DRIFTING in the INFORMATION SEA
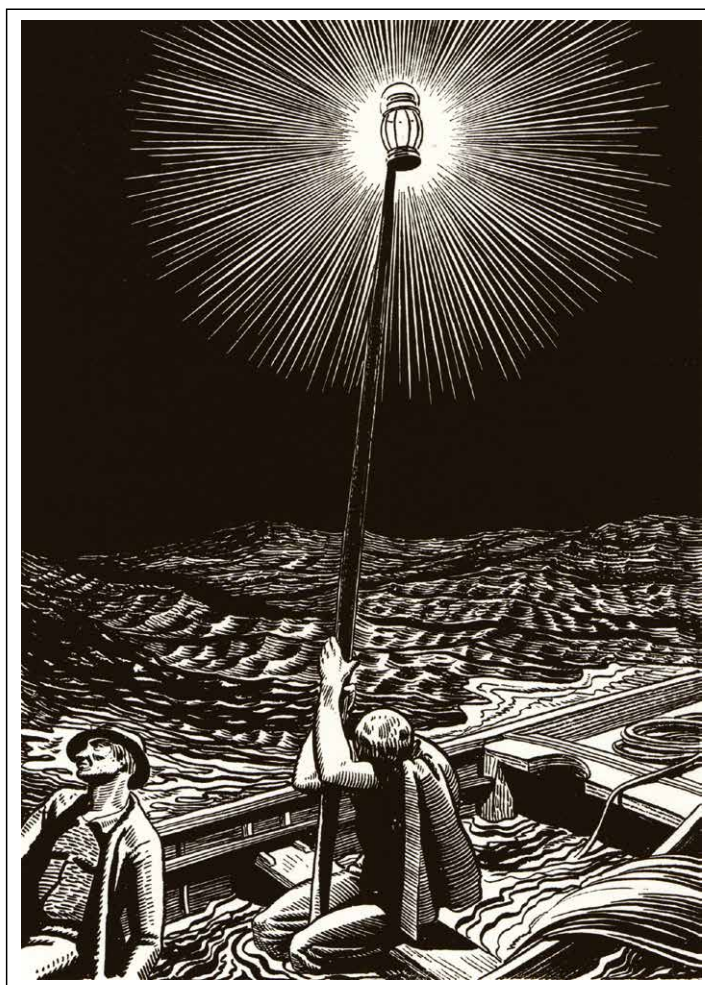
"The rising sea forbade all attempts to bale out the boat."——
Herman Melville described the hardship of struggling
in open sea in his master piece
MOBY DICK OR THE WHALE.
Kent Rockwell, "untitled", linecut on paper,
c. 1930 (Plattsburgh State Art Museum).
MOBY DICK OR THE WHALE VOLUME II
by Herman Melville page 55. Chicago:
The Lakeside Press, 1930.

Digital Publishing And The Web: A Pathway To The Future

Voyager Japan, Inc.

Junko Kamata, Vice President

❖ The "E" Amulet

When I hear the word "mail," I am struck with the realization of just how commonplace the internet has become. Thirty years ago, the internet didn't even exist in Japan, and even fifteen years ago, its existence wasn't well known, with only a small number of IT aficionados enthusiastic about it.

Video conferencing, digital archives, video on demand : While these told the story of great potential, the reality was that the infrastructure didn't keep pace with the changes. However, times have changed, and now, anyone can use a PC, smart phone, tablet or other data device to access the internet. Nearly everyone knows that audio and video and the exchange of ideas through text can be had for free via the internet. People have even begun to lose their awareness of the internet as a unique entity.

Basic communication tools such as letters and postcards have now been replaced by email, and soon the "e" itself may lose its significance. Young people on the cutting edge now gravitate toward the exchange of messages via the social networking services (SNS) such as Facebook, Twitter, GREE, Mobage, Ameba, LinkedIn, LINE, and others.

But what about electronic publishing? I think that in the near future, it will just be called "publishing," but for now, we still hold tight to the "e" in electronic as though it is an amulet. The value of paper-based reading materials is firmly entrenched in our social and economic lives, and electronic publishing still has significant barriers to overcome before it can equal or surpass paper-based publishing.

Six Elements Necessary To Move from ePublishing To Just "Publishing"
I think that for eBooks to become completely the norm, and for electronic publishing to become simply "publishing," six characteristics (which spell out EBOOKS) are essential.

Eternity: Materials must have capability to be stored, recorded, and displayed into the future
Borderless: In a global market, materials must be accessible via any e-reader
Openness: Materials must use open standard technology and formats
Originality: Publishers must aim for new content
Knowledge: Materials must feature knowledge and experiences that are worth preserving
Social Interaction: Materials must encourages social connections between authors and readers

eBooks, having been born comparatively recently, are still in their infancy. If we are lured just by their functionality, we will end up creating products that emphasize their difference from paper-based texts merely through the addition of video and sound. At this point, I continue to hold tight to my "digital" amulet, which makes maintaining "permanence" all the more difficult. Let's look at a couple of examples:

❖ Seeking Originality

Works Created Before the Dawn of the Internet
Voyager was creating eBooks before the internet emerged. During that time, I think we can fairly say that we racked up experiments and failures while seeking originality and permanence. However, there was a common thread among the works we produced:

* Each clearly reflected the deep knowledge of

various people
* Each displayed great creativity
* Each sought expression that could only be fully realized through digital means

CD Companion To Beethoven's 9th Symphony (1989)

A music education software product by UCLA music professor Robert Winter, this was an eBook-like CD-ROM that preceded the eBook. Using HyperCard software supplied on a floppy disc, a user could run a music CD in a Macintosh CD-ROM drive. The software allowed users to analyze the symphony incrementally, measure by measure or even note by note, by seeing the score and listening to the music. This would not have been possible without Robert Winter's direct authoring. The CD Companion series included similar CD-ROMs for Shubert, R. Strauss, Dvořák, Mozart, and Stravinsky.
Japanese Promotional Video: http://youtu.be/6KmM8Rx1uZI

Contains 5 Parts: A Pocket Guide, Beethoven's World, The Art of Listening, A Close Reading, The Ninth Game.

A Pocket Guide: The user can navigate around the entire work by clicking on a particular section to have it play

A Close Reading: By playing the accompanying audio disc, a listener can analyze rhythms and motifs

Explanation of dotted rhythms: The various rhythmical patterns are explained by scrolling over the score while listening to the music

The Art of Listening: The word "Contrast!!" appears in certain spots to highlight that feature of the work.

The Ninth Game: Game consists of listening, score and biographical questions.

I Photograph To Remember (1991)

A CD-ROM Photograph collection by Latin American photographer Pedro Meyer. A deeply personal work chronicling the last part of Meyer's parents' lives. The collection includes 100 black and white photos, Meyer's own narration, and piano music accompaniment by one of Manuel Rocha . When this work was shown at the 1991 Seybold Digital World Conference, it reportedly brought many in the audience to tears. Meyer has made a Flash version of his work available.
Japanese language promotional video: http://youtu.be/eJnF56ihev4
Flash URL: http://bit.ly/iptr_flash

A Hard Day's Night (1993)

A 90 minute music movie contained on one CD-ROM. The script pages turn as the movie progresses so the viewer can move between the script and video and appreciate them together. Contains an indexing feature and the ability to bookmark pages. The film was digitized by Apple's QuickTime and Apple's HyperCard. There was also a Windows version.

The Day After Trinity (1995)

A CD-ROM version of the documentary film *The Day After Trinity*. The project traces the path of J. Robert Oppenheimer, the driving force behind the Manhattan Project, and the development of the atomic bomb. Includes outtakes of interviews with Hans Bethe and other scientists on the project, footage and photos from the project, FBI files, and audio commentary by director Jon Else. The Japanese translation was by Michio Tomita (one of the principals at Aozora Bunko) and Akiko Tomita. The interview portion is available through the BinB store.
Japanese language promotional video: URL http://youtu.be/mwIq6vKZN-8
BinB store URL: http://tt2.me/13632

Shincho Bunko 100 CD-ROM Version (1995)

Based on Expanded Book technology, this was a big-budget work containing 100 Japanese books for around $150. Includes the works of Japanese literary greats such as Ryunosuke Akutagawa, Soseki Natsume, and Kenji Miyazawa, as well as contemporary writers such as Haruki Murakami, Hiroyuki Itsuki, Akiyuki Nosaka and Yasutaka

Tsutsui. Sold over 30,000 copies. With sales over $4.5 million, this product set a record for eBook content.
Shincho Press Release at http://bit.ly/shincho_cd

Voyager has put descriptions of many of its CD-ROM products into video format and published them to YouTube.
See http://www.youtube.com/user/VoyagerLibrary

Creating From Tools
eBooks require two application tools: an authoring tool that can be used to create content as well as a viewer to permit reading. Using an authoring tool, one can create and sell data, while with a viewer, a reader can then open that data. When Voyager began producing eBooks, the basic infrastructure that would allow the creation of eBook content that could be digitally read didn't exist, and so we started out by creating the basic tools. In 1993, we started with Expanded Book, followed in 1998 by .book (Dotbook) and T-Time.

T-Time's Bookstore Distribution Package
In the beginning, T-Time was developed as a utility software for reading digital files such as a TXT format file, and HTML. T-Time was sold both in electrical parts stores as well as bookstores. The design mimicking university notebooks was by Koga Hirano.

Fortunately, Voyager worked together with the authors and editors on developing the tools for these early works. For example, Voyager worked hand-in-hand with the music experts on the CD Companion series. The authoring tool available at that time could record the data for the beginning and the end point of a musical section. Voyager worked with the content experts on how to notate the various points and how to playback. The commentary was, from the beginning, in the minds of these authors; by working together with them, they were able to write to their hearts content about their ideas alongside the music.

