choice can have an impact on psychological processes like narrative absorption, focused attention, rapidity of comprehension, active search for information, etc., which in turn affect enjoyment and learning.

The fourth macro-category is ***comment in footer***, which is visible in the proximity of the source text, but is normally not read before having finished to read the source text. Its position at the boundary of the page makes it easier to refer back to the source text, even with an in-page direct URL in some cases, but at the same time the fact of being located “after the text” influences readers’ attitude. It is a feature more popular than comments in the margins and usually also attracts a greater number of comments and interactions, often with abundant secondary thematization in which nested conversations between readers occur. However, its marginal position affords a different relationship with the text in comparison to external conversation, which normally include longer comments, some kind of moderation, and the existence of an established group of commenters.

The fifth macro-category is ***rating***. Among the rating options there is also the simple view or read of a text, which is automatically recorded by many DSR platforms as a sign of the presence of an audience, and displayed publicly (e.g. Wattpad “reads”). Ratings are visible as individual evaluations leaved by a user, but can also be displayed as an aggregated value which is the average of all the users’ ratings. In most of the cases, they ratings appear on the metadata page that also host additional information about the source text. However, Wattpad shows just below the chapter’s title the number of votes a chapter received, an information that may influence the readers’ expectation, either in terms of quality of writing or plot twists.

The sixth macro-category is the **review**. The source text is not present anymore on the same page of the user-generated content, but the author of the review can quote it or include a picture of it. Reviews are normally about a single book, therefore there is still a direct relation to the source text: if I am already interested in the reviewed book, I am more likely to look for a review and read it. Nowadays reviews are often gathered on dedicated websites, either linked to the purchase of the book (e.g. Amazon) or on a separate platform (e.g. Goodreads), but they also appear in digital editions of newspapers, magazines, and journals, or on personal blogs. Different platforms enable different kinds of relations to the source text, sometimes associating the review to a specific edition or translation of the book, offering purchase options, or linking to its open access version. The source text can also be quoted verbatim, paraphrased, or displayed visually, either to let the audience read part of it or to show the object book. Platforms also determine what kind of social interactions are possible, either encouraging or blocking secondary thematization (comments on the review and replies to comments). The whole digital ecosystem in which a platform is situated can have an impact on the reviews. For instance, South Korea's web is dominated by Naver, a portal offering a search engine and a multitude of additional services, including a popular blogging service (Naver also bought Wattpad in February 2021). Book reviews are frequently posted on Naver Blogs, rather than on platforms dedicated to books, because blogs' content is more effectively indexed and more easily discoverable by other readers.

The seventh macro-category is the **discussion forum**. Forums can be generic, sometimes organized in topics (e.g. Reddit), or specifically dedicated to books, fiction, or a particular author or genre. Accordingly, the relation to the source text can vary from very close – e.g. discussions limited to certain aspects of a story – to very loose – e.g. broader conversations in which multiple texts or themes are cited and associated. I can encounter and meaningfully participate in a discussion even though I have not read (or do not even know) some of the mentioned texts. As with reviews, the source text can be quoted or displayed, depending on the technical options available to users. Being venues for discussion, secondary thematization is central to forums, but platforms determine the DSR affordances, e.g. by regulating who can start new threads or organizing replies so that the original post has more or less visibility and importance in the discussion.

The eighth macro-category is that of **social media posts**, which includes content published on a wide variety of digital platforms. Tweets, Facebook posts, Instagram posts identified by the hashtag #bookstagram or similar, and videos made by



booktubers are all examples of book-related social media posts. As with reviews and forums, the source text can be quoted or displayed. Social media's architecture subordinates the discussion of the source text to the content of an original post, since comments can only appear attached to a post and in reply to it, so secondary thematization is enforced as the default mode of discussion. But the use of hashtags and other tagging systems – e.g. mentioning the account of an author or publisher – allows to group together content by various metadata (book title, topic, genre, etc.), thus accessing an ongoing collective conversation in which posts are related to each other primarily via metadata and only secondarily as chains of replies.

