

Article

Time to read: Exploring the timespaces of subscription-based audiobooks

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Abstract

With remediation of the printed book into audiobook subscription services, reading by listening is becoming a popular alternative to reading by seeing. This article explores when people read by listening and whether there may be a shift regarding the places and times people read by listening rather than by seeing. Based on a considerable dataset from a Swedish subscription service for digital books, this article reveals that audiobook reading takes place at somewhat different times than expected and that subscribers read significant amounts each day. The findings indicate that the remediation into reading by listening using digital audiobooks may close the gender gap common in reading, as the reading practices of men and women are very similar, with men even reading slightly more than women. The reading practices of young adults are also similar to the larger population. Furthermore, the concepts stationary reading, mobile reading and stationary/mobile reading are introduced.

Keywords

Audiobooks, mobile reading, reading by listening, reading by seeing, remediation, stationary reading, stationary/mobile reading, streaming subscription service, temporality, timespace

Introduction

This article investigates changes of when and where reading takes place when it is performed by listening. In focus is an ongoing remediation of reading material as

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books are being refashioned into streaming content on subscription services. It is an example of ‘the representation of one medium in another’ (Bolter and Grusin, 1999: 45). Although it is rare that new media entirely replaces old media, essential elements and aspects are renegotiated. The remediation of literature from print into audio involves written text being turned into spoken words using a narrator, creating a re-representation with different modalities from the original medium (Have and Stougaard Pedersen, 2016; Lundh and Smith, 2016). However, the audiobook is not merely a remediation of the printed book but also of the storytelling traditions of oral culture and the practice of reading aloud to others, which has been present for most of the history of reading (Cavallo and Chartier, 1999; Darnton, 2014 [1986]). There has also been a continuous reshaping of the audiobook since its inception, over time shifting from records to cassette tapes and CDs (Colbjørnsen, 2015b; Rubery, 2016). However, the remediation involved in contemporary practices of reading by listening is quite dramatic and involves several aspects. Briefly put, Western societies have seen a noteworthy expansion of reading by listening, which can be connected to the development of new economic actors. Given that, this text addresses the overall question: *Given the remediation of the book, is there a shift regarding the places and times when people read by listening rather than by seeing?* More specifically, this article examines an exceptionally large dataset in order to investigate three broad comparative issues. Although there has been research on the audiobook publishing industry (Colbjørnsen, 2015b; Whitten, 2002), the audiobook as a new technology for literature (Phillips, 2007; Rubery, 2011, 2016), and audiobook reading (Have and Stougaard Pedersen, 2016), there is still a substantial lack of previous research.

Reading is a concept that can be understood in many different ways. In this article, reading is defined as the process of making meaning from text, either by seeing or listening to the text. This as a broad but, still, moderate understanding. Reading could be defined even more broadly as interpreting, understanding or extracting meaning from various different contexts, such as when watching a film, playing a video-game or listening to a podcast. Another form of reading common today is the reading done online, such as when using social media, reading online newspapers or fanfiction. These extended forms of reading are, however, not studied in this article. The particular focus here is on books, both fiction and non-fiction, that have been recorded, that is, audiobooks. This type of reading is here referred to as reading by listening, an alternative to the more established concept of reading by seeing.

Listening, just like reading, can be understood in various ways. While synonymous with the faculty of hearing, listening can also be used as a metaphor for paying attention or eavesdropping, even when using other senses than that related to the ear (Crawford, 2009). Based on Michel Chion’s (2012) three different modes of listening, we suggest that reading by listening can be seen as a form of *semantic* listening, which entails making sense of spoken language. This is a distinct form of listening separate from *causal* listening, that is, to listen to a sound to gather clues about its cause or source, and *reduced* listening, that is, focusing on the characteristics of the sound itself and not interpreting cause or meaning. However, causal listening may be used in combination with semantic listening as the tone of the speaker may inform the meaning of the words (Chion, 2012). We suggest that reading by listening is a specific form of semantic listening separate

from other forms of semantic listening such as those involved in conversations or consumption of vocal music.

This article engages with and makes contributions to three central issues within contemporary reading research.

First, there is much speculation regarding if young people have different reading practices compared to older generations (Ross et al., 2018). The print-based reading activities of young people, or lack thereof, have been given much attention (Moyer, 2011). Reports regarding traditional forms of reading from countries such as Australia and Sweden declare that young people are reading less and that conventional kinds of literacies are at risk (Läsdelegationen [The Reading Delegation], 2018; Merga and Moon, 2016). It has been indicated that sustained long-form reading is becoming less common among the younger generation (Rutherford et al., 2018). Other studies have found that many young adults read extensively using digital technologies (Ross et al., 2018). The current text will discuss data regarding the following question: *Is reading by listening taking place at different times and places, and to a different extent, for young adults compared to the larger population?*

Second, there are similar discussions regarding differences in reading practices of men and women. Research reveals a gender difference concerning the amount men and women read as well as the type of formats and genres they engage with (Bergström and Höglund, 2014; Höglund and Wahlström, 2018; Ross et al., 2018). The current article will therefore discuss data that contribute to the following question: *Is reading by listening taking place at different times and places, and to a different extent, for women and men?*

