HOW TO MANAGE COLLECTIONS? – THE PROBLEM OF MANAGE- MENT OF COLLECTIONS IN TAMPERE MUSEUMS

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What do you do, when collections include 200,000 objects, and only half of them are within the management system? What do you do with objects that have been damaged by fire or in transfers between collections? These questions prompted the collection management team of Tampere Museums to develop a value classification system in 1994. This system has been applied since, and has proved to be a practical tool for collection management. The system has already been refined through experience. We hope that this article will provoke discussion and motivate museums to develop common collection management methods.

TAMPERE MUSEUMS

The collection policy of the Tampere Museums is to accumulate the cultural heritage of the Tampere Region, maintain it and put it on display.

The city of Tampere was founded in 1779, and is the largest inland city in Scandinavia. It is located on the historical junction of centuries old waterways and roads on the isthmus of lakes Näsijärvi and Pyhäjärvi, on both sides of the Tammerkoski Rapids. It is surrounded by the economic area of Tampere Region. This area attracted inhabitants as early as 6,000 years ago. The position of Tampere at an important economic and traffic intersection was

further strengthened by the establishment of a railway network. The first railway connection was opened in 1876 between Hämeenlinna and Tampere. Industrialists realised the power potential of the Tammerkoski Rapids, and one by one the textile industry, the engineering industry and the paper and shoe industries started to develop and became important branches of Finnish industry as a whole. After decades of structural change, Tampere has become an important centre in the IT industry and a centre of higher education.

Today, the Tampere Museums include the Häme Museum, the Amuri Museum of Workers' Housing and the Vapriikki Museum Centre.

52 Häme Museum was founded in 1904, and is the oldest museum in Tampere. It is housed in a palace called Milavida that was built by the Finlayson family of cotton factory owners. Nowadays, Milavida is better known by the name Näsilinna. The collections of the Häme Museum include archaeological and ethnological material and specimens of cultural history. The most valuable collections are those that represent folk art: the 'rya' type rugs and the peasant furniture collections.

At the heart of the Tampere Technical Museum was the private technical collection of Juho Holmstén-Heiniö that was first put on display in 1883. The Technical Museum has a varied history: it changed location from Näsilinna to the boiler room of the Frenckell paper mill and from there to the factory building of Kenkäteollisuus Oy (Shoe Industry Ltd). In addition to technology, the collections shed light on the industrial history of the Tampere Region.

The Finnish School Museum was opened in the cellar of Tammela School in 1960. Its collections include study materials, teaching equipment and scale models of school buildings and classrooms. The Tampere Museum of Natural History was opened in 1961 in the Kaipio House. In 1988 the Museum re-opened, in the same location but now as part of the new Metso library, and with improved collections. The Museum has large collections of plants, insects and minerals. The Tampere City Museum was founded at the end of the 1960s. The exhibitions at the museum usually present the history of the city of Tampere and local cultural history.

The museums amalgamated in 1969, when the municipal museum sector was

established. The museum sector took over the supervision of the Häme Museum, the Tampere Technical Museum, the Finnish School Museum, the Museum of Natural History and the new City Museum. The role of the museum sector grew when in 1982, it assumed responsibility for the whole Tampere Region and was renamed Tampere Museums – the Regional Museum of Pirkanmaa. Tampere Museums understood its role to be more of a manager than a collector of local cultural heritage.

The problem of scarce resources hit those museums that were under the supervision of the municipal museum sector in the 1970s and the problem became even worse in the following decade. Rapidly growing collections and maintenance of six separate museum units gave impetus to the search for a new, more centralised mode of operation and common facilities. The fire at the Technical Museum in 1989 hastened this development. A new location was selected from the Tampella factory area, and this new centre was named the Vapriikki Museum Centre. The collections of the Technical Museum, the City Museum, the Natural History Museum and the Finnish School Museum were all transferred to this new centre. The basic exhibitions of the Vapriikki Museum Centre will gradually be opened to the public between the years 2000 and 2002.

The management structure of the Tampere Museums was reorganised at the beginning of the 1990s, and each museum unit is now managed by an independent curator. For the first time in the history of museums in Tampere, collection management was now perceived to be an independent sphere of operation.

GROWING COLLECTIONS

The collections of the Tampere Museums do not form a clear entity, but are a sum of collections that have been added to by

different museums using different collection principles. The collections have become quite large; at the moment they include 200,000 objects, specimens and archived items. When the collections were

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The Museum Centre of Tampere, known as Vapriikki, is housed in what used to be the engineering works (on the right) of Tampella Ltd., in the very heart of the Tammerkoski Rapids National Park. The 10,000 square metres of the Museum Centre will be filled with exhibition and educational facilities, an auditorium, collection management and conservation facilities, a photo archive and an exhibition workshop. The Vapriikki area will be completed by the year 2002. Photo Timo Lehtinen.

