The Relationship between Audio Books and Reading Habits in a Digital Era

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[Abstract]

This paper intends to investigate the relationship between reading habits and audio books under the niche market of commercial downloadable audio books. In spite of the booming market of commercial audio books, the reader experience of audio books is still an under-researched area. This is the first paper aiming to investigate how commercial audio books (not audio books for the people with visual impairment) change people's reading habits in a digital era. The results showed that most participants would think listening to audio books can be equivalent to reading and audio books were more like supplements to printed works for them. Generally, participants in this project thought listening to audio books was more flexible than reading print books. In addition, it was found that downloadable audio books could help improve the experience of listening to audio books (e.g. bigger file space and smaller device size), but that they also brought new problems. According to the users' experience of listening to audio books, it is recommended that suppliers adjust their pricing model of downloadable audio books to gain more sales and adopt DAISY format to provide a better navigation system for audio books users.

Keywords: commercial audio books; reading habits; downloadable audio books; digital era

I. Introduction

In a digital era, digital content resellers (DCR) have been impacting traditional publishing in many ways (Young, 2009). Digital content resellers such as e-book and audio book suppliers purchase content from content manufacturers (e.g. a book publisher) and sell it again. In recent years, the rise of commercial audio books for leisure listening has drawn more and more attention from the publishing industry (Philips, 2007). One thing making commuters and vacationers turn to audio books is definitely that audio books can allow these avid readers to multi-task in the hustle and bustle of city life (Audio Publishers Association U.S.A., 2010). For example, one can still fold the laundry or washing the dishes while he or she is listening to an audio book. The number 1 bestseller of i-Tunes in October 2005 was not a pop song but a "book" (Keegan, 2006). The book was an audio version of the World is Flat by Thomas L. Friedman.

Another factor affecting this market is iPod¹ culture which is a term especially referring to the privatization of soundscape in the public space with the prevalence of

portable technology (Szeliga, 2009). The iPod culture has introduced a totally new medium into the market of audio books and attracted new audiences different from people listening to tapes and CDs for audio books (Block, 2007) such as teenagers and urban commuters.

In spite of the booming market, the reader experience of audio books is still an under-researched area (Philips, 2007). In addition, it is really difficult to get the accurate statistics of commercial audio book market as publishers and resellers are reluctant to publicize their digital content sales (Young, 2009). Therefore, the main aim of this paper is to investigate how commercial audio books change people's reading habits under the niche market of audio books.

II. Overview on Audio books

A. When reading meets listening

People have long distinguished reading and listening as two very different activities. So far, no precise relationship between reading and listening comprehension has been agreed generally in research (Irwin,

¹ iPod was introduced by Apple in 2001 as a portable device for storing and playing audio files. The term, iPod, although a specific device name has become a symbol of mp3 players, a small, portable device which can contain several albums and audio files(Philips, 2007).

2009). However, an audio book itself is a hybrid medium (Philips, 2007) combining the text-based and acoustic world. There are critics who doubt the substitution of audio books for reading. Those critics argue that audio books already decoded and interpreted by narrators would interfere with the imaginative process of reading. Besides, listening may not generate comprehension comparable to reading (Irwin, 2009). One thing for sure is that most audio book listeners are not substituting the audio format for the printed one (AudioFile, cited in Mediatore, 2003). Audio books for them are more like supplements to printed works.

Apart from allowing listeners to multi-task, one of the greatest features distinguishing audio books from print books is that audio books can turn reading itself from a solitary activity to a shared experience. For example, a family can share a talking book in the living room after dinner or in a car during a journey. In addition, by putting narration, sound effects, and music together, audio books definitely have the potential to change the nature of reading and create a totally new genre on its own (Philips, 2007). To get a better understanding of the impacts this hybrid medium has on people's reading behavior, more samples need to be taken for more accurate research.

B. History of audio books

An audio book, a recording of primary

spoken words, was initiated mainly for those with visual impairments. In 1931, the American Congress established the talking book program called "Books for the Adult Blind Project" to help those who had difficulties reading print. In the following year, the first talking books were developed by The American Foundation for the Blind (BookAlley.com, 2006). Being easier for people to learn than Braille, talking books was first conceived to be very helpful in the U.K. in the years after the First World War in response to the thousands of soldiers who were blinded or visually impaired in action (British Broadcasting Corporation, 2005). Now, as the definition of books and publishing is evolving with rapidly-changing technology, audio books are changing as well. Audio books are no longer materials just for those with sight problems.

C. The Booming Market of Commercial Audio Books

As digital audio books can be easily downloaded to portable device such as iPod (Nawotka, 2008), there is a booming market for commercial audio books as people gradually get used to leisure listening to books instead of reading them (Engelen, 2008). The turning point for audio books moving from the realm of service for those with visual impairments to a leisure commodity for all consumers was the prevalence of portable cassette recorders

(Sony Walkman) (Philips, 2007). It was such a fresh experience for most consumers to be able, for the first time, to "listen privately in public". Today, with an MP3 player, piles of CDs or cassettes can be easily replaced with several albums stored on only one small gadget.

D. Technical aspect of audio books-DAISY and DRM

This research also aims to learn how technical aspects of audio books affect people's experience and attitude toward audio books. For example, to seek a better navigation system for audio books (e.g. to search specific content in an audio book) is one of the most-wanted user needs for audio book users. Where technology can benefit the visually impaired more is that it allows users to "bookmark" their audio books and search the whole content while still being able to listen to the corresponding audio output, this technology is called DAISY (the Digital Accessible Information System). The DAISY format of audio books was developed by DAISY consortium in 1996 in order to standardize the recording of audio books and to provide a navigation structure for audio books. DAISY books are now available through mp3 files and DAISY CDs with DAISY reading software and this format has become globally accepted (Engelen, 2008).