Third, there are also persistent discussions regarding if there is a gender difference concerning young adults, with girls assumed to be reading more than boys (Asplund and Pérez Prieto, 2017; Ross et al., 2018). Therefore, the following query is of interest: *Is reading by listening taking place at different times and places, and to a different extent, for young adults of different gender?*

Although these questions are broad in character, the large dataset discussed in this text is specifically directed towards temporal aspects. It should be emphasized that the temporally based data are used as a fundament for discussing places of reading as well, that is, timespaces. Parts of these reflections are speculative in character due to lack of data regarding places of reading subscription-based audiobooks. Nonetheless, such speculations build upon understandings of conventions regarding how people organize their lives. Data on patterns of reading over the space of a day, week or a year, as collected for the current study, supply various clues to other dimensions of situated practice due to established societal routines.

The temporal dimension of reading has rarely been investigated. Rothbauer (2009) studied teenagers reading and place, finding that many experienced temporal restraints on their leisure reading. Respondents expressed that they would read more, if they only had the time for it (Rothbauer, 2009). Similarly, Cedeira Serrantes (2016) found that lack of time was a major factor for readers, some experiencing guilt when spending time reading rather than studying or working. Comics proved to be a strategic choice from a time aspect for many, as comics would supply a reading experience, without being as time-consuming as a novel (Cedeira Serrantes, 2016). In a study on audiobook reading, Have and Stougaard Pedersen (2016) found that time previously experienced as wasted by

their participants, such as time spent commuting, became quality time because of their use of audiobooks.

In the following, the remediation of reading through audiobook subscription services will be introduced as an intervention into the routinized practices of reading handheld documents on paper. Thereafter, the notions of temporality and timespace will be introduced. The ‘Method’ section discusses collection of a unique and very large dataset obtained from *BookBeat*, a Swedish audiobook subscription service. Following this, the results of the study will be presented. The discussion will deal with broader implications: given the data on temporality, what can be implied regarding changes of the spaces and activities of reading? The article ends with the conclusion.

Audiobook subscription services

Audiobooks are not new inventions. For well more than a century, books have been recorded on different technologies and for various different groups of readers. Whether as talking books on phonograph records for blind people in the early 20th century or as books on tape for commuters during the 1970s, recorded books have long faced criticism as an illegitimate or lazy form of reading (Rubery, 2016). Constraints of the various formats have also encountered disapproval, as neither records, cassette tapes nor CDs could hold an entire novel on one tape or disc. This resulted in either highly abridged audio versions of the printed books, or in large sets containing anywhere between 5 and 80 tapes or CDs for one book (Rubery, 2016), making it cumbersome in several ways for the reader.

The remediation into subscription-based digital audiobooks brings with it more changes and possibilities compared to the previous technologies, not least as it is possible to store one audiobook in a single digital file. In this sense, it can be seen as a remediation not only of the audiobook into a new format but also as a remediation of the printed book with the many dramatic changes in distribution, economic actors, practice and readership. The changes that come with the remediation from the printed book into the subscription-based audiobook include the following:

- Artefact: from paper to intangible streams.
- Active sense: from eyes to ears. We will in the following talk about, and contrast, reading by listening with reading by seeing.
- Mobility: with content available in ever present smartphones, a wide-ranging catalogue of books is always carried with the user.
- Distribution and economic model: from local bookshops or libraries to centralized content providers.

Traditionally, creative works such as literature, music and film have been communicated through distinctly different types of media, such as books and records. However, with further development of first the digital book and then cloud-based services, these traditional distinctions are collapsing. Literary works, music and films are converging, all being streamed in parallel ways. From the cloud-based service perspective all creative output can uniformly be described as *content*. This is a vital shift for the understanding

of reading by listening. Users of streaming services do not need to think of literary works as books with a material presence that must be used in certain ways. Instead, the book can be consumed as content similar to other streamed listening material such as podcasts, radio and music. Similarly, previous formats of the audiobook, with its cassette tapes or CDs had a significant material presence that dictated its use.

Critically, streaming content is intangible. It is not possible to touch or carry a stream around, only a device through which the stream can be provided, such as a smartphone. A digital book is not something that can be placed on a bookshelf or table. Therefore, remediation generates fundamental challenges to the traditional book market. When practices shift towards intangible content such as e-books and streaming audiobooks, people tend to acquire books more according to the model of the library rather than that of the bookshop. In the library model, users deal with books through borrowing and returning (Söderholm, 2018).

Digital audiobooks on the commercial market are accessible through platforms referred to as streaming services, the book counterparts to *Netflix* and *Spotify*. However, streaming services may not technically be an entirely accurate label, as books also can be downloaded and listened to offline. Instead, we refer to them as subscription services as most audiobook platforms follow a premium subscription model, where users sign up and pay a monthly fee to access all the content. Some other media streaming services, such as *Spotify*, follow a freemium/premium model (Colbjørnsen, 2015a), where users can choose to either use the service for free or become paying premium subscribers. Premium users gain access to the entire catalogue, can download material to use offline, and are not interrupted by advertisements. Most audiobook subscription services currently active on the market operate under the premium model. There are, however, differences between the various platforms.