When Voyager created the Expanded Book software that was used in the CD-ROM Shicho 100 Books, Voyager consulted with well-known book designers Kouhei Sugiura and Koga Hirano on basic elements such as font size, line spacing, margin and the like. We learned the ABCs of book publishing directly from these experts so we could incorporate these elements in our eBooks as much as possible. From our perspective, we also were able to convey the strengths and attraction of digital publishing, and we were able to make the CD-ROM technology more appealing by demonstrating the advantage of extra capacity and numerous color images.

Expanded Book had essentially the same basic elements as the eBook. These include:
Text can be displayed as one page, and the particular features of Japanese text, including vertical writing, ruby annotation (indicating pronunciation), can also be displayed. In addition, the technology goes beyond the capability of paper books by incorporating a search function with storable results, along with a bookmarking function. Additionally, video and sound can be linked with written text.
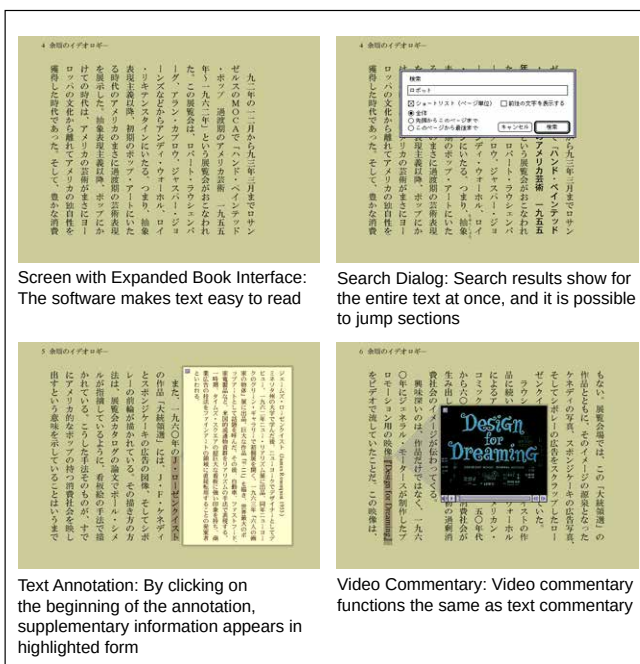
Screen with Expanded Book Interface: The software makes text easy to read

Search Dialog: Search results show for the entire text at once, and it is possible to jump sections

Text Annotation: By clicking on the beginning of the annotation, supplementary information appears in highlighted form

Video Commentary: Video commentary functions the same as text commentary

Example of the Expanded Book Display Functionality

Creative Works Gone With The OS
Whenever a new OS is unveiled, it is always said to be the best; inevitably, there are comparisons between the old and new versions and much discussion about how superior the new version is. Along with the new OS comes new hardware. There is no way to stop new development, and, there are always limits on hardware lifetimes. Although hardware manufacturers may heap praise on a

particular product, the fact is that they seek profits and wish to stimulate the desire to buy new and better things. As operating systems develop and the hardware changes too, no matter how carefully one goes about creating a product, there are times when the software isn't in sync. Physically, the software that is firmly embedded in CD-ROM now has no corresponding hardware for playback, and within just 20 years, we have lost the ability to view them. As the OS changes, the hardware changes and disappears. This is how inflexible the digital world can be.

The preceding works were completed under favorable conditions and were released into the world. Unfortunately, these works can no longer be viewed. With these shifting-sand conditions, it is difficult to create for the long-term. For us, we have lost the environment in which to view these products, but, for the future of the eBook, above and beyond finding a way to create permanence, what is essential is originality.

❖ Book: A Futurist's Manifesto

Thinking Outside The Box
At present, the eBook distribution model imitates that of current publishing in that there are distributors and publishers standing in between eBooks authors and their readers. But, because eBooks require no packaging, there is no printing process required; large printing houses have quickly jumped into digital publishing by taking part in distribution, seeing it as the next great business opportunity. As sales have increased, they have become, in effect, eBook wholesalers.

Between 2012 and 2013, Amazon, Apple, Google and other global IT enterprises have entered the Japanese eBook market. The eBook market continues to grow year by year, but the publishing industry peaked in 1996 and has continued to shrink. If we consider eBooks as one part of the publishing business, the eBook business will also eventually shrink. Emulating an outdated model will mean that ultimately, the eBook business too will remain small. In order for the eBook to succeed, we must look to a completely different approach.

Retailer share of books bought by US consumers, Jan 2010-Nov 2012
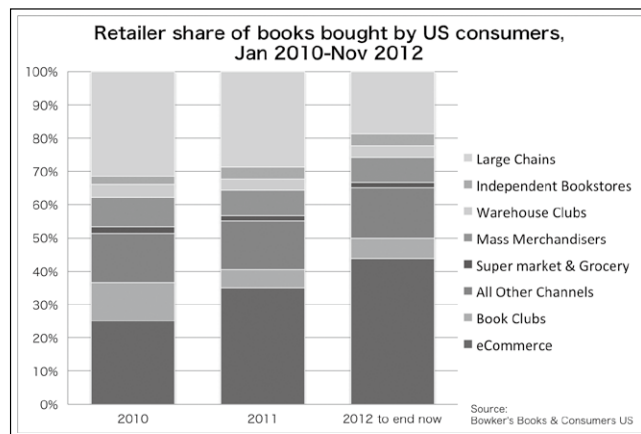
Bowker Market Research: In 2012, for the first time online booksellers outsold conventional booksellers, occupying 43.8% of the market compared to 31.6% held by conventional outlets.

Voyager Company: An Encounter With A Book
Voyager, in seeking for a way to solve these issues, found some clues in *Book: A Futurist's Manifesto* published by O'Reilly. The book centers on the experiences of individuals, mainly in Europe and the US, who have actively grappled with the eBook business. Voyager quickly secured translation rights and in February of 2013, published a Japanese-language eBook and paper-based version.

We realized that, by adjusting our sights to be more entrepreneurial, we could potentially tap astounding business potential.

Here is one good example. The founder of the review site Goodreads, Otis Chandler, titles his article in *Book: A Futurist's Manifesto* "How Do Books Get Discovered." Chandler's Goodreads began services in January of 2007, and by 2012 had over 7.5 million users, with over 280 million book reviews. In March of 2013, it was announced that Goodreads had been bought by Amazon for a reported sum of 200 million dollars. Amazon is an internet-based bookseller, and Goodreads has book reviews; there could be no better tie-up. As of June, 2013, the readership was up to 18 million users and 570 million reviews as the business continues to expand.

In this way, eBooks have expanded their business potential via book review sites, as well as through search and distribution services. There are companies that support book communities, and public libraries beginning to provide new services. These various opportunities are sometimes very

small, yet, without looking for them, they won't be discovered; what is plainly evident is that expanding the eBook business requires actual effort.

The Content Business Must Move From Container To Context

Let's examine the assumption that readers buy books in order to access information (content). The assumption is that people have a problem and they are willing to pay money for information on how to solve it. Stated this way, it seems that books are the only means to get information, but in fact, there are many different ways. For example, I might call or email someone I know who potentially has the knowledge I need. I might also access internet to find information.

Readers are seeking utility. If a book is the easiest way to get inexpensive information, then a reader will buy a book. However, if there is a substitute for a book, and moreover, the information can be had for free, people will not always buy books. There is no doubt that authors are at the origin of information, but there is nothing that says that information must be held within a book (the container). Until recently, the publishing business perceived readers as consumers of the container, but the eBook has made that perception vanish. Now that the necessary infrastructure is in place, we need to change how things are monetized.

Authors and editors know that there is much more information (context) to be had by adding music and images to surround a book. In the future, we

Brian O'Leary, diagram showing the complexity of content and the frequency of reuse. This points to the notion that content becomes increasingly more complex, it becomes easier to chunk and thus there are greater publishing options and genres.
From *Book: A Futurist's Manifesto*. Eds Brian O'Leary and Hugh McGuire. Voyager. Access this at BinB store（http://tt2.me/15294）(also available elsewhere)
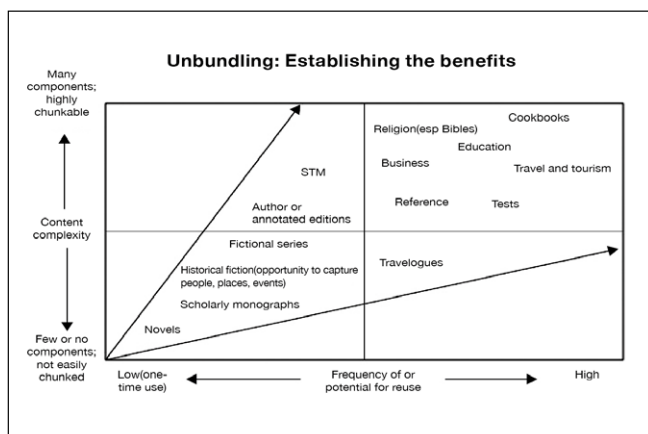
will need to share this context with readers. Readers will thereby reach content that is not in books, via authors, and via critics, as well via this surrounding context. But the question is, how to create this context?
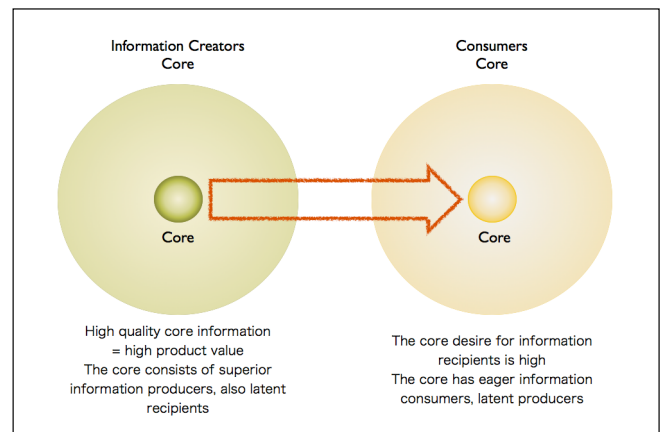
❖ In The Beginning, Was The Network

Readers And Authors Interactively Connected

The entire environment around books is going to change, and in the near future, the publishing business model will shift away from having publishers and distributers intervening between authors and readers.