Another important technical aspect

of audio book distribution through digital formats is copyright protection. Although the largest audio book provider, Audible. com, still provides its audio books in a DRM (Digital Rights Management)-protected format, a lot of important publishers (e.g. Random House and Penguin Group) in America had decided to phase out piracy protection on audio books in 2008 (Stone, 2008). For one thing, the DRM-protected formats or CDs often frustrate customers by hindering them to copy in general and sometimes by hindering playing the legallyacquired files on a normal device (Engelen, 2008). Another aspect is that this approach allows a variety of online retailers to start to sell audio book downloads and at the same time prevents one single store owner (e.g. Apple i-Tunes Store) having too much influence.

E. User study of audio books

According to a consumer survey in 2001, over 75% of audio book listeners were female, and commuters are definitely one of the target groups of audio book market (Audio Publishers Association U.S.A., 2005).

Other user studies such as narrators, genres, and format preferences all influenced the acoustic characteristic of audio books. For example, one of the most significant user inclinations of audio books is that choosing what to read heavily depends on

who is the narrator. As to genres suitable to have an audio version, not every print book is suited to the spoken format (Mediatore, 2003). Mystery/Horror/Suspense was found out to be very popular in the Audio Publishers 2001 Consumer Survey (Audio Publishers Association U.S.A., 2005). It is universally accepted that most audio book listeners prefer unabridged over abridged (Greene, 2006; Mediatore, 2003). As to the technical format. CDs have been the majority in the audio book market since 2005 (Audio Publishers Association U.S.A., 2005, 2009; AudioFile, 2005). However, the greatest growth in the audio book market was the downloadable format according to the latest survey of Audio Publisher Association of America (Audio Publishers Association U.S.A., 2009).

However, it is still very rare for research to directly identify the impacts audio books have on people's reading behavior such as occasions and speed of reading. This paper aims to find out more about the relationships between audio books and people's reading habits.

III. Methodology

A. Methods of Investigation

The main methods used in this research were a questionnaire (appendix A) and interviews (appendix B), and the gathering of the qualitative data is the

primary focus. The qualitative study is suited to this research because qualitative research emphasizes the illumination and the understanding of a phenomena rather than predicting future behavior (Powell & Connaway, 2004). However, quantitative data is still needed in this research such as the background questions (e.g. average age or reading hrs per day) or acceptable price for audio books. Quantitative data and qualitative data are complementary to each other and the two together can make for good research because there are always strengths and weaknesses in a single method (Jick, 1979).

B. Sampling

The questionnaire aimed to understand people's general impressions of audio books, so people who were qualified to fill out this questionnaire should be anyone. However, the subjects of this survey were still focused on adults because the market of audio books continued to be targeted at adults according to the latest survey in 2009 (Audio Publishers Association U.S.A., 2009). In addition, probability sampling was not suggested for this research because of the difficulties in getting a big enough sample to represent the total population in such a short time (Powell & Connaway, 2004). The link of the questionnaire was posted on audio book forums: Librivox.org, Audible.com on Facebook and Audible.co.uk on Facebook to gain responses. Additionally, a multiplerecipient mail was also used to send out the link to faculty and students of the University of Sheffield. Finally, 104 responses were collected. As to the interviews, 5 current audio book listeners and 6 new audio book listeners were recruited eventually.

C. Data Analysis

Most answers in the questionnaire were closed questions. All results of these closed questions were exported to graphics (mainly histograms and pie charts) first. In addition, different filters (e.g. respondents who had listened to audio books) were used to analyze the results (e.g. how many percent of respondents who had listened to audio books think of listening to audio books as one kind of reading). The answers of open-ended questions in the questionnaire were coded. For example, to categorize the occupations of respondents to its career category was coding the data (e.g. assigned piano teacher and high school teacher to the category "teacher"). Then the content of interviews with current and new audio book listeners was analyzed. One of the greatest principles of analyzing qualitative data is to find the regularities in the data (Robson, 1993). Analysis of the interviews was focused on audio listeners' attitudes toward listening to audio books as on kind of reading and the relationship between their reading habits and audio books.

IV. Results

A. Questionnaire

The questionnaire was available on Surveymonkey.com from the 12th of July in 2010 and closed on 22nd of August in 2010. The final number of responses was 104, and the completion rate was 92% (96 respondents). If any respondent skipped any question or a filter was used, "n" was used to represent the number of the sample.

1. Background questions of respondents

It was found that there were more female listeners (68.4%) than male listeners (31.6%) among all respondents (n=79), and this result was quite consistent with the consumer survey by Audio Publisher Association of the U.S. (Audio Publishers Association U.S.A., 2005). The average age of the respondents who had listened to an audio book was 37 (n=76), from youngest 18 to the oldest 62. As to the careers of audio book listeners, over 23 % of the respondents (n=73) were students, 11 % of the respondents were academics (see Figure 1). One career worth mentioning was Braille transcriber. Among 79 respondents who had listened to an audio book, respondents with a bachelor degree were the majority (47%).

Respondents were also asked about the number of print books they read in a year. Among 47 respondents who listened to more than 4 audio books in a year, 40 claimed that they also read more than 4 print books in a year (see Figure 2). The result was consistent with the point "audio books are more like supplements to text-based reading" (Audio Publishers Association U.S.A., 2005; Mediatore, 2003).

The fact that the dominant device used for downloadable audio books was iPod (Young, 2009) was also confirmed in this survey. A filter was used to get the respondents who had listened to an audio book and the format of the audio books they listened to was mp3. Among 59 respondents who passed the filter, 28 (47%) people either used iPod or iPhone (see Figure 3).

2. Respondents' definitions of audio books

It was found that most respondents thought an audio book must contain 3 elements: "from a print book or text-based material", "narrator" and "acoustic". Generally, most respondents defined an audio book as a written book read aloud for listening.