Amazon owned *Audible* differs from most other services with their restricted premium model. For their monthly fee, users get to pick one audiobook to download and keep, with the option of purchasing more books if desired. Other services operating primarily on the European market, such as *BookBeat* and *Storytel*, follow the premium model well established by *Spotify* and *Netflix*, where users get access to the entire catalogue for their monthly fee. This is a noteworthy difference between separate models. In a sense, *Audible* attempts to uphold the traditional ideals of the bookstore. Books are from this perspective seen as individual units and are bought, not borrowed. Even though users are given the status of buyers, the book is still an immaterial artefact situated on a platform account. There is limited value connected to that kind of ownership. *Storytel* and *BookBeat* have more clearly adopted the notion of book as content. This concept also resembles the library model, as books are borrowed by the users instead of bought and owned. It is possible that the usage of the services differs due to the different premium models. Subscribers of services offering unlimited access to the catalogue for their monthly fee may have different usage patterns, or may choose to read more, compared to subscribers of *Audible*, where users need to pay more to read additional books. Therefore, various distribution models afford different reading practices.

In Sweden, where this study was performed, the market for digital book subscription services is growing quickly, both regarding more market actors and increases in subscribers (Dahlgren, 2018). In 2017, it was estimated that 6% of the Swedish population

subscribed to a digital book service, consequently 600,000 people out of a population of 10 million (Nordicom, 2018). A recent extensive survey of Swedish media habits revealed that 30% claimed to be regular consumers of audiobooks (Wallin et al., 2019). Besides availability of subscription services, readers also have the option to purchase audiobooks in bookshops or borrowing them from libraries, both in physical and digital formats. Swedish public libraries now also allow patrons free of charge access to audiobooks and e-books through a smartphone app (Wallin, 2019). Within the commercial market, the three largest subscription services for digital audiobooks and e-books, *Storytel*, *BookBeat* and *Nextory*, represent 15.5% of the entire Swedish book market (Wikberg, 2019). *BookBeat*, whose transaction logs form the dataset for this article, is owned by Swedish media conglomerate *Bonnier*. Having entered the market in 2016, *BookBeat* had in 2019 approximately 150,000 subscribers in four countries: Sweden, Finland, Germany and the United Kingdom, with Sweden holding the majority of the subscribers (Dahlgren, 2019). A majority of *BookBeat*'s users in Sweden are female, over 75%, while young people between 18 and 20 are one of the smallest groups of subscribers (Sandin, 2018). The average *BookBeat* subscriber is 38 years old, although there is a fairly even distribution of subscribers ranging from their 20s to their 50s (Sandin, 2018).

A practice-based perspective on timespace

Human activities are always situated within spatial and temporal arrangements. Since the introduction of clock time in the 14th century, the temporal ordering of daily life has become increasingly well structured (Adam, 2006; Dorhn-van Rossum, 1996). Clocks and calendars are used as measurements and trackers of time (Adam, 2006; McKenzie and Davies, 2010). Days are divided into working time and leisure time, schools run during certain hours of the day, and the end of one working week is marked by the arrival of the weekend (Adam, 2006; Dorhn-van Rossum, 1996). Clock time and calendar time are cyclic in character, and the six basic cycles are minutes, hours, days, weeks, months and years. When investigating the doings of reading by listening, three of these will be in focus. These can be conceptualized as three different cycles of time: *daytime*, *weektime* and *yeartime*. Data regarding these different cycles supply separate forms of insights regarding reading by listening and timespace.

The spatio-temporal audiobook practices can be studied through the lens of Schatzki's (2010) activity timespace theory. Based on the work of Heidegger, activity timespace is opposite from, and can act as a complement to, the separate concepts of objective time and objective space. Objective time and space are, according to Schatzki (2010), autonomous from both human action and consciousness. While humans may both perceive and act on objective time or space, it would also occur without them. The invention of the clock and the calendar is the prime example of how people may measure objective time and organize themselves according to its succession (Schatzki, 2010). Though often understood as two separate phenomena, Schatzki notes that time and space are connected and calls unified time and space activity *timespace*.

These timespaces are the fundamental features of human activities (Schatzki, 2010). Data related to *daytime*, *weektime* and *yeartime* supply different insights regarding what people do with their time. Even though temporal data will be in focus in this study, the

theory of timespace suggests that time and space are intrinsically connected and together they form the essential aspect of action. Humans navigate objective time through routines, that is, we tend to do the same kind of activities at assigned places such as at home, at school, in a restaurant or on public transport. While quantitative temporal data, such as collected for this article, are incomplete, it can still serve as a foundation for some guesswork regarding situated practices. Timespaces are either derived from, or are dependent on, social practices (Schatzki, 2009). Even though activities may be similar, they are characterized, and individualized, by the objective times and spaces in which they occur.

In this article, a quantitative dataset will be used to infer clues to the temporality of the activities of remediated reading by listening. Involved activities take place in literally thousands of places in Sweden and involving a myriad of different practices. Nonetheless, data on the temporality of audiobook reading will supply insights on the possible timespaces.

