This afternoon I would like to present our strategy for collection care. Please bare in mind its work in progress. We think we’re on the right track, but the reason I’m so pleased to be here is to hear your expert input on what we’ve done recently.
This afternoon

Part 1. Integrated, value based methodology for collection care

Part 2. Sophie’s work: value for money

KB published an ambitious Strategic Plan for the years 2010-2013, focusing on the development of the digital library. KB adopted this direction in previous years, but will now pursue it with vigour.

We have formulated four strategic priorities:

- We give everyone access to everything published in and about the Netherlands
- We improve the national information infrastructure
- We guarantee long-term storage of digital information
- We maintain, present and strengthen our collection

This strategy has great implications for collections and collection care. However complex digital information is, it must remain accessible, also in the longer term, and despite constant technological changes. Good information provision in the future needs long-term storage facilities.

And,

Special and valuable paper collections must not suffer as a result of the attention paid to the digital library. The paper and digital collections will mutually strengthen each other. The maintenance, presentation and development of our collections – paper and digital – are and remain the core tasks of the KB.
These ambitions motivate us to also reconsider strategy and operations of collection care, focusing on the care of digital collections. For this, a new Collection Care Plan was agreed upon. This plan designs integrated, efficient and effective collection care for both digital and physical collections along the following strategies:

- Integrated collection care for digital and physical
- Classification of collections into larger lots
- Valuation of collections
- Risk indication
- Different levels for collection care
- Care redirected from the most valuable collections, to those where the highest loss of value is indicated
The KB keeps, as the National Library of The Netherlands, everything that is published in the Netherlands either on paper, or in digital form, in the years to come as much as possible digital. These collections are kept permanent, so that access is insured ‘for ever’. The KB is a last resort library. The KB also collects and keeps material published abroad and about the Netherlands. The KB is an academic library with large context- and reference collections. And finally, we keep extensive special collections.

We manage around 6 million physical objects; 117 kilometres of books, magazines, newspapers, (mediaeval) manuscripts and other material. The KB’s Digital Storage facility, internationally known as the e-Depot, was founded in the nineties of the last century, and is growing very fast. At this moment it contains about 20 million publications.

KB is presently working on replacing the e-Depot by a new digital storage environment.
But storing collections is not enough. Our customers and staff foremost need to be able to access and use these collections. In order to be able to study, lend, download, exhibit or digitize publications they must be kept in good condition. Collections need to receive the right amount of care to remain in good condition so that permanent use is guaranteed. Not less, but certainly also not more.
We can’t dose out the same amount of care to all our kilometres and terabytes. And that is not per se necessary. Not all collections are equally important, and not all materials are equally vulnerable. It will not be a matter of course that the most valuable collections receive the best and most care. The best care will go to those materials for which the greatest loss of value is expected.

To make these differences visible, selection is necessary. As an instrument to facilitate selection we have designed a valuation model. Cultural and research-values of different collections are identified, qualified and quantified with a limited set of characteristics. This is the starting point for prioritizing levels of conservation and preservation. The method of valuating will be identical for paper or digital collections.
Where do we stand now?

Collection care in the KB has been aimed at fitness for use or fitness for purpose or the suitability of collections to support research and be studied or presented as an object of cultural value.

Access prevails. All publications must, in the end, be accessible on site or online. Specific ingest and storage measures are needed to guarantee permanent access. Demands for optimum accessibility partly determine storage, or care for the publication.

Physical collection care is aimed at slowing down deterioration and optimizing the conditions in which materials may be consulted, lend out or presented.

In our large scale projects formerly preservation microfilming, and now mass-digitization we focus on books, newspapers and magazines, analogue material that could otherwise only be accessed onsite.
These coming years, the strategic principles in the Collection Care Plan will be put into practice, resulting in a more detailed and differentiated conservation and preservation policy.

What’s the need?
Well, ...

In the years to come around 60 million pages will be digitized, we will collect 50% of all Dutch digital-born publications and will harvest 10,000 websites.

The library’s attention shifts from conservation and preservation to access. And not just attention, but obviously also capacity and funds will be re-allocated.

The conservation- and preservation strategies the KB has in place currently will not suffice in the years to come. Especially digital collections will be more complex, enriched or enhanced. We will intensify collection of e-books and e-newspapers in many different and changing file formats.