However, it isn't as though once content is put into a digital container, the eBook, that it will magically float up to readers. The instant one steps foot into a bricks and mortar bookstore, several hundred thousand book titles instantly fill one's eyes. eBooks don't have this kind of appeal. The prerequisite behind internet-based distribution is getting readers to locate their books; in other words, "discoverability" is the issue.

Sites such as TOKYO OTAKU MODE and COOKPAD are succeeding in getting users by uniting information producers and consumers in the core.

Of course, one can rely first on search capabilities of the internet. Voyager is diligently working to precisely insert eBook content on the web. Normally, book content is not single faceted, so we include book reviews and critics' comments. Additionally, beginning with 2013, we are holding face to face events monthly for around 30 people. We record and edit the event and post it to the web. We are hoping, to the extent possible, to create interactive communication between authors and

readers and thereby, to connect people around the world.

Once we are no longer bound by the word "publishing", when we look around the web, we see sites that are already succeeding at creating interactivity. With content as the mediator, these sites unite information producers with consumers on the other side. For example, if someone wants information on otaku, that person could access TOKYO OTAKU MODE (https://www.facebook.com/tokyootakumode). There, one can find the best information on otaku. Japanese who enjoy cooking have most likely accessed Cookpad (http://cookpad.com), in which users can see ingredients and names of dishes as well as popular recipes. It is a very practical site. In addition, on both of these sites, users can also contribute their own voices. Users are connected by discovering the sites, using them, and then making their own independent contributions.

The connections between users and interaction between them is important. eBooks can help foster this. At bricks and mortar bookstores, store-created point-of-purchase (POP) ads are much more effective in promoting sales than newspapers and magazine advertisements, which may be because there is so little distance between authors and readers. Since eBooks are not physically lined up in bookstores, we must look at marketing them differently. Most likely, burning up an advertising budget by buying an internet banner is probably not the best solution. Rather, emphasizing interactivity as the base and developing opportunities as they arise is the best approach.

The Wealth Of The Internet
I have already discussed Voyager's creating of an eBook viewer and file format, and how challenging that is to transfer between OS. If we focus just on eBooks it might seem as though there is no future for them, but that is not the case. Recently, web browsers, which are at the core of the internet, have advanced. It is important to note that these developments in browser capability have also resulted in greater potential for reading systems.

When the web browser itself becomes the reading system, one can seamlessly connect to internet content, as if the wealth of the internet had flowed

directly into a book. With this idea in mind, in 2011 Voyager introduced the BinB reading system, and it is now being used by several eBook sellers. Before, there was a barrier between readers and eBooks because the reader application had to be installed, but this is now no longer necessary. The BinB viewer is an ideal one because it is transparent to the user. From now on, the world standard EPUB format can be used, so it will become simplified on the technical side as well.

As this kind of basic infrastructure solidifies, we can test out various possibilities. Earlier, I outlined how, among the six elements that spell out EBOOKS, Originality and Knowledge are at the essence of good projects. Everyone has times when they have something to say. Putting that idea out via an eBook in the internet era is a form of small media, like mimeographing a leaflet. One can choose one's topic freely, and with the internet, one can tell people in Japan, Asia, or the entire world about it.

Voyager intends to continue the work of Book: A Futurist's Manifesto by focusing our publishing efforts on the present and future of eBooks. Fortunately, Voyager has many colleagues in both Asia and beyond with whom we can partner. For example, we are working with friends in Taiwan and Korea on eBooks. We share the same concerns and issues, and through a lively exchange of ideas, we can surely make advances in the concept of digital publishing. ∎

BinB Delivers 3 Million Books To Readers In One Month

Voyager Japan, Inc.

Junichi Hayashi, Development Department Manager

❖ SHUEISHA Website Delivers 3 Million Books In One Month

In April 2013, the Japanese publishing company SHUEISHA launched a limited, two-week campaign making 10 volumes of "*Kingdom*," a comic published in *Weekly Young Jump* (a Japanese comic magazine), viewable for free. "*Kingdom*" is a popular comic version of the historical Chinese drama centered on the Spring and Autumn and Warring States periods before unification of China by Shi Huang-ti of the Qin dynasty, which has been adapted into animation. Out of the full set of 30 volumes, Vol. 1-10 were available on the web and found a huge response, so that a second free reading campaign was carried out in May. As a result, more than 3 million comics were delivered to readers in a total four weeks.

©*Kingdom*, Yasuhisa Hara/ SHUEISHA
"*Kingdom*" Ten volume free reading site (limitedly on view until May 26, 2013)

"BinB (Books in Browsers)," Voyager Japan's reading system, was used for this campaign. It enabled readers to start reading "*Kingdom*" by just one click on the campaign site. Most likely, the readers of these 3 million comics were able to enjoy this title just as easily as they might view any regular website.

More than half of accesses to the campaign site were made by mobile devices such as smartphones and tablets. The majority of them were through Social Networking Services (SNS) including Twitter and Facebook. Readers of "*Kingdom*" posted their thoughts through Twitter, Facebook, or other SNS, and then others who read the comments clicked the links and become new readers; chains of readers were repeatedly developed through SNS, so the 3 million "*Kingdom*" readers were actually chains of readers.

This shows how the connections of the web can lead to the spread of a book. The system of BinB, which enables readers to go between the Web and a book with ease, realises such connections.

❖ What Is BinB Like?

Voyager Japan's BinB is a book-reading system that uses Web browsers. The idea of using browser as a book viewer arose from the Books In Browsers conference. This conference started in 2010 and is held every year at the Internet Archive in San Francisco. Voyager Japan has been participating in

The 2010 Books in Browsers held at the Internet Archive in San Francisco, when a workshop on browser type viewers was held.

it as a founding member.

With application type viewers such as iBookstore or Kindle, it is necessary to purchase a particular device in which a proprietary application has already been installed, or to download a proprietary application in the reader's device in order to read a book. In addition, after purchasing a book, file download is necessary; it takes a long time, much effort and IT knowledge after readers find a book they want to read.

On the other hand, how about a movie share site (YouTube etc.), music distribution site or news site? On sites such as these, anyone can watch a movie, listen to music or read an article as in an instant.

It was Voyager Japan's desire to make it possible to read eBooks in the same easy way and this motivated the company to develop a browser base viewer.


Brad Flickinger
eBook requires a viewer that allows a reader to read a book as soon as the book is selected from the touch screen.

However, in order to bring up the business quality, there were various problems to address. For example, the viewer needs to capable to handle several eBook formats (EPUB 3, dotbook [.book], PDF etc.). In order to improve the look and speed of display, which affect readability, we exploited our original rendering engine and image compression engine. We also created our own original DRM (Digital Rights Management) system by combining several different technologies to protect books from illegal duplication.

Using the latest HTML5 technology, Voyager was also able to build capability for mobile devices such as iPhone, iPad and Android, as well as several Windows and Mac browsers.

BinB's greatest merit is that it needs no proprietary device or application. Devices presently available have an HTML5 capable browser installed so a user can sample, purchase, and then actually read on nearly any smartphone, tablet or PC. One advantage of a browser-based system is the ability to look up a word in a book through Google Search, or to use social function to tweet your favorite phrases on Twitter, etc.

Using BinB services can bring some advantages to publishers, too. In the past, developers have to pay 30% of iPhone/ iPad application eBook sales to Apple, but if they use BinB, they are not restricted to a particular platform; similarly, publishers have also had to deal with outright rejection of their content from companies who possess the platform. In addition, BinB needs only to upgrade some files maintained on a server to update books or systems. And, we have already seen the strength of the Web connection including Twitter and Facebook in the example of "*Kingdom.*"
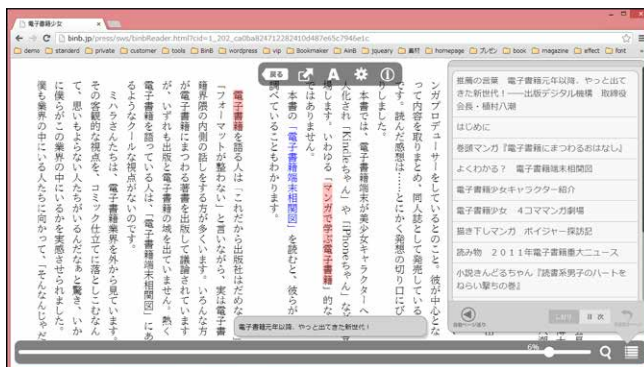
2012©Tetsuya Mihara, ©Voyager Japan.Inc.
The "BinB" reading system uses the latest HTML5 technology, which enables a reader to read a book with only a browser.

❖ Yahoo! JAPAN + Yahoo! Bookstore Shifts From Proprietary Application To BinB

Since BinB was released in December 2011, eBook stores and book PR sites in Japan and other countries have started to introduce BinB. Yahoo! Bookstore began offering the BinB service as part of its store services at the 16th e-Book EXPO Tokyo

held in July 2012.
Yahoo! Bookstore has shifted from relying on proprietary applications to using the Web-based BinB to make it possible to do all sample reading, purchase and full version reading on a browser. Due to an easier update method, the number of available titles is increasing. Also, the system is so easy to use that inquiries from users have decreased and the burden on the customer support division has become lighter.

