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Museum Plantin-Moretus/Print room:  
museology, past, present and future  

I would like to thank Rickey Tax and Alan Marshall and of course the board of the AEPM first of all for their initiative to relaunch the AEPM, and secondly for their kind invitation to present to you the questions on museology in/for the Museum Plantin-Moretus.  

Before I start I would like to ask you to bear in mind that the Museum Plantin-Moretus is not a printing museum. Rather, it is an historic house and a monument – even more it is Unesco-world heritage.  

Secondly it is the house and workshop of a family of publishers, a noble family and merchants. Certainly, the museum houses a fabulous typographic collection; but it also houses a large heritage library and an important and very large collection of prints and drawings.  

By 2016 we will change the museological presentation and the historical rooms. Why we want to do this, you will hear during this lecture.  

In what follows I shall focus on:  
- the early history of the museum and the changes in its displays,  
- the present displays,  
- the research conducted on the problems of the present display,  
- the results of a try-out that is at this moment on display and the survey we conducted,  
- a brief outline of the future of the museum on the basis of contemporary museum needs and issues  
- digital access to the collections.  

Christoffel Plantin, printer in Antwerp  

Christoffel, Jan, Balthasar and Edward. Without those four men, there would not have been a Museum Plantin-Moretus.  

Christoffel Plantin was born in Saint-Avertin near Tours in France around 1520. He moved to Antwerp in order to set up a printing business around 1550 and became, one of the most important printers in Europe. His Officina Plantiniana was one of the largest typographical enterprises in Europe in the 16th century. In addition to his firm in Antwerp, Plantin had a flourishing bookshop in Paris. He also set up a printing business in Leyden and had a warehouse in Frankfurt, as he attended the Frankfurter Messer twice a year. Between 1568 and 1572/3 he had sixteen presses, thirty-two printers, twenty typesetters, three proofreaders and also an administrative staff. He is thought to have employed 80 people in Antwerp and a further 80 people in other Flemish towns.  

In the course of his 34-year career as a printer and publisher, Plantin was responsible for the publication of about two thousand four hundred and fifty (2450) titles. That means an average of 55 per year, an
impressive number even by present standards. It means that between 1,000 and 1,250 copies of a new book were produced every week. His books were sold in the Netherlands, the German Empire, France, Spain and its American colonies, Italy, England and the North-African territories.

Beside his printing business he had a more than flourishing business in lace, which he imported to Paris and which generated as much money as the printing business. He also bought and sold thousands of Antwerp prints, which he shipped to Germany, Spain and his colonies and the Northern Netherlands.

We can say that he did not only spread knowledge over Europe and the Spanish colonies but also images invented in Antwerp.

**Jan Moretus I**

After the death of Christopher Plantin in 1589, his son-in-law Jan Moretus I took over the printing business. It is without any doubt thanks to Jan Moretus and his wife Martina Plantin that the Officina Plantiniana was kept in one piece and survived for so many centuries. They stipulated in their will that the firm should be led by the most competent son, not necessarily the eldest.

The Moretus family continued to run the printing business well into the 19th century. The company was proudly maintained, but was no longer modernised. The Industrial Revolution passed Plantin-Moretus by completely. But it is thanks to this that the whole ensemble is now such a valuable piece of industrial heritage, evidence of this family company’s 300 years of residence and industriousness.

**Balthasar Moretus I**

It was Christoffel grandson Balthasar Moretus I who transformed the house into the splendid mansion the house is today.

**The early history of the Museum**

In 1876 Edward Moretus sold the whole building and its contents to the Belgian state and Antwerp city council to make a museum out of it, exactly 300 years after Christopher Plantin had established his business there. A year later, in 1877, the Golden Compass reopened as a museum.

