

When Books Go Digital: Exploring Transitional Models for Electronic Editions

Zoe Cooper¹

¹ Department of Computer Science, California Institute of Technology, USA

ABSTRACT

The development of electronic editions can be read as a transitional point in book history, of the same order of importance as the shift from rolls to codex or from manuscript to print. Such transitions have tended to be gradual, though, and electronic editions are still a relatively new development, only having existed for a little more than twenty years. Many of the early statements made about the potential of these editions have proved to be overly optimistic. However, we should recognise the real and exciting possibilities opened for scholarly editions by electronic media. In spite of questions about their cost and sustainability, electronic editions constitute an undeniable advance in the access they provide to digitised images, their ability to facilitate the collation of textual variants and their capacity to make possible new forms of editorial collaboration.

RÉSUMÉ

Le développement des éditions électroniques constitue une phase de transition dans l'histoire du livre, d'une importance comparable à celle par laquelle nous sommes passés des rouleaux aux codex ou du manuscrit à l'imprimé. De telles transitions ont cependant tendance à être progressives, et les éditions électroniques sont encore un phénomène relativement nouveau, qui n'existe que depuis une vingtaine d'années. Beaucoup des premiers avis concernant le potentiel de telles éditions se sont avérés excessivement enthousiastes. On ne doit cependant pas perdre de vue les possibilités réelles et passionnantes qui s'ouvrent dans le domaine de l'édition universitaire grâce au format électronique. En dépit de questions relatives à leur coût et à leur durée de vie, les éditions électroniques constituent une avancée indéniable du fait qu'elles permettent l'accès à des images numériques, facilitent la comparaison de variantes textuelles, et laissent entrevoir de nouvelles formes de collaboration éditoriale.

Electronic editions and the history of the book

Since their beginnings, books have appeared in many different forms. They have been written on different materials (clay, wood, linen, Palmyra and Talipat palm leaves, papyrus, parchment, paper), and come in very many different structures (rolls, folded rolls, codices). They have been written by hand, reproduced using wooden blocks or using the movable type printing press, and also presented to readers in electronic form (Diringer 27). Each of these changes in medium has represented an important change regarding the issues of preservation, accessibility of information, potential for modification and distribution. Yet none of them promised so much for so little as electronic books have.

The discipline we know as ‘book history’ includes several points of transition, which have led to the development of the objects we can observe today. Such transitions include the move from roll to codex, the switch from papyrus to parchment and from parchment to paper, and the shift from manuscript to print. All of these mark momentous developments in the history of books, and today we find ourselves in another such stage of transition, between print books and electronic books. This does not mean that print books are going to disappear completely, to be replaced by electronic books, although with gadgets such as Amazon’s Kindle, we might be only one step from the disappearance of paperback editions.

At this time, print books and electronic books exist side by side, and it is not possible to be sure as to where the boundaries are, or the direction in which these are heading. It is almost impossible to offer firm declarations: one cannot say that by 2020, there will be no print books, or that there will be a rebellion against electronic books so that we all return to print. Instead we are forced to accept the moment as a transitional one and to adapt to changing expectations about the nature of books. As an illustration of the present situation one might focus on one particular kind of book: the elaborate scholarly edition, with texts, footnotes, images, massive introductions and commentaries. Such books are a useful case study because they seem perfect candidates for the digital form due to their complexity, their intricate apparatus and the amount of data that they require to support the editors’ hypothesis. If any books should appear in electronic form, not print form, it should certainly be these. Yet we are still far from having most of our scholarly editions published in this manner.

To understand the present situation it is useful to refer to comparable moments in book history. Imagine, for example, the instant in which a person thought of folding a would-be roll to create the very first codex. It is likely that this might have happened several times in the West, probably independently, and that very many instances of folded rolls, especially

papyrus ones, have been lost to us¹. Concertina bindings are not that unusual, they can be found in most major libraries. Figure 1, illustrates such a concertina binding with a manuscript (Or.8210/S.5603) from the oriental collections of the British Library. What is interesting about this type of binding is that one can clearly see that this manuscript could also have been a roll.