Initially this service was available through both a proprietary application and BinB; however, because of the large number of readers who prefer BinB over the proprietary application, distribution of application has been closed for the PC and the service has been completely shifted to BinB.

In May to June, 2013, a free reading campaign called 'MASTER OF SQ COMIC FESTIVAL!' which is part of SHUEISHA's monthly comic magazine *Jump SQ* (*Jump Square*) was held, and links to several bookstores including Yahoo! Bookstore were introduced, with the following information:

You can read these comic directly on your device only through the Yahoo! Bookstore!

*Please be aware that unless you go through the Yahoo! Bookstore, your device may not work to read these comics.

*Please be aware that unless you go through the Yahoo! Bookstore, you may have to make a new account.

How do you feel if you are required to download an application or to make an account while the book you want to read is so close at hand? Imagine a scene where you find that your device is not capable for the book you have just found; you may have to give up reading it.

Now is the time to grab the chance for more encounters and discoveries through BinB, which helps to realize a world of books where readers can open and start to read a book the minute they find it.

∎
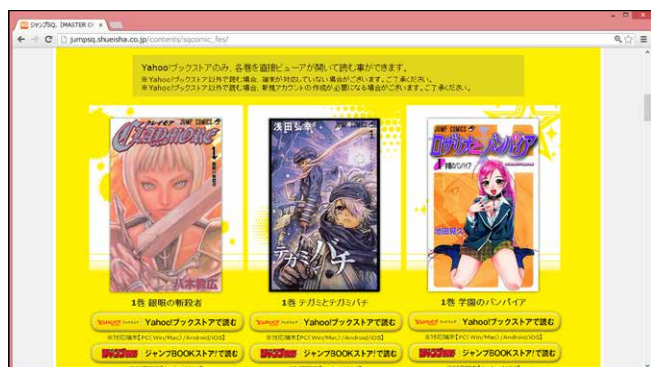
©SHUEISHA
SHUEISHA MASTER OF SQ.COMIC FESTIVAL! (Limitedly available until June 4, 2013)

EPUB Production Workflow

Voyager Japan, Inc.

Toshiaki Koike, Project Manager

❖ Introduction

How are EPUB format eBooks produced?

In this chapter, I first explain the 'open format' characteristic of EPUB; then, I discuss the benefits of openness and how EPUB can be produced by making good use of these benefits. Finally, I provide a description of practical EPUB production workflow and conclude with a few points about eBook production.

❖ Proprietary And Open

What Is An Open Format?

A format that someone has its rights and specifications for is called a "proprietary" format. Since it is owned, only those companies that have rights can freely develop viewers or authoring tools for it.

On the other hand, a format whose specifications are open and anyone can use for free is called an 'open' format. EPUB is an open format, which is managed by IDPF (International Digital Publishing Forum), a non-profit organization working to standardize eBooks.

There are a number of companies developing EPUB viewers, including Apple, Amazon, Google etc. Voyager Japan is also one of them. In addition, IDPF itself is providing a viewer named 'Readium'.
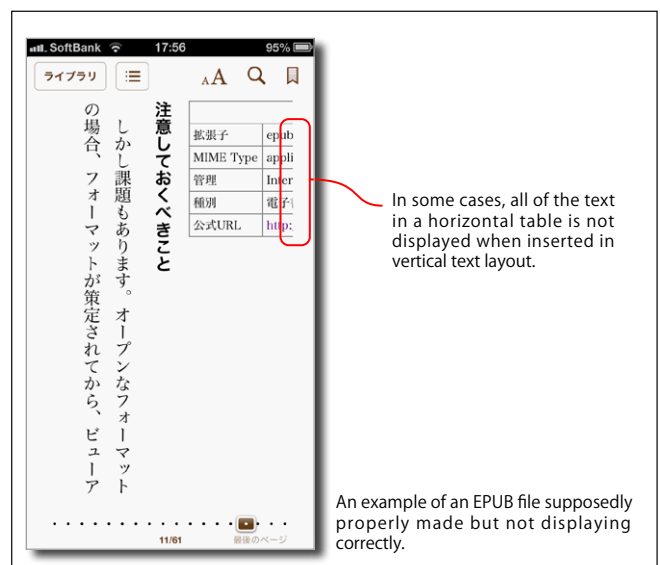
Most eBooks have historically been produced with the 'proprietary' format until recently. This was neither good nor bad, but it was a fact that the market itself was not so large, and the 'open' format emphasizing global standardization had not been brought into the spotlight. Recently, however, the market has solidified and people are now seeking a common eBook format. EPUB, which itself has a long history, is now arguably the eBook standard and this is very positive news. At the very least, it enables us to move forward from having to focus on selecting a format to publish eBooks, to concentrating upon the content itself without having to spend time on format selection.

Some Things To Note

However, there are several problems. With an open format, it takes time to develop and popularize viewers and tools once a format is standardised. In particular, EPUB 3 is now in a transition period and both viewers and tools are still under development.

Under the present conditions, it is possible that a file ostensibly correctly made as EPUB 3 cannot be correctly displayed on a viewer. In order to avoid such problems, publishers should keep some measures in mind. At this point, it is important to master how to produce a simple EPUB file which can be distributed to any viewer, or any eBook store without problem.

In some cases, all of the text in a horizontal table is not displayed when inserted in vertical text layout.

An example of an EPUB file supposedly properly made but not displaying correctly.

Such a situation does not last forever. The day is not far when viewers and tools are fully developed so that everyone can take advantage of open format to choose freely. Developers with common interests are now actively exchanging information through workshops, listserve discussions, and so on. Also, the information about such activities is available for us. As a result, it won't be long before this issue is solved.

❖ EPUB Production Workflow

A concrete explanation of EPUB production workflow follows.

Generally, using an authoring tool is the easiest production method. Unfortunately, however, EPUB authoring tools of are still under development, while a number of companies are now in the development stage. One main reason for this is that the viewer itself is also still under development. In what follows, I describe typical points of eBook production, and then provide examples of what I recommend with actual samples.

Typical Points In eBook Production
Typically, EPUB production methods can be roughly divided into the following two categories:

・Production with an authoring tool
・Conversion from structured text

As mentioned before, authoring tools have not progressed enough, so only conversion from structured text will be explained here.

The word the 'structured text' is common in the eBook industry but in general, it is not a common term. Simply speaking, it means using captions and other semantic text elements to produce correct semantic text. This text can be produced by adding marks for conversion to text, or producing with text word processor software or DTP software (XML or HTML).

Regardless of which method is used, there are several points to note. These will be explained in the following order:

Composition of an entire book

Structure of documents
How to insert images
Text decoration

Those who intend to produce a manuscript on their own for the first time, or those who want to try eBook publishing, should note several key points. If these points are missed, display quality will radically differ depending on the viewer; or, in the worst case, the text will not be converted to EPUB properly. This is more important for text-centered EPUB known as 'reflow type'.

Composition Of An Entire Book
Let's consider a completed eBook. Generally, composition of the whole of a book will be as follows:
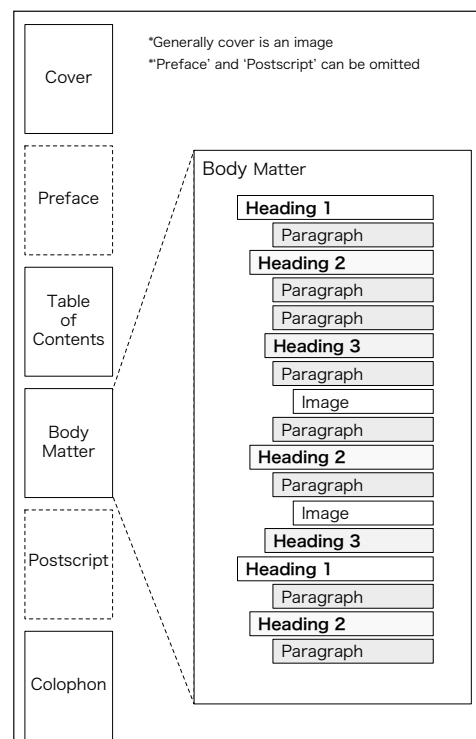
Standard composition of eBooks

Structure Of Documents
When body matter is written, it is important to remember to structure the document using 'headings'. You can use the 'Style' function in word processing or DTP software. In terms of eBook publishing, it is easier and you'll get better results if you have acquired the habit of using the 'Style' function when you write the manuscript.

I recommend that you produce a structured document by using different heading levels

including 'chapter', 'section' and 'paragraph'. These might also be called by numbers such as 'heading 1', 'heading 2' etc. In this article, the words 'heading 1', 'heading 2' and 'heading 3' are used.

When you write a text, it is necessary to consistently follow the order of the level of captions; that is, you must start with 'caption 1' and cannot skip.

When using a word processor or another text editor, many people probably set captions only by changing text decorations such as the font size or boldface. However, this will not complete the settings. You must complete the settings by selecting 'caption 1', 'caption 2' or another style in 'Style Settings' when you use a word processor and do this consistently.

> (Note) Why should you avoid setting captions with text decoration? Large font size, bold font and the like affect only the superficial appearance. As readers, we can interpret them as captions; however, electronic devices cannot made that determination. Many viewers have a function to jump to the next caption, but proper caption settings are necessary to use this function. You can also see the benefit of setting captions properly when you use text-to-speech (TTS) software.

A point to note with paragraphs: do not set indents using spaces and new lines.