54 transferred to the Vapriikki Museum Centre at the beginning of the 1990s, it was time to unify the collections and arrange them into functional groups. The collections are currently divided into the following groups: archaeology, ethnology, cultural history, local history, industrial history, technology, natural history and educational history.

The following chart shows the accumulation of collections in the museums of Tampere. It should be noted, however, that until the beginning of the 1960s, the only collections documented were those of the Häme Museum. The technical collections have only been included since 1970, when the Technical Museum started to list them in a collection register. The collections of the School Museum and the Museum of Natural History are not included in the chart at all, because their collections are closely connected to their own subject areas and are therefore restricted. The same is not true of the collections of the Häme Museum, the City Museum and the Technical Museum: their collections of cultural history partly overlap and form a separate problem area altogether.

The figures show the initial collecting enthusiasm of the Häme Museum. The

collection was augmented by scholarship students under the supervision of the curator of the Häme Students' Association at the University of Helsinki, Julius Ailio. Their objective was to develop a basic collection featuring the culture of the Häme region.

Between 1910 and 1920, grants became smaller and collecting gradually ceased. Since then, collections have mainly been added to through donations. The importance of a collection representing urban history was realised. In the 1920s, items were mainly collected from the Häme region, with some specimens also collected from the Satakunta region. The financial state of the Häme Museum had improved thanks to a private bequest, and it was again possible to collect objects from the region. In the 1930s the Häme Museum's collection changed emphasis. Documentation on the life and culture of the region was left in the background, and funds were used to add to the collections of urban history and photographs. After the Second World War, inflation wiped out the museum's disposable funds, and object acquisition was minimal, although the city of Tampere assisted in covering the running costs of the museum.

Museum	1904-1910	1911-1920	1921-1930	1931-1940	1941-1950	1951-1960	1961-1970	1971-1980	1981-1990	1991-1997
Häme Museum	11,305	9,409	7,396	4,876	1,617	3,374	4,229	1,061		
City Museum							619	5,242	3,450	30
Technical Museum								23,305 +55,000*	18,381 +20,000*	6,506 +35,000*
Total	11,305	9,409	7,396	4,876	1,617	3,374	4,848	84,608	41,831	41,536
items/year	1,615	941	740	488	180	337	733	8,620	4,183	4,459

*an estimate based on diaries

Fig: Items collected by the Tampere museums between 1904 and 1997.

The collection rate fell decade by decade until the 1950s, when the new museum manager, the first manager properly educated in the profession, reversed the trend. The museum was totally dependent on the financial assistance of the city. Some acquisitions were made, but mainly as additions to existing collections. In the 1960s, the Häme Museum's collections were mainly supplemented by large pre-historic collections. The total number of collected objects was already over 42,000. The City Museum started collecting objects and specimens more cautiously, and concentrated on items that were clearly connected to urban history.

In the 1970s, collections exploded. The collections of the Häme Museum were augmented by items of working-class culture up to 1974, when it was decided that the collections of the Häme Museum would not be enlarged any further. New specimens of cultural history were added to the collections of the City Museum, which had its collection growth under control. Larger objects were added to the collections of the Technical Museum, because its storage facilities were better than those of the City Museum. At the heart of the collections of the Technical Museum were the technical collections and the collections of industrial history that had been growing since the end of the 19th century. These collections were now listed using modern cataloguing methods. Collections were added to according to the needs of different exhibition sectors: electronics and power technology, vehicles, printing technology and office equipment, aviation, communication technology and the shoe and textile industries. In the 1970s, emphasis shifted from

technology to the history of industrialism. Large product sample collections increased the number of collected but unlisted objects. At the end of the 1970s, the number of documented collection objects belonging to the Tampere Museums numbered nearly 70,000 and there was an estimated 55,000 objects entered in diaries.

The roles of museums as clear and separate units were blurred within the municipal management system. Collections grew according to the same principles, and most collected items were listed in the books of the Technical Museum. Some of these collections had little or nothing to do with technology (except that the objects were industrial products). When the Amuri Museum of Workers' Housing was founded, its collections were listed in the books of either the City Museum or the Technical Museum. This phase, which has been known as «collection of the cultural capital of a regular, modern member of society», lasted far too long and produced an oversized collection of recent history.

In the 1980s the growth of the collections of the City Museum slowed down because of limited storage facilities. The diaries of the City Museum only included articles of value and small objects of cultural history and a collection called «Gifts of the City». Other items were listed in the books of the Technical Museum. Most objects collected were ordinary articles used in households. As the number of collected objects grew, so did the extent of the batches entered into diaries. Most of these batches included several hundred objects, and the museums no longer knew what they owned. As nobody really knew what objects had already been collected, many new items were included «just to be

56 on the safe side». The catastrophic fire on the storage floor of the Technical Museum solved the problem of oversized collections in an unusual way by destroying over 20,000 catalogued objects, including the irreplaceable collection of Juho Holmstén-Heiniö. After the initial shock, the Tampere Museums started to plan new facilities and new principles for conservation.