One can speculate as to what the initial reaction to this idea might have been, but whatever the reaction, we realise instantly that the codex form allows an ease of search for particular passages that would have been impossible in a roll. This was a revolution. Yet in spite of the evident advance it still took some time for the new book form to be adopted. Indeed, rolls were used for centuries in parallel to codices (indeed, rolls are still used in special circumstances)². This example shows that changes in the history of the book do not occur instantly and do not take over from what was the previous use without many instances of trial and error.

Later, during the transition from manuscript to print, early printers made a conscious effort to make their print look like the more prestigious manuscripts. Consider, for example, different instances of the Gutenberg Bible, each of them illuminated by hand to make the text look as similar to manuscripts as possible. Gutenberg's care was such that, as showed by Mari Agata, he printed first in paper and, once corrections had been made, he went on to print the vellum copies.

Electronic editions have been around now for more than twenty years, which might seem like a long time in computer terms. But twenty years is not very much when compared with the time that it took rolls or codices to reach their climax. Despite this, some electronic editions have been produced with relative success and fulfil the requirements for certain scholarly needs. For example, the second generation Canterbury Tales Project editions have had a great deal of success³. These have accomplished the creation of what we call a synoptic apparatus. They also show the variant distribution within the textual tradition and the line by line collation (figure 2). This information is presented visually by including a Variant Map (generated with the use of phylogenetic software) that shows the distribution of each particular variant (figure 3). These publications also include complete transcriptions of every witness, as well as digital photographs and comparison tools.

Other scholarly editions, however, have failed to deliver the promises made by their early advocates. An example of these is the Doomsday Book

¹ See Reynolds and Wilson, Metzger, *The text of the New Testament*, 7 and "The Greek New Testament," 61.

² An example of this are the rolls of Parliament, which continued to be produced long through the Middle Ages. See, for example, Given-Wilson.

³ The term 'second generation' is applied to those editions produced using the Anastasia publishing system and printed by Scholarly Digital Editions.

electronic edition produced by John Palmer, with support from the Arts and Humanities Research Council in the United Kingdom. Several press releases have told us that this is freely available online, but the most careful searches only show it to be under construction⁴. This electronic edition of the Domesday Book is not available free-to-all, despite the many declarations that it is⁵. Not surprisingly, then, electronic editions are the target of bitter criticism and are often regarded as unreliable and lacking in sustainability. No one has yet succeeded in creating a model for their bibliographical description and scholars are still working on their preservation and their openness for collaboration.

When electronic books, particularly scholarly editions, started to be developed, the generalised perception, almost the expectation, was that the new medium would very soon replace the printed book. Ten years ago conference papers were still being given that promised electronic editions would solve every possible problem: they would present all the texts, all the images, all the variants, all the studies and any other data we could imagine (whether it be useful or not). It was repeatedly said that this was the way of the future and that we should believe that nothing else would be as powerful or good or efficient.

After more than twenty years of electronic editions, we can clearly see that electronic scholarly editions of works like the Domesday Book have not completely replaced print editions. Occasionally, scholars hesitate to produce electronic editions because these are not durable and are susceptible to changes by a third party. These fears are justifiable and justified. Some of the early publications by the Canterbury Tales Project and Cambridge University Press can no longer be read because they use Dynatext for their interface⁶. These electronic books are starting to disappear in front of our eyes. For many years now, the Textual Encoding Initiative (TEI) has guided scholars who want to produce electronic texts, creating standards for the encoding of many kinds of different documents, precisely to prevent problems of this nature. It can be argued that the TEI has succeeded only in creating a false sense of security: scholars feel relieved if their texts are TEI encoded, and this permits them to bury their concerns about preservation, as if encoding was the only thing required to read these texts. Like any other language, TEI encoding is not as 'intuitive' as some of its developers would have us believe. Moreover, unlike ancient, not yet clearly deciphered scripts,

⁴ The British newspaper *The Observer* published an article entitled 'The Holy Grail of Data: It's Domesday Online' about its impending availability on 10 February 2008.