Today the Plantin-Moretus Museum, with its superb 17th- and 18th-century period rooms around a fine Renaissance courtyard, has an atmosphere of delicate luxury and well-being that the Moretuses wished to give their home. But it is above all the 16th- and 17th-century workrooms of the Officina – the type foundry, the letter room, the printing works, the corrector’s room, the bookshop and the proprietor’s office – that give this ensemble its own, unrivalled character and which distinguishes this museum from all other museums of typography and books and from all other historic houses.

The collection that came with the house consists of:

- The art collections and the period rooms contain rare gilt leather, precious tapestries, luxury furniture and paintings by Rubens and his studio, plus numerous design drawings,

- The still intact workrooms from the 16th and 17th centuries are quite exceptional. It is as if the printers, founders, correctors, booksellers and the proprietor himself had just gone out for a while. In these workrooms we see all the superb typographic collections, including the oldest printing presses in the world, the type itself, the tools, and also drawings, wooden blocks, copper plates and so on.
● A precious library whose origins lie in Christopher Plantin's time. It now contains about 640 manuscripts and 25,000 bound volumes: almost everything that came off presses in this house is there. The highlights are manuscripts such as the 9th-century *Carmen Paschle* by Caelius Sedulius, the 14th-century *Chronicles* by Froissart and the *Wenceslas Bible*, a two-part deluxe manuscript from 1402. The early printed works include a 36-line so-called *Gutenberg Bible* by Albrecht Pfister and works printed by Plantin, such as the *Biblia Polyglota*, and the baroque books designed by Rubens. Thanks to these magnificent works, we are able to tell a full story, from manuscript to luxurious printed work. (Unfortunately schools and other groups cannot find those four books presented next to each other; we are considering whether or not we should do something about this in the new presentation.)

● The archives of this major company, covering the mid-16th century to the last quarter of the 19th century, which are a gold mine and provide information on 300 years of business in the *Officina Plantiniana* and on the personal lives of Plantin and his successors. The archives offer important information on:
  - the socio-economic and political history of the Netherlands,
  - international cultural life in the second half of the 16th century and the first half of the 17th century,
  - the study of humanism and the Counter-Reformation,
  - the history of science,
  - the history of book printing from the 16th to the 19th century.

**Research into preventive conservation measures and optimal presentation of World Heritage int e Plantin-Moretus Museum**

Before we move onto the contextual presentation I should perhaps give you the only and real reason why we decided to change the permanent presentation. The building in which the museum houses is a historic monument mainly of the 16th and 17th century, and therefore not built as museum, it is not easy to maintain stable environmental conditions. The premises consist of a series of original houses and buildings connected to each other, with a central, late 16th-century, enclosed garden/courtyard in the middle. Several doors open onto this garden and the visitor steps out from the rooms directly into the open air (and vice versa) which results in a large air exchange rate. The museum has central heating and it has no air ventilation system or central climate-control - as the building is an Unesco monument we are not allowed to install such systems.

Instead, movable humidification units are used (Defensor PH 27/A). The single-pane, leaded-glass windows provide minor protection against outdoor climate conditions. As was common in former centuries, only the lower halves of the windows have shutters, which means that daylight, sunshine and UV-radiation can easily enter the rooms. This means we always have to keep the shutters closed and drapes have been hung over the upper half of the windows.

Until recently, the circulation of the books on permanent display - or the pages on view - changed rarely. All the ca. 300 books on display are in 19th-century oak exhibition cases which, like the house are classed as a monument. The display cases were restored between 1990 and 2010. In order to improve the display and conservation of the objects a protective glass with UV-blocking film has been added and the wooden interior has been replaced by metal with a deeper bottom. These glass cases will never fully meet the needs of the books on display.
The rare books collection is arranged on open shelves in the historical rooms. This poses a dust problem.

Antwerp itself is a moderately large town with 550,000 inhabitants, but with an important port in the north and a lot of traffic around the city, which generates a huge amount of pollution with fine particles. The question is whether the old glass cases and the house itself offer sufficient protection against such pollution.