The ninth macro-category is that of **tags**. Tags can describe aspects of a book, its story, or author, but can as well represent subjective opinions, feelings, or a variety of expressions related to reader response. For instance, AO3 authors sometimes create long sentence-tags and are very creative: “look i just want them to work out their issues in a healthy way :(,” “I am a sucker for pain,” etc. (see section 3.3). Tags can be created ad-hoc or those already circulating can be used to link one's own content to that of other readers; they can be used extemporaneously or in a more systematic way to mark similarities between books and create organized lists or catalogues. Their use can constitute a type of informal classification system called “folksonomy,” that is a user-generated categorization of content (Vander Wal 2007; Mathes 2004; Quintarelli 2005). Tags have a direct relation to the source text, since they become attached to it – and can also be anchored to specific parts (e.g. through Hypothesis's highlight function) – but they also can be used as categories to find and explore set of books, since they can be used as a search filter on some platforms (e.g. Twitter, Instagram, AO3). The same tags and hashtags can sometimes be used across platforms – e.g. #OccupyGaddis (Miletic 2016) – but more often the aggregation of content is only possible within a single platform. Therefore, it is difficult to use tags to collect all discussions concerning the same book. The kinds of tag most used on platforms specifically dedicated to DSR are probably those for genre and topic classification, reflecting the use of metadata in libraries and archives. But a recent trend is that of creating classification and recommendation systems using tags for emotions and moods elicited by books (‘Whichbook’ 2020; Hale 2020; ‘The StoryGraph’ 2020).

The tenth macro-category is that of **lists, bookmarks, and shelves**. Different platforms have different names for this category, but they are all ways of organizing information related to books. Lists can be created by readers, but they can also be generated automatically by algorithms, based on various parameters recorded by the platform, e.g. books with the highest ratings, those most likely to be purchased by me

based on my previous reads, the bestsellers, etc. They can be created by a single reader or be a kind of open bibliography to which others can contribute. Tags can be used to group books into lists, but more often the list name does not become an attribute attached to the book within the DSR platform, thus it is not always possible to see in how many lists a book is included. Similar to what happens for tags, the criteria for inclusion in a list can be related to both an aspect of the book and reader response.

Classifying DSR content in macro-categories is not sufficient to understand its variety but going into more details will bring me to list dozens of content types, without ever being exhaustive. I already mentioned some examples for each category – opinions, feelings, genre, etc. – and while studying a DSR project on Twitter I discovered that most of the content can be classified as text reuse, summary, generalization, interpretation, reader’s reaction, or intertextual reference (Pianzola, Toccu, and Viviani 2021). Similarly, Swann and Allington (2009) manually coded the discussions of British reading groups (16 face-to-face and two online; 300,000 words in total) using the following categories: *on book*, *act of reading*, *ideal text*, *interpretation*, *evaluation*, *language*. While certainly useful to understand how online discursive practices differ from offline ones (cf. Peplow et al. 2016), these kinds of analysis are not sufficient for a broader understanding of DSR. A complementary approach involves looking at the functions for which DSR content is created and read.

## 2.3 Content functions

Remi Kalir and Antero Garcia (2019) define annotation as “an act with five common underlying purposes present across a variety of contexts: to provide information, to share commentary, to spark conversation, to express power, and to aid learning.” These functions have been confirmed by students, who perceive value in *creating* social annotations inasmuch as it helps them to comprehend course content, engage with course content, share ideas, and interact with peers. The perceived value in *reading* peer annotations is: comprehension and clarification of course content, confirmation of ideas, and engagement with diverse perspectives (33 responses to open questions; Kalir et al. 2020).

A more articulated synthesis of the possible functions of text annotation – valid also for social annotation, in my view – was proposed by Marshall, mapping functions to their most recurrent forms ([Table 2](#)) (Marshall 1997, 136). Some of these matchings are relevant for DSR annotations even though they are achieved through a different form, since both the digital medium and the social context in which the text is presented change the affordances of annotation.