In the 1990s, the growth of collections has been normalised. The collections entered into diaries are still growing due to the collection of objects of industrial history. The structural change faced by the industries around 1990 went unnoticed by the museum sector or by the collection management team, because these bodies too had to adapt to changed circumstances. Thus, the collection of specimens of industrial history has been a task for the second half of the 1990s.

The annual growth rate (see chart) indicates that since the initial collection enthusiasm of the Häme Museum, the rate of collection has slowed down and remained under 1,000 objects a year. That number of objects could be documented, given the personnel resources available at the time.

Since the 1970s, the average rate of collection growth has been several thousand objects per year. Two thousand objects were catalogued each year, but this meant that people on the museum staff were mainly occupied in listing objects. The rate of documentation stayed the same in the 1980s.

In the 1990s, the rate of documentation has decreased to what it was in the 1920s. The reasons for this can be found in the new expectations and aims that have been set out for museums: now almost everyone

on the staff is involved in the visible part of museum work: top-quality exhibitions, services and co-operation projects, etc. Museums have started to be responsible for their own profits. Among the task domains of museums, collection management has lost out.

Tampere Museums have been going through a period of reorganisation, regarding collection activities. Although collections are large, they are not comprehensive and to improve representativeness, collections still have to be augmented. Furthermore, collections also have to be added to because of constant development. It is impossible to predict how much the pressure to collect will be increased by future inventions, innovations, events and phenomena. At the same time, existing collections have to be assessed according to changing perspectives.

In order to be able to rationalise the collection management of the Tampere Museums, we need to be able to answer the following questions: What are the responsibilities of the Tampere Museums regarding collection augmentation from the point of view of Finland, the Häme Region and Tampere? Do we need to add to all existing collections? Could fewer objects suffice to describe the contents of collection documents? Are collection activities so important to museums that increased personnel resources should be directed to those activities?

Recent collection management development has led to a classification system, which has been in use since 1994. The basis of this classification system is the conservation rating that was developed out of necessity after the fire at the Technical Museum, with the aim of esti-

mating the damage caused by the fire. It was soon realised that the method could be useful in collection management. A classification system was developed, but that did not solve the problem in itself. However, the classification system can be used within collection management for assessing existing collections and directing future collection augmentation.

COLLECTION CLASSIFICATION SYSTEM

The basic idea of the classification system is that collection objects have different values. Objects are divided into five value categories. Value Category I contains the most essential cultural heritage part of the collection and Value Category II contains objects that are as valuable as objects in category I and can therefore be used as replacements if something happens to the objects in Category I. Objects that are part of permanent exhibitions and duplicate objects (objects that have counterparts in categories I or II) fall into Value Category III. Objects that do not add to the cultural value of a collection are placed in Value Category IV. This category constitutes an observation collection, and its objects may be handled and stored according to directions that apply to utility goods. Value Category V is a so-called deletion category, through which objects that do not fall into any other category are discarded.

CLASSIFICATION CRITERIA

The classification system has seven assessment criteria and a fitness criterion.

1. Nationally and internationally irreplaceable uniqueness

This is used to assess an object from the point of view of preserved cultural legacy, including both Finnish culture and other cultures. How many corresponding objects exist? What is the significance of the object in question? Does it add value to the collection, and if so, what kind of value? Does it contain cultural values or contexts?

An example of an object in this category is the medieval chasuble of Asikkala congregation (HM 152:2). This belongs to the Häme Museum's collection of church history. The chasuble is a rarity within Scandinavia, and the only one of its kind in Finland. Its original appearance has been well preserved and it represents medieval international and Finnish church culture.

2. Scientific and historic representativeness taking into account the history of evolution, style and art

This is used to assess how well an object represents the scientific phase of its time, historical events and phenomena of the era, people and their ideas and what it says about the evolution of nature and the environment. What is the value of the object from the point of view of art history and trends?

The altarpiece of Kuhmalahti church (TKM 8516) is an example of an object in this category. As a work of art, the altarpiece is quite average. Other similar works by the same artist have been preserved. The value of this particular altarpiece is determined by a historical event and story connected to it. The altarpiece represents the gratitude of local soldiers returning from the Seven Years' War in Pomerania. At the same time it paints a picture of

58 the period; peoples' behaviour, war and the significance of the church.

Another example is a falcon mummy (HM 68:1). According to Egyptian Religion, the falcon symbolised the God of Heaven, Horus. Therefore, falcons were mummified and buried when they died. At the end of the 19th century, Egypt was the Shangri-la of archaeologists and rich travellers. A Finnish Baron, Carl Munck af Fulkila, acquired this mummy and added it to his souvenir collection. He donated the mummy to the Häme Museum in 1908. As an object, the mummy represents Egyptian bird species, religion and culture and the use of rubber-like fluids and shows the interaction between collectors and museum collections.