We anticipated a severe influence of all the above-mentioned factors on the conservation of the heritage conserved in the Museum Plantin-Moretus. In 2008 we ordered a long-term study: ‘Research for preventive conservation and optimal presentation of World Heritage in Museum Plantin-Moretus, Antwerp’, with financial support from the Flemish Government. The results of the research project are applicable to the situation of many other historic places in Antwerp, and probably also other large cities.

The research on the pollution was conducted by the Department of Chemistry of the University of Antwerp. For the issue on the monitoring of indoor climate and lighting conditions, the Royal Institute for Cultural Heritage (KIK-IRPA) in Brussels and the K.U. Leuven, Faculty of Arts were involved. Alongside this, a team of paper and book conservators made condition reports on some 300 books on display. They examined the details of the materials used (wood, metal, glass and paint) for the display cases, the systems used to seal them, air circulation and lighting. The possible influence of environmental conditions over the years and treatments needed were also taken into consideration.

The main task of the research was to characterize the most threatening air pollutants, microclimatic and lighting conditions and to determine whether the showcases are sufficiently protective for the objects on display. The results obtained will be used to improve the preservation conditions of the unique collection in the museum.

These research and monitoring campaigns are unique because they have brought together different partners to look at different aspects. The results of the survey have been compiled so it is now possible to come to a conclusion concerning the amelioration of the books displayed in the cases.

The results of the research were not encouraging.

The research of the Chemistry department focused on gasses as well as on small particles. It is important to keep out noxious air pollutants, specifically sulphur dioxide (SO2), nitrogen dioxide (NO2) and ozone (O3), as those have the most damaging effect on leather and paper. The concentrations of the gases were generally found to be highest outside the museum, lower inside the rooms and at their lowest inside the display cases at any time of the year.

Except for the sulphur concentrations, the differences between outside and inside were very small and therefore sulphur can be regarded as one of the most common elements in the museum.

Particulate matter was differentiated into two fractions: bulk particulate matter (PM10 and PM2.5), and size segregated single particles. Carbon-rich particles constituted the most abundant group in all detected particle types, both inside and outside the museum. Carbon-rich particles have a corrosive effect on leather and paper.

A separate study – which has already been presented at the AEPM-congress two years ago – was conducted on lead types by Prof. Patrick Storme of the preservation department for metals. Sulphur and ozone increase the presence of acetic and/or formic acid in the wooden boxes. The acid leads to a chemical reaction with the formation of acetates or formates, which disrupt the original protective layer of
the lead types. They show remarkable changes in morphology, volume and weight: for some of them, the increase in volume led to sudden expansion in all directions, accompanied by extensive cracking. The only way to reduce this process is to relocate the entire lead collection.

Monitoring indoor temperatures and RH gave more information about the environment in and outside the display cases. The conditions showed large fluctuations in temperature and relative humidity, caused mainly by the construction of the historic building. Subsequent to these results, an experiment was conducted in 2011-2012 in which an existing display case was modified (e.g. by sealing open joints, covering back plates with inert barriers and introducing RH regulating material). This experiment showed that the books would gain from such a sealed glass case. The only problem is that all books are available through the reading room, even the ones that are incorporated in the permanent presentation, sealed glass cases would not be convenient.

The lighting conditions measured inside different types of older and refurbished display cases and in the rooms showed that the Lux (sometimes up to 8,000 lux) and UV values were accelerating paper degradation. The data registered revealed that most books were exposed to relatively high light doses as a result of which their condition in recent decades had become severely deteriorated. Light management is needed in order to reduce the amount of visible light affecting the books in open shelf storage and on display in the showcases.

The books have been on display for about 50 years. Books that have been displayed without proper support for a very long time cannot be closed without damage. The benefit of the survey in terms of management of the collection is the identification of a list of books with deformations in need of conservation treatment.

The overall results of the multidisciplinary research program will help us to take decisions on the preservation of this unique library and museum heritage.