**Table 2.** Mapping annotation form into function (Marshall 1997)

Form	Function
Underlining or highlighting higher level structure (like section headings); telegraphic marginal symbols like asterisks; crossouts.	Procedural signaling for future attention
Short highlightings; circled words or phrases; other within-text markings; marginal markings like asterisks.	Placemarking and aiding memory
Appropriate notation in margins or near figures or equations.	Problem-working
Short notes in the margins; longer notes in other textual interstices; words or phrases between lines of text.	Interpretation
Extended highlighting or underlining.	Tracing progress through difficult narrative
Notes, doodlings, drawings, and other such markings unrelated to the materials themselves.	Incidental reflection of the material circumstances of reading

Marshall based her classification on the analysis of over 150 books (textbooks, fiction, and non-fiction) used by American university students. To what extent can we generalize and say that, historically, annotations always served these purposes? And how did the functions of annotation change with digital ecosystems? The functions listed by Marshall are pertinent for private annotations in other historical periods as well (Jackson 2001; Slights 2001), but the interpretative function includes a wide variety of other functions, attested both historically and nowadays.

Even considering the social aspects included in Marshall's annotation ecology (1998; cf. Figure 2) – e.g. formal annotations that are a product of thought and contemplation, have long-term permanent value, and can thus often be regarded as a form of public authorship (Winget 2013) – the focus on annotations done in work or learning contexts make her overlook aspects which are central to the life of many readers and annotators: the pleasure of reading and a playful attitude. I already briefly mentioned this kind of shortcoming related to a focus on institutionalized reading (section 1.1.3) and it will resurface again when talking about social annotation in educational contexts (Chapter 4), and about a popular approach to reading research (Chapter 5). An

exemplary case of this attitude is readers “talking back” to a book and to characters, a sort of role-playing that can have the function of either corroborating/contradicting the text or express one’s own affective response to it. It happened with British Romantic readers (Jackson 2005), but it also happens in Kindle notes (Barnett 2014), and Wattpad comments (Pianzola, Rebora, and Lauer 2020). Overall, Marshall’s categories are certainly useful but need to be integrated taking into account the subjective expression of emotions and thoughts elicited by a story (without necessarily being an interpretation of it), the association with personal experiences (cf. Jackson 2005, 303; Driscoll and Rehberg Sedo 2018), and other kinds of intentions.

We can have a different perspective by looking at research on media use. In his extensive reflection on comments in digital media, Joseph Reagle (2015) observes that “comment can inform (via reviews), improve (via feedback), manipulate (via fakes), alienate (via hate), shape (via social comparison), and perplex us.” All these behaviors can be seen on DSR platforms, too. However, one particularly interesting difference between the various types of DSR platforms concerns feedback. Since traditional literary communication is mostly asymmetrical, with readers receiving an author’s message through their book but not being able to reply to them via the same channel, feedback rarely occurs in primary thematization, at least not in the sense of a “comment that is intended (or at least expected) to be seen by the person it is about, its *object*. Among the many types of comment, what is most salient about feedback is that it can be personal. It is an expressed reaction to something that often is close to the core of another’s self” (Reagle 2015).

If reviewers of books by institutionalized authors include some kind of feedback in their reviews or comments, normally it is not because they really expect it to be seen by the author, although it can sometimes be the case (Murray 2018b; Skains 2019). Readers mainly create content “seeking affirmation, illumination, or contestation from co-readers” (Murray 2018a, 376). In this sense, I already mentioned how controversial it is to establish the psychological motivation behind these intentions, but the most plausible one seems to be that we want to be seen as contributors to knowledge, a process related to management of our social reputation and, ultimately, our fitness within a social group (cf. section 1.3.3).