The fact that the same principles will apply to determining care for both physical and digital collections is new to the KB. But although strategy for conservation and preservations will be the same for bytes and paper, in operational aspects
there will clearly be differences.
How will we go about this integrated approach?
We’ll follow 4 simple steps. [well, simple...;-)]

The first being a meaningful division of our collection into lots. We’ve now indentified 15 lots in the digital collections (ranging from websites to licences), and 9 physical lots (from Dutch newspapers to Alba Amicorum).

After being identified and described these lots will be submitted to valuation to indicate the different values of collection-lots. We’ve defined the values that we find applicable to our collections, gratefully using the knowledge and methodology presented in the Australian publication *Significance* or its digital version *Significance 2.0* as presented in 2009.
Value assessment means taking g systematic steps by collection-experts in identifying and calculating values of collections. These steps being: division, definition, rating and calculating.
With *Significance* as our starting point we formulated four primary criteria:

Informational value
Aesthetic values
Historic value
Social value

A collection must have at least one of these criteria to be accepted as a collection that merits conservation or preservation. Primary criteria are the basic values of a collection itself, without relating to other collections.
<table>
<thead>
<tr>
<th>Primary criteria</th>
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<td>1. Informational value: this value refers to the content of collections as a source for research</td>
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<td>2. Aesthetic value: the artistic value of collections as a collection of objects</td>
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<td>3. Historic value: this value is based on the age of a collection</td>
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<td>4. Social value: the collection was of significance to one or more groups in society</td>
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‘Informational’ value is about the content of collections as a source for research and about the objects themselves as carrier of information.

‘Aesthetic’ value is determined by the artistic value of a lot, obvious in part of our special collections. But also in the digital collections the look and feel, for instance in our web archive, is regarded as aesthetic value.

‘Historical’ value is based on the age of collections or how they are connected to important events in our national history.

‘Social’ value is about collections that are, or have been of importance to one or more groups in Dutch society. Social values rise when this group plays or has played a more important role.
Next to the primary values, there are four comparable or secondary criteria, determined by comparison with other collections within and outside the KB.

1. Use
2. Completeness
3. Condition
4. Provenance

The secondary criteria affect the weight of the primary criteria. A collection of medieval manuscripts in good condition will, for example, have a higher overall value than a collection in poor condition.
Secondary criteria

1. Use: The actual use that’s being made of a collection
2. Completeness/uniqueness: the extent to which a collection is complete, rare or unique, in comparison to other collections
3. Condition: this value refers to the physical or digital state of a collection (functionality, authenticity)
4. Provenance: this value refers to the person or organization the collection is from. The value depends of the extent to which the provenance of a collection is known.

‘Use’ measures the actual use of a collection, be that lending out, reading, online access, digitize etc.

‘Completeness’ is the way in which a collection is complete, compared to other collections. A collection can be unique, very representative, or more complete than collections elsewhere. Completeness, uniqueness, rarity of a collection is complementary. ‘Rareness’ will, especially for digital collections rise as time progresses.

Condition measures the physical or digital state of collections: that of the medium (book, newspaper, digital file) or its content.

‘Provenance’, finally, refers to the person or organisation where the collection originates from. The more we know about the origins of the collection, and the more important that origins is, the higher this value will become. For digital collections provenance or origin can guarantee authenticity of the collection, a sort of quality-mark. Certain publishers of digital publication are more trustworthy and deliver better files than others.
At the start of working on our plan we organised a couple of Group session with colleagues from all over the library, but especially with collection specialists. We discussed endlessly the content of collection/lots, our gut feeling about values and tried out several calculating methods.

In this we were grately helped by our colleagues from the Dutch Institute for Cultural Heritage, especially Agnes Brokerhof and Bart Ankersmit.

They have worked with Significance and risk assessment as taught by the Canadian curator Rob Waller before, but mostly in museums. This was the first time to try out this way of value based collection care in a more or less large library collection.

It did mean that we have adapted Significance to fit our situation and our collection.
How does that work? Qualifying values.
We can make it look quite simple and orderly: see sheet.