So, the next years we will have to
- reduce the light levels (this is very easy to solve),
- reduce the temperature (this is rather difficult to solve),
- the infiltration of dust (this seems impossible to solve),
- relocated the type collection (this is relatively easy to solve),
- treatment of the damaged books in the permanent presentation (most of them have been restored)

And above all we have change to a display whereby the books are shown in changing selections to prevent their suffering more damage.

**Today's displays**

What did the display look like in the first decades of the Museum?

The conditions of the permanent presentation forced us to rethink the presentation. At the same time we asked ourselves how we could make a presentation which is more accessible.

The museum is classified as Unesco World Heritage and some people tend to say that this means that we are not allowed to touch the permanent presentation. To refute this it is interesting to look to the past of the museum.
Between the sale of the house and the opening of the museum, the city council had a year to carry out a considerable amount of conversion work. During the same period, one of the oldest parts of the city of Antwerp was demolished for the development of the harbour. It included some important mansions. These demolished mansions probably provided some interesting building materials for the Plantin house: door frames, tiles and gilt leather wall-covering.

To help with the refitting, they were able to rely on information in the archives.

- The inventory attached to the 1876 deeds of sale mentions the tapestries and a large proportion of the various pieces of furniture. But during the refurbishing in the 19th century they relied heavily on the 16th and 17th century inventories of the house of the deceased that have been preserved in the archives and provided a very good basis on which to adjust the uses of the rooms one by one and to adapt their fittings and furnishings.

- Series of photos taken between 1876 and 1950 show that the emphasis of the displays has shifted. The Plantin-Moretus museum has not always been a museum of books. From an original approach in the 19th and first half of the 20th centuries when more interest was shown in the collection of drawings and prints (related to the rich collection of wood blocks kept in the museum), a shift occurred as of the 1950s towards a display that tells the story of book printing, as part of which work is shown by Christopher Plantin, the Moretuses, other Antwerp printers, and other major European printers. The approach these displays take is quite characteristic of the 1950s. It is almost encyclopedic, a purely academic approach: lots and lots of information, shown almost taxonomically.

In the present presentation there is no indication of how Plantin and the Moretuses positioned themselves towards other Antwerp printers. No information about the distribution and sale of the books. No contextual backdrop related to the period. No personal approach to the people who lived in this house. New research that has been developed in recent decades has not had any effect on the displays.

Typography, one of the most significant elements of the collection, is undervalued in the presentation.

**The relation of the current display to the public**

There are two major reasons to change the current display.

Firstly, the Plantin-Moretus Museum should be a museum of book printing and publishing. We have the means and material to show the public what printing and publishing as a business was all about in the 16th and 17th centuries.

Today visitors to the museum deambulate through the magnificent historical living rooms and workrooms of the *Officina*. When they reach the first floor, they are suddenly confronted with a museum display on books rather than on printing, with no less than 300 books!

Books shown in display cases require a greater effort from visitors, this is very tiring. But we offer visitors in the museum no moments of rest. Nor are there any eye-catchers in the present presentation. The presentation is aloof and does not make the visitor feel involved. It is a story of the history of books rather than a story of the importance of the book, book printing and the role played in this by Antwerp and Plantin and the Moretuses.

What does the public gain from such an abundance of books? How many books do they actually see? And do they notice the core items in the collection? Seasoned bibliophiles admit that after a three-hour
visit they still haven’t seen the whole display. How frustrating do visitors find it that the books can only be seen behind glass?

A book should build up a personal relationship: it should be cherished, leafed through, smelt and felt. The historical rooms lighten up the circuit, as does the highlight of the museum: the libraries.

Secondly, when the present display was developed, society was differently organised: in the Belgium of the 1950s there was barely any notion of the multicultural society. Society was clear and simple: there was the solicitor, the mayor and museum director; they were the authorities. When they said anything, the public believed it. Nowadays visitors get information in other ways, one of the most important being the internet. And people are now educated differently and to a higher level. Museums have suffered a loss of authority. When you consider the extent to which society has changed, offering the same as 10 or 20 years ago is not sustainable. In addition, internationalisation and new technology have made the world much smaller.