3. Regional representativeness

This is used to assess the regional comprehensiveness of a collection and the significance of individual objects for the collection.

This example is part of the Häme Museum's ethnological collection: a cupboard from Ikaalinen (HM 1261:50). In the ethnological collection of the region, the design of this cupboard is unique and it is very well made. This variant from South-West Finland reinforces the diversity of the collection. The cupboard represents different trends of style and type, visible in its form and ornament.

4. Connection to society, social groups and ideologies

This is used to assess the connection of an object to different social groups, ideologies and phenomena of the time, and the importance of the object as a manifestation of these matters.

Häme Museum has a collection called «the collection of the year 1918». This collection contains material

that was gathered in Tampere from the battle areas of the National War that was fought immediately after Finland declared its independence (HM 1140:1-412). Its emphasis has changed over time. This collection, gathered from the point of view of politics and ideologies, has increased its significance as a portrayal of social and societal development.

5. Knowledge of the history of the museum objects

This is used to assess, how well the life cycle and connections of an object are known; what this information brings to the study of history and collections and whether the object's history paints a picture of the times.

Example: skeleton of a chimpanzee called Chitta, an object in the Tampere Zoo collection of the Tampere Museum of Natural History (TLM 5020). The heart-stirring story of Chitta's life in circuses and zoos tells us about the sad phases of Tampere Zoo, and, more extensively, about the positive and negative aspects of the lives of captured animals.

6. Technical aspects and fabricating techniques

This is used to assess the object in relation to the technology, inventions and innovations within its field. What does the fabricating technique say about the object's properties, and its production and methods of usage? In addition, the object's origin, genuineness, changes in outward appearance, supplements, improvements, modifications, etc. are taken into account.

Our first example is a Kullervo tractor (HM 1259:17), produced by Turun Rautateollisuus Oy between 1918 and 1924. It represents top-level technology and fabrication techniques of the time, even in international comparison.

Chitta the chimpanzee with the manager of Tampere Zoo, Leo Wachman, accompanied by Mäcky and Benny. The skeleton of Chitta belongs to the collection of the Tampere Museum of Natural History (TLM 5020). This object is used as an example of value assessment criterion 5: Knowledge of the history of museum objects.

As a second example we have shoes from the time of the Depression, produced by Aaltosen Kenkätehdas in 1943 (TTM 4921). In wartime, there was a shortage of several raw materials and of equipment. The situation prompted people to invent different substitutes and alternative solutions, and some of these have proved to be useful even since the Depression. Within the shoe industry, the quality of the newly developed paper-cloth and wooden soles was so high that they were even appreciated outside Finland.

7. Manufacturer

This is used to assess an object according to its manufacturer. Several collections in museums, both private and public, have been created in this way, and thus this is one of the most important value criteria.

Our example is from the industrial history collections. Smaller collections representing the production of industrial establishments form a large part of these collections. Considering the location of the Museum Centre Vapriikki and the importance of

A Nokia 9110 Communicator, a mobile phone that represents the latest technology, produced by Nokia Mobile Phones (TTM/D 4884). This mobile phone is the newest object in the collection of industrial history. It has been used as an example in criterion 7: Manufacturer. Photo Timo Lehtinen.

the textile industry in the history of Tampere, one of the most important of these smaller collections is the Tampella collection (TTM/D 3017). This collection portrays the linen products of Oy Tampella Ab from the latter part of the 19th century to the beginning of the 1980s.

Another example in this category is the Nokia 9110 Communicator, a mobile phone produced by Nokia, which represents novel technology. In this phone, wireless data transfer, GSM mobile phone and pocket computer have been combined and, for the first time in history, wireless image transfer is possible. Although, because of the manufacturer, this mobile phone is included in the industrial history collection, it has a lot of significance when assessed from national, international, societal, scientific and technical viewpoints.

Fitness

The value of an object is not assessed using this category; it is used to determine the ways in which the object can be used in museums. If an object is removed from a collection because it is worn-out, it does not cease to exist. The physical element of the object is discarded, but the importance of the remaining written and pictorial elements increases.

DIVIDING COLLECTIONS INTO VALUE CATEGORIES

With the help of the classification criteria, the value of collections can be assessed. Criteria 1-4 connect objects to wider perspectives; to the collection itself and to

corresponding collections in Finland and elsewhere. Criteria 5-7 are subjective to the objects. They define the level of contextual knowledge. The character of a collection determines the criteria that will be used; which one is the most important and what can be disregarded.

For instance, an optical collection is primarily a technical collection, and the manufacturer is an important factor (criteria 6 and 7). Lately, since objects are used in many different contexts, the importance of contexts has grown (criterion 5). A silver collection is regional and local, and the manufacturer is the main criterion used when adding to the collection, but the history of trends and uses is also important (criteria 2, 3, 5 and 7).