For example, if you want to indent an entire paragraph by 3 letters, you must not indent by inserting 3 spaces, writing a sentence and inserting 3 more spaces after the start of a new line. If you are using a word processor, you should use 'Style Settings' to set an indent.

Inserting Images
Many eBooks may include illustrations or figures for explanation or enhancement. When you insert them, be aware that there are various display sizes in EPUB viewers, and readers may change font size or hold the viewer vertically or horizontally. It probably better not to worry too much about the exact layout of the images and to merely place the images between paragraphs.

PDF fixes layout tightly so that publishers can layout images as they like. On devices that have a big display such as tablet, the display may be attractive. However, in the case of small display such as a mobile phone, it may happen that, even if the publisher is careful with the layout (including floating text around image), it is possible that the images are too small to see. In a sense, this problem can be solved only by making a loose layout.

Text Decorations
Text in a paragraph may be decorated for emphasis or other purposes; also, in Japanese, ruby pronunciation guides (also called furigana) may be added. In a foot or endnote, material in brackets may be set to a small font size.

Reflow Type EPUB Production
In this section, reflow type EPUB production workflow is explained using Voyager Japan's 'EPUB 3 Maker.'

'EPUB 3 Maker' is a Web service to convert a document to EPUB 3, and it can create both text and comic illustration content. The conversion format can be selected from either EBPAJ (The Electronic Book Publishers Association of Japan) EPUB 3 File Creation Guide or the General guide (for Kindle/ iBooks/ Google/ kobo/ Yahoo!). Converted EPUB 3 is simple, and without wasteful tags; it has a proper structure and professional quality.

At present, this service is for companies, but a service for individuals capable of conversion from Microsoft (MS) Word is planned for launch this autumn.

For details of EPUB 3 Maker, refer to the following URL: https://pro.dotbook.jp/mkepub_man/manual.html

Document For Conversion
The first step is to prepare a document for conversion. Take care to follow the structure explained above.

'Body text' is composed of 'captions' and contents ('paragraphs', inserted images and etc.). Each paragraph can be either centered or right-align (and bottom-align in vertical text layout). In addition,

paragraphs may be indented for lists or quotation. Sentences in a paragraph may have added ruby, specific font style, font size and font color or have emphasis through circle marks or lines. Inserting hyper links is a specific function of eBooks.

EPUB 3 Maker has an unique format called as 'DP Mark Up', which is a mark up format based on Aozora Notes, used in Aozora Bunko.

(Note) Aozora Bunko is a free library of Japanese literary texts on the Web which are free from copyright.

'DP Mark Up' enables headings, images, paragraph indentation, alignment, addition of ruby, text decorations (font style, font size, font color, vertical text in horizontal text and emphasis circle mark or line) and hyper link insertion.

In addition to this method, I will introduce another example of how to produce a manuscript for EPUB conversion using a word processor. The manuscript can be produced using MS Word or LibreOffice.

(Note) LibreOffice is an open source office suite whose native save format is OpenDocument Format (ODF). It can open and save MS Office documents (OOXML).

Using the 'Style' function, create the settings. In particular, be sure to set captions as Caption 1 and Caption 2, etc. Both MS Office and LibreOffice have a standard 'Style' menus for captions. Once the captions are set, you can chose whatever naming

style you like for paragraphs.

Conversion And Conversion Logic
With 'EPUB 3 Maker', the table of contents and colophon are automatically produced when a document is converted to the final EPUB file. For the cover, a prepared image for cover is used as the first page of EPUB (and as a cover image for an icon on a bookshelf). The index is automatically produced from the points marked as captions. The imprint is automatically produced from prepared bibliographic information such as book title and author name.

Output Format
'Output format' means the format after conversion; of course it is EPUB 3. As mentioned before, EPUB 3 can be read on any different device. 'EPUB 3 Maker' can produce documents in two output formats: Kindigi (conforming to the EBPAJ EPUB 3 File Creation Guide) and Kindle/ iBooks/ Google/ kobo/ Yahoo!. Kindigi (conforming to the EBPAJ EPUB 3 File Creation Guide), true to its name, meets production specifications of Kindigi and is the same as EBPAJ EPUB 3 File Creation Guide. Preset CSS (Cascade Style Sheet) is available for this format.

(Note) Kindigi is an abbreviation in Japanese for the 'Urgent Content Digitization Project' sponsored by the Ministry of Economy, Trade and Industry.

'Kindle/ iBooks/ Google/ kobo/ Yahoo! capable'
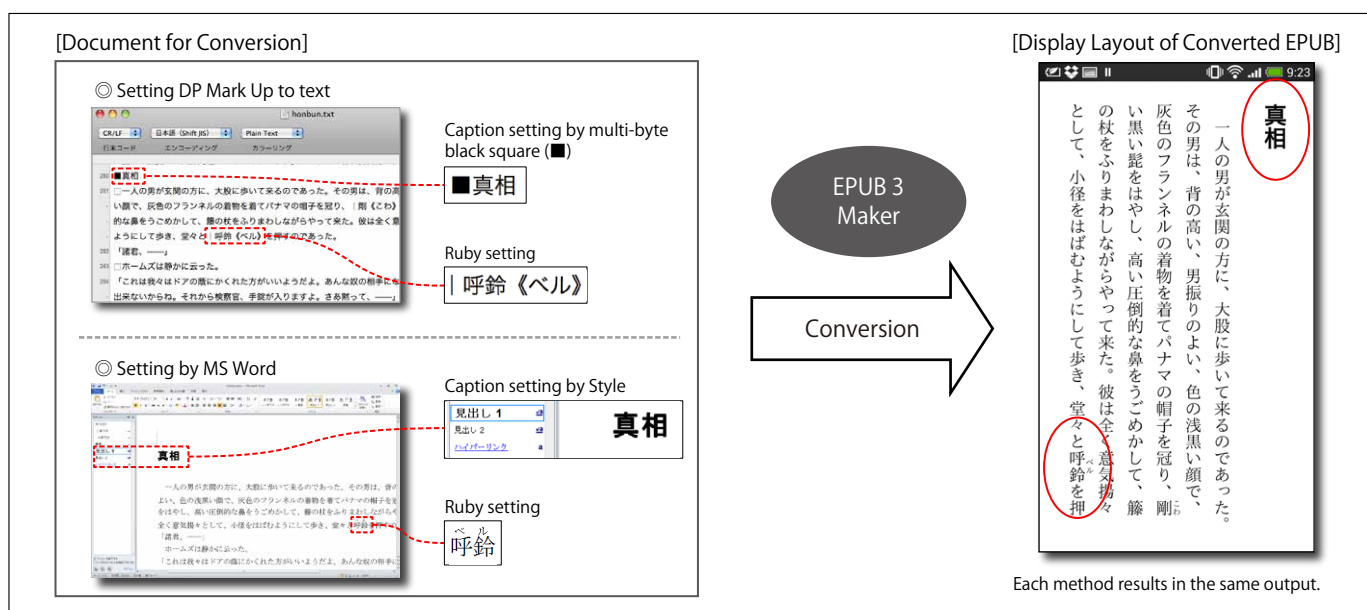
EPUB conversion flow by EPUB 3 Maker

conforms to to EPUBJP (EPUB 3 Japanese Basic Standard) http://www.epubjp.com/home）and can also add meta-data necessary for iBooks or Kindle (KF8). When converting from a word processor manuscript as mentioned above, this is the selected format.

Fixed-Layout EPUB Production

The previous explanation deals with text-centered eBooks, which use the 'reflow format'. In contrast, image-centered eBooks including comics and photo books are 'fixed type' or 'fixed layout format'. Production workflows for the reflow format and fixed layout format are completely different. The reflow format has already been explained in the previous section; this section explains the fixed layout format.

Every page of the eBook discussed in this section is made up of images.

Fixed layout format content means merely that images are lined up in order, but for the facing pages to display properly, the following settings are necessary.

・Setting of page turning direction ('from right to left' or 'from left to right')
・Setting of odd and even page numbers (right page and left page)

Page Progression Direction

Example of facing pages layout　*Give My Regards to Black Jack* by SHUHO SATO
Manga on Web：http://mangaonweb.com

BinB　　　　Google Play Books　　　　Kinoppy

Examples of Navigation Functions　*Give My Regards to Black Jack* by SHUHO SATO
Manga on Web：http://mangaonweb.com

If a navigation function is necessary, prepare an table of contents page using clickable map or use the navigation function of EPUB.

Preview

There is a tool called "epubcheck" that validates EPUB file format is correct; so use this tool to check immediately after conversion. EPUB 3 Maker includes in its conversion process a step to validate the file by "epubcheck", so if a file is properly converted, there are no file format problems.

In addition, EPUB 3 Maker has a preview function to check converted EPUB to be sure it has been converted correctly. Because it is a Web-based service, you can check not only via PC but also by smartphone or tablet. You can check for omissions and errors, layout settings and so on; if there is a problem, correct the manuscript and convert again. If there are no problems, download a file and complete the process.

Preview on PC　　　　Preview on Smartphone
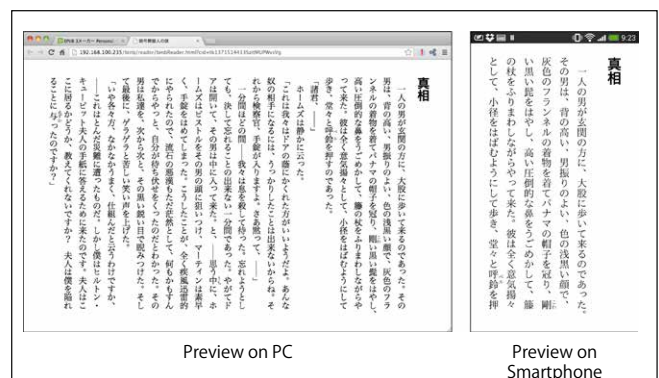
Preview Function of EPUB 3 Maker

❖ Future Of EPUB

Advanced/ Hybrid Fixed Layout

When text type reflow text and fixed layout are mixed, this is also defined as 'fixed layout' in EPUB. At present, only a few readers, such as 'Readium,' can handle this format, but in the future, these will probably increase.