Method

In order to acquire data about when people listen to streaming audiobooks, it became necessary to gain access to transaction logs detailing the use of a digital audiobook subscription service. Such nonintrusive methods have been used to collect information on user behaviour in various digital collections (Huurink et al., 2010), including study of temporal aspects of use (Jansen et al., 2005). This method was chosen as it details the actual usage of the chosen platform and is able to reveal user patterns from a large group of users. This type of information would be difficult to obtain in any other way. There are ethical problems involved in collecting personal data in this kind of investigation. In order to avoid such issues, it was decided not to attempt access to the transaction logs themselves. Rather, queries would be provided to a subscription service, which would supply the authors with statistical results. Therefore, no personal data were collected.

A collaboration was set up with *BookBeat*, a Swedish subscription service for digital books active in several European countries. In this study, only the users on the Swedish market during the 12-month period between April 2017 and March 2018 are included. *BookBeat* was unwilling to share the exact number of subscribers during the time of data collection, probably due to the competitive market. This is one of the drawbacks of collaborating with a company. However, this is compensated by a much larger dataset than would probably be possible otherwise. Although it is difficult to say exactly, it is probable that the data consist of at least 80,000 users. This is an exceedingly large dataset compared with most conventional studies on media habits, which usually build upon a few thousand respondents.

Four questions were formulated by the authors that would make it possible to understand the specific patterns of reading among young people, men/women and the whole group of subscribers. The cyclic notions of *daytime*, *weektime* and *yeartime* were used to understand data on reading in connection with temporality. The four questions could therefore be formulated the following way:

1. How many minutes per day does the average BookBeat user read audiobooks? What is the use of the average man/woman in comparison to the average young man/woman?

2. How is the reading distributed over the day for the average BookBeat user? Is there a difference in use between the average man/woman and young man/woman?
3. How is the reading distributed over the days of the week for the average user? Is there a difference between the average man/woman and young man/woman?
4. How is the reading distributed over a year for the average user? What is the use of the average man/woman in comparison to the average young man/woman?

Informed by these questions, *BookBeat* carried out log searches within their system, providing the authors with statistical data in the form of averages. These data did not contain enough information to calculate median levels or standard deviation. Visualizations of the data were created by the authors, offering a descriptive overview of the time-related usage of audiobooks on the *BookBeat* platform.

Limitations and ethical considerations

It is worth noting that the people in this study are presumably very interested in reading, as they are willing to pay a monthly fee to a subscription service for digital books and must therefore not be taken as a representative sample of the larger population. The pricing for the audiobook platforms active on the Swedish and European market is currently set at about 40–50% higher than the prices for streaming services offering film, TV and music.

The category of ‘young men/women’ is always problematic. Initially the intention was to collect data on 16- to 19-year-olds, the age group typically in upper secondary school in Sweden, with the larger group of all users. However, since users need to be 18 to register with *BookBeat*, it would not be possible to specifically study younger teenager in this case. Therefore, the age group of young adults was chosen to be people between ages 18 and 20 years. Included into the category of all users was anyone with a Swedish *BookBeat* account who listens to audiobooks.

While the data reveal temporal aspects of audiobook use, it cannot reveal how, or in what places or situations, that audiobook reading was carried out. It is also impossible to know whether the user was actively listening to the book, and if it was the owner of the account doing the listening. It is possible that a subscriber may share the access to the account with another person, for instance, a parent might let their child listen to an audiobook using the parent’s account. However, since it would only be possible to play one book at a time on a single account, multiple users could not use the same account simultaneously, unless listening together in the same time and place. Nonetheless, it is likely that listening is carried out predominantly by the account holder. While being aware of these limitations, the data gathered will be used following two assumptions: (1) the person playing the book had the intention of reading, and so all minutes will be considered actual reading minutes and (2) it will be assumed that the person registered to the account is the one doing the listening. These assumptions are quite reasonable given the extensive amount of data involved.

These data were collected by *BookBeat* and provided to the authors during the spring of 2018, before the implementation of the new European data protection law, the General Data Protection Regulation (GDPR). Again, it is important to note that individual user’s transaction logs were not studied or accessed by the authors. Nor has there been any focus

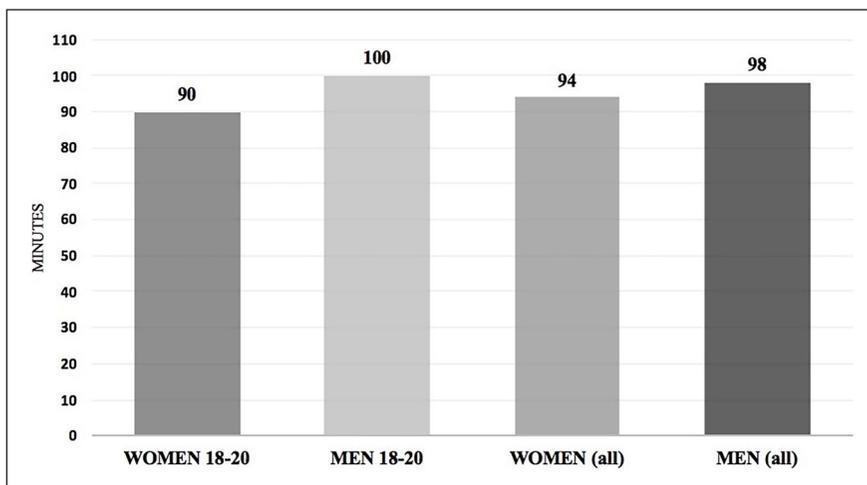


Figure 1. Minutes spent listening to audiobooks per day on average.