3. Listener's experiences of using audio books

a. Source

Free downloads from the Internet was found to be the most popular source to get

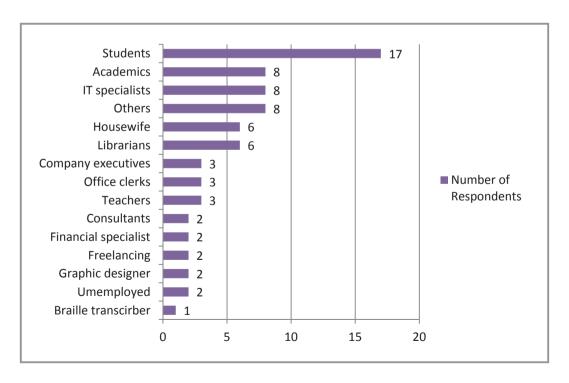


Figure 1: Jobs of respondents who had listened to an audio bok (n=73)

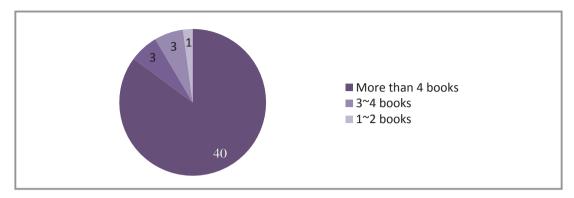


Figure 2: The number of print book read by respondents who read more than 4 audio books in a year (n=47)

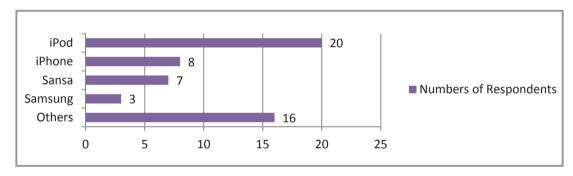


Figure 3: The brand of the respondents' mp3 player (Respondents who had listened to an audio book and the format of the audio book was mp3, n=59)

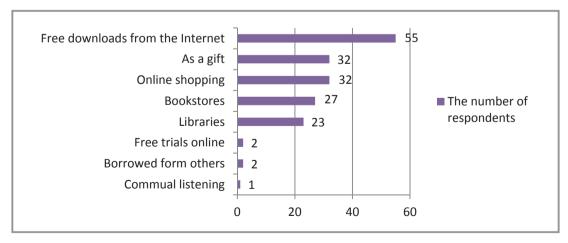


Figure 4: How did you get the audio books? (n=76)

an audio book (see Figure 4). Bookstores and libraries were also very popular places for these respondents to get audio books. One of the respondents listened to audio books because of the communal listening with his wife.

b. Formats and Categories

The fact that respondents listened to not only one format of audio books was found according to the result of the question "what format of audio books do you listen to? (see Figure 5) "According to the result, 74% of the respondents (n=77) still used cassettes to listen to audio books. CDs and mp3 files were also very popular among audio book listeners. Apart from these 3 popular formats, broadcasts and podcasts also had certain audiences (respectively 21% and 39%). These result might imply that lots of audio book listeners listen to more than one formats of audio books (e.g. listen to CD in car, whereas listen to mp3 while jogging).

As to categories of books respondents thought were especially suitable to have an audio version, language learning and fiction were assumed to be the most popular categories. Books for children came after these two categories (see Figure 6).

Lots of respondents did not know how much they were willing to pay for an audio book. However, there were still over one quarter of audio book listeners who were willing to pay \pounds 6-10 to get an audio book.

This result might due to the developing market of commercial audio books and the fact that customers had not gotten used to a certain commercial mode such as downloadable audio books or online audio books.

c. Occasions

The occasion on which audio book listeners listen to audio books was also one of the main issues in this research. Most respondents listened to audio books at home (see Figure 7). Cars have always been a very common place for listening to audio books (Irwin, 2009). In this survey, 39 respondents listened to audio books in cars. Due to its multi-tasking feature, many respondents would listen to audio books while doing housework or cooking (see Figure 8). One respondent wrote in the field of "others": anything that doesn't require a lot of attention. This answer might be one of the best descriptions of occasions people listen to audio books.

d. Features

It was not surprising that over one quarter of respondents (n=77) first listened to an audio book when they were young children. Playing an audio book is just like storytelling for pre-literate children and is very helpful for their language acquisition (Kozloff, 1995). In fact, children's audio books represent a major portion of the marketplace of audio books

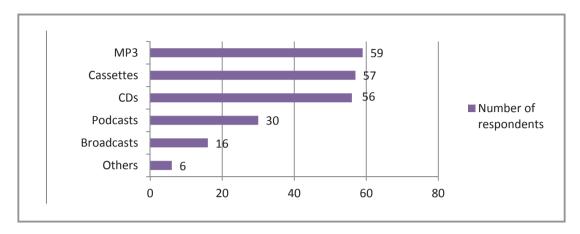


Figure 5: What format of audio books do you listen to? (n=77)

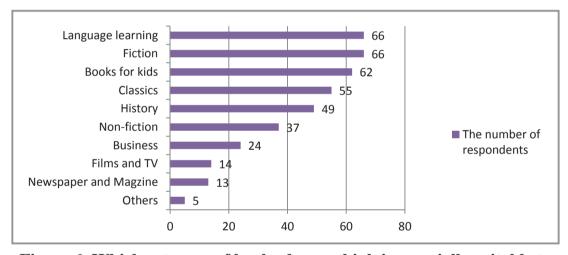


Figure 6: Which category of books do you think is especially suitable to have an audio version? (n=77)

(Audio Publishers Association U.S.A., 2009; Kozloff, 1995). As to respondents' description of their experiences of listening to audio books, the analysis was split into two parts: the benefits and deficiencies.