In addition, 'Advanced/ Hybrid Fixed Layouts' are also being created. This format enables scrolling from frame to frame so that one can read comics on a mobile device, make the words in a comic balloon bilingual, and create reflow formatted text within fixed layout pages in magazine-type eBook.

Future Benefits Of Open Format

In this article, I have introduced production workflows, accounting for the differences in devices and considering that there is presently much under development. This may have left the impression that there is a lack of unity and much confusion. But this situation will not continue for long. Open and standard formats provide ground for companies and individuals to freely develop solutions. We expect that better services will be developed and provide us new possibilities.

Of course, we still have the freedom to select the best one. Some developers may focus on trying to develop multi-function tools. Others may develop tools with few functions but which are stable and user-friendly. Do you want to distribute rich content for specific eBook store? Or do you want stability and the ability to distribute an eBook to every bookstore? The most suitable solution will likely differ depending on the need. If the best solution is not available, you can try to develop your own.

It will not be long before such a day will come. We should remember that there is a long history of trial and error, but these countless trials have connected us across the globe. I encourage you to courageously challenge yourself to create something new. ∎

VOYAGER TIMELINE

1998.7	T-Time Internet Vertical Writing and Reading Model (Hybrid edition), a software which converts HTML files into book-like text in a vertical layout, was released.
1998.10	Adapted TTZ format into T-Time, a predecessor of dotbook format (.book).
2000.6	Adapted .book file format.
	Adapted T-Time Plugin: a .book/vertical reading system for web browsers. Made it possible for distributers to administrate the reading time on web browsers.
2000.9	.book was adopted as the standard ebook format in the PABURI electronic library, the collaborative electronic bookstore of four major publishing companies (KADOKAWA GROUP PUBLISHING, Kodansha, SHUEISHA, SHINCHOSHA Publishing).
2005.3	Announced T-Time 5.5, with a new function which allows exporting on-screen images.
2006.2	Implemented low-brightness mode in T-Time. Made it possible for visually impaired persons to read .books by providing choices in font size, brightness of screen and a magnifying glass.
2006.10	Made T-Time compatible with Denshi-Kataribe, a text-to-speech software, which made it possible to listen to .books.
	Cooperated with CELSYS and INFOCITY. Adapted BookSurfing, a reader for mobile phones. Started distributing .book files in BookSurfing format.
2008.5	Announced T-Time Crochet. Started distributing encrypted .book files in increments for faster access. Realized a distributing system for high capacity content, such as comics, that can instantly respond to users' requests regarding display mode.
2008.7	Released T-Time for iPhone. Started providing comic books for iPhone and iPod touch in App Store.
2008.11	Made .books compatible with PC-Talker, a text-to-speech software for visually impaired persons using PC.
2010.6	Adapted Risoh Shoten to iPad and released Voyager Books, a viewer app for iPad.
2011.10	Released the "EPUB3 Japanese Basic Standard" in Japanese and English. Jointly launched the EPUB Japanese Standard Study Group (EPUBJP).
2011.12	Released "BinB", a new reading system by Books in Browsers. At the same time, opened "BinB store" running on this BinB system.
2012.3	The reading system "BinB" started supporting comic books. Realized the right-to-left page progression and the mirror-margins layout without any application or plug-in for web browsers.
2012.7	Started providing the "BinB" reading system to Yahoo! Japan Bookstore.
2012.12	Provided the "BinB" reading system to Shueisha's "Ultra Jump Magazine Official Website".
2013.2	Published "Book: A Futurist's Manifesto – Japanese Edition –" edited by H. McGuire and B. O'Leary, originally published by O'Reilly Media. Provided the "BinB" reading system to Kodansha's special bookstore site "Denponya San (Mr. e-Bookstore)".
2013.4	Provided the Chinese-compatible "BinB" reading system to Taiwanese e-Bookstores, "eCrowd Media Inc." and "Wanderer Digital Publishing Inc.".

What's Next Beyond Self-Publishing?

Chief Editor of the digital magazine, *Torutaru*

Yasushi Furuta

❖ Digital Publishing And Self-Publishing

My name is Yasushi Furuta, and I publish Torutaru, a digital magazine. I am a writer by profession. Beginning my career in 1995, I have hardly experienced "writing" with a pen. That is because, from the beginning, I "entered" my text digitally using a word processor. I think that printing presses had already been largely digitalized at the time , but communications was not fully developed and there were compatibility issues, so there were plenty of editorial rooms that didn't have computers. For that reason, we commonly printed out our manuscripts on home printers and faxed the pages to an editor. Later, emailing became commonplace, and manuscripts were then printed for the first time at the editor's office, instead of at home. Even then, there were probably still points in the editorial process where someone looked at a printed version of the manuscript and reentered data digitally. Now, however, we have made progress in digital editing, and this two-mode process have finally disappeared. I think we can generally say that at this point in time, the only place where something should be printed is at the actual printing press facility.

In much the same way, the form of the book itself has changed, and we have arrived at a new type of book where even readers do not have to touch paper. As this becomes more widely accepted, we will see tremendous changes to the "stage" that was the essential performance space for the publishing business.

Specifically, what will change? I wondered this myself, so, beginning in 2010, I used Amazon, iOS apps, and Puboo (http://p.booklog.jp/), and tried publishing several books. Sales were modest, but, even with this completely different approach, I was still able to publish books. In particular, I was struck by the casual nature of the process. The "publishing" part was almost the same, but, with computer, I had complete freedom to do it myself. For someone like me, who makes his living at writing, this was tremendously attractive. I had been captivated by the allure of self-publishing.

❖ It Is Difficult To Create A "Good Book" All Alone

Nearly anyone can create a digital book from scratch. This is really true. But, it isn't long before one realizes the limits of going it alone.

For example, take book covers. Because one doesn't hold a book in one's hand, the cover is an even more important part of the appeal, and so, I needed to ask someone to help. Moreover, when I had problems with the layout or design, I needed to ask a programmer or designer to assist with these aspects. I also realized that in order to promote my book over the internet I needed someone with that expertise. Finally, what I wanted most of all was an extra pair of eyes. In traditional publishing, editors and proofreaders have a firm grasp of the project plan, and, by serving as the text's "first readers," they raise the quality of the text through careful reading. Actually in my case, I rarely receive much corrections to my manuscripts. Perhaps it is due to the recent publishing slump that there have been cutbacks in the proofreading business. Still, however, editors read and make comments. However, in true "self-publishing" no one checks over a text; for me, this was a source of anxiety.

So, it is quite difficult to create a good book all alone. My long-standing connections to the publishing world might have made me feel this particularly deeply. Perhaps a strong will, and more extensive knowledge and technology might have solved the problems, but I found that it was essential to get support from others engaged in the same endeavor while leveraging the inherent nimbleness of self-publishing. At that point, I hit on

the idea of collecting serialized columns on various topics into a "digital magazine."

The basic idea is like that of a rock band. I assemble the instruments, various lyrics, songs, and so forth, and then on a regular basis, produce a digital magazine. Since a digital publication can contain all kinds of content, I decided to let people who were interested create whatever they wanted, without worrying about their areas of specialization or expertise. In other words, like a sign in a local record store that used to say: "Looking for professional and part –time musicians," I posted a similar type of notice in Facebook: "Looking for people to work on an digital magazine." On April 1, 2012, we debuted our digital magazine called Torutaru (http://bit.ly/toru_1). Since then, we have had four issues and two special editions; all combined, we have had a total of over 12,000 downloads as of late May, 2013.

❖ Collaborative Digital Publishing Using Social Networking Services (SNS) And Cloud Computing

Torutaru is published using EPUB 3, but it is not just the format that is digital. In fact, one of its hallmarks is that everything related to the publication is digital. First, the authors I assembled via Facebook live in various locales, from Hokkaido in the north to Kagoshima in the south, to France and America abroad. As a result, it wasn't possible for us to physically get together or to exchange materials face to face.

Our editors used the Group function in Facebook and kept documents and progress reports in Google Drive. Google Drive's strong point is the ability to allow editing and proof reading to take place in the cloud. Large files, such as images, video and audio files were uploaded to SkyDrive, a cloud-based storage site, and we had separate folders for each magazine issue. We also stored completed manuscripts there, so it functioned as an archive. Then, programmers and engineers could download the files and mark them up. Next, using "gepub", an EPUB generating software made public on GitHub, we created our first draft. The Facebook editors would then download their portion and edit using their own terminals and OS. If there were changes or bugs, these could easily be shared and fixed,

creating a subsequent draft which could be rechecked. This process could repeat as necessary until the final product was completed. Once the release date was determined, team members would, as time allowed, promote the magazine by posting the material via Facebook, Twitter, blogs and so forth. This was our basic process.

Of course, it was the SNS function that made this work process possible, but the rapid development of cloud-based storage and the possibilities it opens up for editing and creating material also played a crucial role. Just two years ago, group of individuals like ourselves could not have done this. Even one year ago, I think the process would have been much more confusing. In that sense, the development of the web has really made today's digital publishing possible.

This production process was born naturally out of trial and error, but many people found it quite interesting. So, I named it "crowd publishing." Using cloud-based services, a team (crowd) works to publish collaboratively. This kind of group publishing will take self-publishing to a new level.