on what type of books the users read. Instead, the study has only been concerned with temporal audiobook usage patterns of the whole group of subscribers. At the time of data collection, it was stated in the service user agreement that the customers usage of the platform would be documented and used for development, marketing or personalized recommendations. It was also stated that *BookBeat* may share information with their collaborators.

Results

In the following, four figures based on the transaction logs provided by *BookBeat* will be presented and analysed.

Daytime reading

During a cycle of daily routine, various activities take place. Some of these are routinized and performed similarly or almost in the same way every day, such as wake up activities, meals and bedtime routines. There are other routines that are different depending on work/school day or weekend. Traditionally, reading has been part of daily routines for many people, such as reading before going to sleep. In the case of reading by listening facilitated by subscription services, it should be noted that reading material is ubiquitously present for smartphone owners.

Figure 1 is concerned with ‘daytime’, that is, how many minutes per day, on average, that different *BookBeat* user groups listen to audiobooks. The data are from the 12-month period starting with April 2017. Young women between ages 18 and 20 listen on average 90 minutes per day, while young men of the same age group listen 100 minutes per day. Meanwhile, the larger group of all women with a *BookBeat* account listen 94 minutes per day and all men 98 minutes. Given the questions that we want to investigate, generational

and gender differences, it is striking that there are only marginal statistical differences among these groups. Interestingly, young men have the highest daytime reading of all groups, with men of all ages close behind. This means that the men in this study on average listen slightly more than women, which is noteworthy considering the common notion that men read substantially less than women (Asplund and Pérez Prieto, 2017; Höglund and Wahlström, 2018; Ross et al., 2018). These data show that all the groups studied in this material average around the same amount of reading time on a daily basis. This is notable as, again, studies on reading books tend to show a gender gap. *The current study implies that remediation from reading by seeing to reading by listening using a subscription service may serve to close this gender gap.*

The second major takeaway from the statistics is the substantial time involved. In all, 90–100 minutes per day on average is a considerable amount of time spent reading every day, contrary to common claims that young adults and men read very little. Since the amount presented here is the average amount, there will also be *BookBeat* users who read less and users who read more.

As of writing, there is no other study to compare with in regard to the quantity of time actual users spend specifically on audiobook services each day. However, it should be emphasized that this is a large number even when compared to other activities as measured in other studies. According to a recent large Swedish survey, the average person spends 22 minutes reading books of all formats daily, with audiobooks representing only three of these minutes (Nordicom, 2018). This can be compared with 50 minutes on social media, 52 minutes playing music and 97 minutes watching television. Young adults aged 15–24 are fairly similar to the larger population concerning books and television but spend exceedingly more time on social media and music, with 121 minutes per day on social media and 109 minutes listening to music (Nordicom, 2018). These figures represent estimations of time spent using various media from the larger population, including nonusers, as opposed to the statistics gathered for this article which only represent users of audiobooks on the *BookBeat* platform.

In studies by Rothbauer (2009) and Cedeira Serrantes (2016), the participants expressed a clear wish to read more but felt they lacked the time for it. Their findings show that many people want to read more than they actually do and actively attempt finding solutions in order to be able to do so, in one form or other. The remediation of the printed book into the subscription-based digital audiobook makes it easier for people to read while doing other things. By reading by listening, and by having the audiobook streaming through a smartphone, the eyes and hands of the reader are unrestricted, except when using the app to start or stop the book. This offers them the possibility to engage in other activities while also reading their book, thus perhaps finding time for reading where there was not time before. *Results from the current study, then, implies that remediation from reading by seeing to reading by listening may serve to increase daily time spent on reading by average persons.*

Figure 2 allows for a closer and somewhat different view of ‘daytime’, illustrating how audiobook listening using *BookBeat* is distributed over an average day in January 2018. At first glance, it becomes apparent that the reading is distributed quite evenly throughout the day, although with a dip between 1 a.m. and 5 a.m. for all users. This decline in reading during the night is to be expected, as most are likely to be asleep. There is also a slight



Figure 2. The distribution of audiobook reading during an average day.

decline starting from 5 p.m. until about 9 p.m. This drop in audiobook reading is interesting, as it falls during a time that would be considered traditional leisure time. Most people would be out of school or work after 5 p.m. and it could be expected that a leisure activity such as reading would be carried out during this time. Between 10 p.m. until about midnight, there is a rise in reading again, which assumedly would be bedtime reading.