The question is: what is the relevance of our museum, how we can put what we have to say into another form, and how can we link to the world and interests of our visitors?

**New display: spreading knowledge**

We decided that we want to shift the new display to a presentation of the spread of knowledge

Baricco expressed it very well: all major cultural changes have occurred at times when new groups gained access to knowledge, technology and tools which had previously been reserved for smaller groups.

The invention of the printing press was a turning point which greatly augmented the spread of knowledge, so that many more people were able to read not only the Bible but also such pernicious books as those of Galileo.

The change in our present way of thinking can be explained by another turning point: advances in information technology. In the same way as when the printing press was developed, the new technologies enable much larger groups of people than in the past to participate actively in culture and cultural production. Google enables people to find the information they are looking for much faster and more precisely than before. Internet and the communication society are now the main drivers of change in society.

If we wish to explain and show the relevance of the Plantin-Moretus Museum, we have to tell a universally recognisable story about the spread of knowledge, technical innovation, business enterprise and family life in the context of the historical house, whereby:

- the importance of book printing as a turning point in the rapid spread of knowledge and images is presented in relation to that second major turning point in our history: the distribution of knowledge and visualisation by digital means. In this way we can updated the story and adapt it to our changing society.

- the story of Antwerp as a centre of European printing and its importance in the world are presented on the basis of new frames of reference.

- attention is paid to typography, with links to adolescents and young adults.
attention is once again paid to the richness of image production in 16th- and 17th-century Antwerp, as spread by the Officina Plantiniana.

stories are told so that the context of the house and its inhabitants are brought to life.

the rooms are given a clearer and more unambiguous profile and the atmosphere of the historical rooms is enhanced.

Through those approaches we can link to the present and thus update the display and make links to the world of our visitors.

To renew the attention of the visitors new forms of presentation have to be used:

in every room one book will be highlighted,

we will introduce facsimiles and computer applications of those books, in order to let the public leaf through them (this gives a moment of rest with the result that their attention is sharpened),

the computer applications will be used to give the entire foot-print of the book: importance of the book, related publications, translations of parts of the text, sources, illustrations, previous or later editions…).

One thing we are concerned about is that we do not want to turn the historical house into a digital museum. We must first of all focus on the strong points of the house as it is now.

Conditions to be met by the new display:

the old glass cases have to be maintained (they are included on the list as protected heritage),

the ambiance has to increase – this means that the use of multi-media is allowed but has to be ‘invisible’,

light levels have to be reduced,

the number of displayed books has to be severely reduced,

more material has to be incorporated into the print room.

printed objects (i.e. books and engravings) will be shown for a maximum of 24 months – depending on their fragility and the light level (this means that the display in the 15 rooms where books are exhibited will have to be changed entirely every two years) – it will become a semi-permanent presentation. The changes will happen gradually – for instance at the moment we want to highlight a certain event we can change a part of the permanent presentation instead of bringing a temporary exhibition on the subject.

Try out anatomy

In 2014 the first test or try out was set up: it is a presentation on the distribution of information.

In 2014 Andreas Vesalius is celebrated in Belgium, so we decided to focus our try out for the new presentation on ‘Christoffel Plantin as printer of scientific works, namely anatomical books’.

We made a presentation that focuses on:

the history of knowledge of science people had preceding Plantins book ,

the production of books: who was involved in the production of books, which new techniques were used,
• the market for books: who bought anatomical books and what did they cost.

At the same time we introduced some alterations to the rooms to avoid damage to the presented books and objects:
• new curtains that not only reduce UV and the light level, but also temperature in the summer while they give a better idea of the structure of the building,
• new LED-light, that reduce the light level and temperature,
• Less books (about 1/3 of what used to be on show in those two rooms.

To restore the contact between the public and the books we introduced:
• computers on which the public can browse through the books – where we point our which type was used, give more information on the illustrations, who was involved in the printing and who bought the books,
• facsimiles to leaf through.

What did the public think of those changes?

