

Michał Zajac
University of Warsaw

Book apps for younger children: between a book and a computer game

Describing the contemporary media reality as the era of the convergence culture has already become fixed practice in research reflections of various fields of the social sciences. Henry Jenkins' idea assumes the abandonment of the dominating decades-old vision of new media pushing out the older ones for the benefit of the acceptance of the narration in which various media create a certain mosaic in which new relationships and new constructs appear (Jenkins 2006). It might be thought that the media product that is the main subject of this paper – book apps – is a good example confirming Jenkins' theory. The fact that the said applications started to mushroom and gain popularity a couple of years after the publication of the breakthrough *Convergence culture* only strengthens such a thesis. This is because book apps – designed for tablets and smartphones – smoothly combine the characteristic features of all the earlier media: text, sound, image, video film, and the use of internet connections.

The researcher's attention is particularly attracted to book apps dedicated to the younger children. This is so for several reasons. When browsing through the stocks of, say, App Store, i.e. the main platform of distribution of apps dedicated to products of the Apple company, we can see that from the point of view of sheer numbers, it is the children's book apps which dominate among all the book apps, and that they also sell the best (Stichnothe 2014: 1). Additionally, when analysing the apps themselves, it is easy to conclude that they are the ones which execute the idea of the media mosaic typical for media convergence to the highest degree. And, finally, researchers indicate that in the times of the development of communication technologies, it is increasingly the case that literature, or, to put it even more broadly – text – accesses the users for the very first time in none other but digital form. At the moment, this is the case mainly in the countries which are most technologically advanced, in which the appropriate equipment is commonly available, and the media competences of the citizens are higher. Hence, opinions appear such as those expressed by Ghada Al-Yaqout and Maria Nikolajeva in their essay *Re-conceptualising picturebook theory in the digital age* – which assume that book apps have an important role in the literary initiation of the youngest children: "Today, digital picturebooks are often the first literature young children engage with."

(Al-Yaqout, Nikolajeva 2013). When assessing the possibilities of book apps, some authors formulate far-fetched conclusions – Lisa Margarete Schons gave her work devoted to book apps the following title: *Is the picture book dead? The rise of the iPad as a turning point in children's literature* (Schons 2011) (although in this case the title should be most probably treated as a planned provocation).

This paper aims at an analysis of selected aspects of book apps for younger children (history, terminology, research issues). The relationship between the products in question and the traditional book and computer games will be given a much more thorough treatment. This is because, on the one hand, it determines the media nature (including the ways of use) of book apps to the fullest extent; however, on the other hand, it confuses parents, as well as teachers and tutors: “[...] convergence of reading and game playing enabled by new digital formats raises concerns and misperceptions among adults. In a recent series of interviews in a library in Southern California, several parents expressed surprise that apps found on the iPad could be anything but games” (Martens 2014: 19).

Definitions are a very significant issue accompanying reflections concerning electronic publications (not only the ones addressed to the youngest recipients). This is because we can still observe terminological chaos – both in the scholarly environment and among publishers and producers¹. Currently, two dominating e-products containing the word “book” in their name function on the market. On the one hand, the market offers “**e-books**”, **computer files** containing digital copies of paper books. They can be played on stationary computers, laptops, tablets, special e-book readers, as well as mobile phones. All further actions to do with e-books: the very reading and browsing through the content, changing the font style and size, making notes, etc., require separate software. E-books are actually very close cousins of the Gutenbergian codex, as they maintain the linear text-based structure of the message, and, with few exceptions, do not offer any interactive options.

The second product – the one being the main subject of this paper – is the book app. **Book apps are computer programs** designed solely for tablets and smartphones (with various operating systems, including IOS, Android, and Windows). Their basic feature is their interactivity executed (from the IT point of view) by software components allowing the user to animate illustrative elements, turn on the sound, image, etc..

The origin and development of book apps for children is closely related to the market introduction and popularisation of tablets. This new generation of mobile devices combining the qualities of a portable computer, a music and video player and an e-book reader introduced entirely new possibilities to the world of media, leading to the onset of a mass production of apps. In turn, these products contributed to a significant change in the market of electronic publications for the youngest children. As Junko Yakota and William Henry Teale put it: “The typical e-book read on a dedicated e-reader (Kindle, Nook, etc.) has not hit the children's literature world for elementary school child readers in a particularly big way, but e-books and apps that incorporate text, illustration, and interactive features and

¹ Even today, researchers who are less familiar with the subject make such odd mistakes at conferences devoted to electronic media as referring to e-book readers as... e-books.

that are directed at an audience of young children – often thought of as the equivalent to picture books – have become a major force.” (Yokota, Teale 2014: 577).

