

# DESCRIBING A DIGITAL WORLD

## New Media Descriptors in the AAT

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Getty Vocabulary Program

# AAT Expansion

- The AAT is always expanding to accommodate new genres, media, standards, processes, and techniques.
- New terms are determined by literary warrant.
- New media diverges from traditional media regarding material (and even objecthood), and significantly in dimension.

# New Media Descriptors

- New media works often exist in or use proprietary formats or standards not usually entered in the AAT:

Flash

Quicktime

- Terminology is in flux: often there is no consensus, or terms for a single concept may have many slight variations.
- Genre terms are not stabilized, and are coined haphazardly.
- Terms are used interchangeably:

DPI

PPI

# Measurements, Standards, and Documented Sizes

- Measurements per unit for traditional media: value (count) + extent (chain lines) + qualifier (per inch).
- CONA

**Dimensions:**

Display Dimensions: Image: 19.4 x 24.1 cm (7 5/8 x 9 1/2 in.); Mount: 29.7 x 35.6 cm (11 11/16 x 14 in.)

Value	Unit	Type	Extent	Qualifier	Scale Type	Form
29.7	centimeters	height	mount			
35.6	centimeters	width	mount			
13			chain lines			

per inch  
per square inch  
per foot  
from the interior

Depicted Subject Outside Iconography Culture/Style Other Displays Events Images Notes Media Addl Subject Field

**General Subject**

Here you would note the count in the Dimensions field of a work record, not as an AAT term, the number of chain lines per inch. This is specific to the item being cataloged, not a standard measurement. Distinctions will be worked out as the hierarchy grows, regarding usage of “dots per inch” “pixels per inch” and [units related to the resolution of digital images](#).

# Measurements: Traditional Media



**Title:**  
Mosaic Floor Panel

**Artist/Maker:**  
Unknown

**Culture:**  
Roman

**Place:**  
between Bacoli and  
Pozzuoli, Italy (Place found)

**Date:**  
4th century

**Medium:**  
Stone tesserae

**Dimensions:**  
149.2 × 151.1 × 10.2 cm  
(58 3/4 × 59 1/2 × 4 in.)

**Alternate Titles:**  
Bear Hunt (Display Title)

**Object Type:**  
Mosaic

<size/dimensions by unit>

<size/dimension units for distance>

braccia  
centimeters  
decimeters  
ells  
fathoms  
feet (units of measurement)  
inches  
kilometers  
leagues (measurements)  
linear feet  
linear meters  
meters (units for distance)  
miles  
millimeters  
mils  
rods (measurements)  
yards (measurements)

# Traditional media <size/dimensions by unit>



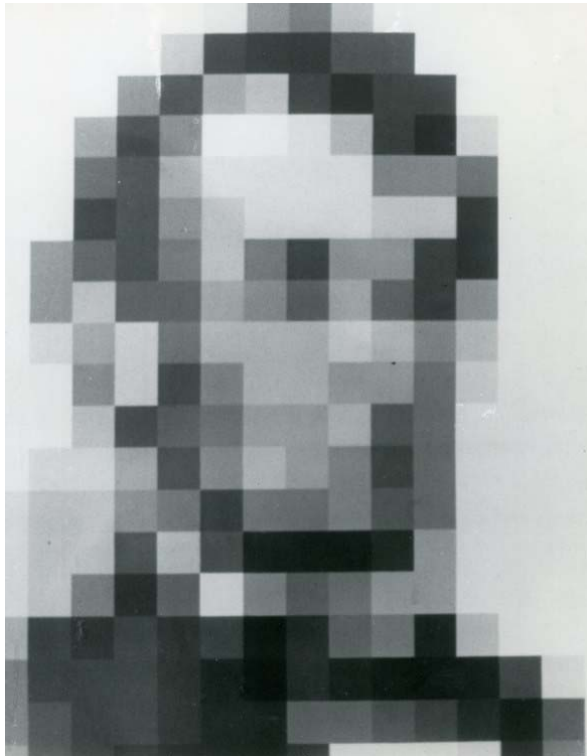
**Title:** Gala Contemplating the Mediterranean Sea which at Twenty Meters Becomes the Portrait of Abraham Lincoln-Homage to Rothko (Second Version).  
**Maker:** Salvador Dali  
**Date:** 1976  
**Material:** Oil on Canvas  
**Dimensions:** 99  $\frac{1}{4}$  in x 75  $\frac{1}{2}$  in