(1) Benefits

Firstly, "pleasant" and "relaxing" and

"soothing" appeared the most often among all responses. Such a comment was "Very pleasant - it is nice to relax my eyes but still enjoy the pictures in my head." Secondly, allowing multi-tasking was one of the most frequently-mentioned features of audio books by respondents. Such as a comment: "Convenient--it allows me to move around

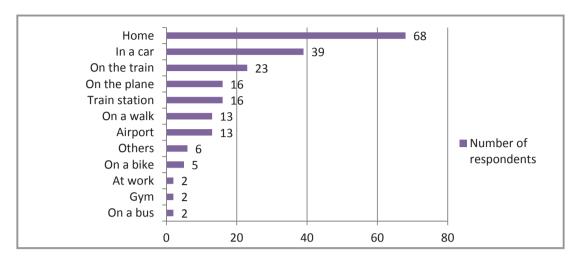


Figure 7: Where do you normally listen to audio books? (n=78)

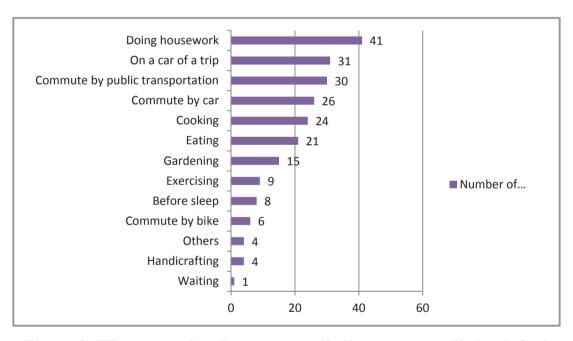


Figure 8: What occassion do you normally listen to an audio book for? (n=78)

the house and do other tasks while keeping my mind busy, as well as allowing me to spend more time on reading than I would be able to otherwise due to my poor vision". A few respondents used 'engaging' and "engrossing" to describe their experiences of listening to audio books, and some respondents also thought listening to audio books could help them get deeper impression of the content of a book. Such a comment was "As I know there are some people around me they have better learning ability from hearing not reading. The voice can enhance their in memory". Last but not least, 2 respondents mentioned that listening to audio books was very helpful for language learning.

(2) Deficiencies

One of audio books' greatest deficiencies mentioned by lots of respondents was that it was difficult to keep concentrating on an audio book. In addition, a few respondents thought it was really difficult to skip an audio book backwards or forwards.

Although communal listening is one of the features distinguishing audio books from traditional print books, over 79% of respondents (n=77) preferred to listen to audio books alone. This might be affected by the personal experience inherited from reading print books and devices people use to listen to audio books. For example, people normally listen to audio books with mp3 players through headphones, and it is hard to share with people through headphones.

4. Listeners' attitudes toward listening to audio books as one kind of reading

Among the 93 respondents in this survey, 27 thought listening to audio books

and reading were two different things and 57 assumed listening to audio books was one kind of reading. The main reasons respondents thought listening to audio books was different from reading were:

- a. Reading implies the sense of sight.
- b. Listening can be the equivalent of reading, but not the same.
- c. Reading involves making an interpretation of a work on one's own, but listening to audio books doesn't.

B. Interviews

A total of 11 participants were interviewed; 5 of them were current listeners and 6 were new listeners. Questions for current audio book listeners were focused on the reasons they turned to audio books and the relationships between their reading habits and audio books. The other set of questions was designed for new audio book listeners, and the new listeners were asked to talk about their experience of listening to audio books. Their attitudes towards downloadable audio books were also one of the key issues this research aimed to find.

1. Interviews with current audio book listeners

a. Background of interviewees (See Table 1)

Table 1: Background of interviewees

	Gender	Age	Job	Educational Attainment	MP3	Audio book channel
Interviewee A	F	35	Management Information Administrator	High school	Sansa Clip	Audible and eBay
Interviewee B	F	22	Student	University	iPod	Naxos, Librivox and bookstores
Interviewee C	F	36	University Lecturer	PhD	iPod	i-Tunes, BBC website and bookstores
Interviewee D	М	60	Librarian	University	None	Libraries and bookstores
Interviewee E	M	45	Novelist	Master	iPod	Audible

b. The reason the participant first turned to audio books

Most participants turned to audio books for certain purposes. Some started listening to audio books out of price and efficiency intention. For example, Interviewee B started listening to audio books because she could get access to online audio book library for free in her university. In addition, she thought listening to audio books could accelerate reading. Interviewee C started listening to audio books for recreation. She thought listening to audio books was relaxing and can allow her to learn subconsciously. She also mentioned that one of the greatest benefits of audio books was not having to use eyes. One participant started listening to audio books serendipitously. Interviewee A originally bought one of the novelizations of the Robin Hood TV series because she thought the reader's voice was "very sexy".

c. The experience of listening to audio books

Every interviewee talked about his/her experience of listening to audio books from different perspectives. Some interviewees compared their experience of listening to audio books with other media. Interviewee A thought the experience of listening to audio books was far more intense than reading a print book. "I do tend to read too fast so can overlook detail, whereas with an audio book, I have to go at the pace of the reader so I get much better sense of place and atmosphere" said Interviewee A. Interviewee D pointed out the main difference between watching TV and listening to audio books. He thought listening to audio books was like

being told stories, and it made children go to bed. "Compared to TV, it is less frantic. You can turn the light off, whereas if you turn the TV on, the light will affect the child and keeps them awake" said interviewee D. In addition, he mentioned the educational function of audio books." My daughter learnt to distinguish the words by turning the pages at the right place and by matching them" said interviewee D.

Interviewee B shared her experience of how to pick audio books. She mentioned 3 important elements of audio books: (1) voice and tone of a narrator, (2) quality of recording, (3) background music. Nevertheless, the first element was everything for an audio book for her. "I think the VOICE of the presenter is everything" said interviewee B.

d. The differences between audio books and print books

"More dramatic", "portability and flexibility" and "communal listening" were three points of audio books which the interviewees thought different from print books. Both interviewee B and C mentioned that audio books could bring elements that print books do not have. "Certainly the dramatized version adds something you wouldn't get in the print. It is extra to the print" said interviewee C. Both interviewee D and E talked about portability and flexibility of audio books. As the comments of the questionnaire, they talked about the

fact that audio books allow readers to multitask. "I used always to wish that I could read something while doing the housework. Now I can" said interviewee E. Finally, as mentioned earlier, communal listening was definitely one characteristic which made audio books different from print books. Interviewee D used audio books to distract his children from TV because they can share audio books together.