❖ The Significance And Possibilities Of Crowdsourced Publishing

Torutaru is currently distributed free of charge at (http://bit.ly/toru_k) so the business angle still needs to be developed. In the future, we intend to again proceed via trial and error, and to possibly publish some of the material in a book. We don't know if we will succeed or not.

However, I feel strongly that there is substantial merit in crowdsourced publishing. Of course, creators can contribute their skills to help one another, but, more than that, there is the marketing effect that comes from engaging social media. It is often said that web-based promotion is essential to getting digital content to people, and crowdsourced publishing offers an excellent avenue for that through the everyday activities of its participants sharing and retweeting.

The greatest value, however, is the inclusion of third parties into the creative process. we introduced the editorial function into our work with *Torutaru*, but other contributors too could have a substantial share

in the creative process. Anyone with interest can engage. Thus, from unexpected places, one might hear a new idea coming from someone suggesting, "how about doing it this way?" and if one includes Twitter in the mix, then some excellent idea might come from a completely unknown person. Of course, there can also be contributions that are not terribly helpful, but in general, there is a lot to be gained from this type of creative style that, by its very nature, incorporates the unexpected into its structure and doesn't depend solely on meetings and brainstorming sessions.

Since I have been continuously working in this flexible environment, I have come to see new possibilities in how teams are assembled. In terms of publishing models, if we are able to assemble professional teams for text, drawing, photo, editing, design, typesetting, and programming, then we can have the smallest possible units. And, if we could add someone with web marketing expertise, it would be the best. But, this idea is only extending the traditional publishing. It is merely "digital (ly created) publishing." I think it is a real waste to use the development of the web just to publish digitally. In order to imagine the future media and "book of the future," we must open the door wide, and create a place where many different people can join us inside.

At present, *Torutaru* has about 80 contributing members, including musicians, composers, video creators, and dancers, many of whom have had no previous connection to publishing. Because of their participation, it is possible to screen film series and to make promotional videos. People in printing and DTP operator who until now have not had a role in content creation, will definitely play a role. Beyond thinking about books that are "born-digital" these members provide a valuable resource for us to the traditional skill of book creating can be of help in creating "born-digital" books. Experiments with original fonts created by designers especially for digital publishing are also possible due to cooperation by various members of the group.

However, I strongly feel that this is not enough. What we presently call "content" is really just a package, and nothing more. And this is just not interesting. Presently, the Torutaru editorial team is working toward developing completely new ideas

by working with creators with whom we have previously not had contact. For example, one of our colleagues who is in the fountain pen business and currently writing a column in our magazine, has an idea about the "next generation writing interface," a pen that works like an app and connects with the internet. This new technology may represent a second major shift in digitizing text, following the first shift when text was "entered" via word processing. Other examples include some young New York dancers still in training recently sent a short dance film. They are imagining events held on stage or in the street that feature both film images and dance. A writer also a "shougi" (Japanese chess) instructor, recently connected with the president of a picnic group and together they have planned "shougi and board game picnics" that are being held at various places across Japan. Those types of events can also be considered "content" will appear as a "book" and can be "read." I dream of "books" in the future that rapidly incorporate these kinds of ideas.

Of course, it may be that my vision is just too big to become reality. But, when we think of "where the book is headed," we don't actually know what that will end up looking like. It is worthwhile to try out new ideas. I think this effort will not only expand the concept of the "book", but it will also expand our notion of what think of as "content."

To recap, "digital publications" are not just books that have been digitized. Creators from various places come together, and show us the promise of changing what we think of as production, and how we think about content. Working with Torutaru has taught me this. It may be audacious, but I am planning to keep going in this direction. ∎

Yasushi Furuta
Born in 1969 in Aichi Prefecture. A writer by trade, in 2010 he started the private label digital press Kanakana Books. In April of 2012, he founded the digital magazine Torutaru using EPUB 3. Kanakana Books: http://kanakanabooks.com/

After Drifting Along Together For 30 Years, What Now?

Voyager Japan, Inc.

Masaaki Hagino, President

❖ A Chance Meeting Marks The Beginning

There is a reason why I stand here today. There is someone upon whom, for many years, I depended, or, perhaps more frankly, to whom I clung. For me, Bob Stein has been my colleague, my partner, and, at times, my life support. Without this man, I wouldn't be here today.

Bob is oddly insistent that that was 32 years ago. Maybe he doesn't want to neglect even a single year. Because for Bob, our meeting was the beginning of his journey too. Our ships did not leave a clear wake, not by any means. We floated along, drifting here and there, in our little boats. As we crossed the seas, we periodically hollered out encouragement to one another. It ended up being a rather desperate ocean voyage of which neither of us can forget even a single hour.

Illustration by Takeshi Kojima

I still remember when we first met. It was in LA, at a crummy fast-food joint. We ordered only drinks and talked for a short while. Across the street, I could see a newly built shopping mall. Looking at the non-stop traffic of cars going in and out of the mall, I could smell the joys of consumerist indulgence, even from across the street.

Bob was wearing a shirt with worn-out collar He held his head, already balding at the time, high and talked grandly of doing what had to be done. I understand the grandness, I said, but when I asked, "but how do we actually do it?" Bob quickly responded, "You don't understand – what we need is money, money!" he said, and then he tempered it with, "well, more politely, capital, you know?" I didn't really understand English well. But, at any rate, I think he said something like that.

If Bob was trying to persuade me to cough up cash like a trickster, he was gravely mistaken, since I didn't have it. But, regardless, if he wanted to persuade me, or anyone, to provide funding, he'd need to show some actual plans that could make his grand idea actually work.

"So, let's talk about making the plan," Bob suggested. Then, he continued, "There's no reason why we can't become the future Random House, right?" He was a really strange guy, I thought. Didn't he have any common sense? Ultimately, this was as far as our conversation went. But, because of this conversation I was knocked out of my rut and found myself wanting more than anything to do something along these lines. That was all the contact I had with him at the time. In a way, it wasn't bad that I had found a worthy challenger. It was that chance meeting that marked the beginning of our unusual, almost karmic, connection.

Thirty-two years later, with the reality that we didn't become "the future Random House," our goal has become much more complicated than it first was, Bob says, his eyes characteristically half closed. He says he has realized that becoming a "publisher of the future" is not enough. However he wants to put it, from our launch long ago, we had years and years of drifting ahead.

❖ Before Becoming A Publishing House

But, in order to proceed, we needed to be ready. We needed tools for our trade, and pens and paper wouldn't suffice. But, it wasn't that we just needed someone who could use computer technology, since it would be stifling to have to get instruction each and every time. We needed to be able to use the tool ourselves, freely. We needed technology that didn't require a lot of technical knowledge. What we needed to be creative was a robust tool that we could use to break through the status quo and build our base.

"You know Gene Youngblood, right?," Bob asked. Youngblood's book, *Expanded Cinema*, provided a detailed introduction to various kinds of experimental movie that challenged film's potential. It shouldn't be forgotten that, before the development of the Hollywood movie industry, there were a number of film pioneers who faded away in indignation.

When I first met Bob, I was head of a laserdisc production company, and was producing the "Visual Pathfinder" series that included these kinds of experimental videographers. I myself had never had much interest in major recreational films. I was more interested in probing the depths of these pioneer filmmakers' intent through laserdiscs, which allowed me to examine the film frame by frame, and I came to believe that this was the direction media would go. In the more than one hundred years of film history, a new form of creativity emerged through these experimental techniques designed to create illusions.

Bob and I talked about the history of film: the French Cinéma vérité[*1], the British Documentary Movement[*2] and the German Encyclopaedia Cinematographica (EC) [*3], among others. Around the world, various movements developed around cinema. These movements were not just in the imaginative realm either. Reality was also a messenger. Yet, for film images to capture reality, they had to carry only what the eyes saw but what the ears heard, as well.

Thinking about starting point in silent films, it is easy to understand just how big a barrier there was in creating synchronized sound. It took a very long time to synchronize image and sound in film. When it was finally achieved, it is hard to imagine just how people must have felt when they first experienced the new world that opened with the freshness and reality of moving images. That feeling is now probably impossible to recapture, given our current age of digital cameras that have made such things an everyday occurrence.

My conversation with Bob touched to Joris Ivens' film *Song of the Rivers Das Lied der Strome*. I realized that it wasn't that he and I saw things the same way; rather, it was that we both were looking in the same direction and enjoying a very nice illusion. But, while our eyes were on the world, our hearts were in our respective homes. Without realizing it, we'd become close friends.

"To tell the truth, I didn't think I'd be hearing about Cinéma vérité and visual anthropology from you, a Japanese guy," Bob responded, and I could see that he found Japanese people surprising. But with the mention of Gene Youngblood, there was no way I could leave it with just a nod of agreement. I definitely didn't want him take Japanese lightly. Eventually, using the "expanded" from Expanded Cinema, we named our tool "Expanded Book." Thus, even before we thought about publishing, we tried to see the future through the history of film, and in terms of tools, transferred printing to the computer.

❖ Absurdity And Sadness

We used all our energy in developing the tool. Exhausted is probably a more honest way to put it. I don't really want to call it a waste, but the truth is each day was a struggle.

As usual, we promoted "Expanded Books." Our slogan, "Anyone can do anything, easily" is still circulating. In reality, though, those who can use the tool are few, and those that can use it manage only by plowing through some real challenges. Of course, if we had financial capital, were blessed with well-intentioned backers, had lots of patience, and could do a case-study over the long term, then, we might find out our slogan was for real. If there

was ever a long term case study done, then we might find out that our slogan was for real. But, that kind of luck doesn't just float down from the sky. Ultimately, our slogan was just a gimmick that will eventually die out.