<size/dimensions by unit>

<size/dimension units for distance>

braccia  
centimeters  
decimeters  
ells  
fathoms  
feet (units of measurement)  
inches  
kilometers  
leagues (measurements)  
linear feet  
linear meters  
meters (units for distance)  
miles  
millimeters  
mils  
rods (measurements)  
yards (measurements)

# Digital media: <size/dimension **units** for **resolution**>



**Title:**

**Maker:** Leon Harmon

**Date:** 1973

**Material:** ?

**Dimensions:** dpi, lpi, or ppi?

**Size:** bits, megabytes?

**Resolution:** **bit depth**, **pixel density**?

In November 1973, a researcher at Bell Labs named Leon Harmon wrote an article for Scientific American titled, "The Recognition of Faces." It includes several "block portrait" illustrations, most notably this one of Abraham Lincoln. He created the portraits with a computer equipped with a flying-spot scanner. Harmon used these pixelated portraits to test human perception and automatic pattern recognition. The article doesn't have the word "pixel" in it.

## Measures of Size, Dimension, or Resolution

- ***Pixels* are both components (picture elements) – and [N] <size/dimension units for resolution>**
- ***Megapixels* are not considered picture components but units of measurement related to resolution, measured in pixels.**
- ***Bit depth* (color depth, audio bit depth) :<size/dimensions by specific type>**

*A measure of digital resolution as determined by the number of bits used to render each pixel or sample. Higher bit depths indicate a higher tonal range or fidelity. Bit depth for color defines the amount of color available to each of the pixels in digital image processing and display. This is derived from the number of bits used to define color within a digital image as determined by its file format. Audio bit depth is defined by the amount of bits in a sample in digital audio, which directly corresponds to the resolution of the sample and the dynamic range of the resulting sound produced or recorded.*

***8-bit, 16-bit, 32-bit***



## AAT additions:

<size/dimensions by unit> for capacity, frequency, and resolution

- Top of the AAT hierarchies
- + Physical Attributes Facet
- + Attributes and Properties (hierarchy name)
- + <attributes and properties by specific type>
- + form attributes
- + size/dimensions
- + **<size/dimensions by unit>**
- + karats (purity measurement for gold)
- + <size/dimension units for area>
- + <size/dimension units for capacity>
- + <size/dimension units for distance>
- + <size/dimension units for duration>
- + <size/dimension units for frequency>
- + <size/dimension units for resolution>
- + <size/dimension units for volume>
- + <size/dimension units for weight>
- + stories (measurements)

- ..... <size/dimension units for capacity>
- ..... bits (computing) [N]
- ..... bytes [N]
- ..... gigabytes [N]
- ..... kilobytes [N]
- ..... megabytes [N]
- ..... terabytes [N]

- ..... <size/dimension units for frequency>
- ..... gigahertz
- ..... hertz
- ..... kilohertz
- ..... megahertz

- ..... <size/dimension units for resolution>
- ..... megapixels [N]
- ..... pixels [N]

## Placement in the hierarchy...

- + <attributes and properties by specific type>
- + form attributes
- + size/dimensions
- + <size/dimensions by specific type>
- + **<size for computer files>**
- bits (computing)
- bytes
- gigabytes
- kilobytes
- megabytes
- terabytes

AND

- + <attributes and properties by specific type>
- + form attributes
- + size/dimensions
- + <size/dimensions by unit>
- + **<size/dimension units for capacity>**
- bits (computing) [N]
- bytes [N]
- gigabytes [N]
- kilobytes [N]
- megabytes [N]
- terabytes [N]

# Other differences...

Many new media terms appear primarily as acronyms or abbreviations:

- EXIF: Exchangeable Image File Format [AAT ID# 300410386]
- JPEG: Joint Photographic Experts Group [AAT ID# 300266224]
- TIFF: Tagged Image File Format [AAT ID# 300266226]
- GPS: Global Positioning System [AAT ID# 300263888]
- DSC: Differential Scanning Calorimetry [AAT ID# 300389963]

The AAT generally avoids abbreviation in all fields unless the usage is well established and the abbreviation is consistently the preferred or only form in major sources. Preferred descriptors in the AAT include EXIF, JPEG, and TIFF.