On the basis of the assessment criteria, collections are divided into categories I-V. In order to specify and simplify the assessment a rating scale from 1 to 5 can be used.

Value Category I

Objects that, when combined, form a representative general view of a collection's subject area, are placed in Category I. In practice, these objects are selected by using the chosen assessment criteria. If scoring is applied, then objects that are placed in Category I have been given the maximum points (5) in one or more criteria, or the object is given an average rating of = or > 4.

Value Category II

This contains objects that correspond to or are variants of objects in Category I, but are not essential for understanding the character of a collection. Often the contextual information level of objects in Category II is lower than in Category I.

Objects are important to the collection, but are not irreplaceable.

These objects do not add to the comprehensiveness and representativeness of a collection, but they bring depth and nuances, and information about the extent of variants. If scoring is used, an object that is placed in Category II must get 4 points in at least one criterion, or the average rating has to be 2-4.

Value Category III

Objects that belong to permanent exhibitions and objects that are important as reserve objects are placed in Category III. If the number of objects exceeds a level that is a sensible reserve level, the objects can be offered to an «object bank of museums» or to the collections of other museums. Objects in Category III are not preserved as artefacts; as they can be replaced by corresponding objects. The fitness level of objects in this category should be high, because the objects have to endure being on constant display and the wearing maintenance measures. Average rating, if rating is used, is <2.

Value Category IV

Objects that are placed in Category IV fulfil most of the same criteria as objects in Category III. The level of contextual information is clearly lower (rating 0-1). These objects are not necessary as reserve objects. Objects in this category can be used in museums or other cultural establishments. Copies that have been made of original objects are also placed in this category, and these can be used in exhibitions. Observational, educational and utility collections are formed of objects that belong to this category.

62 *Value Category V*

Category V is a so-called deletion category. Objects, that do not fulfil the criteria (average rating less than 1) and cannot be placed in categories I-IV, and objects that are so worn that they can no longer be conserved or maintained, are discarded through this category. Objects are abolished according to a disposal programme, after a separate decision to abolish the object has been made.

EXAMPLES OF VALUE CATEGORIES – BICYCLE COLLECTION

As an example of dividing objects into value categories we will describe the assessment and scoring of a bicycle collection. We know from experience that rating is not practical in collection inventories, but it is necessary in research-based, in-depth value assessment.

The bicycle collection of the Tampere Museums has grown over the decades. The first bicycle was obtained by the Häme Museum in 1908. During the initial phase, the collection was mainly added to through donations. Active collection on behalf of the Tampere Museums started at the end of the 1970s, when the Tampere Museums were asked to construct a bicycle stand for the Loma 79 (Holiday 79) recreational fair. Tampere Museums decided that the exhibition should portray the history of technological development and the use of bicycles.

An inventory of the bicycle collection indicated that the collection covered the 19th century very

well, but that it was impossible to depict 20th century developments in the collection. The collection had to be augmented. Gaps were filled and the exhibition, *Phases of the Bicycle*, was put on display. The following year, the exhibition was transformed into a permanent exhibition at the Technical Museum. In 1988, the collection was supplemented by the addition of new material, particularly the products of domestic manufacturers.

After the active collection phase the collection contained 62 bicycles in the collection covering the period from the 1860s to the 1980s; with the emphasis on the period between 1930 and 1960. In addition to normal bicycles, the collection included some special models. The collection portrayed the developments of the 19th century well, although hand-made, wooden bicycles were rare.

The bicycle collection is technical-historical by nature. The viewpoint is Finnish, and emphasis is on domestic production. This perspective was used, when single objects were assessed in relation to the collection. Of the assessment criteria, the following were applied: 1: Nationally and internationally irreplaceable uniqueness, 2: Scientific and historic representativeness taking into account the history of evolution, style and art, 4: Connection to society, social groups and ideologies, 5: Knowledge of the history of the museum objects, 6: Technical aspects and fabricating techniques and 7: Manufacturer. We have selected examples from each value category.

Value Category I

As an example of bicycles that have been placed in Category I, we have a bicycle from the 1890's. The main guidebook of the Häme Museum reveals that

Time	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980
objects	1	3	3	2	1	2	5	13	6	14	4	4	4

Fig: The Bicycle collection of the Tampere Museums

A bicycle produced by Outinen & Lehmusvirta Oy, Tampere (TTM 31514). The trademark is Opel and it was manufactured in the 1930s. It represents objects of the bicycle collection that fall into Value Category II. Photo Timo Lehtinen.

the bicycle came to the museum in 1915 as part of a collection batch belonging to Erkki Korri, who was a scholarship collector and common school teacher (HM 1077:10). The bicycle comes from the village of Rantala in Kylmäkoski, and it was made by the nine-year-old son of crofter, Kustaa Hakala.