There is a surprisingly continuous reading activity going on during the day, from about 7 a.m. to 4 p.m. There are some variations between the groups during this time, with the group of all women reading slightly less than the others, young men slightly more, and all men and young women somewhere in the middle. During the daytime, it could be expected that a majority of people would be in either school or work. Although a smaller part of the user groups may be out of education and work, or working during odd hours, they should not significantly impact the statistics for the whole group. Therefore, it must be assumed that many people listen to audiobooks during the day, possibly during breaks and at lunchtime. Some people may also have jobs where audiobook use is acceptable during the working day, and some students may be allowed to listen to audiobooks during lessons. It is possible that the flexibility and portability of digital audiobooks mean that they could listen for a few minutes here and there, instead of just for long stretches of time. However, these are only speculations as to why the data look the way it do; the timespaces of these listening activities would need to be researched further in order to better understand what is going on behind the figures.

Weektime reading

While a substantial amount of activities is routinized, and some may be distributed unevenly over the cycle of the week. Working days, Monday–Thursday, are for many people

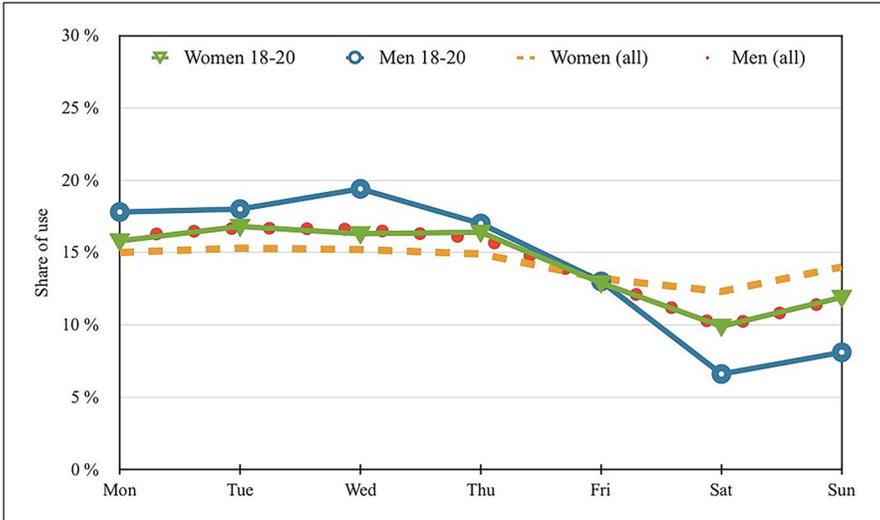


Figure 3. The distribution of audiobook reading over the days of the week.

similar in character. This should particularly be evident in such a large dataset as is examined in this study. It is common that activities during Friday, often the last day of the working week, include somewhat different activities. The weekdays of Saturdays and Sundays are not only similar but can also vary in some ways. Again, these are broadly adopted norms within Western societies. As such, we expect them to be formative for the data. Individual patterns from people working shifts or work on the weekend will be embedded in the data but not as explicit as the most broadly available patterns.

Figure 3 concerns ‘weektime’ during the 12-month period between April 2017 and March 2018 on the *BookBeat* platform. Women of all ages have the most evenly distributed reading over the week, with only the slightest decline over the Saturday. The other groups of young users and all men read more during the weekdays, with a clear decline in their audiobook use during the weekend. Young men stand out slightly with a steeper decline in reading over the weekend and a more distinct increase in listening during Wednesdays.

The weekend decline is interesting in relation to what was revealed in Figure 2, where it seemed like a large amount of listening is carried out during daytime, in what would be considered the school day or working day, or in close proximity to it. If the listening is related to school or work, this would make the decline over the weekend understandable, as most would be out of school or work during Saturday and Sunday. It is possible that there is a social aspect to the drop in listening during evenings, shown in Figure 2, and the drop during weekends, shown in Figure 3. These traditional leisure times may be when people are engaging socially with their friends or families or taking part in other activities where audiobook reading would not be suitable.

It is also possible that the various routinized activities of the weekdays accommodate for audiobook reading better than weekend routines. Possibly, audiobook reading, with

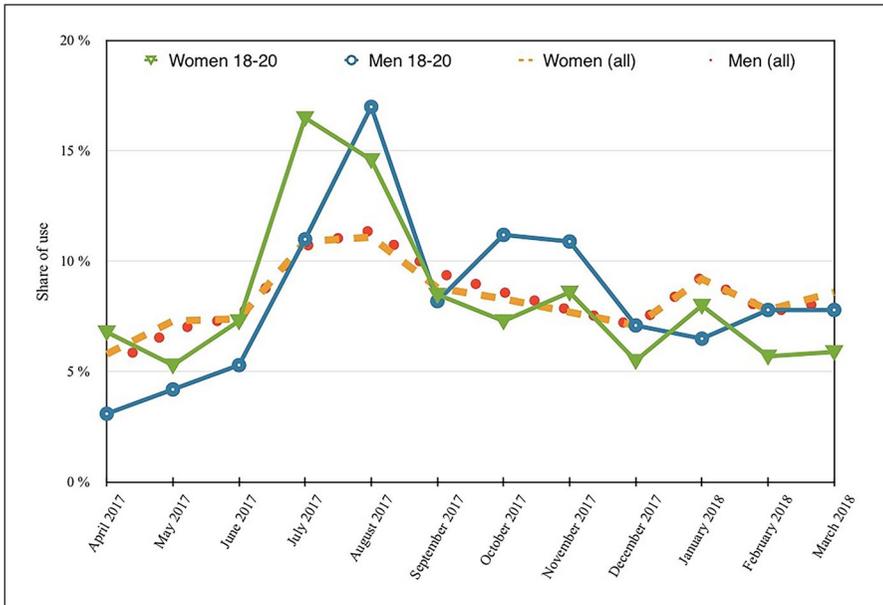


Figure 4. Distribution of audiobook reading over a year (April 2017–March 2018).