Besides institutionalized literary communication, feedback often occurs in DSR content during secondary thematization in formal learning contexts (Ball 2010; Yeh, Hung, and Chiang 2017) and, with respect to primary thematization, it is extremely popular on fanfiction platforms (Thomas 2011a; Aragon, Davis, and Fiesler 2019; Campbell et al.

2016). The fanfiction jargon distinguishes between *beta-reading*, *feedback*, and *concrit*, i.e. “constructive criticism” (‘Beta’ 2020), and some fans also separate *commentary*, *review*, *recommendation*, and *flaming*, depending on the discursive tone, focus, and on whether the comment is addressed to the author or to other readers (synecdochic 2008).

Alecia Marie Magnifico and colleagues have analyzed the various types of feedback found on two of the biggest English-language fanfiction platforms, Figment.com and FanFiction.net (646 idea units, i.e. bits of discourse in which the reviewer introduces one concept) (Magnifico, Curwood, and Lammers 2015). They identified four linguistic functions: to direct the author with advice (~8%), to elicit a clarification or interpretation from the author (~3%), to inform the author about a feature of the story (~81%), and social communication (~8%). Social communication regards attempts to establish a reader’s credibility or social presence, it “serves to reveal readers’ expertise and presence, promote reciprocity in review practices across the network, and demonstrate appreciation” (Magnifico, Lammers, and Curwood 2020, 6). Interestingly, “social communication” is a category that had to be added to existing classification methods previously applied to online writing environments (Kline, Letofsky, and Woodard 2013), because social interactions in online fanfiction communities involve behaviors that do not arise in classroom interactions. In the same research, they also looked at the focus of attention in comments: general, e.g. “good job!” (~34%); content, e.g. “the protagonist is cute” (~26%); readers’ reactions, e.g. “I am anxiously awaiting the next chapter” (~17%); writing, e.g. “I like your style” (~6%); and conventions (~3%).

The functions identified for social annotation and fanfiction comments may also be relevant for other DSR platforms, hence it can be useful to summarize and rephrase them in a more general fashion (Table 3). Note that not all content is created with a primarily social function, even though the creator knows that it will be shared with others. For instance, highlighting passages and creating lists can be done to mark a paragraph or a book that I want to read or reread at a later time; and I can highlight, comment in the margins, list, and tag to help me remember something, be it a sentence I particularly liked, the mood that a book elicited in me, or what books I have read last year. Nevertheless, if created on DSR platforms, the content is also shaped by its social function (Rowberry 2016; Barnett 2019). Knowing that other will see them, I may be induced to make my comments more explicit or add a description to my lists. [Table 3](#) summarizes the most frequently observed functions for DSR content.

**Table 3.** Functions of DSR matched with possible types of content

Function	Highlight/underlining	Tooltip/hoverbox	Comment in the margin	Comment in footer	Rating	Review	Discussion forum	Social media post	Tag/shelf	List/bookmark
Procedural signaling for future attention	✓		✓						✓	
Placemaking and aiding memory	✓	✓	✓		✓			✓	✓	✓
Problem-working		✓	✓	✓		✓	✓	✓		
Tracing progress through difficult text	✓		✓	✓	✓	✓	✓	✓	✓	
Signaling appreciation	✓		✓	✓	✓	✓	✓	✓	✓	✓
Expressing emotions			✓	✓		✓	✓	✓	✓	✓
Informing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Interpreting			✓	✓		✓	✓	✓	✓	✓
Improving via feedback			✓	✓		✓	✓	✓		
Negotiating identity			✓	✓		✓	✓	✓	✓	✓
Influencing others' opinions			✓	✓	✓	✓	✓	✓	✓	✓
Alienating/canceling			✓	✓	✓	✓	✓	✓	✓	✓
Impressing and shocking			✓	✓		✓	✓	✓	✓	✓
Creating and maintaining social relations (incl. authority)			✓	✓		✓	✓	✓	✓	

Note that a single content can have multiple functions, and a specific function could be achieved through other functions, e.g. *expressing emotions* while *negotiating identity*, or suggesting *my own idea* about a genre through a *feedback* given to a fanfiction author. Confirmation of the validity and usefulness of this classification should come from empirical research. There might be other functions, but these are a good starting point for the analysis of DSR practices.

