

**Conference****Off the press:****Electronic publishing in the arts****May 22&23, 2014.****Museum Boijmans van Beuningen and WORM Rotterdam, The Netherlands**

Session 1 Opening lecture

***Going Electronic******Joost Kircz***

Electronic book publishing in the Arts is a multifarious adventure. On the one hand, electronic publishing is already an unclear notion and on the other hand the notion Arts is something nobody agrees on anyway.

Nevertheless in our Toolkit project we are able to refrain from deep philosophical preoccupations and - as this conference will prove- are able to develop methods and techniques that help publishers, editors and authors to use electronic means to recreate old works and to create novel ones. Often, as we see in the history and philosophy of technology, it are the practitioners that take the lead, whilst the theoreticians will follow suit to interpret the results.

Let me try to develop the notions we need to attack and to develop electronic publications in the arts, as replacement and as complement of print on paper.

First of all, we limit ourselves to graphical arts, drawing, painting and typography. Though music and dance fit wonderfully well in a web-based environment, for an electronic book it is still a long way to go, before we understand the interactions of all various expressions in one medium. It goes without saying that experiencing an electronic *Gesamtkunstwerk* or a game on a tablet is not the same as an electronic book.

However, as soon as we realise that electronic publishing is more than just a change of substrate from paper to screen, our world changes. The electronic medium most important feature is its active memory. A memory that allows for endless reuse and multiple presentations on a great variety of substrates, such as.... paper. Be aware that these different representation forms can have very different depending on the substrate used; paper, e-ink, low or high resolution screens, etc.

Contrary to hot type or ink the content stored in an electronic memory cannot be read by humans, it is stored in a coded form. But this set back, at the same time, transcends itself, because we can reprogram the coded content in ever new representation forms.

Obviously, also this free lunch comes with a price. In order to enable coded stored information to be expressed in multiple forms, the coding must be, and this is imperative, highly semantically structured, as we have to know what kind of information is coded and what outlets are possible for what kind of information.

The language for this coded information is nowadays called eXtensible Mark-up Language or XML. This rule-based so-called Mark-up language is not easy to master for people who don't use it every day. A simplified cousin is the well-known and simple HTML (HyperText Markup Language), the latest version HTML5 aims to keep it readable for humans as well as that it will support all kinds of multimedia developments. An important branch in this family of Markup languages is Epub3, which is an open standard for books and, in a way, a competitor of its cousin HTML5. Never mind, in this conference we embrace Epub3 and other speakers will enlighten you about this all.

## Markup Languages

SGML (1982!) Mother of all

XML

HTML 1,2,3,4,5

Epub3

**Mark Down**

And many more to follow

The only thing I want to stress now is that the most important conclusion we can draw from the fact that we use structured coded information as basis for book production, is that this demands new working methods throughout the whole process from author to reader.

As soon as we take a step away from just a replication from the printed page, our design, our editorial practises, as well as our production and dissemination will change from bottom to top and back.

The Toolkit project's aim is to enable flabbergasted small publishers in the Arts sector to find new working methods and familiarize themselves with this splendid but dangerous new world.

The simplest approach is just forgetting that we deal with electronic publishing. In this, still dominant, case, we only transpose a paper production, with it accompanying storage, logistics and business model to the world of screens and transport via Internet. This is the world of scanning and PDF. The very term PDF makes this already sufficiently clear: portable document format. We just translate the paper page into an electronic form.

Of course, we can also transpose the page as it is to Epub and get a reflowable text, now the newly created page is flexible. But we lose often most of the design and topographical uniqueness of the paper page.

At the other end of the scale we take each and every element as an independent semantic module, which means that we have to create a massive system of overlapping as well as complementary metadata schemes.

In order to understand all the novelties, the collaborating research groups and publishers in the Toolkit project split our endeavour in four approaches.

## Toolkit Scenarios

- Art/design Catalogue
- Artist's/ designer's book: traditional vs new
- Research publication
- Art/design periodical

These four tracks are more integrated than we might think, let me try to explain.

In dealing with electronic storage of publications, we have, as always, two ends of the production pipe-line. At one end we have the structured memory as input. This warehouse has many stories. On the ground level we have bits, a level higher we see words, packages of 8 to 64 bits. The longer the words the more complicated information can be stored. In a document environment words make sentences and sentences make paragraphs and paragraphs make documents. On all those levels we can add descriptors, which are words or strings of words that define the value of the original words. These descriptors are called metadata. Obviously there are many classes of metadata, such as semantic declarations, indicating the knowledge value, such as the metadata "Fruit" informing us that Apple is a fruit, while another metadata will tell us that the same word -in another context- means a computer. We also have presentation declarations, such as bold or up-side-down. On a higher level of grouping of words we have document, appendix or book. The beauty of having declarations around words or sentences and higher aggregations, is that they can be nested and hence, we can sort them.

## Metadata learn to love them

In the running text:

<type of fruit> Apple </type of fruit>

<equipment>apple </equipment>

<quotation> All you need is love,lalala</quotation>

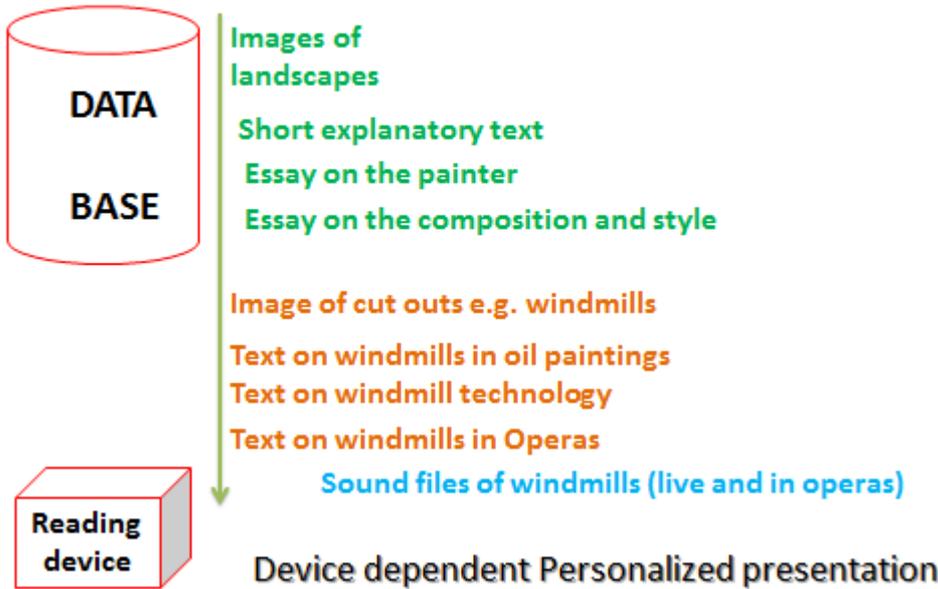
<postaladdress> P.B. BOX 1541, 1000 BX, Amsterdam  
</postaladdress>

Allows you to define the presentation

e.g.: *All you need is love, **lala lala lala***

The results of all these metadata are that we can store, search and retrieve, based on well-understood classes of information and not single words only. So, using metadata is essentially the same as creating a structured database.

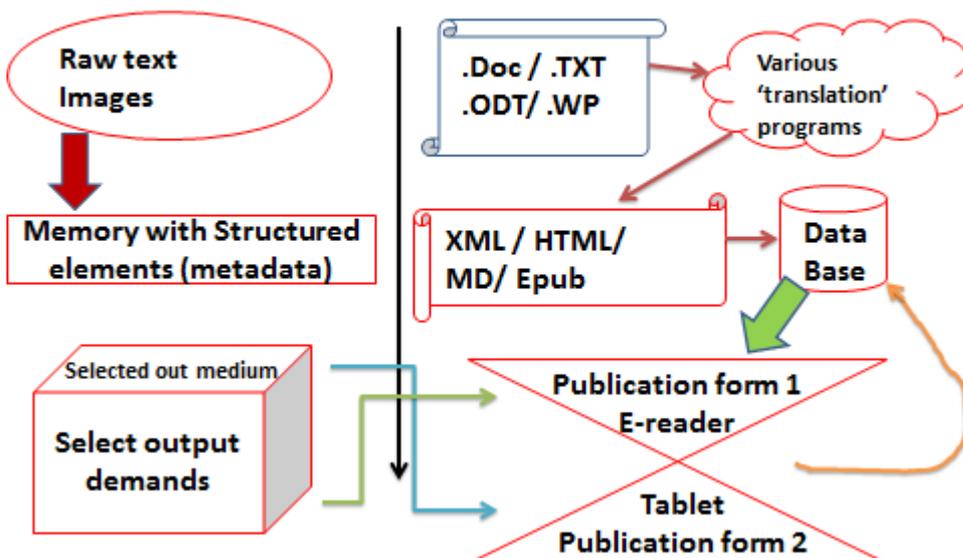
## Database as a dynamic source



Now, if we have our content in a structured database, we can play with it as we can do with Barbie dolls and their exchangeable garments. In our terms it means that a database allows for multiple publications and depending on the output substrate, the bandwidth of our internet connection, and capabilities of integrating text, sound, film and images

But maintaining a database is a lot of work and demands some strict rules on what classes we implement and use. So, in our catalogue track it is highly recommendable to go all the way and, at the end, allow for a great variety of outputs.

## Pipeline



For a collection of research papers, we can relax the granularity a bit, depending of our goal in disseminating research papers, such as the presentation on conferences like the present one.

## A research paper

- The bibliographic part: Name author(s), address, title, summary
- The body of the text, including: pictures, tables , etc.
- The bibliographic references
- Appendices
- Biographical information of the author

In periodicals, that aim for screen presentation, as well as for printing parts as reading long texts is still easier on paper; things are again a bit different. As reading non-fiction is still easier from paper, because we can make notes and annotations, we will see various kinds of texts. Just as we see in on-line newspapers, where long texts have a different status than short news snippets.

## A periodical

- Fixed informative text: bibliographic, editorial, subscription policy, etc. etc.
- Standard layout for certain departments (letters from readers)
- Overall design as fixed frame
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The real step into a new form of arts publishing will be the situation in which the original works are already made in such a way that they allow various presentations. Now, the artwork is not anymore a single unique object, but a multiple unique object. An art form that allows transformations, depending of the final substrate, without losing its unique character.

This might sound a bit strange as I started telling you that we are practitioners and not philosophers. But think it over; we do know this kind of artistic expressions already! We know it for centuries in music. There, whole symphonies are, without losing their essence, reworked for smaller ensembles or even string quartets. Consider the symphony orchestra as the highest level of resolution and colour depth, then, the string quartet is something as a smart phone, whilst the piano version is like an e-paper reader, sharp but without colour.

The big difference with the musical metaphor where an original source is recreated for different outlets is that the central issue of our toolkit project is that we consciously try and define the creation, production, and consumption of a creative object as one single process. We try and experiment to creation a production pipeline of illustrated texts or textually explicated collections of images in such a way that right from the beginning we understand, and appreciate that electronic publishing is more than reworking existing works, but a new creative branch in human expression.

This conference is taking stock of the present day state of the art and presents our current investigations. I kindly invite you to join us and develop your own perspectives in our workshops tomorrow.



And there was electronic publishing ????