# 2D or 3D Stick the label to the picture

Rijks Museum 2015



Sarah Saunders

# Why embed data in images?

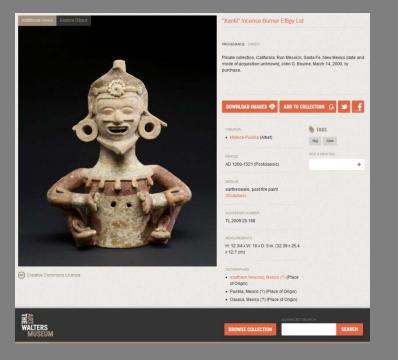
# This is what we hear...

- There are too many standards
- There are too many fields
- It's too much work to add all that data
- The labels change depending on the software
- We do things our own way
- There's no budget for improving our data
- Photographers do pictures not data

## The scandal of web orphans

## Museum Web Page

http://art.thewalters.org/detail/80343/xantil-incense-burner-effigy-lid/



## Downloaded Image

ps1\_tl200920188\_back\_dd\_t10.jpg



Who? What? When? Where? Museum? Copyright

# Identity and attribution

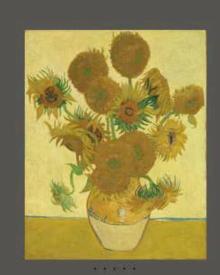


1. Vincent van Gogh, Sunflowers, 1888 © The National Gallery Enlarge and zoom in

2. Vincent van Gogh, Sunflowers © Van Gogh Museum, Amsterdam (Vincent van Gogh Foundation) Enlarge and zoom in

# IPTC Core fields

in the core		
Creator	The National Gallery Photographi	2
Creator: Job Title		2
Creator: Address	Trafalgar Square	2
Creator: City	London	2
Creator: State/Province		2
Creator: Postal Code	WC2N 5DN	2
Creator: Country	United Kingdom	44444
Creator: Phone(s)	020 7747 2838	
Creator: Email(s)	PhotographicOffice@ng- london.org.uk	9
Creator: Website(s)	-	2
Headline		2
Description		23
Keywords		2
IPTC Subject Code		2
Description Writer		2
Date Created		9
Intellectual Genre		9
IPTC Scene Code		9
Sublocation		9
City		9
State/Province		9
Country		2
ISO Country Code		9
Title		2
Job Identifier		2
Instructions		9
Credit Line		9
Source		9999999999999999999
Copyright Notice	Photo: The National Gallery, London.	9
Copyright Status	Copyrighted	-
<b>Rights Usage Terms</b>		9
▶ Audio		



140130\_sunflowers\_N-3863-full-v2-205x259.jpg Today, 09:48

*Missing - Painting Title and Creator. Could be in Description.* 

# IPTC Core fields

Creator	Vincent Van Gogh (1853-1890)	9
Creator: Job Title		2
Creator: Address		77777777777
Creator: City		2
Creator: State/Province		2
Creator: Postal Code		2
Creator: Country	Nederland	2
Creator: Phone(s)		2
Creator: Email(s)		2
Creator: Website(s)		2
Headline		2
Description		2
Keywords		2
IPTC Subject Code		2
Description Writer		9
Date Created		9
Intellectual Genre		99
IPTC Scene Code		2
Sublocation		2
City		2
State/Province		2
Country		2
ISO Country Code		2
Title	Sunflowers, 1889-01 ARLES	2
Job Identifier		2
		****
Credit Line		~
Source	Mar Carl Marson American	2
Copyright Notice	Van Gogh Museum Amsterdam (Vincent Van Gogh Foundation)	~
Copyright Status	Copyrighted	W
Rights Usage Terms		Ì
Audio		
▶ Video		
h picou		