1: Nationally and internationally irreplaceable uniqueness

The bicycle is unique, both nationally and internationally. There are only a very few corresponding objects in other Finnish collections. 5 points.

2: Scientific and historic representativeness taking into account the history of evolution, style and art

From a historical perspective, the bicycle is interesting. Wood is not a commonly used material in bicycles. The first bicycles at the beginning of the 19th century were wooden, quite soon, however, various types of metal became the standard material used in bicycles. This bicycle, although individually interesting, is not irreplaceable in the history of bicycles; it is more a curiosity. 4 points.

4: Connection to society, social groups and ideologies

The bicycle is clearly part of society. It is part of the cultural heritage of the rural social group that had no possessions. The source of innovation was presumably a factory-made, Diamond-framed bicycle that was seen in the area at that time. This type of bicycle became common in the 1890's, but was naturally only used by higher social groups. The son of crofter Hakala probably saw this vehicle innovation, and constructed his own bicycle based on what he had seen. 5 points.

5: Knowledge of the history of the museum objects

The history of the production and the use of this bicycle is known thanks to scholarship collector Erkki Korri, who informed the museums about the manufacturer and the user. There are, however, no details available about the functionality or length of service of the bicycle. 4 points.

6: Technical aspects and fabricating techniques

When the bicycle collection was studied at the end of the 1970s, the structure and fabricating technique of the bicycle were investigated as well as its technical features. The bicycle is made of birch. It has a Diamond frame, and it is pedal controlled, cogwheel and chain geared; the chain is made of wood and metal wire and the gear ratio is 60.0. The wheels of the bicycle have wooden frames, the rims are made of metal and the diameter is 20". There are no brakes. The saddle is made of wood and it is fixed. The bicycle is a hand-made variant of a factory-made bike. The Diamond frame model was developed in the 1890s and it revolutionised the bicycle industry. Thus, this bicycle represents a technical solution that was revolutionary, but common. From a purely technical viewpoint, the bicycle collection includes other bicycles that represent this technical phase more accurately. 4 points.

7: Manufacturer

The information concerning the maker of this bicycle is intriguing. The price of bicycles started falling in the 1890s with serial production, and it is possible that the son of crofter Kustaa Hakala saw a bicycle even in the remote area of Kylmäkoski. Being good with his hands and technically talented, he managed to construct a bicycle out of a traditional Finnish raw material, wood. Considering the age and social status of the maker, and the elementary tools he had to work with, he succeeded remarkably well in transposing the technical features into the object on display. 5 points.

The bicycle was given 27 points in the assessment, the average rating being 4.5.

The fitness of the bicycle was evaluated after the value assessment. The bicycle is quite worn, and long-term storage has affected its fitness, insects have caused some damage to the material, for example. The overall fitness of the bicycle is relatively good, however. Of the original parts, the cogwheel centre is missing. It was replaced by a wooden, cogged wheel before the exhibition in 1979. A more detailed assessment of the bicycle's fitness and a plan for conservation and future use in exhibitions is part of the job description of a conservator.

Value Category II

An example of an object in this category is a bicycle produced by a sports shop named Outinen & Lehmusvirta Oy in the 1930s (TTM 31514). The brand name of the bicycle is Opel and it was donated to the Technical Museum in 1982. The bicycle collection contains another Opel bicycle, a woman's bicycle from the 1920s (TTM 31513). As it did not make sense to place both bicycles in the same Category, the woman's bicycle was placed in Category I and the man's bicycle in Category II. This decision was taken on the basis of the following three criteria: 1) there are fewer women's bicycles in the collection than men's, 2) the wo-

man's bicycle is an example of the earliest bicycles produced by Outinen & Lehmusvirta Oy and 3) the woman's bicycle still has its licence plate on it.

1: Nationally and internationally irreplaceable uniqueness

The bicycle is neither unique nor rare. It is a serial product made of industrially produced parts. 3 points.

2: Scientific and historic representativeness taking into account the history of evolution, style and art

The first boom in the history of bicycles was experienced at the end of the 19th century. Bicycles were registered, and on a local level these registers also listed those modern upper-class people, who followed international trends. At the beginning of the 20th century, bicycle production grew rapidly and prices plummeted. Bicycles became common. In the 1920s, bicycle sales kept growing and by now bicycles were used in the countryside as well. At the same time, small bicycle assembly and sales shops flourished. This bicycle is a typical example of the bicycles of the period. 3 points.

4: Connection to society, social groups and ideologies

The donator of the bicycle is known, but its user is not. Therefore, it is not possible to determine the bicycle's connections to society. 0 points.

5: Knowledge of the history of the museum object

The history of the bicycle is not known. As the frame model of the bicycle is designed for a man, we can deduce that the original user was male. The donator comes from Tampere, but that does not necessarily mean that it was used in Tampere. There is no information about the period of use of the bicycle. 1 point.