# Format or Standard? The language of sources

- AIFF = Audio Interchange File Format [AAT: 300312048]

*AAT Scope Note= Audio file format for uncompressed waveforms used to store sound with a high sampling rate. Primarily a recording format, for master files, or for reformatting from analog sound sources.*

*Apple Computer Inc.: The Audio Interchange File Format (Audio IFF) provides a standard for storing sampled sounds. The format is quite flexible, allowing for the storage of monaural or multichannel sampled sounds at a variety of sample rates and sample widths.*

- JPEG = Joint Photographic Experts Group [AAT: 300266224]

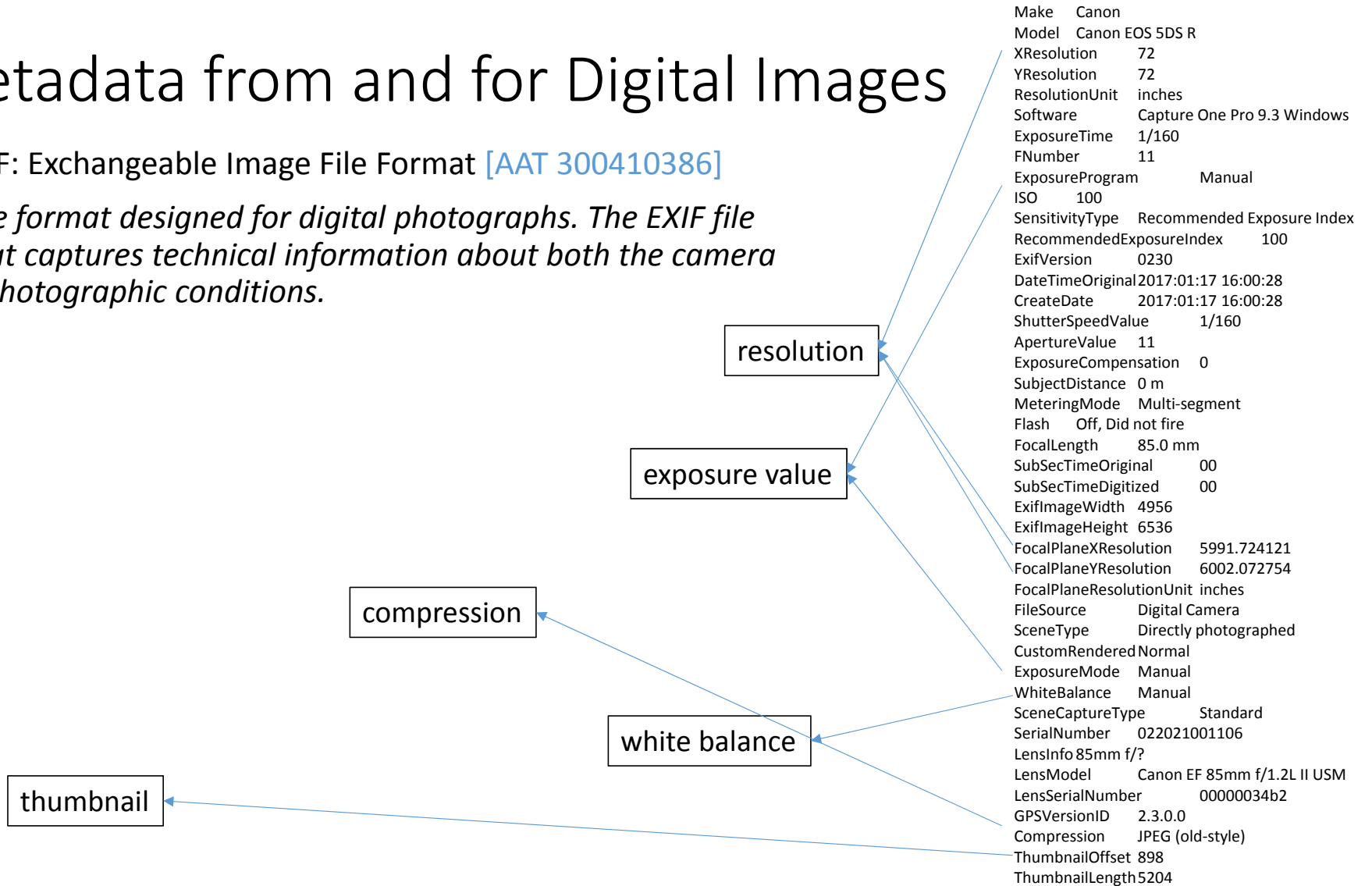
*AAT Scope Note = File format or compression scheme designed to create smaller file sizes for images on the World Wide Web; name derived from Joint Photography Experts Group, a committee of the International Standards Organization.*