its mobile affordances, is related to being in motion, such as commuting, exercising or doing errands. If this is the case, perhaps people choose to engage in other forms of reading when they are at home and have the opportunity to sit and hold a book in their hands. Perhaps, reading by listening is not competing with print or e-book reading but rather with other types of audio such as listening to podcasts, radio or music in situations where headphones are suitable, but when perhaps reading by seeing is not.

Yeartime reading

Figure 4 displays ‘yeartime’ reading on the *BookBeat* platform from April 2017 to March 2018. Young users differ from the larger group of users in that their reading is much more varied throughout the year, with greater increases and declines compared to users of all ages. The female and male groups of all users display a more even listening distribution throughout the year, although with a moderate increase over the summer months and at the start of the year. The young users have a strikingly visible rise in listening throughout the summer months, with young women listening more during July and August, and the listening of young men significantly increasing during the month of August. There are also other, more modest, spikes in reading throughout the year, such as young men’s increase in October and November, and an increase in listening for young women in January, following a decline between November and December, similar to that of the groups of all men and women.

The stark increase of young people reading during the summer months stands in contrast to what was shown in Figures 2 and 3, where it seemed young people did most

of their reading during the day on weekdays, appearing as though their reading was disconnected from leisure time, rather linked to the school day or the working day. Between the months of June and August, Swedish schools and universities are closed for holidays, and the month of July is traditionally a holiday month for people in the workforce as well. Many young people do have summer jobs during their holiday. One possible explanation to the stark increase in audiobook reading is related to summer jobs. It is feasible that many young people are employed to do routine tasks where it is possible to listen to a book while working. An alternative explanation can be that young people out of school have other timespace practices during the summer, resulting in different reading practices.

It is also worth noting the slight increase for young women and all men and women between December and January, this is also a time where many people have time off. Schools usually shut down for 2 weeks over the Christmas and New Year period. Contrary to the other groups, young men have a small decline in reading during this period. There are difficulties, as noted before, in explaining such trends in the data. It is only possible to speculate without access to more data.

It is quite notable that yeartime patterns of reading for all men and all women are practically identical. Again, this study tends to indicate that remediation from reading by seeing to reading by listening may serve to close the gender gap.

Although perhaps obvious, it is worth noting that the statistics for the whole groups of *BookBeat* users reveal little about individual usage. One person may be doing all their reading as bedtime reading only, while another is listening in short spurts throughout the whole day. The spikes in the various figures represent times where a large group of people read audiobooks at the same time.

Discussion

Conventional reading by seeing tends to be restricted in various ways. These restrictions become evident when alternative formats and practices emerge such as reading by listening using subscription-based audiobooks. Even though it is possible to perform reading by seeing when standing or walking, it is cumbersome. To a substantial extent, traditional reading practices have been performed either sitting or lying down. The visual senses need be totally focused on the words on print and the primary orientating appendices of humans; hands and arms, are usually engaged by holding the book. Contrary to this, reading by listening frees up both the visual sense and the hands for other tasks. In addition, there is no need to sit or lie down. It is perfectly possible to walk around and perform various tasks.

What emerges is therefore almost the inverse of traditional reading by seeing. Earlier it was mostly performed seated or lying down. With reading by listening it instead becomes mostly standing or walking, as audiobook use is a highly mobile form of reading. This is one way in which the timespaces of reading by seeing, which tends to be stationary, and reading by listening, with the potential of mobility, differ. The possibility of mobility afforded by reading by listening creates different timespaces. Although the audiobook has always been more mobile than the printed book, books on tape became popular with commuters in the 1970s (Rubery, 2016), previous formats

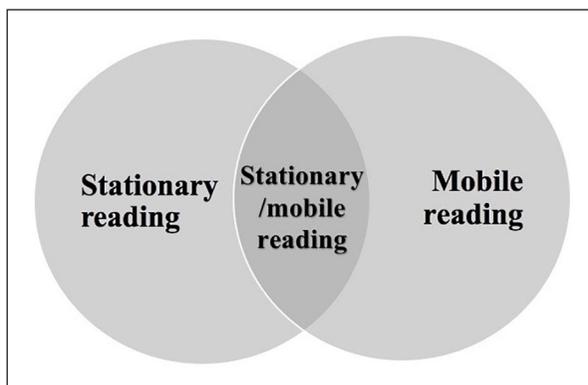


Figure 5. The reading mobility shift model.

were less mobile and much more inconvenient to use on the go compared to the subscription-based audiobooks of today.

