Karolina Tabak Manager Digitization and Visual Documentation Department National Museum in Warsaw Al.Jerozolimskie 3 00-495 Warszawa tel. +48 22 621 10 31 ext. 289 ktabak@mnw.art.pl

key words: data base, thesaurus, standardization, glass negative, digitization, documentation, condition report

On the way to harmonized data. Over 20 year history of building a data base in the National Museum in Warsaw

In the 1990 National Museum in Warsaw began its journey in building a digital data base – called an electronic inventory in that time. We emphasize this fact very often, in sort of a pride, that we have overtaken other museums in Poland, that our modern thinking has begun a few or even over a dozen years earlier than others. But is our situation so privileged? We should have had by now a complete data base with a digital photo for each object, controlled vocabularies, complete on-line catalogue, but the reality is more complex, far more difficult than the situation of other museums which only now start building their own data base. In the 1990's there was no network in museum, the first version of museum system worked on a few selected computers. System was used mainly as a register of loans, not as a catalogue of works of art.

MONA-DOS	9 J			
Nr inwentarza:	MP 527 232710			
Malarz:	1317/1570/71 Boznańska Olga			
Nazwa: Właściciel:	Portret Julii Rylskiej Muzeum Narodowe w Wars	, literatki zawie		
Dział: Obecna lokaliz.:	MALARSTWO POLSKIE			
	69,5 x 48,5 ok.1930	(od ok. 1925 do ol	k. 1935)	
Rodzaj: Tworzywo:	obraz		11007	
Technika: Nr negatywu:	olej			
	104780 Sztuka			
Wycena:				
Cechy: Sygnatury:	W czarnej marynarce. 1.g.: Olga Boznańska			
Nalepki:	1) MNW nr inw.232710 2) [spisowa] 1317/1570	/71		
F8:wizerunek F	9:zb.tekst. KARTY->F4:	nauk/F5:ewid/F6:mag/	/F7:kope	rta/F3:fiszka

The first version of museum system MONA

The change in thinking on how to use the system took place 10 years later. 15 separated bases started to work in a network. Each base was created by each museum department; each

record was created in a way typical for this department, or even worse, typical for each employee. 5 years ago we started a process of joining selected bases. On this occasion, it was the first time we have ever noticed the scale of the problem. Objects were described in a way that hampered any queries; there were no controlling list or any rules concerning authorization in system. A big problem was also a different level of description. For years the works of art have been cataloged either by an expert, or by registrar worker or students and outside workers. Many records were made based on the inventory book or other documentation such as cards without analyzing the physical object. Some of this documentation was made even in the XIX century or after the Second World War.

nogeview podparty at level open in pre- wel trajue voltante va stole voltopo ue korte i franchen al al Marc - Griene traju ajac is vanie. soonej ogie kistoit	77 90	Pacietmoure Shing htuck	REV. 1948
Getard Jan al al . Mare - Griem trymając w vanie. sionej rojec kietrik		Parietmore 2hog htub	M. N. N. N. M. 1320 1320 18 M. M.
Mjøre - Grieve trymajze v mie. sronej reje kietret	77 90	Paintmome 2biog htub:	14 13 2 2 11 2 5 4 18 H
Mjøre - Grieve trymajze v mie. sronej reje kietret	11.00	thing the	14 13 2 2 11 2 5 4 18 H
stoney ryce kielter		1 curd un	Provide and the second second
			1 topp made will and an
- I d		and the second s	Kito 775
			PLOSER MAL
		10.1	
Scidenbeutel Miasz		Paintmoine	
Martine malura Na bialej termene	-	thing france	
ales 2 authalus, cora rope.			
parce and anework Japourne			
while .			TOTAL
Ruston Jan	37 33.5	Dar	20.10 EST-1969
state Kaculaite' 2 Jost whom	1	letteriera	1948 Apris 1936/1849/1 14
Euplichiei - Conversio unades danna -		prog.	Ingrishing the Friend
w. praini wholf grown 1/4 4 levo Success			Jus. Mai Palikinge park
acus moreno devoltowana Mosycienne z lokan			DAY MP JASTA
userouqui ne noto istroi, TTo cience. V.p.S			Es /10 EST - 1969
Kustem au	3834		
ortret rublichiego. Popiersie ug.		ligteriora	1948 1450 1256 161 1917
your suricourse of a maine Ciennos ara.		1	
			Ingrinance in pal
recobridy cience. The cience		-	or the 2502
2. 1+ 1/00 11 ·······························	211 11/1	ALL BAC	20.111 Rys. Pol. 19363
Lichter Willbald	37 25 48	mide which	1948+ spr. 355/2/24
hidok Natolilie		Todounago	relate a state
		vuccune	The second second second
		The second second	COLUMN STREET,
10.1	1	20-20-20-20-20-20-20-20-20-20-20-20-20-2	I DE TRANSPORT
nets.			
	untersetter Marshing Herneric ten i jarta aui, cat to raje i jarte Une observat jepwishi Austen der <u>August</u> riter Kardlike Statybert austen au marshing of the state indelike - Adjord and and marshing au conservation of the state and herner destrout Aragina of the construction of the state with the hill and indelike Vatolices Centre Millerd Sidek Natolices	Minten Jac Standon Minh That La Minter Standon 37 335 That the Minter Standon 37 335 Telblichie: Popret giona 14 a lus Jitterson and house destricture Waysiener o barne mansangen in word war Job Channe Offs Pratter Jace Poprets Cience offs Pratter Jace Poprets Cience of pa- ters franc - hay helsture Warp michod y ciencel. The cience of part - hay helsture Warp in the Standon Standon Standon to Star - hay helsture Warp Start Without Stress Start Wather	lusten den singer Titat Karling Statuter Listen den singer Listen den singer Listen den singer Listen den singer me besen destriene Keigenen singer Pasten den Statu den Statu den track - half helsten konger man swisser 44 street konger me breit singer 44 street konger ten fran - half helsten konger sidek Natolina Street Street konger Status and side singer Status and side side side street konger Status and side side side side street konger Status and side side side side side side side sid