⁵ It is possible to download the book as a database for Microsoft Access or as .rtf files. Despite existing in electronic form, neither of these formats can be considered an electronic edition. Indeed, the .rtf files' appearance is that of a print book. There is a CD-ROM version of the edition available for sale on Amazon, as of 15 January 2009, for \$435.

⁶ Dynatext required OS9, an operating system that Macintosh stopped supporting after their adoption of Intel processors.

the encoded texts require being processed by machines and passed through other specialised editing software in order to produce a readable display. In order to make the Cambridge University Press editions of the Canterbury Tales Project readable again, quite some time and effort will have to be dedicated to the development of a new interface (admittedly, it would take less time than doing all the work from scratch). For these (very good) reasons, some scholars remain wary of electronic texts and prefer to avoid them.

In spite of these difficulties, however, there is still a segment of the population of textual critics who think that electronic texts can be so far superior to printed ones that, at least in some cases, they are worth the work that they require. Using the the Canterbury Tales Project editions as an example, the electronic medium makes possible access to digitised images of all the manuscripts and incunabula for a given section of the text, as well as presenting a host of other materials.

The problem is that there is a series of assumptions which permeate this area of scholarship and that generate misunderstandings that are very difficult to overcome. Analysing some of the major categories of misunderstanding might help to clarify some of the confusion surrounding electronic texts.

The beliefs

In those times when people still had hope gleaming in their eyes when they spoke about electronic editions, there was also a belief that superseded all others. A belief so powerful, so alluring, so inherently appealing to the ego of the editors, that it dominated everything else in the field: electronic editions could be published by individual scholars without them having to resort to the intervention of publishers and presses.

This belief was the result of two ideas. The first was the generalised perception of the Internet as a democratic medium in which everyone can participate. This was never very true: you need a computer as well as electricity, so any assumption of mass participation is really limited to the so-called developed countries and even in those, to a particular segment of the population⁷. The second idea was the result of the perception that editions are made by heroic individuals working on their own. This idea is supported by the monumental editions of yesteryear: the Kane and Donaldson or the

⁷ For example, in Switzerland there are 864,584 computers per million people, while in Niger there are 0.716. Naturally, one would think unfair to compare developed countries with developing ones. But one might also point out that Portugal has 133,449 computers per million inhabitants, while Greece has 89,136.
<http://www.nationmaster.com/graph/med_per_com_percap-media-personal-computers-per-capita> (accessed 14 January 2009).

Skeat *Piers Plowman*, the Manly and Rickert *Canterbury Tales*, as well as more recent ones, such as Hans Walter Gabler's *Synoptic Ulysses* or Giorgio Petrocchi's edition of the *Divine Comedy*. In our mind's eye we see these editors inclined over their desks, laboriously recording every small variant, every mark on the brownish and blemished pages, every correction, every stain. Later, these same editors would collate all variants and mysteriously understand the hidden meanings of the text. Eventually, they would produce a new text, which many editors and readers would call 'definitive' and then their work would be done.

The combination of these two ideas (that anyone who can make a website can produce an electronic edition and that editors have always worked alone) has given rise to expectations that cannot be fulfilled by any piece of software currently in existence.

In an attempt to help others, those who can program tend to promise that 'soon' they will develop software that will be as easy to use as any regular computer application, software that will not require that the lay scholar hire any technical help, software that will work as easily as Microsoft Word, but will produce results that will compete with Gabler's *Synoptic Ulysses*. This, however, has not yet happened and it appears that it might take some time yet for it to become a reality.

The reality

The reality surrounding electronic editions is very different from those images that have captured our imagination. If we consider the second idea, that editors have produced the monumental editions by themselves, we might start to see the flaws in the models we have envisioned.