In order to discuss the practices connected to the remediated book, it is useful to introduce two new concepts, describing two modes of reading: *stationary reading*, which can be associated with reading by seeing, and *mobile reading*, associated primarily with reading by listening. With reading by listening, it becomes possible to engage with a narrative while driving, biking or walking, for instance. That said, there are certain practices of reading where mobile and stationary reading overlap. In certain mobile situations, it is possible to read by seeing, such as when riding on a bus or train. This thus becomes *stationary/mobile reading*. These different modes of reading are illustrated with the ‘reading mobility shift model’ in Figure 5 below.

Figure 5 illustrates that the remediation of the printed book is connected to a mobility shift. This also involves a shift in focus. Reading by seeing tends to need a different type of focus compared to reading by listening. Traditional visual reading practices have a strong dependence on the eyes and body of the reader. Simply put, if the eyes or body of the reader is needed elsewhere at the same time, they need to stop reading. There is also a particular form of decoding of text carried out when reading with the eyes, which demands concentration. This does not lend itself well to also carrying out other tasks at the same time. Reading by listening meanwhile does not demand the use of the eyes or the body, meaning the reader can focus on other things at the same time as listening to a book. However, a different form of focus is needed when reading by listening; without this concentration, the reader would lose comprehension quickly. In both cases, the reader needs to create meaning from the book, and it is this similarity that marks both these activities as reading in this study.

There are different well-established notions of time in society, such as the division between working time and leisure time. It is expected that during working time, traditionally 8–4 or 9–5 on weekdays, people engage in work or education. Evenings and weekends are often considered leisure time, or free-time, as people are out of work or school and may engage in whatever activities they choose. However, it appears as

though in the digital age, leisure time activities are changing (Vilhelmson et al., 2018) and the separation between these times are becoming blurred. Digital culture makes it possible to work from home and carry out leisure activities at work or in school (Agger, 2011; Vilhelmson et al., 2018). This is also indicated in the findings of this article, where it is revealed that *BookBeat* users listen to audiobooks to a surprising degree during daytime on weekdays, with less during evenings and weekends. This continuity in reading over different times throughout the day, and during the working day, could in part be due to the remediation of the printed book, and analogue audiobook, into subscription-based audiobooks. As books are repackaged as streaming content, they become accessible in new ways. Digital audiobooks are especially mobile, which is illustrated in the mobility shift model. This implies shifts in the timespaces of reading that require much further study.

Conclusion

Subscription-based audiobooks are growing substantially in popularity, not least on the Swedish market where this study was performed. This is a significant remediation of not only previous audiobook formats and the ancient tradition of listening to books being read aloud but of the printed book and the practice of reading by seeing. The rise of subscription services for digital audiobooks is making reading by listening an increasingly common mode of reading. This study has discussed empirical data collected about reading by listening using *BookBeat*, a subscription service for digital audiobooks. With the lively emergence of subscription-based services overall, and the lack of attention in previous research to audiobook services, the results presented here must be seen as substantial and, to some extent, surprising.

With a focus on the timespaces of reading by listening, and especially on the temporalities on audiobook reading during daytime, weektime and yeartime, this study revealed that users listen to audiobooks during slightly different times than expected. Due to broadly adopted routines in western societies, certain temporalities are connected with certain spaces and activities. The patterns of daytime and weektime were fairly similar across the different groups studied, and a large part of the reading was carried out during, or in relation to, the working day. However, there was a marked difference as to yeartime reading practices. Particularly, young people had significantly higher increases in reading during the summer months, in direct relation to the summer holiday. Apart from this, there was no marked difference in the reading patterns of young people compared to the larger group of all users of *BookBeat*. The reading was very similar both in distribution over daytime and weektime and in the amount being read each day on average. Furthermore, there was no significant gender difference in the reading practices revealed by the data. Men spent a little more time reading each day compared to women, but their reading was otherwise very similar in regards to the distribution over daytime, weektime and yeartime. There was, however, a slight dissimilarity between young men and young women, with young men reading on average 10 minutes more per day compared to young women. This reveals that the remediation into reading by listening using subscription-based audiobooks may close the gender gap so common in traditional forms of reading by seeing.

Furthermore, this study found that the users of *BookBeat* spent significant amounts of time reading, between 90–100 minutes per day on average. This implies that the remediation from reading by seeing to reading by listening may serve to increase the daily time spent reading, especially due to the mobility of subscription-based audiobooks.

The difference in mobility between reading by hearing compared to reading by seeing prompted the introduction of three concepts in this article, *stationary reading*, *mobile reading* and *stationary/mobile reading*. While stationary reading mainly was associated with traditional forms of reading by seeing, mobile reading was in turn associated with reading by listening. Stationary/mobile reading refers to travelling situations where there is a choice between the two modes. When travelling as a passenger, it is equally doable to read by seeing as by listening. For instance, sitting on a bus, it is possible to select the preferred reading mode. Buses all over the world have traditionally been places where passengers have engaged with various reading materials such as books, newspapers and magazines. However, today there is a choice. The reader frequently chooses to don a headset. Indeed, the listening equipment may already have been engaged before boarding the bus.

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