Formulating the relevance of primary and comparative criteria per lot will result in a qualitative statement about the total value of a part of the collection, or the significance of that collection. This statement of significance must be applicable in different situations and for different decisions. Thus, the result of an expert-based valuation of KB-collections lies at the root of ascribing certain preservation- or conservation levels.
We took a good look at the different aspects that can make up ‘Cultural value’, and the way in which they are related.
Our first attempts to qualify values were rough and messy. But a bold quick and dirty approach did give us the idea that, could we figure it out, we would have an interesting new way to get a hold on collection care.

‘Doing valuation’ has from the start been an exciting adventure. Trying to come to a more sensible grip on why our collections are valuable. Thinking about the components of that value or significance and weighing them against each other.
In this trial phase we roughly calculated values of different collection. Seeing not only their relative values, but also how these values were built up. Meaning what primary and secondary values played how big a role.
Another look at work in progress.
The result of all this work is becoming visible now.

By now we have a simple but effective system of quantifying these values by giving points – much like the European Song contest - and multiplying outcomes. Our learned collection specialists will give all collection-lots 1-10 points for primary values, and 1-5 points for secondary values. By multiplying primary and secondary values we arrive at a relative value for all collections.

And how do secondary values influence the primary values? Not all secondary values will affect any primary value in the same way. ‘Use’ for instance will have no effect on the historical value of collections, but may very well influence the informational value. How valuable can information be, that is not used?

To this end, a weighing factor has been added to the relations between all primary and secondary values.
After testing, we’re confident that this simple, but effective model will help us in
a) Quantifying the total collection value,
b) The relative value of a certain lot within the KB collection value-pie,
c) The way in which the total value is segmented.
When values have been qualified and quantified the next step is risk assessment. Based on our expertise and experience we will set up a limited risk assessment that will indicate risks to be expected for different values.

For example: for a lot that holds mostly informational values, let's say digitized newspapers, readability is of essence, and preservation will be aimed at guaranteeing contrast.
For a lot that has a high aesthetic value (for instance our paper historical collection) protection against light damage comes first.

It is not sufficient to identify and recognise risks. We will also need to develop a scale to quantify and compare risks, a method to indicate the impact of certain risks and the means to mitigate risks.
The final step is designing a limited set of preservation- and conservation levels, applicable to specific lots, which share specific values and a sensibility to specific risks. The levels and the actions that go with them are aimed at preventing loss of value.

For the physical collections we have now identified 6 levels. They range from temporary, non-sustainable storage. This will be a suitable level for instance for general reference such as reading room materials.

On the other end of the scale there is the absolute risk-free – we believe ;-) - storage for our precious special collections, kept as safe and stable as possible.

For the digital collections we now suggest three levels of collection care.

The first being pro-active preservation including the possibility of adding actions as time progresses or as the demands of the digital collections change. The third and lowest level we think will apply to access-files. We’ll make sure they are stored as delivered and are retrievable. Basically storage ‘as is’.

At the moment we are working with these levels, applying them to collections and making them an integral part of for instance the development of our new digital stacks, our new e-Depot.
But not only in that respect does the plan come to life.
My colleague Sophie Ham worked on the shift of value when objects are digitised. What does that action mean for the value of the digital and the physical object? A relevant question for our library. We are in the process of digitising almost all our out of copyright collection. Either doing that ourselves, with European funding, or with private partners such as Google and Proquest.

In a couple of year’s time all our printed collections before 1870 will be accessible online.

Returning to our value-questions. How can that help in dealing with digital files and physical objects?

The Collection Care Plan not only offers the tools for the determination of preservation levels, the framework that is being used for the value assessment is also very useful to analyze the influence of external factors on the value of collections.

Two of the most important influences on the value of our collections are: Disasters

- Of course, fire, water, earthquakes and insects will have a devastating effect on
the collections -

And

Digitization

It's no bold assumption to state we will be doing a lot of that the following years. When KB presented its ambitious strategic plan for 2010-2013 it was Big News.
The header of this newspaper-article says: “Scanning 730 million pages in twenty years”.

To reach this goal KB follows different strategies, varying from high-end digitization of special and rare objects to large-scale digitization projects with commercial partners like Google and Proquest. Here’s a short overview of KB’s digitization activities:
As we are eventually digitizing almost our entire collection, it makes sense to investigate and analyze the consequences of all that scanning on the value of the collections.