We think of traditional print scholarly editions as the result of a huge effort by one or two remarkable individual editors (Petrocchi, Gabler, Manly and Rickert). This does not mean that the editors carried out all the work by themselves; rather that the prominence of these editors hides the effort of all the students and assistants that created records or checked variants or generally did any other work that the named scholars did not want to or could not do.

For example, although the Manly and Rickert edition of the *Canterbury Tales* only lists John Manly and Edith Rickert (the editors), it is known that many of their students, as well as others, worked on the collation cards and on the corrections of the book. By way of contrast, electronic editions from *Beowulf* (Kiernan) to the *Canterbury Tales* Project editions, not forgetting Murray McGillivray's edition of *Cotton Nero A.x*⁸, take special care in naming all their collaborators, including proofreaders.

⁸ <<http://www.ucalgary.ca/~scriptor/cotton/project.htm>> (accessed 14 January 2009).

It is not so much that anything has changed since the days of the monumental print editions to require many more people to work on them, but rather that our standards in acknowledgement have evolved. Indeed, we do not need to have many more people working on electronic editions. In all such an edition might have one or two people responsible for the electronic components and one or two who are responsible for the realisation and visual aspects of the edition. But mostly, a large electronic edition will take about the same effort and the same number of collaborators as a large print edition.

The first belief, that anyone who can make a webpage can produce an electronic edition, is even more dangerous than the second one, because it creates several false expectations in editors and in publishers, as well as in software developers and humanities computing specialists. While scholars keep searching for the tool that is as easy to use as Word but that can produce a complex digital edition, programmers pursue the idea of creating such a tool: each running after their goal much like the greyhounds run after the mechanical rabbit in the track, always with the same desire, but never being able to fulfil it. The problem is that programmers and scholars are scheduled to run in different races. It takes an immense effort to get them to run in the same race, towards the one goal. To run in the same race, they have to really talk to each other.

And because they do not really talk to one another, their effort can be wasted. During a meeting in Antwerp in September 2007, there was a particularly striking example of scholars and a computer scientist failing to talk to each other. Nathalie Mauriac gave a presentation on a piece of software originally developed for HyperNietzsche⁹ and which she had attempted to use to create transcripts of draft manuscripts by Marcel Proust. Professor Mauriac had been unable to re-create many of the features in the manuscript and had found it increasingly frustrating to transcribe in this manner. The software developers were unable to understand what had happened. However, this was very obvious to part of the audience: Professor Mauriac had been working on paper editions for some years, but was never trained on the use of the software that was specifically developed for transcribing Nietzsche manuscript materials and not for generalised transcription of original textual sources. In part, the lack of success was due to deficiency in guidance, but it was also due to the fact that all manuscripts, particularly draft manuscripts, present very diverse challenges and there is no available software that can handle absolutely everything that can be put on paper. Although one might be able to encode any text in very specific manners (using XML and TEI), even with a correctly encoded text, it can be difficult to find software that can display the details in which one is interested.

⁹ <<http://www.hypernietzsche.org/base.html>> (accessed 14 January 2009).

Consider the example from James Fenimore Cooper's *The Bravo* (figure 4). In this passage, Cooper wrote the words 'as if thou' and immediately continued 'wert truly born'. In the next line under these, he wrote 'under the good protection of our southern patron birth place' (figure 5). He then proceeded to delete both of these and added, above the deleted 'wert truly born', 'had again birthright then xxxxxx of thy', which in turn, he cancelled. And finally, below 'wert truly born', Cooper wrote 'really fancied thyself born in the land'. An editor has to make sense of all the changes and cancellations and make decisions about what was the intended text at every point (including the final text). In this particular case, the sequence was:

- 1) [...] as if thou wert truly born under the good protection of our southern patron birth place.
- 2) [...] as if thou had again birthright then xxxxx of thy [...]
- 3) [...] as if thou really fancied thyself born in the land.