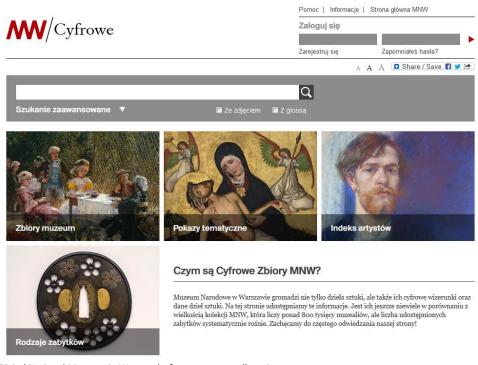
Page from Inventory book

There were many mistakes, wrong attributions or simply lack of basic elements in the description (the date of creation, dimensions etc.). At the beginning of the data base, numbers were more important than the quality of knowledge.

Since then we are trying to organize all the records. I believe that in many institutions the first step is not to decide which data exchange standard to pick, but how to make the knowledge about works of art that emerged in and outside the system accessible and discoverable. We cannot simply erase 20 years of experience even if we know now that these were the times when chaos emerged. There were no rules how to describe an object, how to use general rules which did not match the vocabulary of art and the searching routine of web users. The policies and legislation provided only the list of basic elements needed in museums evidence. In Poland there was no complete, standardized cataloguing instruction. So we have made our own in accordance to CDWA.

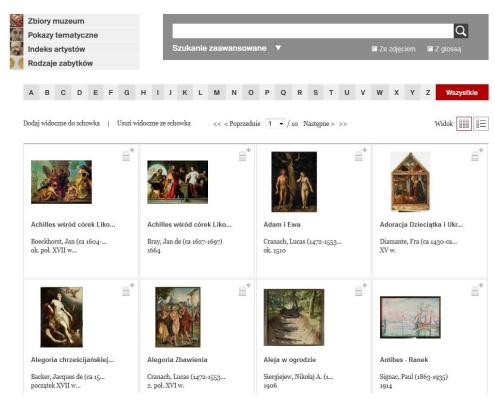
With a big help from all the curators and museum staff we have created a document - collection of directives for a suitable description and we hope that these guidelines will lead us to fully accessible digital resource. Our museum collects a variety of objects, from ancient vases, medieval altars to modern design and video installation. It is still very hard to use general rules for all the objects. We are trying to teach museum staff that the unified description will help web users or professionals who use the system during their search. In practice we still have many problems, for example many employees still create descriptions in their own manner and in accordance to their habits by omitting the rules. But in some cases those habits reflect also searching routine and we have to make some compromises i.e. the geographic names - we recommended using the current names as preferred terms, but scholars searching ancient art won't use term 'Bodrum, Turkey' but 'Halikarnas', searching pottery manufacture we have to include that this specific manufacture was Polish in XIX century but now is Belarus. The creation of relation between the terms is still a task we need to deal with in the close future.

Currently in the system we have over half a million records which is 68% of the whole collection. In 2011, we launched our internet catalogue – Digital National Museum in Warsaw (cyfrowe.mnw.art.pl).