At the same time that we’re finally going to agree on the value of all our collections, a large part of our physical collections will be digitized, turning our value-assessment upside down. Or not?

What happens when we digitize collections? Then we create new collections, that can be seen as copies of the existing analogue collections. Or rather: these items are the digital representations of our physical objects. It’s important to consider the values of the two manifestations as a whole, because their values are related.
To illustrate that relation, Sophie picked two extreme examples: the Medieval Manuscripts and the newspapers. Following her, I will demonstrate a strongly simplified version of the model because of our limited time. She left out two values, and instead of multiplying the values I added them. Of course, the overall values now will be different, but the principle still stands.
On a scale from 1 to 10 – In the case of Medieval Manuscripts lots of the value derives from the object: the age of the parchment, the bindings, the grit between the pages [historic value], the carefully handwritten texts and beautiful illuminations [aesthetic value]. Every manuscript is different. [uniqueness]

The value of newspapers is mainly based on its content, the printed texts. [informational value]. Newspapers contain lots of information about politics, language, history, but their layout or bindings are less important [low aesthetic value]. They are used a lot by researchers [use], but their condition is usually very poor, while medieval manuscripts are mostly in a very good state [condition].

So what happens to the values when we digitize these collections?
KB already scanned quite a lot of both categories, Medieval Manuscripts and Newspapers. An example is the medieval manuscript Trivulzio.
Trivulzio is a 15th-century illuminated book of hours that had long been supposed lost. It was once part of the famous collection of the princes of Trivulzio of Milan. The value of the manuscript is estimated at nearly six million euro's. KB presents the manuscript on its website in two ways:
One version for researchers, in which the content is easy accessible
… and an more attractive (but still ugly) version for the broad audience, with lots of context information about the importance and origin of the manuscript.

In both versions you can zoom into the pages.

Our newspaper website which now contains over a million pages, has partly the same functionality.
On this website you can browse through and - full text - search within thousands of newspaper articles. The volumes are completed when possible. At a single glance you can find where on the page the keyword appears.
How do these digitized editions relate to their analogue counterparts?
Let's go back to our matrix.
The primary values of the digital collection are partly based on the primary values of the analogue collection. At least, when the value refers to the content of a collection. Value that derives from the physical aspects of a collection does not shift to the digital version.

That means:

**Informational value** of both the medieval manuscripts and the newspapers can be copied from the original versions – assuming our scans are of a high enough quality.

**Aesthetic value** and **Historic value**: Both values refer – in my slightly simplified definition - to the value of the object itself. The scans do not have such value, so the rating goes down to the minimum: one point for each value.
The secondary values of digitized collections can differ from the analogue collections for the functionality [condition] and use will potentially increase because the collections are easier accessible.

Furthermore, there is a very important relation between the condition of the original physical collection and the uniqueness of its digitized copy. The worse the condition of the original collection, the harder it is to reproduce it and the more unique and therefore the more valuable the digitized copy becomes.

The use of both digitized collections is higher than the use of the analogue collections. You can measure that for example by comparing the amount of catalogue requests to the web statistics. Approximately 50,000 people visit the digital newspapers each month. [The OCR of the newspapers is –not yet-indexed by Google, so there were no “accidental” visitors who reached the website via search engines] The Mediaeval manuscripts in digital form had about 10,000 visitors.

Completeness/Uniqueness. Because of the bad condition of the original newspaper collection, the digitized version gets a higher score. The digitized collection is rare, because it’s hard to reproduce. The digitized manuscript is less unique for the same reason: the condition of the original is quite good, so it’s relatively easy to make a new copy if necessary.

Condition. The condition and functionality of the digitized manuscripts are
adequate. The functionality of the digitized newspapers is even better; the image quality is similar to the scans of the manuscripts, but because of the OCR, functionality improved.

But now we have only analyzed the value shift from analogue to digitized collections. The primary values of the physical originals are the starting point for the value assessment of the digitized collections.

But, once the digitized copies are being made, the overall value of the original physical collections also changes.