This example helps us understand why standardised software is unlikely to work with a text like this one (or indeed with most modern authorial manuscripts that present different states of the text).

What the HyperNietzsche software did was to provide an interface which allowed the user to introduce plain text and to mark it with more specific details. For example, one could specify that the text had been cancelled or that it was interlinear, very much in the same way one uses bold or italic in Microsoft word. However, other features of the text could not be represented (for example if the added text was included as a vertical line or at what point the editor thought the text had been included). Naturally, if software similar to that of HyperNietzsche could be generalised, this could offer a great solution for those who cannot carry out XML encoding. Yet it is unlikely that all the possible details that can appear in manuscript materials (whether these are autograph manuscripts, authorial drafts or scribal copies) can be covered *a priori*. It could take years to develop such software for texts in the more common book forms, and we have not even begun to consider objects like the Vindolanda tablets, where the texts being recovered have been scratched in the wood that held the wax of Roman wax tablets, or monumental inscriptions or ostraca.

Some Exceptions

In the world of electronic editions, there are some exceptionally gifted scholars who have all the required skills to successfully complete one of these projects by themselves, without any external help¹⁰. These skills include traditionally required knowledge (for example, training in

¹⁰ An example of such an edition is The Chicago Homer, edited by Ahuvia Kahane and Martin Mueller. <<http://www.library.northwestern.edu/homer/>> (accessed 14 January 2009).

palaeography, understanding of the language of the text on which they are working, including very high standards of understanding of grammar and syntax as well as awareness of dialectology, bibliography, experience in the transcription of primary sources, understanding of the results of collation and textual critical training, just to name a few). They also include skills that are specifically required for the electronic component of the edition (a general understanding of encoding systems, familiarity with the TEI, ability to locate and put to use the available software, as well as some training in design to achieve a publication that is not a design disaster and is more easily usable). Naturally, all these skills must also be used with a moderate degree of intelligence if the edition is to be a success. If one takes into account all this and assume that someone has such knowledge and training, one would have to hope that this person is not a Dantista (as there are more than 800 manuscripts of the *Divine Comedy*) or a Latinist specialising on the Vulgate. Instead, one should hope that this 'super editor' is actually working on Anglo-Saxon riddles or on the very short story by Augusto Monterroso, *The Dinosaur*.¹¹

Because it is rare to find scholars with all the appropriate abilities to produce one of these editions, the tendency has been to put together teams and try to collaborate with others to achieve a common goal. However, even these teams are generally found wanting and might lack the designers or the programmers needed to realise the edition.

The question is why should we expect anyone (a group or an individual) to take the text of a particular document and end up with a fully developed electronic edition that can be freely available on the Internet? Scholars have almost never done anything remotely similar with print books. No one expects a scholar to do the research and then to carry out the design of the book, take it to the press, print it and have it bound, as well as distribute it later. So why do we insist on attempting this for electronic books and why do we think that it is a good idea?

Collaboration

The issue of collaboration brings with it a range of important implications. Given the range of skills required, there is little future for someone who believes that he or she can produce an electronic edition alone. Instead, one has to rely on collaboration with other scholars. Over the years, editors have succeeded in creating and maintaining all sorts of collaborative projects. Sometimes we do this because we know that a particular scholar or group of scholars have a good idea but they cannot realise it in electronic form without a great deal of advice and technical help. Some other times, as

¹¹ The complete text of Monterroso's short story translates to something like 'When he woke up, the dinosaur was still there'.

in the Canterbury Tales Project, the sheer amount of materials and the minute details provided in the transcriptions and collations require a large group of people working on the files. Moreover, different individuals have been working on various aspects of the editions, for example, Daniel Mosser is responsible for the manuscript descriptions¹², while a team from Brigham Young University took over of the transcriptions of the so-called fragment VII (which includes the Shipman's and the Prioress' tales, among others)¹³.