*OED: Any of various techniques and standards for the compression of continuous-tone still images such as photographs; usually attrib., esp. designating images encoded according to such a standard. Also: an image encoded in this way; a file in which such an image is held (usually named with the file extension .jpg).*

# Metadata from and for Digital Images

- EXIF: Exchangeable Image File Format [[AAT 300410386](#)]

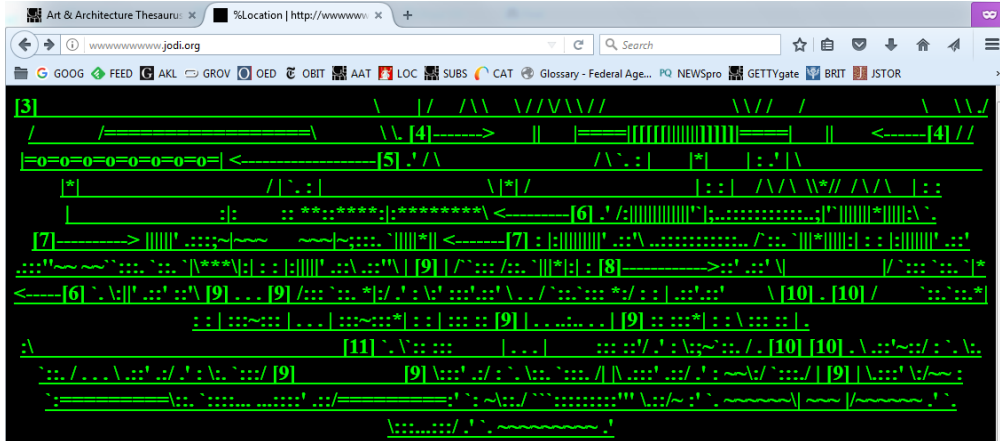
*Image format designed for digital photographs. The EXIF file format captures technical information about both the camera and photographic conditions.*



# ArtBase

The ArtBase is Rhizome's archive of digital art, freely accessible to the public online. The Rhizome ArtBase was founded in 1999 to preserve works of net art that were deemed to be "of potential historical significance." Encompassing a vast range of projects from artists all over the world, the ArtBase provides a home for works that employ materials such *as software, code, websites, moving images, games, and browsers.*

- “Net.art was the product of a particular technological constraint: low bandwidth. Net.art is low bandwidth through and through....As computers and bandwidth improve, *the primary physical reality that governed the aesthetic space of net.art begins to fall away.*”\*
- ‘Net art’ (Web art?) is already considered obsolete.

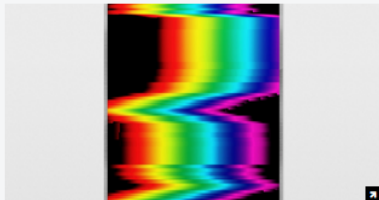


\*Maximiliano Durón. "A Net Art Pioneer Evolves With the Digital Age: Rhizome Turns 20." *ArtNews* (posted 09/01/2016) <http://www.artnews.com/2016/09/01/a-net-art-pioneer-evolves-with-the-digital-age-rhizome-turns-20/>

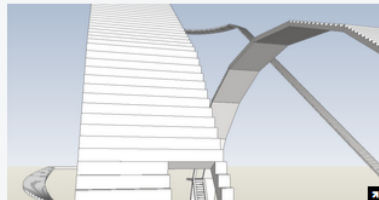
# Examples of born digital works from ArtBase