## 2.4 DSR taxonomies

The types of DSR content and the functions for which they are used can only describe actual DSR systems to a limited extent. DSR platforms usually mix different types of content and readers can use them in unexpected ways. In order to create a satisfactory taxonomy of DSR, we need to combine the typologies that I presented in the previous sections and examine additional features of DSR platforms. The first taxonomy of DSR has been proposed by Bob Stein (2010; [Table 4](#)), together with the presentation of a DSR platform, the CommentPress plugin for the WordPress web content management system ('About CommentPress' 2010).

**Table 4.** Bob Stein’s taxonomy of social reading (Stein 2010)

Category	Online / Offline	Synchronous / Asynchronous	Informal / Formal	Ephemeral / Persistent
1. Informal face-to-face discussion	Offline	Synchronous	Informal	Ephemeral
2. Informal on-line discussion	Online	Asynchronous	Informal	Persistent
3. Formal face-to-face discussion	Offline	Synchronous	Formal	Ephemeral
4. Formal discussion in the margins	Online	Synchronous or asynchronous	Formal	Persistent

Stein’s basic proposal is based on the intuitive distinction between traditional conversation about books and online discussion, but it is problematic to qualify DSR practices with respect to the register (informal or formal) or to their availability to other readers (ephemeral or persistent). Category 2 (informal online discussion) includes, for example, activities such as reviewing books on Amazon or Goodreads (Thelwall and Kousha 2017), but also commenting on forums or Facebook groups. Even though it is true that comments are most often written in an informal register, it is not unlikely that readers take seriously their job of reviewing books and, therefore, adopt a more formal and highbrow register (Boot 2011). On the other hand, category 4 (formal discussion in the margin) includes the quite famous *Golden Notebook Project (If:Book and APT 2008)*, whose “conversation in the margins” are rather formal. Despite this, the same category also includes most of the writing happening on Wattpad, a platform connecting writers and readers, where many comments are definitely informal and slangy.

Regarding the time span for which DSR discussions remain available online, for both category 2 and 4 there is a high variability: website hosting reviews and comments are fairly permanent, but discussions happening on Facebook groups can be difficult to access, since the website’s search function is limited and cannot be used in an automated way. This aspect is even more critical in the case of online annotations and comments in the margins, which can be preserved if taking place on websites, but can also become almost inaccessible if a company proprietary of many eBook readers

suddenly decides to discontinue a service they control, like Amazon did when it stopped displaying highlights and notes on its website (cf. ‘Alice’s Adventures in Wonderland. Shared Notes and Highlights’ 2014; Rowberry 2016).

Moreover, highlights and annotations on e-books are a hybrid form of social reading, since they are often created for private use, but can also be shared. During the years, the social aspect has been widely encouraged, often adding to e-readers and apps features that simplify and amplify the sharing of quotes and annotations. The most notable case is probably the acquisition of Goodreads by Amazon, which later enabled Kindle’s highlights and notes (only Amazon-owned Kindle’s highlights and notes!) to be displayed on the most popular book reviews website (goodreads 2016). This kind of annotations are created in the margins of the source text but, when shared, they can be transferred to a website (e.g., Goodreads) or other media (e.g., Twitter), often not including the original text.