#### Missing – Description

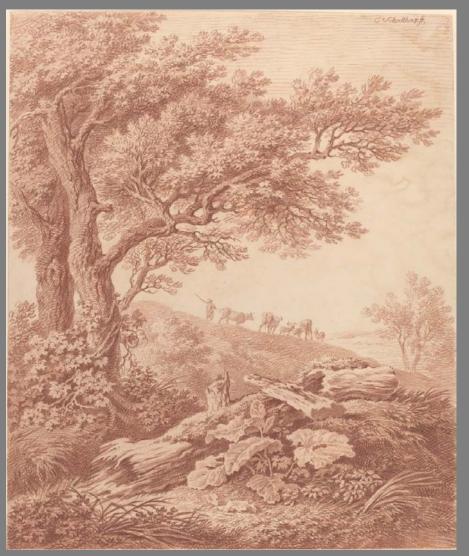


Sunflowers-L1162\_full\_200x262\_no2.jpg Today, 09.48

# Beyond DAM, beyond web ...

- Photographers can take control of data for their images
- Workflow can be made easier
- Embedded data can be used in practical ways by the public





# Pastoral images

Images downloaded from web with embedded data are imported into a Powerpoint presentation

MetaShotPpt - PowerPoint importer or

Title : R-20091016-0002.jpg Creator : National Gallery of Art Description : Carl Philipp Schallhas (Austrian, 1767 - 1797), Ancient Trees in a Pastoral Landscape, 1790/1795, red chalk over traces of black chalk on wove paper, Gift of Katrin Bellinger in memory of Wolfgang Ratjen City : Washington, DC



Creator : 11610 DateCreated : 2012:12:23 09:22:10Z Description : illustration for 'Little Boo Peep'., Subject :

rural,pastoral,colour,poetry,outdoors,people,female,woman ,19th century,children's literature,illustration,nursery rhyme,children's drawings,little bo peep, color,outdoor,females,women,personalities,famous people,named people,colours,poem,poems,childrens literature,childrens stories,children's stories,illustrated,farmland,outside,children's books,children's story,childrens books,childrens book,children's pictures,childrens pictures,childrens picture,childrens drawing Rights :©The British Library Board Location : St Pancras City : London State : England Country : GBR

# Photographers

- You have the object or artwork
- You can add data at source
- Photographers need not be locked out of data workflow (even if they don't have DAM)



# SCREM for Heritage Media Files

## SChema for Rich Embedded Metadata for *Heritage*

# SCREM PROJECT organisers



Greg Reser University of California San Diego



Sarah Saunders *Electric Lane* 

# SCREM PROJECT aims

- Make data entry easier at all points in the workflow
- Extend IPTC fields for heritage metadata
- Encourage people to use the fields available
- Use existing standards to create a practical schema (SCREM) for embedding and reading heritage data in images

# Data schemas

#### EMBEDDED

COLLECTIONS MANAGEMENT	SCREM XMP panel	ΙΡΤϹ
Starts with object description	Treats object and image separately and relates to image workflow	Starts with image description
Detailed description of object and its administration including movements, exhibition condition and provenance	More granular data for object than IPTC, but not so detailed as COLLECTIONS MANAGEMENT.	Granular data about image and its administration, and includes key details of artworks and object depicted
Used by institutions	Can be used by institutions to exchange granular data about image and work	Used in image workflow and publishing/viewing environment

# IPTC - Artwork/Object Fields

## **IPTC Extension 2008**

# First time artwork information separated from image information

## ARTWORK

- Title
- Date Created
- Creator
- Source
- Source Inventory
- Copyright notice



# 2014 IPTC Photo Metadata standard

Added some key artwork/object fields not in 2008 version

- Title
- Date Created
- Circa date created
- Creator
- Creator ID
- Source
- Source Inventory URL
- Copyright notice
- Style/Period

- Current copyright owner name
- Current copyright owner ID
- Current licensor name
- Current licensor ID
- Physical description
- Content description
- Contribution description

# Granularity principle



# How do you want it?



- Granular means you can have your data how you want it (lumps or granules)
- Solid lumps can't be split

# Criteria for IPTC candidates

## YES if

- about the digital image
- needed to identify source, creator and copyright of artwork
- links to more granular data on the web
- descriptive data useful for end user
- useful for image retrieval
- can be mapped from other schemas

# Criteria for IPTC candidates

NO if

- about movement, condition, exhibition of work, except where needed for accreditation
- specific to institution holding the work and not needed by outside users
- detailed provenance (former owners etc)
- about monetary value or insurance of work

# Consultation – with interest group

Image libraries, collections management cataloguers, software providers



ahess@guggenheim.org Remove

Adam Hess



Amalyah Keshet akeshet@imi.org.il emove?