At least two values are directly influenced by the digitization: the Use and the Informational Value. Let’s start with the Informational value, for this is the most disputable topic:

**Informational value**
The relation between the digitized newspaper and its original is a difficult one. We already saw that all the content - and therefore all the informational value - of the analogue version is copied to the digitized version. But you can also state that it’s not only copied to it, it’s transferred to it. Because all the content can be found in the copy, there is no need to study the original anymore – at least not for its information. Besides, the information in the digitized newspapers is even better and more complete than the original analogue version, because of OCR. That means, the informational value of the analogue collections actually decreases after digitization, if we regard the digitized collections as the new “default collection”. That is also true for the medieval manuscripts: to read the text you don’t need the original anymore.

**Use** For the newspapers, we at KB have the an indication that customers in our reading rooms are requesting the titles we have digitized less than before. The digitized copies seem to fulfill the needs of researchers sufficiently, so the use of the physical collections decreases.

But the situation for the medieval manuscripts appears to be different. After digitization, it would seem, the medieval manuscripts are easier to find, the interest in the materials increases. That could translate into more requests for loans by museums, more visitors, and more publicity.

So value is actually added to the analogue collections by digitization. It’s a genuine value shift from analogue to digital – and back again.

Recapitulating, analogue collections with little historic or aesthetic value can decrease in value by digitization, because they are being used more frequently. The digital copy is in some respects even better than the original, for the functionality has improved. Especially when the condition of the original is poor,
the digitized collections are more valuable than their analogue counterparts.

Analogue collections with high aesthetic and historic values – like the medieval manuscripts – could increase in overall value because the use increases and the collections are more accessible. When establishing the risk assessment and strategies for preservation and conservation it’s therefore important to regard the values of the analogue and digital collections as a whole.
Of course, we need more statistics to found this Value Shift. Our first experiences with scanning large volumes of books do seem to confirm that loan requests for digitized books from 1800 decrease, while the requests for the older, more special materials go up. We expect that because of the Google Library Project more figures will become available soon- also from the other participating libraries.

When starting digitization projects, thanks to the matrix, it’s easier to decide beforehand for which purpose you are actually scanning. If your institution plays an important role as a keeper of heritage and you want your original collections exposed, digitizing the old, special and rare collections seems a good strategy. When your library is mainly an information supplier, and your main goal is visitors on your website, but not in your building, digitizing large volumes of more recent content-rich information is the better way to go.
So the Value Assessment helps us prioritizing digitization projects and gives us quantitative foundation while choosing the preservation levels and methods.

A first conclusion from this value assessment could be that not all master scans are equally valuable. In fact, maybe you want the scans from your newspaper collection better preserved than the scans you made from Trivulzio. Digital preservation still is very expensive – and only worth the effort and costs if you are sure that you made the ultimate copy.

And although we think we found the Ultimate Preservation medium now – we thought that a few times before.
We’ve put the medieval manuscripts on Diapositives, Microfilm, Tiffs and now JP2-files. What will be next? As long as the analogue collection remains more valuable than any other copy and it’s condition allows reproduction: we should consider the good old paper and parchment objects as the masters.

By the way, that’s not an old-fashioned digi-fobic library- way of thinking: The Internet Archive, the nonprofit organization that’s founded to prevent a “digital dark age”, collecting websites and other born digital material, announced exactly the same strategy a few months weeks ago.
They are starting to collect books – real paper books – in large containers to have reference copies for the digital ones they present online.

If that is not a value shift...
Part 3: What do you think?

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Part 3:
Let’s summarize:
We’ve agreed upon the 4 steps:
1. Division in lots
2. Valuation
3. Risk indication
4. Prioritization

Can value based collection care work in the digital library?
- Identification of values
- Relating risks to specific values
- Determining the nature and amount of care
- Spend resources effective and objective
- Helps building and equipping the National digital library
So!... We think this will work. It will give us grip. Grip on our resources, but foremost grip on what’s important. What’s of value, and what determines the value of our national Collections, at KB.

A value based system for collection care will enable us, through matching values and risks to focus on the loss of value for groups of objects. By applying levels of preservation we aim to give just enough care to keep our collection accessible for generations to come.

In other words, identification of values and relating risks to specific values will enable the KB to determine the precise nature and amount of care for all our collections. We’ll spend our resources in a more effective and objective manner. Collection Care will in this way contribute to building and equipping the National digital library.

Thank you for your attention.
Are there any questions?
Thank you!

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