Given these limitations, a revision of Stein’s taxonomy has been proposed by Winget (2013), who claims that:

it may be more productive to think about social reading in terms of whether the annotations’ meaning is explicit or tacit, whether the annotations are a by-product of reading or thinking, whether the annotations are linked inextricably with the primary text or are distinct from it, and whether the generated “discussion” is meant for personal, small group, or global use, with the understanding that each of these values can be placed at a point on a spectrum. (12)

Winget’s taxonomy is explicitly modelled on Catherine Marshall’s categorization of social annotations (1998) and includes three kinds of DSR ([Table 5](#)). Marshall’s terminology is a bit different, with “as writing/as reading” corresponding to “thought-based/reading-based”, and “anchored” corresponding to “linked.” Anyway, the distinction between comments directly linked to the text and comments published separately is quite important because it can affect both the kind of content produced and the interaction between readers (see section 3.4 below).

**Table 5.** Megan Winget’s taxonomy of digital social reading (adapted from Winget 2013).

Category	Explicit / Tacit	Linked / Discrete	Thought-based / Reading-based	Personal / Small group / Global



1. Blog comments, reading groups, reviews (e.g. Goodreads)	Explicit	Discrete	Thought-based	Global
2. Social reading <i>platforms</i> (e.g. Wattpad)	Explicit	Linked	Thought-based	Small group
3. Social reading <i>tools</i> (e.g. Kindle Popular Highlights)	Tacit	Linked	Reading-based	Any

Winget introduced two useful distinctions, that between DSR platforms and tools, and that between content which is either discrete or linked to the source text. However, discriminating between thought/reading -based content does not seem very useful to classify DSR systems, because it is a distinction related to the commentator's attitude – like Stein's (2010) formal/informal distinction – and, thus, it is not directly related to the affordances of the technology used.

Kristin Kutzner and colleagues (2019) used a taxonomy development approach – commonly employed in information systems theory – to identify various dimensions characterizing DSR systems, based on a sample of ten German platforms. They started with a conceptual-to-empirical step, deriving ten dimensions from a review of research on DSR; then, they manually verified the presence of each dimension in a set of DSR platforms, added new dimensions, and further identified specific characteristics for each dimension; lastly, they performed a computer-assisted cluster analysis to group the DSR systems with similar characteristics. The result is a detailed taxonomy of DSR characteristics, whose presence or absence allowed the identification of four general types of DSR systems (the examples in brackets are mine):

1. manifold discussions within a bonded community (e.g. online book clubs, fanfiction blogs) (cf. Rehberg Sedo 2011b);
2. assessment of books to support purchase decisions (e.g. Amazon ratings, reviews, and book recommendations) (cf. Finn 2011; 2012);
3. immediate discussions on books within a closed community (e.g. Hypothesis groups, Wattpad, fanfiction archives) (cf. Thoms and Poole 2017; Blyth 2014; Kalir et al. 2020);

4. hybrid discussions on books, related to sales and monetary gratification (e.g. Kobo Reading App, Bookstagram, Booktubers) (cf. Jaakkola 2019).

Kutzner et al.'s taxonomy is quite restrictive in specifying the characteristics of DSR systems, a limitation acknowledged by the authors and related to the narrow scope of their inquiry, i.e. German-language platforms. With slight modifications their taxonomy would be generalizable to many other platforms and markets in various continents. For instance, by removing the adjectives “closed” (community) from cluster 3 and “monetary” (gratification) from cluster 4. In Table 6, I propose my DSR taxonomy based on Kutzner et al.'s work integrated with the reflections presented in the previous sections of this chapter and a new category related to the temporal dimension of DSR practices.

**Table 6.** Taxonomy of digital social reading systems

Type of DSR Feature	Immediate discussion within a community	Manifold discussion within a community	Evaluation to support information management and purchase decision	Hybrid interaction related to sales and gratification
<b>Content macro-category</b>	highlight, tooltip, comment (margin/footer), rating, tag	rating, review, discussion forum, social media post, tag, list	highlight, tooltip, comment, rating, review, tag, list	highlight, tooltip, comment (margin/footer), rating, review, social media post, tag, list
<b>Relation to source text</b>	immediate	external	immediate, external	immediate, external
<b>Type of audience</b>	group, institution, public	group, institution, public	group, institution, public	group, institution, public
<b>Timeframe</b>	during/after reading, scheduled, self-paced	after reading, scheduled, self-paced	after reading, self-paced	during/after reading, scheduled, self-paced
<b>Examples</b>	Hypothesis groups, Wattpad, comments in fanfiction archives	Goodreads groups and discussions, fanfiction blogs	Amazon highlights and reviews, Goodreads lists, Twitter bookmarks and lists, crowdfunding	Kobo Reading app gamification, bookstagram, booktubers