Amanda Rybin arybin@uchicago.edu Remove



Andrew LaBonte alabonte@1000museums.com Remove



Beatriz Waters bwaters@britishmuseum.co.uk Remove



Cecile van der Harten c.vander.harten@rijksmuseum.nl Remove



Dan Brennan dan.brennan@metmuseum.org Remove



Grea Reser greser@ucsd.edu

Jens Nymose jens@nymose.dk



Julia Stribblehill JStribblehill@britishmuseum.org Remove













Richard Light

richard@light.demon.co.uk Remove







Steve Tatum setatum@vt.edu Remove



tmccarthy@dekooning.org Remove



Timothy McCarthy



tony.harris@culture.gsi.gov.uk



Ulla B. Kejser ubk@kb.dk Remove

archives@leemiller.co.uk Send another invitation Remove



david@riecks.com Send another invitation Remove





Remove



# Consultation

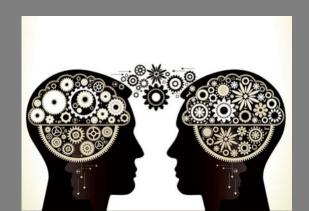
- We consulted on the scope of the project, and the fields needed
- There were 3 iterations, and some areas where fields were concatenated

## Issues

- We could not add unlimited number of fields
- Recognition that authoritative data is held in collections management system
- Persistence of data snapshot or link?
- Human or machine readable?
- Technical XMP issues

# Principles

- Support registry entries and machine readable data
- Display human readable data
- Link to authoritative sources where possible
- Cater for non-art objects and the way they are sourced
- Include 'display' and 'search' metadata



# 2014 IPTC Photo Metadata standard

Added some key artwork/object fields not in 2008 version

- Title
- Date Created
- Circa date created
- Creator
- Creator ID
- Source
- Source Inventory URL
- Copyright notice
- Style/Period

- Current copyright owner name
- Current copyright owner ID
- Current licensor name
- Current licensor ID
- Physical description
- Content description
- Contribution description

# Once we have the data fields, what then?



- Let people know they exist
- Encourage software adoption
- Get people using them

# The usual comment



## Speed things up.... create a panel !

0		IPTC Cultural Heritage Met	tadata (version 2015-04-0	8)		
		GO TO → IMAGE RIGH	TS ADMIN			
ARTWORK/OBJECT						
Title Bacchus and Ar	riadne		Title			
Creator 1 Titian		ID	Creator	Titian		
Creator 2		ID	Creator's Job Title			
Creator 3		ID	Date Created			YYYY-MM-DD, e.g., 2015-01-
Date Created	YYYY-MM-DI	D, e.g., 2015-01-3	Location	Sublocation		
Circa Date Created	1520			City		
Style/Period	16th Century Venetian School			State/Province		
<b>Contribution Description</b>	Bought 1826 by National Gallery	<i>.</i>		Country Name		
				Country Code		
Physical Description	Oil on Canvas			World Region		
					ame Camera Location	(Channe All Learnstinger)
Source	Name National Gallery				ame Location Shown	Show All Locations
	Inventory Number		<b>C</b> 111		Fill fields helow usi	ng Artwork/Object data
	Inventory URL		Fill	clear	Fill fields below usi	ng Artwork/Object data
Content Description	Bacchus, god of wine, emerges	with his followers from the	Headline			
	landscape to the right. Falling ir	love with Ariadne on sight, he				
	leaps from his chariot, drawn by Ariadne had been abandoned or		Description			
	Theseus, whose ship is shown in	n the distance. The picture				
	shows her initial fear of Bacchus	s, but he raised her to heaven 💌				
Copyright Notice						
Current Copyright Owner	Name		Keywords	1		
	ID					
Current Licensor	Name					
	ID	· · · · · · · · · · · · · · · · · · ·				
		1				