As pointed in the result of questionnaire, most interviewees preferred listening to audio books alone. Interviewees preferring listening to audio books alone all mentioned they used mp3 players (3 were iPods and 1 was Sansa Clip) to listen to audio books. The portable device might be one of the reasons they preferred to listen to audio books alone because they usually listened with headphones. Even with speakers, interviewee C still likes to listen to audio book alone. "Sometimes my husband was there, and then he would start asking too many questions about the audio book. I just have to stop. He gets in the way" said interviewee C.

e. Listening to audio books as one kind of reading

Most interviewees gave positive answers toward listening to audio books as one kind of reading because they thought listening to audio books was just another way to interpret text. Interviewee C thought this question was just a format question. "I know some people think this (listening to

audio books) is not reading, and I disagree because you are still engaging in the text which the author has written, so it is just a format question, really, isn't it" said interviewee C. Interviewee E agreed with the idea that audio books could substitute print books only under some circumstances. He said he would insist sitting in front of the text and reading it when the content is about the nuances of history or philosophy. Interviewee D thinks audio books encourage reading rather than replace reading. "I think basically. You listen to the audio books, and you receive the book by the same people, you want to read it" said interviewee D.

f. Attitudes toward downloadable audio books

Among 4 interviewees who like downloadable audio books, 2 are total enthusiasts and 2 still listen to audio books in CD format. As mentioned in the previous paragraph, interviewee E thought downloadable audio books helped him solve "the issue of always having to find your place again." Interviewee A only listened to downloadable audio books because she thought her mp3 player was much smaller than a CD player and because she did not have to worry an exciting chapter in a CD was scratched.

As to the two interviewees listening to audio books in both CD and downloadable formats, one of the main reasons they still listened to CDs was that CDs are tangible. "it

feels better to own the CDs, tangible ones" said interviewee B.

The only interviewee who never listened to downloadable audio books emphasised one reason why he never did that: he loves public libraries, so he borrows a lot. Other reasons for not listening to downloadable audio books were "to save file space" and the stereotype of "music is 'cropped' and shortened in downloads."

2. Interviews with new audio book listeners

a. Background of interviewees (See Table 2)

b. The experience of listening to audio books

As mentioned earlier, 6 interviewees were invited to listen to downloadable audio books (Audible.com). After their trials, most interviewees showed positive attitudes toward listening to downloadable audio books.

Both interviewee F and J thought the experiences of listening to audio books were not so different from what they had expected. Interviewee F thought "the content was still absorbed in the same way" even with the different mechanism. Interviewee J was originally a "book person" who liked the feeling of being able to touch the paper and feel the book. "I wasn't very sure if I'll like an audio book. But it turned to be very enjoyable to listen to, especially when my

Educational Devices used for The chosen title Gender Age Job **Attainment** audio books Interviewee F M 25 PhD student PhD **iPhone** Entanglement The girl with the Interviewee G F 25 Masters student Masters iPhone/laptop dragon tattoo Interviewee H 27 Civil servant University iPod Outliers Interviewee I F Island beneath the sea 31 Energy Analyst University Laptop Interviewee J F 25 iPod Christine Graphic designer Masters

Masters

Table 2: Background of interviewees

eyes are tired and I just want to relax" said interviewee J.

31

Civil servant

F

Interviewee K

As found in questionnaire part, Interviewee I found listening to audio books was very helpful for her to improve her English although she had lived and worked in Canada over ten years.

c. The differences between audio books and print books

Most interviewees thought the greatest difference between audio books and print book was the accessibility. Over half of the interviewees thought audio books had better accessibility than print books. "One of the main differences I would state from my experience is the accessibility, I found I was able to engage with the book at times and in places it would have been impossible to engage with a print book (e.g. walking)" said interviewee F.

Two interviewees mentioned that their experiences of listening to audio books were not as personal as reading print books. "While listing to the narrator, I have to build up a relationship with him/her, which makes it not that personal anymore" said interviewee H. "When I read a book, I would have an image in my mind; when listening to a story, it feels like seeing the image through other's eyes" said interviewee I.

iPod

The lost symbol

d. Listening to audio books as one kind of reading

Most interviewees thought listening to audio books was different from reading books, and only 2 interviewees agreed that audio books can substitute print books under some circumstances.

e. Audio books and print books could be interchanged in most cases

Instead of using "substitute", interviewee F thought audio books and print books could be interchanged in most cases. "Definitely, I think that although they can be used differently, (and I would have different preferences, such as preferring an audio book to fill my time spent walking or doing menial tasks) I would think they could be interchanged in most cases" said interviewee F

f. Audio books and print books are two things

The interviewees who did not agree that audio books could substitute print books under some circumstances felt that mainly because they had always been used to the mode of reading print books such as tangibility. However, interviewee K said "maybe future generation listens better than reads, perhaps".

g. Participants' suggestions for downloadable audio books

(1) A better way to present the sample

Over half of the interviewees found it very difficult to decide a title. "The sample is really important" said interviewee H. Interviewee F suggested that it would be better if users could select 3 minutes freely from the whole content (users cannot choose what section they want to listen to in an audio book on Audible).

(2) Keyword searching

Although interviewee K listened with iPod which allowed time tracking on the screen, she still found it very hard to go back and look for something she wants (e.g. what did the person say....). She would imagine audio books allowing keyword searching, and that would make things easier.

(3) Author as the narrator

Interviewee H and I both mentioned they preferred the author of a book to be the narrator. "I think he (the author) knew the content far better" said interviewee H.

(4) Trained narrator

Interviewee F found the narrator of his book often pronounced words wrong. Because the book chosen by interviewee F was about a specific academic field (quantum mechanics), he hoped "for specialist books, narrators should be coached through specialist terms etc".

h. Participants' inclinations toward continuing listening to audio books

Price and DRM (Digital Rights Management) issues were the main concerns for participants to continue listening to audio books. Half of the participants would like to continue if they could get lower price of audio books; 2 participants did not think they would need audio books; only 1 participant was very positive about continuing listening without any condition. Apart from the pricing model, 2 participants also thought the technical problems could

be obstacles of using audio books. "The DRM system (Audible uses DRM to prevent people copying audio files, so users have to download specific software and not every portable device is suited to this format) and the associated software was inconvenient but wouldn't put me off if I felt that the prices were reasonable" said interviewee F. "I can't just upload it onto any mp3 player" said interviewee H.