I have previously defined the *content macro-categories* and their *relation to the source text* (cf. [section 2.2](#)). The types of content created by readers are *highlight/underlining*, *tooltip/hoverbox*, *comment in the margin or in footer*, *rating*, *review*, *discussion forum*, *social media post*, *tag/shelf*, *list/bookmark*. Their relation to the source text can be *immediate*, both in time and space, when displayed over the source text (highlight, tooltip) or in its boundary area (comment in the margin/footer, tag), or *external*, when displayed on a platform that does not host the source text (rating, review, discussion forum, social media post, tag, list).

I adapted the types of *audience* from Marshall's annotation ecology (cf. [section 2.1](#)): *group* includes specifically selected readers (e.g. Goodreads private groups or a classroom), *institution* mainly regards participation from registered platform users

(e.g. as regulated through AO3 privacy settings or institutional email addresses), *global* means unrestricted access to anybody who can afford it. It is important to consider the type of audience because it can affect many aspects of the conversations around books, e.g. topics, tone, intensity of participation, chances to encounter diverse perspectives, perceived safety in the digital environment, self-censorship, etc.

The last crucial aspect to consider is the *timeframe* in which a DSR activity unfolds. There are two axes of distinction: *during* vs. *after the reading activity*, and *self-paced* vs. *scheduled* by someone. The majority of DSR platforms focus on content created once one has finished reading a book and has time to upload their own response, but there are also platforms and activities designed to allow a “real-time” tracking of reader response (highlight, comments in the margin), generating a large quantity of aggregated or individual data that change how we can study reading practices at scale (Braslavski et al. 2016; Rebora and Pianzola 2018; Pianzola, Rebora, and Lauer 2020). With respect to pace, the effect of scheduling a DSR activity has to be considered. For instance, defining a shared calendar that specifies the time range within which specific chapters or short stories are read can help to foster the discussion, since more participants will have a fresh memory of the readings and higher chances that others will reply to their comments (Thoms and Poole 2018; Law, Barny, and Poulin 2020; Pianzola, Toccu, and Viviani 2021).

The choice of only four macro-types of DSR platform/practices is inevitably incomplete, but it is sufficient to mark the most salient distinctions regarding the reading act and the actions directly related to it. Many other accessory functions and user roles could be listed (cf. Kutzner et al. 2019), but I think that a synthetic classification is more useful, since it can be quickly adopted for the analysis or planning of DSR activities. The four types of DSR proposed would be a good criterion to select case studies, but the selection I made for chapter 3 is informed by different motivations. Coherently with what stated in the introduction, I will focus on DSR practices that have shown to be potential sources for learning, either for students who are trying to nurture their skills and passion for reading, or for researchers who are trying to clarify the cognitive and aesthetic processes activated when we read. In this light, I will not directly discuss cluster 4, since its dominant characteristics are related to competitiveness and the purchase of books, and as such less directly related to the cognitive-aesthetic experience of reading fiction. The gamification of reading through mobile apps – disentangled from commercial exploitation – is an aspect worth investigating and, unfortunately, it is also the less studied one (Martens 2015; Chen, Li, and Chen 2020; Maria Anca et al. 2019; D. K. Reed et al. 2019). Before moving on to an in-depth

analysis of three case studies, let me just point out that in cluster 4 “gratification” can mean both material rewards (e.g. discounts, free books, gadgets) and symbolic gain (e.g. in the form of higher “vanity metrics” or social reputation).