Apple tablets appeared on the market at the beginning of 2010, and it was as soon as in May that year that the Winged Chariot company published the app *Emma Loves Pink*, universally considered to be the first book app for children. The same year saw *Alice in the Wonderland* published for iPad (*Alice in the Wonderland* 2010) – a product which is still valued and popularly purchased. Upon its launch on the market, the app stirred much enthusiasm of the reviewers, who saw it as a “pop-up book of the twenty first century” and “a product, which reinvents reading” (*Alice in Wonderland iPad App Reinvents Reading* 2010). An important event in the still brief history of this kind of applications was also the publication of an electronic version of Olivier Jeffers’ ambitious picturebook addressed to a more demanding audience entitled *The Heart and the Bottle* (December 2010). The app recorded a commercial success, and the publishers thus additionally proved that e-publications do not have to be tacky products based on low quality scenarios and books.

In the course of almost five years since the appearance of such apps, a considerable number of scholarly papers devoted to them have been published and they have also become a subject of interest of some well-known researchers so far focusing mainly on picturebook research, including Maria Nikolajeva, Junko Yokota or Betty Sergeant. Several subjects appeared on which both academicians and practitioners have concentrated their reflections. Without any doubt, the most important one is the discussion on the development of a research paradigm allowing adequate scholarly reflection (comp. Turrión 2014). Practitioners (teachers, librarians, tutors) try to build pragmatic criteria of evaluation of the quality and educational usefulness of these products (comp. Bircher 2012). Polish research reflection concerning the book apps for non-adults is still rather poor. Noteworthy are Małgorzata Cackowska’s texts, which penetrate the educational value of book apps and popularise them (comp. Cackowska 2013). I myself have analysed book apps for older children and teenagers from the point of view of the book studies (comp. Zajac 2013, 2014). Several scientific conferences of which they were the main subject were also organised (for example in Barcelona in 2014²). Another important step in the popularisation of book apps for children was the introduction of an award for these publications to the list of trophies awarded during the world’s biggest and most prestigious children’s book fairs in Bologna (*The Bologna Ragazzi Digital Award*, since 2013).

Still, is not the reference to a “book” – which, after all, ennobles an electronic product – in the name of the medium a misuse? One of the most frequently asked questions in the context of the media products under discussion concerns their “książkowość” (“bookness”). The term – very useful for our contemplations – was introduced to the Polish bibliological reflection by Sebastian Kotuła. It denotes a “collection of attributes an object must have to be a book” (Kotuła 2013: 104). In the simplest terms, the evaluation of a bookness of a given product would be based on checking whether it contains (printed) text, on what medium (“material [a codex made from paper cards put together]”) it was published and in what way

² Simposio internacional “La Literatura en Pantalla” Grupo GRETEL, Departament de Didàctica de la Llengua i la Literatura, Universitat Autònoma de Barcelona, Spain, Barcelona, 3–4 October 2014.

one gets acquainted with its content (“reading [contact with the text understood in this way and produced in the material contemplated in this way]”) (Kotula 2013: 106).

An attempt at the justification of the bookness of the applications under analysis can be commenced with the main argument, i.e. the perception of their literary value delivered by the text. Book apps are equipped with text as one of the main (although not the only) medium of the narration understood in the broadest possible way. At the same time, it should be stressed that most book apps for children offer an option allowing one to turn on a narrator reading the text, and that all of them use iconotext (or icono-linguistic unity) – an amalgamation of textual and iconic narration typical for picturebooks and comic books. However, this does not change the main principle under which it is the written word which constitutes the basis for the construction of the presentation of the content in book apps.