Several groups of specialists and the public have been invited to give their experiences with this test display. The results will help guide the ultimate form of the new display and use of the historical interiors.

We questioned different groups of people: slightly interested public, visitors that have a passion for history (our core public), teachers (schools), professionals.

The general slightly interested public judged that the new presentation was still too high-brow: difficult texts, a complicated story, they want to be guided much better, taken by the hand. The new presentation should be much more innovative still lacks innovation, might be more adventurous and it is still very old-fashioned (as said before we want to maintain the 16th century atmosphere). The computers and facsimiles were a good innovation.

The teachers asked for many more links between the past and the present. The presentation was too intellectual, not exciting enough, and was not comprehensible. The computer application was OK. Probably the teachers need something else than the new presentation. In fact they need a good programme to lead them through the museum and to explain about: the birth of printing, the economics and politics of life in the 16th century

The connoisseurs were happy, they liked the entire presentation. Perhaps the texts were a bit too difficult, but they appreciated the amount of information and the different forms of information.

Based on the try out and the surveys we conducted it is clear that we should focus more on:
• introducing a meta level of the story, which is now missing. We need one clear story.
• creating a common thread and with a limited number of themes, which means make choices to avoid museum fatigue,
• creating more highlights, focusing on one important book in each room and showing less.
• providing more context.
• enhancing the atmosphere (which is already impressive, focus on the authenticity and continuity).
● providing more rest points.
● using simple language, a museum is not a book on the wall.
● introducing activities of Gutenbergmuseum with its printing demonstrations.
● making the presentation accessible for people with different cultural backgrounds, introducing points of recognition for them, and doing the same for people who do not read books.

Most importantly, we should decide who we would like to reach with the new presentation. For example we know that:

● about 70% of our visitors are foreigners,
● about 80% visits the house for the first time,
● 20% of our visitors are young people who come to the museum within their school programme.
● we are what you could call a Valhalla, not only for printers, typographers and designers, but also for librarians and book collectors...

How do we please those different people, what do they really need. To settle this we will design, based on the theories of Falke & Dierking, five visitor profiles. The National Maritime Museum in Amsterdam and the Gallo-Romansmuseum in Tongeren (Belgium) already used this technique. With those profiles we will be able to define the needs of different types of visitors and what they expect from us. This will help us to make choices, create a common thread and then select a limited number of themes or how we should manage our audience development.

In 2016 the new museum display and renewed historical house will be launched together with the new reserves and new reading room.

We are increasing accessibility for you too

Creating a new display in the museum is not the only way to make the collection accessible for the public. In the present display and in the new one in the future we can still show no more than 2% of the collection. We want our public and researchers to be able to fully consult the collection.

The museum intends to stimulate and support research and lower the threshold to the collection as much as possible by making catalogues and digital visual material available online.

At present, the following parts of the collection can be consulted on the museum’s website:

- the entire collection of old printed works (28,000 volumes from before 1800) through the Anet catalogue (a cooperative project with several academic/scientific libraries in Antwerp).
- the collection of drawings and prints (85,000 items) through the collection online catalogue.
- the art collection in the house is available in such a way that works by a single artist in both the Print Room collection and the museum collection can be seen together (think, for example of an artist like Maerten de Vos, of whom the museum holds 170 drawings, 1,500 prints and 50 copper plates). This inventory also includes the precious collection of punches and matrices, which remain one of the most important of the museum’s core collections.
- including the collection of punches and matrices – at this moment without images but I hope that we will add them next year.

- the modern library, through the Anet catalogue.

- by the end of this year a first part of the family and business archives will be made available through a new archive module (which has been developed in association with the Letterenhuis (Literature House), with software supplied by the University of Antwerp).

By speeding up the availability of the inventories on the website, we aim to foster research into our collections. And I hope that in the months and years to come you will be making use of these facilities.

It might be extremely interesting for our and your researchers if we were able, in one way or another, to link our collections – through the website or if possible through linked online catalogues.