Digital National Museum in Warsaw (cyfrowe.mnw.art.pl), main page

Each month we're adding to the web base a few hundred new records. Each record is exported from our internal system; before the publication we check if the description is correct and made in accordance with our guidelines. All the editorial work is made by one person and since it is a very big task to manage, we hope that in future, we will have funds to create a working team. Currently over 15 thousands objects are available via internet.



Digital National Museum in Warsaw (cyfrowe.mnw.art.pl), Collection - list of items

The process of structuring the language and errors correction is time-consuming and challenging pursuit. But in the time of linked data and knowledge coexistence in many systems, it is necessary.

The whole process has a few stages:

- Improvements in the system
- Museum staff training
- System account management
- Changing/creating procedures

There has been made a few adjustments in the system that make correction work much easier. These are simple tools, but without them, any correction in a big data base would be almost impossible. In every action we have to remember that each term is used in several or even in hundreds of records, and before erasing anything from the system, we have to be sure that it is a correct step. In the system, we can easily replace one term by another in the whole database, we can block the terms that were verified, mark selected terms as confidential (in regards to ownership disputes), or create

hierarchy. Unfortunately, when the system was built there were no global standards or on-line thesauruses. The only solution was to match our terms with other thesauruses such as ULAN Getty or AAT – it was made quite simple, the ID of the term was an additional information in our internal thesaurus.

Słownik twórców (autorów, wytwórni, wydawców)	×					
Kryteria wyszukiwania						
WZR Podaj nazwę %remb%	8: /1 1					
Image:	^					
Rembowska Hanna (1912-1947) rysownik						
Rembowski, Jan (1879-1923)	-					
Nazwisko i imię lub nazwa						
Rembowski, Jan (1879-1923)						
Oboczności:						
Źródła						
ULAN:500106945						
VIAF:96479749	- <u> </u>					
Rola (główna) rysownik 💌 ?						
Biogram:						
Jan Kembowski (1879-1923) to rysowniki illustrator reprezentujący nurt symbolizmu. Kluczową rolę w kształtowaniu się jego postawy artystycznej odegrała sztuka Stanisława Wyspiańskiego i podhalański folkior. Tatrzańskie						
						legendy służyły mu za kanwę kompozycji o narodowowyzwoleńczej
Uwagi dodatkowe	Ĵ.					
	*					
	-					
Tłumaczenie nazwy:						
angielski						
niemiedki						
francuski						

Museum system MONA, Creators thesaurus

Also the administrative vocabulary such us location dictionary needed sorting and hierarchy building. The bigger task were the geographical terms, creators and key words thesauruses, i.e. our creators thesaurus contains 35 thousands terms, key words – almost 50 thousands. To make this vocabulary accessible, standardized and linked with on-line data bases, we needed an external help. We hope that new longstanding government program coordinated by National Institute for Museums and Public Collections "E-Muzea" will help in organizing a work team.

The system that we are now using, as it was mentioned above, was created over 20 years ago. Currently we are using the third version of it. Almost every function of the program was created in a close cooperation with the museum staff. The advantage of this situation is that the program fits perfectly to our often very complicated collection; the disadvantage is that most of the solutions are very specific and not common in other systems. In the future, we will eventually have to change the system for a new, modern application that would allow the data exchange between museums, and the use of common formats and standards. There is a possibility that National Institute for Museums and Public Collections will coordinate the construction of a new museum system that would also be compatible with SPECTRUM standard.

Beside the huge task of standardization of vocabulary and creating thesauruses, we also see a big problem in badly organized documentation associated with an object which was only partially registered in the system. The traditional documentation of the object means scientific cards, inventory books, negatives, old condition reports, sketches and more formal documentation such as agreements, documents confirming changes of status, ownership, and licenses. In choosing documents to digitize we should follow a few rules:

- Digital version of document will be helpful for museum staff in research, queries
- The documentation is fragile and there is a need to create a digital version as a preservation of knowledge
- The documentation itself is an interesting collection that should be digitized and should be accessible via Internet
- Document contains information crucial in history of work of art

Other documents are stored and registered in museum's Archive.

This year we launched a project which aim is to digitize conservation documentation and make it accessible to whole museum staff. Prewar condition reports, description of intervention, x-rays, ultraviolet pictures, notes that were made by museum employees during the German occupation, sketches of early Christian frescoes in 1:1 scale - everything is scanned or photographed and connected with an object record.