Another argument in favour of bookness, which should be referred to in this place, is the fact that a very considerable part of such apps are based on literary originals. Used for the purpose are both classical works – fairy tales (the traditional repertoire of fairy tales includes for example Little Red Riding Hood and Cinderella), the more modern classics (Lewis Carroll’s *Alice in Wonderland*, Polish productions, such as Józef Ignacy Kraszewski’s *The Old Man and his Wife*, or Stanisław Jachowicz’s *The Sick Kitten*), and modern works (Pablo Curtis’ *Love, The App* or the already mentioned *The Heart and the Bottle* by Jeffers). To immediately reject the obvious counterargument: the adaptations are made with the help of entirely different tools than film adaptations. Their creators use ready illustrations such as plates and spreads, which in the course of the production process acquire new properties (animations, interactivities, etc.). At this point, it is worth pointing out that one of the basic discussions accompanying the development of the products in question concerns the advantages and disadvantages of adapting the already published printed books (in particular picturebooks).

When attempting to answer the question concerning the bookness of these apps, we should also mention the already quoted article by Al-Yaqout and Nikolajeva. The authors carry out an analysis of the formal structure of book apps, trying to identify the elements constituting the equivalents of certain morphological components of the elements of a picturebook for children. Hence, an icon used for the launching of the app, which is displayed on the tablet or smartphone home screen, would be an equivalent of a book cover, the screen (as a unit organising the narration) would be equivalent to the picturebook spread, which fulfils a similar function, while a subsequent update would be tantamount to a subsequent edition of a paper book (Al-Yaqout, Nikolajeva 2013).

It is difficult to clearly answer the question of the degree to which book apps meet the third component of bookness – that of reading as a manner of familiarizing oneself with the narration. Without any doubt, the decoding of written signs is one of the main elements of immersing oneself in the content of the app, but it is neither the only, nor (which is most important) the absolutely necessary one. As mentioned above, most book apps offer a narrator mechanism which may substitute independent reading. Also, to some extent (just like in the case of a picturebook, which would find it problematic to meet this bookness condition), its user may try to follow the content by just looking at the iconic message.

Therefore, book apps for younger children have very many qualities of bookness. Still, they are certainly not books, although owing to these similarities, they can be an interesting research object for bibliologists. Book apps also disclose in many ways their connection with another field: ludology (game studies), a discipline focusing on games (Turrión 2014).

It is very easy to find – at different levels of the users' interaction with applications – connections with games. They can be divided into two types. The first one consists in the direct participation in the very game, which is separated from narration and offered to the user. The second one is related to the notion of gamification, which is immensely popular in marketing. Gamification should be understood as activities consisting in the “transfer of mechanisms we know from games (including computer games, but not only) to the real world for the purposes of changing human behaviour” (Tkaczyk 2012: 10). Another definition – one which better fits the subject under analysis – resigns from the concept of the “real world”, while indicating the goals of the strategy: ““Gamification” is the “idea of using game design elements in non-game contexts to motivate and increase user activity and retention” (Martens 2014: 20).

On the example of selected apps, we may show that their users in some situations follow gamification scenarios prepared by the product authors, while participating in the game independently in other situations.

At the very primary level (in chronological context, i.e. the child's first contact with the app), the very identification of the navigation system used in a given product has the properties of a game. In the absence of some standardisation (which covers for example the book), the child must face a certain challenge: determine what interface solutions are used to operate the app. Obviously, the most basic actions – mainly the switching to the next screen being the equivalent of page-turning – have already acquired universally used markings. They are normally arrows in the bottom left and bottom right parts of the screen (*Amelia and Terror of the Night*, *Alice for the iPad*). However, equally popular are “clicks” on the screen edges which are not marked with icons, or sliding the finger on the touch-screen imitating a similar gesture in the paper codex (*Love, The App*). It is much more of a challenge to identify mechanisms managing the app at a higher level: to find the menu and the commands allowing the activation of additional options, such as loud reading, recording of the voice (*The Old Man and his Wife*) or personalization of the app (be it by the introduction of one's own bookplate or photo) (*Little Red Riding Hood*). Of course, every app of this kind is equipped with the appropriate instruction manual, but it should be remembered that the recipients' reading comprehension is not always very efficient. As a result, the children are very often (with the exception of joint reading with a parent) left to their own devices, i.e. identification by trial and error.