Save

Cancel

# IPTC - New Artwork/Object Fields (2014)

### Artwork/Object

#### Image

		IPTC Cultural Heritage Metada	ta (version 2015-04-0	8)		• • • • • • • • • • • • • • • • • • •
		GO TO → IMAGE RIGHTS	ADMIN (b	1		
ARTWORK/OBJECT		-	IMAGE			
Title Bacchus and A	riadne		Title			
Creator 1 Titian	ID		Creator			
Creator 2	ID		Creator's Job Title			
Creator 3	ID		Date Created			YYYY-MM-DD, e.g., 2015-01-3
Date Created	YYYY-MM-DD, e.g., 201	5-01-3	Location	Sublocation		
Circa Date Created	1910			City		
	16th Century Venetian School			State/Province		
Contribution Description	Bought 1826 by National Gallery.			Country Name		
				Country Code		
Physical Description	Oil on Canvas			World Region		
6				_	same Camera Location	Show All Locations
Source	Name National Gallery				same Location Shown	
	Inventory Number		Fill	clear	Fill fields below usin	ng Artwork/Object data
	Inventory URL		Headline			
Content Description	leaps from his chariot, drawn by two cheet	ahs, towards her. 🚡	Headinie			
	Ariadne had been abandoned on the Greek Theseus, whose ship is shown in the distar		Description			
	shows her initial fear of Bacchus, but he ra	ised her to heaven 🛛 📗				
	and turned her into a constellation, represe above her head.	ented by the stars				
Copyright Notice	L					
Current Copyright Owner	Name		Keywords			
	ID		Reywords			
Current Licensor	Name					
	ID					

Cancel

# IPTC - New Artwork/Object Fields (2014)

#### Image - with artwork/object data

0		IPTC Cultural Heritage Metadat	a (version 2015-04-0	8)
		GO TO → IMAGE RIGHTS	ADMIN (b	
ARTWORK/OBJECT			IMAGE	
Title Bacchus and A			Title	
Creator 1 Titian	ID		Creator	
Creator 2	ID		Creator's Job Title	
Creator 3	ID		Date Created	
Date Created	·····,,,,,,,,	2015-01-3	Location	Sublocation
Circa Date Created	1910			City
	16th Century Venetian School			State/Province
Contribution Description	Bought 1826 by National Gallery.			Country Name
				Country Code
Physical Description	Oil on Canvas			World Region
Course				same Camera Location Show All Locations
Source	Name National Gallery			same Location Shown
	Inventory Number		Fill	clear Fill fields below using Artwork/Object data
	Inventory URL		Headline	Titian, Bacchus and Ariadne
Content Description	Bacchus, god of wine, emerges with his		ricadime	Titian, Bacchus and Arladhe
	landscape to the right. Falling in love w leaps from his chariot, drawn by two ch		Description	Titian; Bacchus and Ariadne; 1520; 16th Century Venetian School ; 🛛 🚡
	Ariadne had been abandoned on the G	reek island of Naxos by 🧵		Oil on Canvas; Bought 1826 by National Gallery. ; National Gallery ;
	Theseus, whose ship is shown in the di shows her initial fear of Bacchus, but h			Bacchus, god of wine, emerges with his followers from the landscape to the right. Falling in love with Ariadne on sight, he
Copyright Notice				leaps from his chariot, drawn by two cheetahs, towards her. Ariadne
			r	had been abandoned on the Greek island of Naxos by Theseus, whose ship is shown in the distance. The picture shows her initial
Current Copyright Owner	Name		Kananala	la ante e e e e e e e e e e e e
	ID		Keywords	Titian; 16th Century Venetian School;
Current Licensor	News			
	ID			
	ID			
		Save	Cancel	