V. Conclusions

A. An audio book is a written book read aloud for listening

According to the results of the questionnaire, the definitions respondents gave of audio books were very consistent. Basically, there were 3 elements in an audio book: from a pint/written book, a narrator/narrators and acoustic in nature. In conclusion, most respondents defined an audio book as a written book, read aloud for listening.

B. Listening to audio books is more flexible than reading print books

According to the results of this survey, the answer of "whether listening to audio books changes time, place and occasion of reading" was definitely positive. The most frequently-used words to describe the experiences of listening audio books are "accessible", "portable" and "flexible" because people can listen to audio books under more circumstances than reading print books. The places (e.g. home, train or bus) where people listen to audio books could be pretty similar to the places people read books, but the tasks people are doing while listening to audio books could be very different. For example, it is almost impossible for a person to read and drive at the same time, not mention washing dishes while reading. Places like "gym", "on a walk" or "on a bike" were not words people used in the past to describe their experiences of reading print books. Allowing multitasking is definitely the key feature of audio books that facilitates the change in the occasions for reading.

One thing that has not changed is that people listen to lots of audio books still read many print books. As mentioned in the literature review and in the result of this survey, listening to audio book is more complementary to reading print books rather than substitutive.

If listening to audio books really accelerates reading for some people, it might be because audio books allow people to access to books in more situations, not because people listen faster than reading. Among all interviewees, 3 directly pointed out that listening to audio books helps them read more books than they used to. Two interviewees did not say that listening to audio books helped them get through

more books, but they both mentioned that they could listen to audio books in more situations than reading print books.

C. Listening to audio books is more like a supplement to text-based reading

For lots of audio-book listeners, it was found listening to audio books is more like a supplement to text-based reading instead of being a substitution for print books. As mentioned at the beginning, the main aim of this paper is to find out more about the relationships between listening to audio books and reading habits. Though most respondents of questionnaire agreed listening to audio books can be defined as one kind of reading, some respondents who did not agree preferred to define listening to audio books as "an equivalent of reading" rather than "one kind of reading." As to data collected from interviews, only 3 (out of 11) interviewees thought listening to audio books was one kind of reading. One thought "do you think listening to audio books is one kind of reading" was just a semantic argument on the term reading, and listening to audio books was definitely equivalent of reading. 6 interviewees thought listening to audio books could substitute reading under some circumstances.

D. Pricing audio books right is an important issue for audio book suppliers

As shown in the questionnaire and interview parts, it was suggested that audio books suppliers to price audio books in a simpler way to attract more audience. Over 30% of the respondents did not know how much they were willing to pay for an audio book. The main reason of the great uncertainty was probably caused by the significantly varied pricing models among different audio book formats (e.g. online, downloadable, CDs, cassettes and mp3 CD) (Engelen, 2008). Therefore, to price an audio book right might be the biggest challenge for audio book supplier.

E. Downloadable/electronic audio books help to improve experience of listening to audio books but also bring new problems

Downloadable/electronic audio books do change the occasions people listen to audio books. Although portable devices for audio files are not new for consumers, being able to contain hundreds of albums in a small device is a big evolution for the history of personal soundscape. Two interviewees said that they love CDs to be tangible, but they could not find enough space for them. In addition, mp3 players (not mp3 CDs) allow audio book listeners to be

engaged in activities they could not do in the past. One interviewee mentioned that he likes to listen to audio books while jogging.

Few audio book listeners in the era of cassette Walkman and CD walkman would listen to audio books while taking strolls, not mention jogging. Mp3 players are much smaller than Walkmans and their appearance solved the problem of CD walkmans' instability (scratched or skipped).

Downloadable audio books also help to solve one of the greatest deficiencies of audio books: the difficulty in finding a place in a tape or CD. One interviewee complained about the issue of always having to find the previous place again in a tape or CD, and he thought downloadable audio books solved the problem.

Some old problems were solved, but new problems will rise. Though it is much easier to find a place with the time track on the mp3 player screens, content search is still an unsolved issue of audio books. To seek a better navigation system for audio books, some say the available solution might be in the DAISY (Digital Accessible Information System, a standard audio book format originally for people with print disabilities) (Engelen, 2008) (Royal National Institute of Blind People, 2010).

DRM (Digital Rights Management) is another problem especially for downloadable audio books. Two new audio book listeners mentioned that it is really inconvenient to deal with the software and

the "transfer file" (DRM) problem, but they both thought the DRM settings are understandable.

Another format related to downloadable audio books is online audio books (e.g. Naxos). The subscription fee is much cheaper than the downloadable format, but the interviewee using online audio books complained "no Internet, no books" (online audio books are not downloadable). Although audio books in a digital era have become much more convenient, there are still lots of specific problems to be solved.

VI. Recommendations

A. Recommendations for the suppliers of downloadable audio books

1. Pricing model: an easier subscription mode and lower price than print books

No matter invited or current listeners of audio books, they all thought prices of audio books (both CDs and downloadable) are really too high. Over 36% of questionnaire respondents did not know how much they are willing to pay for an audio book. Most interviewees thought they would rather to buy physical books if the prices of downloadable audio books are the same or higher than physical book. Considering the fact there are also free digital audio books for downloading (e.g. Librivox), to adopt

a different and easier subscription mode or reduce the price could be options for the suppliers.

2. Trials are very crucial in determining a consumer's purchase decision

According to the result of the questionnaire and interviews, a sample of an audio book was another key determinant for users to choose an audio book. To allow users to choose any section she or he wants from an audio book of a trial (e.g. a work can only be listened to 3 times and each time for 3 minutes) might be a solution to relieve consumers' uncertainty of a work, and then it might help to increase sales of audio books.