Collaborations can be enormously successful for those who understand the benefits of symbiosis, but they can also be very frustrating and eventually collapse. To say that one is willing to collaborate and to truly be willing to do so are two very different things. There have been cases on the Canterbury Tales Project in which individuals decide that they no longer wish to cooperate, whether because they feel they have the necessary expertise to proceed on their own or whether they become possessive of those materials on which they have worked. In the case of the Canterbury Tales Project, a few transcribers are now claiming rights over individual transcriptions. In practice, this means that if anyone else wishes to use those, they would have to request permission to each of the copyright holders. The project, then, becomes almost impossible to manage and future research is crippled by claims of copyright by different individuals and institutions, all of which demand that their permission be sought before any alterations are made to the text.

Indeed, such instances are devastating in the world of electronic editing and one has to think very hard before getting involved in such enterprises. As a solution to this problem, for several years, the Institute for Textual Scholarship and Electronic Editing (ITSEE) has been advocating an Open Transcription Policy, which allows other scholars to make free use of the transcriptions we create as long as they give proper credit to the original transcriber, they clearly state the changes they have made and they redistribute them under the same conditions.

Making it easier

Ultimately, the most important factor to enable collaboration is to try to make it easier to work together. In order to facilitate this, scholars at ITSEE are developing a workspace for collaborative editing. This online environment will allow people to work remotely on files held in a server. Data about individual contributions will be kept and individuals will be able to see the results of their work instantaneously.

¹² Mosser's *Digital Catalogue of Manuscripts and pre-1500 editions of the Canterbury Tales* will be published in 2009.

¹³ Other parts of the project being transcribed and collated by other groups are the Clerk's Tale (New York University) and the Man of Law's Tale (Posnan University).

The first step in the direction of the collaborative workspace was the digital Nestle Aland edition of the Greek New Testament¹⁴. This new model allows the user to choose what they would like to see in their screen and in which position, as well as materials drawn from other sources. From this idea was born the Virtual Manuscript Room, led by Peter Robinson and with the University of Muenster as partners, a project that ‘will bring together digital resources related to manuscript materials (digital images, descriptions and other metadata, transcripts) in an environment which will permit libraries to add images, scholars to add and edit metadata and transcripts online, and users to access material’¹⁵.

The hope offered by a project such as this is the development of more democratic and accessible editing tools. Ideally, it should be possible for anyone to contribute, regardless of their location or status. This should facilitate cooperation and make it easier to bring together people working in different parts of the globe.

Sustainability

As mentioned above, some scholars do not feel that the digital media is persistent enough to justify the effort that scholarly editions require and the potential lack of longevity of these editions is a major concern among scholars.

A printed book (barring a flood or certain types of fire) will remain exactly the same for centuries to come and, even if humanity disappeared, the books could remain there to be deciphered by a future and unknown race of intelligent beings. With electronic editions, one cannot even be sure whether they are going to last for a few years. Up to this point, the main scholarly concern has been the preservation of the data behind the electronic book, but this is clearly not enough, since vast amounts of public and private funding have gone into the creation of these books and so we expect that they will be integrally available and not just in the form of raw encoded files.

Those who do not produce this type of work themselves (such as readers or computers and the humanities experts) often sing the praises of free for all web access for electronic materials. The problem is that nothing is really free and the so-called free Internet access has to be paid for by someone. This is well illustrated by the example of Google. Their search engine appears to be free. One does not have to pay to use it and yet, on 15 December 2008 Google had 24,400 full-time employees, employees who have to be paid every month. Even a relatively small resource requiring minimal maintenance still necessitates at least one person to look after it. But even this is not enough, as what is really required is institutional support. Some projects have secured

¹⁴ <<http://nestlealand.uni-muenster.de/>> (accessed 14 January 2009).