6 and 7: Technical aspects and fabricating techniques, and information about the manufacturer

Like other bicycles of that time, this one was assembled using mass produced, standard-sized

parts. In addition to the large bicycle manufacturers, there were several smaller assembly shops in Finland. Outinen & Lehmusvirta Oy was an assembly and sales shop founded in 1919 in Tampere. It was a small local business; in 1948, for instance, its sales constituted 2.75% of all Finnish bicycle sales. Oopel is a typical basic bicycle of the time, designed for travelling. It is black, like most bicycles of the time. The bicycle has a rack and a bell as accessories. 4 points.

The bicycle was awarded 11 points, the average rating being 2.5.

The bicycle is in good shape, taking into consideration its age. Maintenance, conservation and usage guidelines for Value Category II will be applied to this object. These guidelines are developed together with conservators.

Value Category III

A bicycle made by Kone ja Terä Oy in the 1950s in Tampere has been placed in Category III (TTM/D 3572). The trademark, Jaguar, is the best known of the company's brands. The bicycle was donated to the Technical Museum in 1989.

Kone ja Terä started manufacturing bicycles in 1933. A new, three-storey factory was opened in 1937 and production grew. Kone ja Terä was one of the largest bicycle manufacturers in Finland up until 1965, when its ownership changed and production of bicycles came to an end.

The bicycle collection contains five Jaguar bicycles produced by Kone ja Terä. They have been placed in different value categories according to added value derived from contextual information. The Jaguar is green (the original colour) and has a stand typical of the times. Some newer parts have been added to it, including a lamp. As the fitness of this bicycle is better than the fitness of the other Jaguar bicycles, this one is more suitable for use in exhibitions.

Value Category IV

An example of Category IV is a messenger's bicycle from the 1930s. The bicycle has lost its identification documents in storage transfers. Despite several efforts, no explicit connections between the bicycle and the information in diaries has been found. Presumably, the bicycle belongs to diary batch TTM/D 2707, which includes equipment from a shop in Tampere. The bicycle is in poor condition; its surface is damaged and its sign plate has disappeared. It is not worth conserving the bicycle, because the collection contains other messenger's bicycles that are in better condition and equipped with better contextual information. The bicycle will be transferred to the utility collection. It will be repaired and used as an observational instrument in education, or for transportation of small items within the Vapriikki Museum Centre area.

Value Category V

An example in Category V is a bicycle from the 1930s. The bicycle was damaged in the fire at the Technical Museum. The sign plate, which is important to help identify it, is missing. The identification documents connected with the bicycle were destroyed in the fire. We assume that the bicycle may have been taken into the collection of the Technical Museum in 1983 and given the diary number TTM/D 2569. As this is only an assumption and as the fitness of the bicycle is really poor, it is not sensible to keep this bicycle in the collection. The decision to dispose of it is backed up by the fact that the collection contains several similar bicycles from the same period.

THE VALUE ASSESSMENT SYSTEM IS IN USE IN THE TAMPERE MUSEUMS

The value assessment system is an essential part of the management of collections

66 in the Tampere Museums. The system is not only used to assess existing collections; it moulds our attitudes towards collection management. It influences both active and the passive collection. We tell people who offer us objects for our collections, the value category in which the offered object would be placed, and we also explain what this means in real terms. After we have assessed a collection, we know how the collection should be supplemented. We no longer need to take in objects «to be on the safe side»; active collecting is based on knowledge of the collection.

When we decide to add to a collection, we take into consideration the criteria used to assess the collection. For example, if we have several alternative objects, we select the one that, in addition to its main criterion, has a good average rating in the criteria chosen for the collection. A good rating in most of the criteria means that the object can be used in different ways in collections or exhibitions. By selecting objects carefully, we can reduce the size of collections, when a single object covers several criteria of a collection.

The value assessment system enables more versatile use of objects. After we have selected the best objects (categories I and II) and an exhibition collection (category III), the remaining objects fall into Category IV, which is a source of education, observational and utility collections. If an object is not useful in Category IV, it is moved to Category V and disposed of. Together with conservators, maintenance, conservation and usage guidelines are developed for objects in Category IV. These guidelines are written bearing in mind that objects in Category IV should be used in a versatile way, even if it means

that the 'museum life' of an object becomes shorter. These objects can be used to offer visitors a museum experience that goes beyond visual sensation.

APPLICABILITY OF THE ASSESSMENT SYSTEM IN A NUTSHELL

1. The value assessment system is a practical tool for the assessment of museum objects.
2. On the basis of the assessment, maintenance, storage and conservation measures can be determined for collections and individual objects as well as the criteria for putting objects on display.
3. Value assessment helps to define the cultural heritage value inherent in a collection and makes it possible to determine a culmination point for the collection. It makes it easier to assess when new objects do not add to the value of a collection. We can calculate the optimum size, including a sufficient cultural assortment from its subject area, for each collection.
4. Value assessment reveals the strengths and weaknesses of a collection.
5. Value assessment is a basis for the reasonable management of collections.