It is not just users and readers who may feel deceived. At Voyager, we do everything with, by, and for computers, and we of course carry out our development based on computer standards. These standards are clearly determined by private enterprise, and they can change the standards at will. But, we can't complain just because at one time our own ideas were unknowingly undercut by these changes.

We have to develop our business by depending on a strong leader. But, the leader can change quickly, and our ideas can be overturned in an instant. When that happens, there is no point in expressing futility, or in holding on to feelings of hardship, absurdity or sadness.

Expanded Book originally depended on Apple's Hypercard. After that, the focus was on Apple's Quicktime, and we moved toward that, but when Apple management's decided to dissolve the QuickTime team, we lost our bearings and got lost.

Expanded Book came to a dead end. But Bob did not give up. The plan was to "publish on the web" so he deepened his efforts and developed TK2/TK3 (ToolKit 2/3). With a team consisting of a production team in New York, programmers in Bulgaria, and designers in San Francisco, we managed to create a stunning product. Time was required for development. What sustained us economically was the funding from an easy-going foundation that, for those who were successful anyway, spared nothing in terms of support or funding. Bob was to act as our fundraising "guru."

Where is that money going to come from? Bob, aren't you the laborer and soldier who has crossed the rough media seas? You worked with sweat on your face, and in the evenings, frugally, you sat at the kitchen table, becoming a thinker. Watching from the sidelines, it seemed so refined. At some point, you became a professor at a famous university, and became gradually enshrined in the apartment you were housesitting, where you got a big dog, and sat at your table night after night surrounded by intellectuals.

I was also invited several times to that table. At times, I had to run to the window in my disgust at being surrounded by such difficult English. Below, I could see Washington Square Park. Hey, isn't this the absolute center of New York, I thought to myself?

What was I to do? Like a kid disinherited by his parents, it was like I was destitute. I had no qualifications to sit here shamelessly talking about the future, when all I could think about was how my rice bin was empty and I had no next meal. It is ok to be poor, right? I thought. At any rate, I am ok with that. If you, Bob, can get something done with other people's money, then please offer me some comfort with those words. I silently yelled these things at Bob's turned back and had no choice but to leave.

❖ My Favorite Word: "Resignation"

All right, I thought, let's quit the dependence. There's no choice but to go it alone. I'll do it myself even if it means that I sacrifice myself. I'll focus on what I can write, what I can say, and, I am only going to think in Japanese. Who cares about the rest of the world – it can do as it pleases and so will I. The only thing that really exists is the language, Japanese, that I can use. If you ask me what my favorite word is, I'd say in Japanese it is *akirame*, "acceptance". That is all there is.

I felt like everything was for naught. Nonetheless, I couldn't stop thinking. I still had spirit. Seeing that it was impossible in Japan to get money from an easy-going foundation or funds from some successful person, I'd just have to depend on the simple tools that I had. If what Bob did was boiling up a rich and nutritional beef stew, I was going to have to answer with soba noodles boiled in water. Who knows which is better?

So, I threw the grand ideas away. There was only one thing that truly mattered: it was letters, characters, script. I wanted to take that faithful tool, constantly been in use since ancient times, and hook

it to the most advanced technology we have today. I haven't forgotten that those with nothing still have power. Let people laugh at me, but I didn't care. I would believe in the power of script.

I thought it would be sufficient if the Japanese language could be read on the web as it is meant to be read: to have a passage display in Japanese script, first, vertically and then, at will, to convert it to display horizontally. Above and beyond this basic requirement for Japanese, it was important to provide a means to display ruby pronunciation markers, and to follow the rules for hyphenation and indentation. If we could maintain these basic elements, then we could let go of other, somewhat unnecessary trappings, and chalk it up under "acceptance."

We called our new reader software T-Time. Then we created .book (Dotbook) as a file format that would allow the most natural display for reading books, particularly those written in Japanese. .book was used by numerous publishers, the main one being Kodansha, and it also made market inroads as the format for ebooks sold by publishers.

On the other hand, Bob, in making his beef stew, ended up choking. Thinking he could do this and that, he ended up doing nothing. With several boiling pots in front of him, he kept thinking it wasn't quite ready, but would be soon. We just have to get to the next version, he kept saying.

In the end, TK2/TK3 was not completed. "I am too ahead of the times. This battle is being fought in too short a time frame. Just give me a little more time, and little by little, I'll definitely make progress…" Bob said. The lack of success was a tough fact to face. In the end, all the money invested in the development was really just faith and expectations offered up by the "guru."

One of us made a fantastic bet and learned the cruelty of fate. One of us struggled along in the mud and starved. Which one of us was right is hard to say. But what is for sure is that neither of us really succeeded the way we would have liked.

❖ No One Understands

Over the years, the digital publishing world has seen dramatic changes. Amazon has managed to secure a top position in the market. Now, everyone realizes that there are very big differences between booksellers, who stand in between publishers and distributers. For example, we have realized that when we sell through large internet booksellers such as Amazon, aside from sales figures, the reality is that we get no additional information from them.

After the failures of TK2/TK3, Bob started talking incessantly about the "social" component. In a physical book, the essence is trapped in a stagnant package. He realized that when a book goes onto the internet, the form of the information cease having a set and defined form. The infrastructure must therefore be independently constructed.

By loading up a text online, readers can get together to talk, share, and collaborate, even taking notes in the margins. In order to help realize that vision, Bob developed SocialBook. Simply stated, SocialBook is a system for readers to read together. SocialBook has been used by experimental English literature classes, high school Spanish language classes, for discussions on German bestselling fiction, and on how to "read" a film.

However, these uses all seem to have an educational purpose behind them. But not everyone wants to be educated in cinema, or watches a movie with the intent of getting some valuable information. These are just films with the goal of education. Do people really want that, I wonder? Even if people do have opinions and perspectives on movies, I think that in actuality, there are relatively few movies that someone would want to go back to a specific scene and leave a comment for others to see later. After all, movies are really just a product people consume, and not much more. Bob, don't you agree?

When Bob started developing technology and looking around for funding to get into the market, he realized a couple of things. Bob constantly said to me that he believes that SocialBook is an incredible platform, but, at the same time, he

recognizes that it may take time for users to actually begin using it. It is a steep road to get to that point. It may be that, for investors, the timeline to success is just too slow. Hearing this from Bob, I thought, "What is it with this guy? He certainly is obstinate." And, at that point, Bob mumbled, "No one understands."

❖ We Two Are One

I wanted to hug him. He says no one understands him, but here I am, aren't I? No matter how different our viewpoints or situations, we have been working together all along. There were times when we didn't see each other. But, somewhere in the world, I have thought that all along we were both out there battling as though our lives depended on it.

Hachidai Nakamura, the songwriter behind the famed "Sukiyaki Song" (actually titled in English "I shall Walk Looking Up") wrote a song toward the end of his life that contained a message for those who are exhausted by life. This song is not on any CD. I tried to remember it.

> *Life is borrowing from someone.*
> *Life is paying someone back.*
> *Get someone to do that for you.*
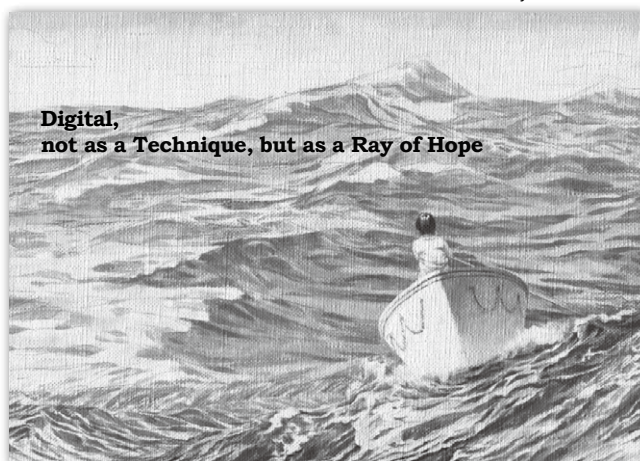> *Do that for someone else.*

I have no interest in continuing to talk about the budding of this new digital publishing business. I simply wanted to do something out of the box, and at that point, I met Bob, and we both sailed off. We set off on a voyage without much knowledge, and had no choice but to deal with pounding rain, wind, and even drought.

Situations like this are not limited to digital publishing. In this world, regardless of what challenges you take on, there is ultimately only oneself to take responsibility and have pride. So, for Bob and for me, even if we drifted far from the work of publishing, I thought we'd still both be sincerely engaging with our work, whatever it was, and we'd each hope the other one was there. In terms of this new age built with technology and business, it comes down to the starring role that each individual's quality of character plays. Behind

all the big, often undulating waves of change that seem to trifle with us, lies a human being, floating like seaweed, just a tiny being. But we don't need to be crushed; we can stand tall and know our worth. Bob helped me, and I helped him to see our respective dreams, shining faintly, and to accept our hearts made of steel. The two of us were one.

＊1 Cinéma vérité: In French, "truth cinema." A documentary technique in which filmmakers interact with the object of filming. The elimination of the presence of the filmmaker in conventional films was denied as a fabricated trick. The French visual anthropologist Jean Rouch was a well-known proponent.

＊2 British Documentary Movement: A movement led by documentary filmmakers Paul Rotha and John Grierson that advocated the use of film for propaganda and education to inspire social revolution.

＊3 Encyclopaedia Cinematographica (EC): In Germany, at the Göttingen Institute for Scientific Film under Professor Gotthard Wolf, an archive of scientific films for use at the university level and for international scientific study.

Illustration by Osamu Naruse

Digital,
not as a Technique, but as a Ray of Hope