Fragment of digitized conservation documentation

Other example in digitizing archive documentation is the collection of glass negatives. Thanks to the funds that Museum gained in the Long-Term Government Program Culture + we begun in 2010 digitizing a unique and very fragile collection of negatives on glass. Negatives, that were created before the Second World War, show mainly objects from museum collection but also objects from private collections. In many cases the images are still the last image of an object before it was looted by Nazis. The black and white photos that were taken in that time are high quality; a digital version of it is a tremendous resource to curators and scholars at museum. In 2010 a famous, looted painting by Aleksander Gierymski, Jewess with Oranges was discovered on an auction in Germany and with the help from Ministry of Culture and a private foundation was brought, again, to museum collection. After it was discovered, a few members of the museum staff had to analyze the painting and prove that this is a painting from our collection. Such prove was a print in 1:1 scale made from the digital image from glass negative, that was used as a comparison to the actual painting.

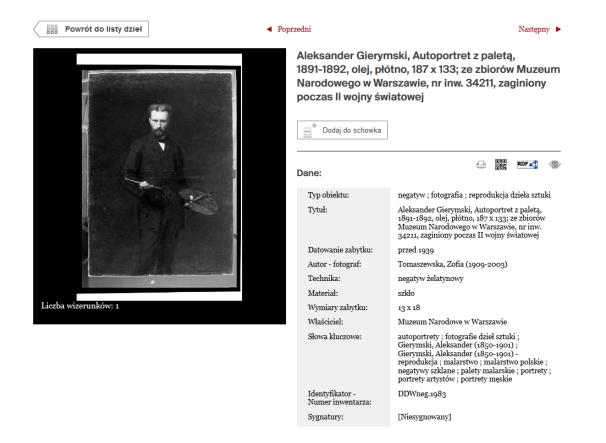


DDWneg.2008, Aleksander Gierysmki, Jewish woman with oranges, approx. 1880-1881, oil on canvas, 65 x 54; from the National Museum in Warsaw, inv. MP 5526 (73408), lost during World War II, recovered in 2011, glass negative

Each negative has its record in the system that allows us also to show the collection on our website. Images are also connected with the record of actual work of art. Some of the images show the objects from other museums collection; these negatives have links which direct the users to the current data and image.

arta	obiektu: DDWneg.1983	Same Spinster	A Real Property lies	-	and the second second	Contraction of the	X	brazów	-
-	Identyfikator		klasyfikacja		typ	l.szt.inw	Identyfikator zespołu (obiektu	vanie	
	DDWneg.1983		2 zabytek	- 🛃	pojedynczy obie	DDWneg.198	3 - wizerunek - w:\ddw	\ddwneg1983.jpg	
=	Nazwa , tytuł						and the second se	discut discut	and the second second
F	Aleksander Gierymski, Auto olej, płótno, 187 x 133; ze								
	Twórca (autor, wytwórnia, wyda	wca)	+	Datowanie					
3	nazwisko, nazwa	uwagi	rola	przed 19		18	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Tomaszewska, Zofia (190)	9-2003	fotograf						
				Wymiary (gabaryty)				
7				13 x 18					
_				Waga					
K	•		•						
	Miejsce powstania, znalezienia		Ŧ	Tworzywo		in Brans			
2	nazwa	uwagi	typ	nazwa	uwa		a terrar	and the set	
Ď				szkło				Sall.	
3									
)	*		۶.	•					
	ut di i que p	ział							
∎ *			ACJI I DOKUMENTAC	JI WIZUALN	EJ 🛃	time of the second			
						i l	•	the second second	
	zespoły, obiekty złożone								
n	przemieszczenia Właściciel								
u.	znajdź w wyszukanych	Muzeum Narodov	we w Warszawie		~				
9		_							

Glass negative record in the museum system; DDWneg.1983, Alexander Gierymski, Self-Portrait with a Palette, 1891-1892, oil on canvas, 187 x 133; from the National Museum in Warsaw, inv. 34211, lost during World War II, glass negative, Zofia Tomaszewska, before 1939



Glass negative record in the Digital National Museum in Warsaw (cyfrowe.mnw.art.pl); DDWneg.1983, Alexander Gierymski, Self-Portrait with a Palette, 1891-1892, oil on canvas, 187 x 133; from the National Museum in Warsaw, inv. 34211, lost during World War II, glass negative, Zofia Tomaszewska, before 1939

These two examples of digitizing the documentation that emerged during the life of an object in the museum show how important it is to preserve this knowledge and to make it accessible not only for museum staff. The standards and procedures in Museum concern digitizing and describing works of art in the system, not their documentation. I believe that over time, we will need a procedure that will show not only the need to preserve the analogue documents, but also show which document should be preserved in a digital form and how it should be described.

Every museum system should give the possibility of content management including tools for simply cleaning the base, building relation between the terms. It should be flexible enough to add new fields concerning the area of documentation of the object. Even if we are using software which doesn't have all the dedicated functions, we should create a solution-compromise that guarantees preservation and quality of knowledge.