COLLECTIONS GROW – UNDER CONTROL OR OUT OF CONTROL?

One of the main purposes of museums is to supplement collections. Museums live; they follow the phenomena of their subject areas and document the cultural heritage connected with their collections. Therefore, collections grow all the time. The amount and quality of this growth depends on the role of the museum; is the

sphere of competence national, regional or local, or does it concentrate on a special subject area? The Tampere Museums supplement their collections from a national, regional, and local viewpoint and specialise in several subject areas. As the field is so comprehensive, it is impossible to justify limiting the acquisition of new objects to any extent without affecting the representativeness of collections.

Supplementing collections is problematic, because there are no guidelines for culling collections. Continuous growth of collections is untenable due to limited space, staff and budgetary resources. How have museums solved the problem of culling? In Finnish museums this problem has not been openly discussed. «A fire once every decade» was the playful remark (or wishful thinking) of old museum people. Often a fire or some other catastrophe has indeed provided a solution to the problem of oversized collections. But what kind of solution? In some cases, unsuitable storage facilities have caused permanent damage to objects. This passive attitude has led to a partial destruction of our cultural heritage. Some active measures have also been taken, however. A perpetual lack of space has prompted museum staff to dispose of objects crudely on the basis of subjective estimates. Sometimes straightforward, mathematical systems have been applied, where every second, third or fourth object has been removed. The value assessment system provides a solid foundation for decisions concerning disposals. The representativeness of a collection can be maintained and even improved, when documentation and conservation measures are concentrated on the essential part of the collection.

At some point, every museum that supplements its collections will face the problem of limited storage facilities, and with it the problem of value assessment. Disposal of objects (Value Category V) will be a natural part of collection management. It is sensible to admit the imminence of oversized collections and to prepare for it. It is possible to develop co-operation between museums and to create common, functional and reasonable disposal guidelines. What criteria should be used for object disposal? What factors (such as the terms of a donation) exclude the possibility of disposal? By accepting the disposal of objects as a natural part of collection management, we facilitate the collection of new objects. Contemporary phenomena and future trends can only be understood from a historical perspective. Museums have therefore traditionally been a step behind with their acquisitions. The consequence of this has been that it has often been difficult and expensive to acquire the objects needed to depict the phenomena.

The principle of contemporary documentation could be incorporated to include collection management: collect an oversized, basically documented collection, and assess it, after enough time has passed, from a historical perspective and dispose of the objects that do not contribute to cultural heritage. This would reduce the need to supplement collections later with objects that are expensive or hard to find, or with objects that have happened to be saved inadvertently or because of the subjective interests of collectors. We have to keep in mind that the interests of collectors and museums are seldom in tune.

68 The value assessment system provides museums with tools for assessing collections and for setting guidelines for future acquisitions. But this is not enough in contemporary society, where objects abound. If responsibilities are not distributed between museums, they will not be able to produce adequate basic documentation. A Swedish model, Samdok, was introduced into Finland on the initiative of the National Board of Antiquities around 1990. The Board sent a comprehensive questionnaire to museums to clarify the contents of collections, and asked for suggestions as to how responsibilities could be divided. The project has not been carried through, however. Thus museums are still expanding collections according to their own preferences. It cannot be reasonable that, inspired by momentary insight, several museums collect corresponding objects based on the same phenomena, while other phenomena are completely ignored. This mode of operation leads to large, overlapping collections. As the national division of collection responsibilities has not yet been realised, Tampere Museums have decided to define their area of competence themselves, taking into account local features and the significance of these features on a national level. Tampere Museums have open-mindedly started to assess and manage collections in a controlled manner.

Tampere Museums presented its value assessment system for the first time at a collection seminar arranged by the Finnish Museum Association on November 16, 1994. The system aroused interest and evoked discussion to such an extent that the applicability of the assessment system in practical

work was already being discussed at the following collection seminar on 20 and 21 September, 1995. Since then we have learned that guidelines for collection assessment have been developed in several European museums, often without any knowledge of the efforts of others. Tampere has exchanged experiences with, for example, the Organismo Autónomo de Museos in Tenerife.

The writers, Ritva Palo-oja and Leena Willberg, are responsible for the management of collections in the Tampere Museums. Leena Willberg started documenting the ethnology and cultural history collections at the Häme Museum at the end of the 1960s. Ritva Palo-oja took on the responsibility of the documentation of the Technical Museum in 1973. Since the mid-1970s, Willberg and Palo-oja have been working together in the field of collection management and research. The collections of the Häme Museum, the City Museum and the Technical Museum have become familiar over the years. Since the beginning of the 1990s, Willberg and Palo-oja have been in charge of object collections at the historical museums, excluding archaeological collections and collections of natural history. In their practical work, they have encountered the problem of managing collections and sought solutions to this problem which they are still pondering.

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