— SEBASTIAN SCHMIEG



— MANUEL FERNÁNDEZ



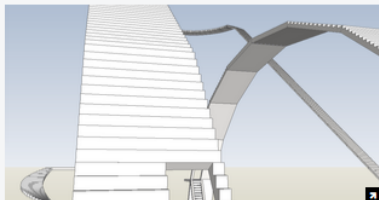
— KRISTIN LUCAS



— NICK YULMAN



— BRIAN PIANA



— KRISTIN LUCAS



— MANUEL FERNÁNDEZ



— ADAM CRUCES



— MIYU VAN STENIS



— RAFAEL ROZENDAAL



— MICHEL BIJNS



— KARI ALTMANN



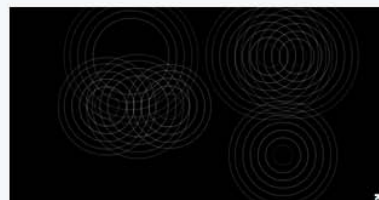
— JAN ROBERT LEEGE



— ERIC SCHOCKMEL



— DAVID KRAFTSOW



— ANGELA DETANICO

# 'Net art' or 'Web art'

- ArtBase suggests a taxonomic, metadatic structure for describing all these works:

TITLE

ARTIST

YEAR OF PRODUCTION

URL

**TECHNOLOGY AND FILE TYPE**

DESCRIPTION



Title: The Garden of Emoji\* Delights  
Artist: Carla Gannis



By replacing religious vocabulary with secular and contemporary digital symbols, Gannis reconstructs the powerful iconography at the core of Bosch's landscape in *The Garden of Earthly Delights*. Her stunning, pop art 2.0 digital collage explores and critiques consumerism and modern society through the three emoji-fied realms of Eden, Hell, and Earth.<sup>7</sup> By Benoit Palop — Oct 24 2014, [The Creators Project](#)

PRINT, VIDEO & 3D Works Below. For ★ INTERNET YAMI-ICHI ★ GARDEN of EMOJI DELIGHTS REMIX items pics & info [HERE](#).



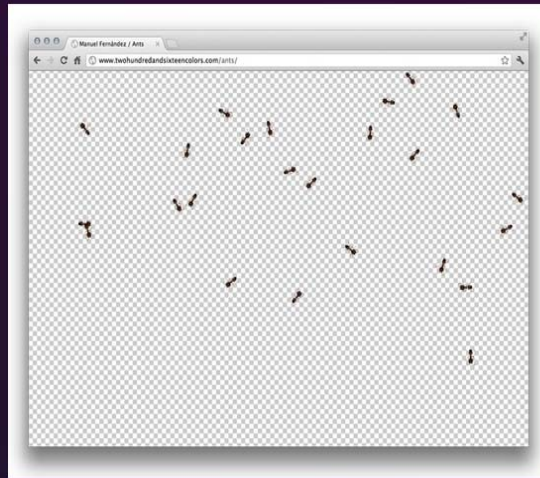
The Garden of Emoji Delights, digital C-print, 13ft x 7ft, 2014 (installation view at Kasia Kay Art Projects Gallery)

Difficult works that have multiple, scalable expressions, and re-appropriate elements of historic or current works... all can still be easily described with the AAT. Structured, linked data retrieves specific iterations...

\*AAT ID: 300412189

## In practice..... (ArtBase)

- How are these [born digital \[AAT 300374824\]](#) works described? How are they accessed?



### *Ants*

Piece inspired by the sequence found in the surreal short film "Un Chien Andalou" (1929) by spanish filmmaker Luis Buñuel, in which a group of ants begins to emerge from a hole in the hand of the actor.

YEAR CREATED:  
2012

WORK CREDITS:  
MANUEL FERNÁNDEZ

ARTIST  
TITLE  
YEAR  
DESCRIPTION

# Virtual Museums/Archives

*“The work Rhizome is trying to preserve is not a static set of documents. “We don’t think of anything we are conserving as a thing or a stable entity,” Dragan Espenschied, Rhizome’s current digital conservator, said. “Internet and network-based art is the most extreme type of artifact that you might want to archive, because many websites or projects that happen on the web have blurry borders. So you can’t quite define an objecthood. Some are changing all the time, so you can’t nail down a definitive version of the artwork.”*

*[...] It’s easy to think of Rhizome, being based online, as ephemeral, but Kaplan thinks of it as [the next in a line of great New York art institutions](#), starting with the Met and moving on through MoMA, the Whitney, and the New Museum. Rhizome started when net art did; as the internet evolved, so did Rhizome.*

*[Maximiliano Durón](#). “A Net Art Pioneer Evolves With the Digital Age: Rhizome Turns 20.” [ArtNews](#) (posted 09/01/2016)  
<http://www.artnews.com/2016/09/01/a-net-art-pioneer-evolves-with-the-digital-age-rhizome-turns-20/>*

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