3. Adoption of DAISY

To find a suitable navigation system is always an issue for audio books. The "finding places" problem was mentioned more than 4 times among all interviews. The DAISY format which allows the reader to access to the digital material via enhanced navigation

(e.g. chapter headings) should be seriously considered by the suppliers of commercial downloadable audio books.

B. Recommendations for the future research

Although there is a booming market of commercial downloadable audio books, user studies in this area are currently underresearched. This research was focused on the audio book users. The reason why non-users do not use audio books should be also understood. For example, most invited audio book listeners did not want to continue listening to audio books because they did not think the price of downloadable audio books was reasonable. In addition, lots of consumers did not listen to audio books because they still had deep affections toward print books according to this survey. Therefore, it is concluded that more research should be focused on non-users, especially the new generation who were born in a digital era (not a paper era).

References

Audio Publishers Association U.S.A. (2005). *Audio Publishers Association (APA) Fact Sheet*. Retrieved August 8, 2010, from http://www.audiopub.org/LinkedFiles/APA_Fact_Sheet.pdf

Audio Publishers Association U.S.A. (2009). *Industry Data*. Retrieved May 10, 2010, from http://www.audiopub.org/resources-industry-data.asp

- Audio Publishers Association U.S.A. (2010). *The History of Audiobooks & the Audiobook Industry*. Retrieved May 17, 2010, from http://www.audiopub.org/resources-industry-data.asp
- AudioFile (2005). *AudioFile's 2005 format survey*. Retrieved August 6, 2010, from http://www.audiofilemagazine.com/features/fea0805a.html
- Block, D. G. (2007). *Glass Houses: Discs Still The Best Choice For Spoken-Word Programming*. Retrieved July 7, 2010, from http://www.emedialive.com/Articles/ReadArticle.aspx?ArticleID=12938
- BookAlley.com (2006). *Evolution of Audio Books and Media Players*. Retrieved May 10, 2010, from http://booksalley.com/bAMain/bAlleyT02_Museum.php
- British Broadcasting Corporation (2005). 'Talking book' special programme. Retrieved May 3, 2010, from http://www.bbc.co.uk/radio4/factual/intouch_factsheet_20051115. shtml
- Engelen, J. J. (2008). A Rapidly Growing Electronic Publishing Trend: Audiobooks for Leisure and Education. Paper presented at the Conference on Electronic Publishing, Toronto, Canada.
- Greene, J.-a. (2006). *Hear ye, hear ye: That's the job of an Audies judge*. Retrieved August 3, 2010, from http://www.audiopub.org/LinkedFiles/LancasterPASunAudiesJudging134 0_001.pdf
- Irwin, W. (2009). Reading Audio Books. *Philosophy and Literature*, 33(2), 358-368. doi: 10.1353/phl.0.0057
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in Action. *Administrative Science Quarterly*, 24(4), 602-611. doi:10.2307/2392366
- Keegan, P. (2006). *Audible Cranks It Up.* Retrieved May 03, 2010, from http://money.cnn.com/magazines/business2/business2_archive/2006/03/01/8370576/
- Kozloff, S. (1995). Audio books in a visual culture. *Journal of American Culture*, 18(4), 83-98. doi:10.1111/j.1542-734X.1995.1804_83.x
- Mediatore, K. (2003). Reading with your ears. *Reference & User Services Quarterly*, 42(4), 318-232.
- Nawotka, E. (2008). Our digital future. *Publishing Research Quarterly*, 24(2), 124-128.
- Philips, D. (2007). Talking books-The encounter of literature and technology in the audio book. *The International Journal of Research into New Media Technologies*, 13(3), 293-306. doi:10.1177/1354856507079180
- Powell, R. R., & Connaway, L. S. (2004). *Basic research methods for librarians* (3rd ed.). London: Library Unlimited.

- Robson, C. (1993). Real world research. Malden: Blackwell Publisher.
- Royal National Institute of Blind People (2010). *About DAISY audio books*. Retrieved August 21, 2010, from http://www.rnib.org.uk/livingwithsightloss/readingwriting/Talkingbooksanddaisyplayers/daisyaudiobooks/Pages/daisy_audio_books.aspx
- Stone, B. (2008, 3 March 2008). Publishers phase out piracy protection on audio books. *The New York Times*.
- Szeliga, R. (2009). The public-private soundscape. New Creative Strategies, 1.
- Young, N. D. (2009). How digital content resellers are impacting trade book publishing. *Publishing Research Quarterly*, 25, 139-146. doi:10.1007/s12109-009-9122-2

Appendixes

Appendix A - Questionnaire abut Audio Books

Dear participants:

Thank you very much for your participation. This questionnaire is purely academic research. As people gradually get used to leisure listening to books instead of reading them, this questionnaire mainly wants to investigate people's general impression of audio books and how willing they are to adopt audio books. All answers that you give in this questionnaire are entirely confidential and anonymous. The date will help understand how commercial audio books can change people's reading habit.

I. Background of participants

1.	Please tick your gender
	☐ Male ☐ Female
2.	Please write down your nationality (ex: Taiwanese)
3.	The country you live in
4.	The city you live in
5.	Your age
6.	What's your job?
7.	Your education attainment
	☐ primary school (elementary school)
	☐ high school
	☐ college/university
	☐ graduate school
	□ PhD
8.	How much time do you spend on reading per day?
	□ under 1 hr
	☐ 1-2 hrs

□ over 2hrs	
☐ I do not know	
9. How many print books do you read in a year?	
None	
Under 1	
\Box 1-2	
□ 3-4 □	
☐ more than 4	
10. Do you have an mp3 player	
☐ Yes, and the brand is ☐ No	
II. Audio book listeners or not	
1. How would you define an audio book?	
2. Have you ever listened to audio books? (skip logic used)	
☐ Yes (respondents will be led to part III)	
☐ No, but I would like to try (respondents will directly be led to part IV)	
\square Not, I am not interested in (respondents will directly be led to part IV)	
III. Listeners experiences of using audio books	
1. When was your first time to listen to an audio book?	
☐ As a young child	
☐ elementary school	
☐ high school	
☐ college/university	
☐ after university	
☐ cannot remember	
2. How would you describe the experience of listening to audio books?	
3. What was the format of the audio book?	
☐ tape	
\square CD	
☐ MP3	
☐ broadcast	
□ Podcast	