¹⁵ <<http://arts-itsee.bham.ac.uk/vmr/>> (accessed 14 January 2009).

their sustainability by entering into contracts with institutions that will remain responsible for their maintenance. For example, for the Sinaiticus Project¹⁶, the British Library took a commitment to maintain the publication indefinitely. Some might take this to mean ‘forever’, but forever means for the rest of eternity, while ‘indefinitely’ means for as long as the responsible party is able to do it. Such institutional support certainly goes some way to resolving the problem of sustainability, but one has to wonder if it is viable for most publications. For now, at least, it is limited to a few editions and, naturally, depends of the longevity of the institution.

At this very moment, particularly in the United Kingdom, preservation is becoming more of an issue, since funding is being withdrawn from services such as Arts and Humanities Data Services, where electronic resources were collected, preserved and promoted. In this way, we have begun to realise that only those materials that have a high level of demand will be properly maintained and that the free-for-all publication model is not sustainable over the long term. It is thus crucial that we engage in reflection about how to handle these problems.

The Middle Man

If once it was thought that scholars could get rid of the middle man (the publisher) and become a group of self-publishers, it is now evident that this is not going to be the case. If the objective is to produce and make available electronic editions that are worth using, it is necessary to understand that the final stages of their production do not belong to scholars. Instead, these must be tackled by people who understand how to present and sell things. It is also important to face the fact that the Internet free-for-all is not such and might be more accurately described as a ‘cost-to-all’. What is required is several publishers (one or two will not be enough) who are ready to face the challenges presented by the finalisation and the commercialisation of electronic editions. If publishers become involved in these editions as commercial enterprises we can expect that a process of natural selection will occur. The editions will follow a process of peer reviewing equal to that of printed ones and later will be sold and maintained if the community shows an interest in them. Anything that is not used, cannot be used, or is difficult to use, is likely to be discarded and forgotten, while those editions that are useful or in any way required by the users, will be maintained.

The commercial way should not be considered an evil in itself. No scholar expects to receive the books they require for their research for free¹⁷, so there

¹⁶ <<http://www.codex-sinaiticus.net/en/>> (accessed 14 January 2009).

¹⁷ Currently, copies of Manly and Rickert’s *The Text of the Canterbury Tales*, the few that are available start at \$625.

Hans Gabeler’s three volume *Ulysses A Critical and Synoptic Edition* can be found for \$199.95.

is no reason to expect electronic editions to be free either. Electronic editions have the great advantage of having a delivery medium that is less expensive than paper for the distribution of large amounts of data, but that does not make them free. They require the same kinds of permissions and, because they tend to include full colour digital images, also some extra ones. Author's rights also have to be paid as well as any text that might need to be licensed. Generally, these costs cannot be met by grant money and they have to be faced by the publisher (although there are some projects that have gained funding for digitisation the prohibitive costs are an obstacle for most of them). Clearly, none of this can be done for free and while it could be tempting to keep insisting on the idea of 'free' books, we must accept that this can never be.

Consequently, the publication model for electronic editions should be exactly the opposite of what has been promoted and we have been told: the way forward is a commercial publication model in which editions are produced according to the demands of the users and follow the highest standards of the print editions. It might be possible to have free access to certain parts of the edition (transcriptions, for example), but there will be other parts that would remain part of the paid for component. In this way, we could have the best of both worlds with original materials being made available for free and original ideas remaining part of the purchased edition.

So the question remains, where do we go from here? What is really the future of the book? I can see two clear paths in front of us. We could choose to accept the limitations of printed books and continue as we have done in the past, working mostly on our own and finishing with a product that will outlive us and exist within an object for centuries to come. Or, alternatively, we could choose to keep working with electronic editions, trying to present more materials, more easily and producing more of an impact in the community, but with the knowledge that our work might become unreadable within ten years of its publication. Which one might last longer: the undying object, unopened on a shelf or the enduring impact of our ideas, alive in the hearts and minds of others?

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Advances in Aeronautical Science and Engineering

ISSN: 1674-8190

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