# IPTC - New Artwork/Object Fields (2014)

#### Image Rights

#### Admin

0		IPT	C Cultural Heritage Meta	adata (versi	on 2015-04-08	8)			
		GO	TO → ARTWORK/OB	JECT IMA	GE (b)	1			
- IMAGE RIGHTS	(c) The National	Gallery			E ADMIN Instructions				
Copyright Owner	Name ID				Source Type mum Width	Original digital	capture of a real life s Height	cene 🗘	
Copyright Notice	(c) The National	Gallery			Supplier	Name Supplier ID Image ID			
Rights Usage Terms	Contact The Na	tional Gallery Image Library to license	the image.	Re	egistry Entry	Organization IC Image ID			
Licensor	Name								
	Telphone 1 Telephone 2								
Property Release	Email Web Address Status								
	ID								
			Save	(	Cancel				

#### \varTheta 🔿 🔿 🔄 NG-0035-D1-000094-pp\_550.jpg @ 100% (RGB/8#)



# The VRA panel

				NG-0035-D1	1-000094-pp	_550.jpg	g					
Advanced	IPTC	IPTC Extension	Description	Camera Data	Video Data	Audio	Data Mo	obile SWF	Categories	Origin	VRA_2_0	•
VIa reso	VISUAL panel version 2.0 Compatability Mode - all fields are visible  Use semicolons as delimiters To preserve commas and semicolons as punctuation, use quotes for a phrase, (example: "Picasso, Pablo")											
*to preserve co	*to preserve commas and semicolons as punctuation, use quotes for a phrase. (example: "Picasso, Pablo")											
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	Title					Creator					്പര്മ	
	Date	dama di ana ang		1	/ra Imag	e Source					vra	
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Work	Туре				/ra		Usage Terms	Contact The	ne National Galler	y Image Library t	to rights	Ŀ
	add in	dexed entry						license the	image.			
Ma	terial				/ra	Co	pyright Notice	(c) The Nat	tional Gallery			
		dexed entry					insert ©				62	
Tech	nique add in	dexed entry		6	ra							
Measurer		dexed entry			Custom	3 Label	Data					
		dexed entry					-				vra	
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Xmp							Prefe	rences	Export 🔻	Cancel	OK	

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Use semicolons as delimiters

\*to preserve commas and semicolons as punctuation, use quotes for a phrase. (example: "Picasso, Pablo")

		Work	<b>S</b>	IPTC Artwork Data Available					Image		
Agent Displa	У			vr	a	View	(Title)			– type –	👻 vra
	add indexed entr	у				Origina		cribes the specif	ic view of the depicted work.		al a constant
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# Using web resources

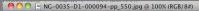
### Getty Vocabularies as Linked Open Data

The Getty vocabularies are constructed to allow their use in linked data. A project to publish AAT, TGN, ULAN, and CONA to the LOD (Linked Open Data) cloud is underway. The documents on this page contain news and presentations about releasing the Getty vocabularies as LOD. These materials are subject to frequent modification and addition.



- News and Status of the Project
- What Is LOD?
- Introduction to Getty Vocabularies as LOD (PDF, 3.8 MB, 46pp)
- Linked Open Data Flier (PDF, 1 MB, 1pp)
- List of External Advisors (PDF, 88KB, 7pp)

The AAT and TGN are now available as LOD. They are published under the ODC-By 1.0 license.





# Linked Open Data

Style/Period	Modern								
	indexed entries								
	+	Modern Style	AAT	•	300375743	×			
	م	Search Getty AAT							
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Wor

# Linked Open Data

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	add indexed entry				
	+				
	close Getty Art & Architecture Thesaurus®	i			
	Search Work Type terms				
	AND OR Exact Phrase				
	Select a term				
	painting components				
	fan paintings				
	porcelain paintings (visual works)				
	pottery paintings (visual works)				
	matte paintings				
	salon paintings				
	Go to AAT online entry				

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# Linked Open Data

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	close Getty Art & Architecture Thesau	irus	s®	i	
			Search Work Type terms		
	AND OR Exact Phrase				
	Use selected Term				
	tempera paintings	•	Note: Unique works in which		
	reverse paintings on glass (visual works)		images are formed primarily by the direct application of		
	painting equipment		pigments suspended in oil,		
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# Linked Open Data