A certain development of the above “game” – one which is more connected with the very familiarisation with the narration – is a typical gamification challenge the creators of the product provide to its users, consisting in the search for interactive elements hidden on the screen. The elements do not necessarily have to have anything to do with the development of narration (a hidden nest of a squirrel – *Amelia and Terror of the Night*, a banana skin you can throw to the bin – *Locomotive*). Here, we are dealing with a special version of hide-and-seek. The recipient

examines the screen, checking which elements may hide various effects, and is sometimes rewarded with a comic effect: an animated insect touched with a finger makes funny noises, the clicked tree hole reveals its secrets in the form of a bird's nest with amusing nestlings, etc. (*Amelia and Terror of the Night*).

Another way in which games function in book apps for children is the most obvious one, which requires little commentary: the direct participation in the "disclosed" game. A large share of the products are equipped with the "play" option in their menu. This allows one to play a short computer game to a lesser or higher extent connected with the narration. This may take the form of doing e-jigsaw-puzzles (*The Old Man and his Wife*) or a game of skill (such as the "drawing" of patterns on the screen in *The Heart and the Bottle*). The use of such possibilities is facultative – it does not affect the possibility to get familiar with the tale, and allows one to return to it at any moment and place of narration.

A much more interesting version of the above strategy in the gamification version is making a positive result of a game a condition for further familiarisation with the narration – the result is no longer an "option" or an addition, becoming a part of the narration. This strategy can take several forms. On the one hand, it can take the form of a computer game classic – where the user has to collect various artefacts, which can be used at some stage of the course of the app (e.g. the collection of feathers lost by birds in *Little Red Riding Hood*). Another solution is to collect the appropriate number of points (which can also be symbolised by artefacts), which allows one to collect an award in the end. In book apps, this may take the form of the possibility to read the final part of the tale or some kind of a bonus, for example a song (*Amelia and Terror of the Night*).

The most advanced introduction of gamification to the products in question is making the readers able to decide about the development of the narration. When becoming familiar with the tale, at some point the child has to decide about its further course. Apps using this gamification strategy are published by the Nosy Crow company (*Little Red Riding Hood, Cinderella*). On the way to her grandma, Little Red Riding Hood stands at the crossroads and has to decide whether to follow the "path to the feathers", or the "path to the flowers"? Each of the choices results in an alternative version of the narration. Obviously, the number of options is very limited, and the end of the tale is consistent with the literary canon.

The appearance of games and the implementation of gamification do not necessarily take place separately. The described strategies combine (quite often) to make uniform concepts. When choosing the "path to the feathers", the user of *Little Red Riding Hood* must participate in a game of skill consisting in the collection of feathers lost by birds, and the feathers must be subsequently used during the end stage to solve the wolf issue.

Closing this part of my contemplations, I must most definitely declare that – just like in the case of books and bookness – book apps despite their very many connections with games cannot be described as such. A game (in all the forms presented) is not a goal in itself – it plays an auxiliary role: it is to strengthen the readers' interest, their engagement in their familiarization with the narration. Additionally – as shown above – the game (games) and narration interweave, and the boundary between reading and playing a game blurs.

Summary

It seems that book apps are something more than a passing craze or a product, which will leave the media stage during the next few years. They deserve in-depth research reflection based on the understanding that the apps – despite the fact that they share many features with books and games – are a separate media entity, requiring special methods of description and analysis. The passion with which non-adults treat the products of electronic mobile technologies, and the fact, as quoted above, that they become a portal of initiation to literacy, and perhaps even to literary initiations, calls for the attentive studying of the mechanisms of the use of applications. In this context, some researchers write about reading “remixed”, referring to the mosaic-like media structure of book apps (Kasman, Stephens 2012).