	□ others
4.	How did you get the audio book?
	☐ as a gift
	☐ at a library
	☐ at a bookstore
	\square online shopping
	☐ free downloads from the internet
	others
5.	How many audio books do you read in a year?
	☐ less than 1
	□ 1-2
	□ 3-4
	☐ more than 4
6.	Where do you normally listen to audio books? (Multiple choices accepted)
	□ home
	☐ train station
	\square on the train
	□ car
	□ airport
	\square on the plane
	□ on a bike
	□ other
7.	Who do you listen to an audio book with?
	☐ I usually listen to audio books alone
	☐ with my family
	☐ with my friends
	\square sometimes I listen alone, sometimes with friends or family
	□ with
8.	What occasion do you normally listen to audio books? (Multiple choices accepted)
	☐ on a car of a trip
	☐ gardening
	□ cooking
	☐ doing housework
	□ eating
	\square on the way of commute (public transportation)

	☐ on the way of commute (by car)
	on the way of commute (by bike)
	☐ on the way of commute (by foot)
	others
IV	Attitudes of respondents toward listening to audio books as one kind of reading
1	. How much are you willing to pay for an audio book?
	\square only if it is free
	□ £ 1-5
	$\square \pounds 6-10$
	□ £ 11-15
	☐ more than £15
	☐ I do not know
2	. What is the channel (s) are you aware of for getting audio books? (Multiple choices
	accepted)
	☐ do not know any
	□ libraries
	☐ Amazon's Audible
	☐ Audiobooks.net
	☐ AudioBooksForFree.com
	☐ Leisureaudiobooks.com
	☐ Librivox.org
	☐ Traditional book stores (e.g. Waterstone or Barnes and Noble)
	☐ Official websites of publishers
	☐ Others
3	Which category of books do you think is especially suitable to have an audio version?
	(Multiple choices accepted)
	☐ Business
	☐ Classics
	☐ Fiction
	☐ Non-fiction
	☐ History
	☐ Language Learning
	☐ Books for Kids
	☐ Films and TV

	 □ Newspaper and Magazine □ Others
	How would you define 'reading'?
	Do you think listening to audio books is one kind of reading? ☐ I do not know ☐ Yes ☐ No, because
	nk you for your participation, you have finished all the questions.
Ap	pendix B - Questions for interviews
	Before we start the interview, I would like you to answer some questions about your kground. These questions can help understand user needs of audio books better. Thank you much.
Bac	ekground of participants
1.	Please tick your gender
	☐ Male ☐ Female
2.	Please write down your nationality (ex: Taiwan)
3.	The country you live in
4.	The city you live in
5.	Your age
6.	What's your job?
7.	Your education attainment
	☐ primary school (elementary school)
	☐ high school
	□ collage/university

	☐ graduate school
	□ PhD
8.	How much time do you spend on reading per day?
	☐ under one hour
	☐ between 1 to 2 hours
	☐ over two hours
	☐ I do not know
9.	How many print books do you read in a year?
	□ None
	\square under 1
	□ 1~2
	□ 3~4
	☐ more than 4
	Do you have an mp3 player?
	☐ Yes, and the brand is (e.g. iPhone, iPod or Sony)
	□ No
Qu	estions for current audio book listeners
	How would you define an audio book?
1.	
1. 2.	How would you define an audio book?
1. 2. 3.	How would you define an audio book? When was your first time to listen to an audio book?
1. 2. 3. 4.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book?
1. 2. 3. 4. 5.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book?
1. 2. 3. 4. 5.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book?
1. 2. 3. 4. 5. 6. 7.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book?
1. 2. 3. 4. 5. 6. 7. 8.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book? Who do you listen to an audio book with?
1. 2. 3. 4. 5. 6. 7. 8. 9.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book? Who do you listen to an audio book with? What's the difference between audio books and printed books?
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book? Who do you listen to an audio book with? What's the difference between audio books and printed books? Which category of books do you think is especially suitable to have an audio version?
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book? Who do you listen to an audio book with? What's the difference between audio books and printed books? Which category of books do you think is especially suitable to have an audio version? What channels do you normally get an audio book from?
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book? Who do you listen to an audio book with? What's the difference between audio books and printed books? Which category of books do you think is especially suitable to have an audio version? What channels do you normally get an audio book from? Is there anything you want an audio book to be improved on?
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	How would you define an audio book? When was your first time to listen to an audio book? What's the format of the audio book? How did you get the audio book? How would you describe the experience of listening to an audio book? What occasion do you normally listen to an audio book? Who do you listen to an audio book with? What's the difference between audio books and printed books? Which category of books do you think is especially suitable to have an audio version? What channels do you normally get an audio book from? Is there anything you want an audio book to be improved on? What suggestion would you like to give to an audio book?

16. How do you like downloadable audio books?

Questions for new audio book listeners

- 1. Before this project, do you know Audible.com?
- 2. Have you listened to an audio book?
- 3. How would you define an audio book?
- 4. What device do you use for listening to an audio book?
- 5. How would you describe the experience of listening to an audio book?
- 6. What occasion do you normally listen to an audio book for?
- 7. Where did you listen to the audio book?
- 8. What time do you usually listen to an audio book?
- 9. How much time do you spend on the audio book?
- 10. Who do you usually listen to an audio book with?
- 11. What's the difference between audio books and printed books?
- 12. Which book did you choose? Why?
- 13. Which category of books do you think is especially suitable to have an audio version?
- 14. Is there anything you want an audio book to be improved on?
- 15. How would do define 'reading'?
- 16. Do you think listening to an audio book is one kind of reading?
- 17. For you, can audio books substitute print books under some circumstances?
- 18. Do you think the pricing model is reasonable?
- 19. If you have to pay on your own, are you willing to continue using audio books?