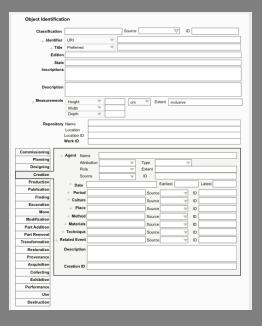
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	+		-vocabulary	•		x
	close Getty Art & Architecture Thesaurus®					
				1	Search Work Type terms	]

# The compatibility question

VISUAI panel version 2.0 Compatability Mode					
uncheck fields to hide V OK					
Artwork/Object       Image/Photo         ✓ Creator       ✓ View Description         ✓ Title       ✓ Original Date         ✓ DC Title       ✓ Creator         ✓ Date       ✓ Image Source         ✓ Style/Period       ✓ Image Source         ✓ Style/Period       ✓ Image Source         ✓ Work Type       ✓ Copyright Status         ✓ Work Type       ✓ Creative Commons         ✓ Material       ✓ Usage Terms         ✓ Copyright Notice       ✓ show standards         ✓ Technique       ✓ Copyright URL         ✓ Measurements       ✓ Custom 3         Location       ✓ Custom 4         ✓ Site       Administration         ✓ Discovery       ✓ Sourde         ✓ Installation       ✓ Custom 5         ✓ Other       ✓ Custom 6         ✓ Other       ✓ Summary         ✓ Work ID       ✓ Keywords         ✓ Notes       ✓ Description/Caption					
Powered By					

- Infinite multiple values don't work with spreadsheet data exchange
- Compatibility mode has limited number of values (eg up to 3 Creators)
- Note that you can hide fields you don't want to see!

# SCREM panel



- More data fields than IPTC
- Uses IPTC AO fields
- LIDO style event based schema
- Has fields useful to photographers eg inscription
- Aims to be user friendly

# SCREM panel blueprint

#### **Object Identification**

Classification	Source D
$_+$ Identifier	URI
+ Title	Preferred
Edition	
State	
Inscriptions	
Description	
+ Measurements	Height Cm Extent inclusive
	Width
	Depth
Repository	Name
	Location
	Location ID
N 1	Work ID

## SCREM panel – event based

Commissioning	+ Agent Name	
Planning	Attribution	
Designing	Role	Type  Extent
Creation	Source	
Production	+ Date	Earliest
Publication	+ Period	
Finding	+ Culture	
Excavation		
Move		Source ID
Modification	+ Method	Source ID
Part Addition	+ Materials	Source ID
Part Removal	+ Technique	Source ID
Transformation	+ Related Event	Source ID
Restoration	Description	
Provenance		
Acquisition	Creation ID	
Collecting		
Exhibition		
Performance		
Use		
Destruction		

## Free or commercial....

- Identification is important
- Rights are important
- Descriptive information can be used
- Attribution is about public access to information

# When to embed

WHEN IT AIDS THE WORKFLOW

- Transfering data to the database environment
- Data transfer between departments or institutions (sometimes)
- Data transfer between image libraries for commercial sales

# When to embed

ALWAYS

- When the image 'escapes' from the database
- Any image that can be control-click downloaded from the web

# SCREM

- Uses fields from existing schemas
- Uses some IPTC fields
- Enables exchange of richer data

# Labels and standards

- There are too many standards
   Use existing standards
- It's too much work to add all that data
   Use automation, hide what you don't need
- The labels change depending on the software Make demands on software companies - get used to mapping
- We do things our own way Fine, but can you share your data?
- There's no budget for improving our data
   You can get it right from now on for very little cost
- Photographers do pictures not data Not true!

What have we learned about creating and using standards ?

- Create a small group for the project
- Consult with practitioners
- Provide practical tools for use
- Use open linked data
- Hold tight to the vision this is a long game

above all

### Start Now!

#### www.electriclane.co.uk

#### www.electriclane.blogspot.co.uk

www.metadatadeluxe.pbworks.com