Literature

- Alice In Wonderland iPad App Reinvents Reading*, 2010, http://www.huffingtonpost.com/2010/04/14/alice-in-wonderland-ipad_n_537122.html [access: 10.10.2014].
- Al-Yaqout G., Nikolajeva M., 2013, *Re-conceptualising picturebook theory in the digital age*, <http://www.childlitaesthetics.net/index.php/blft/article/view/26971> [access: 5.10.2014].
- Bircher K., 2012, *What Makes a Good Picture Book App?*, “The Horn Book Magazine” March/April.
- Cackowska M., 2013, *Co ma książka obrazkowa do interaktywnej aplikacji książkowej?* [What does the picturebook have to do with an interactive book app?], “Ryms” No. 20.
- Jenkins H., 2006, *Kultura konwergencji. Zderzenie starych i nowych mediów* [Convergence culture: where old and new media collide], transl. M. Bernatowicz, M. Filiciak, Warszawa: Wydawnictwa Akademickie i Profesjonalne.
- Kasman Valenza J., Stephens W., 2012, *Reading Remixed*, “Educational Leadership” Vol. 69, No. 6.
- Kotula S.D., 2013, *Komunikacja bibliologiczna wobec World Wide Web* [Bibliological communication in the face of the World Wide Web], <http://depotuw.ceon.pl/handle/item/189> [access: 10.10.2014].
- Martens M., 2014, *Reading and “Gamification”. Joining Guilds, Earning Badges, and Levelling up*, “Children and Libraries” Vol. 12, No. 4.
- Schons L.M., 2011, *Is the Picturebook Dead? The Rise of the iPad as a Turning Point in Children’s Literature*, “Journal of Digital Research and Publishing” No. 2.
- Stichnothe H., 2014, *Engineering Stories? A narratological approach to children’s book apps*, “Nordic Journal of ChildLit Aesthetics” Vol. 5, <http://www.childlitaesthetics.net/index.php/blft/article/view/23602> [access: 10.10.2014].
- Tkaczyk P., 2012, *Grywalizacja. Jak zastosować mechanizmy gier w działaniach marketingowych* [Gamification. How to apply game mechanisms in marketing activities], Gliwice: Onepress.
- Turrión C., 2014, *Multimedia book apps in a contemporary culture: commerce and innovation, continuity and rupture*, “Nordic Journal of ChildLit Aesthetics” Vol. 5, <http://www.childlitaesthetics.net/index.php/blft/article/view/24426> [access: 10.10.2014].
- Yokota J., Teale W.H., 2014, *Picture Books and the Digital World: Educators Making Informed Choices*, “The Reading Teacher” Vol. 67, Issue 8.
- Zajac M., 2013, *Przestarzały jak e-book? Nowoczesny jak t-book?* [Obsolete like an e-book? Modern like a t-book?], “Notes Wydawniczy” No. 8.

Zajac M., 2014, *Od Produktu Totalnego do książki konwergencyjnej. Związki książki dla dzieci i młodzieży z innymi mediami* [From the Total Product to a convergent book. The relationship between the book for children and youth and other media] [in:] *Współczesne oblicza komunikacji i informacji* [Contemporary faces of communication and information], E. Głowacka, M. Kowalska, P. Krysiński [eds.], Toruń: Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika.

Book apps discussed

Alice for the iPad, 2010, Atomic Antelope.
Amelia and Terror of the Night, 2014, OhNoo Studio.
The Sick Kitten, 2013, Fundacja Festina Lente.
Cinderella, 2013, Nosy Crow.
Emma Loves Pink, 2010, WingedChariot.
The Old Man and his Wife, 2013, Fundacja Festina Lente.
The Heart and the Bottle, 2011, Penguin Group.
Little Red Riding Hood, 2013, Nosy Crow.
Locomotive, 2013, Big Rabbit.
Love, The App, 2013, Contenidos SRL.

Summary

Book Apps for Younger Children: Between a Book and a Computer Game

The article deals with the topic of children's and young adults' book apps. It shortly presents the history of this medium and the most important stages of its development. Children's book apps are discussed as a part of the "culture of convergence". Outlined are also both terminological aspects and the basic previous research attempts directed at these book apps. The main focus of the article is the connections between apps and computer games. The Author attempts to explore these connections on several levels starting from the first user's experience, through gamification structures installed within the narrative, and ending with micro-games included in the book apps as a kind of "bonus".

Keywords

children, tablets, book apps, games, convergence

English translation: Anna Moroz-Darska

Tłumaczenie sfinansowano ze środków Ministerstwa Nauki i Szkolnictwa Wyższego na podstawie umowy nr 661/P-DUN/2018 z dnia 13 lipca 2018 roku w ramach realizacji zadania 1 – stworzenie anglojęzycznych wersji wydawanych publikacji w 2018 roku.

The translation was financed with funds made available by the Ministry of Finance and Higher Education under contract No. 661/P-DUN/2018 of 13 July 2018 as a part of the execution of task 1: the creation of English-language versions of the issued publications in 2018.