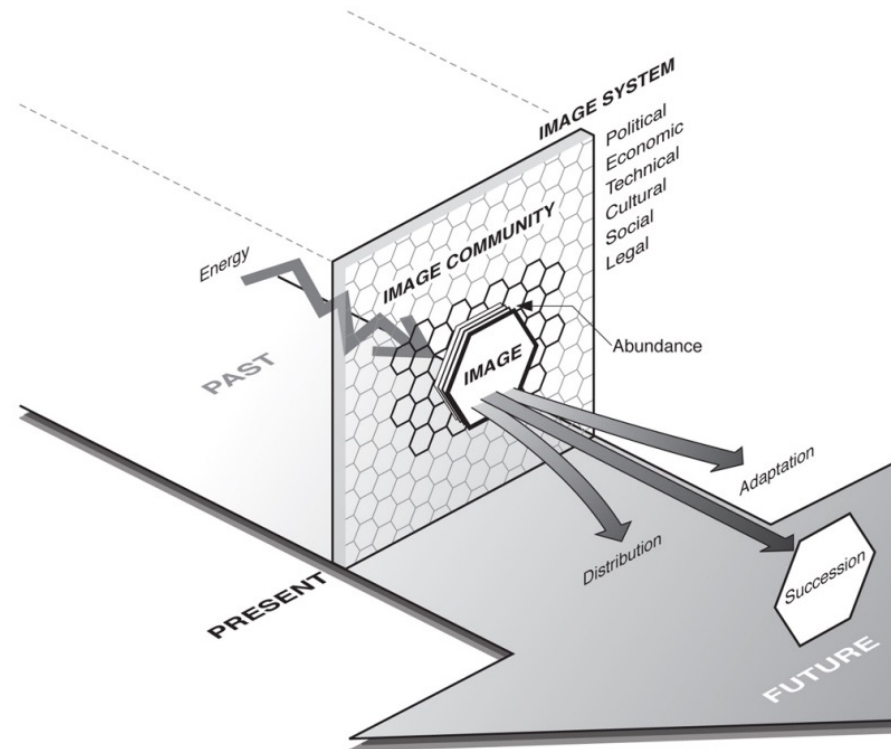


# Seeing is not believing: Visual literacy in the age of AI

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**Module 4: Sontag's Ecology of Images**

# Sontag's *Ecology of Images*



# From *On Photography*

- According to S. Sontag (1977, p.180), the power of photography has altered our understanding of reality
- The distinction between images and things, copies and originals has been blurred
- One could think of images as merely shadows
- Sontag argues that images are material realities in their own right
- Images are more real than anyone could have supposed
- They turn the tables on reality
- Sontag urges for a way of including images into the real world

# Sontag's *Ecology of Images*

- According to S. Manghani (2013, p.1), *Ecology of Images* to be understood as a guiding metaphor – seeks to locate how/why images operate in certain environments/systems of meaning
- Takes a cue from the ecologist's three main 'units' of assessment – the organism, its community, and the eco-system – an image always exists in a set of contexts
- 'Image system' includes and interconnects with political, cultural, economic, technical, social, legal discourses and systems
- History is a crucial aspect of the image and how it fits into the past, present, and future
- Sontag's thoughts on an 'ecology of images' pertain to certain ethical principles about reality, representation, and images

For more on Manghani's interpretation of Sontag's *Ecology of Images*:  
[http://blog.soton.ac.uk/wsapgr/files/2014/10/Looking\\_at\\_images\\_MANGHANI.pdf](http://blog.soton.ac.uk/wsapgr/files/2014/10/Looking_at_images_MANGHANI.pdf)

# *Ecology of Images*

- Encourages one to examine images beyond their content, to consider how/why they are produced, consumed, and how/why they are used to make meaning(s)
- Technological advancements of the digital age oblige us to:
  - reflect on the ever-present influence of visual information
  - engage in the exercise of slow looking
  - view images as constructed artifacts that have a past, a present, and a future
  - enhance our visual literacy

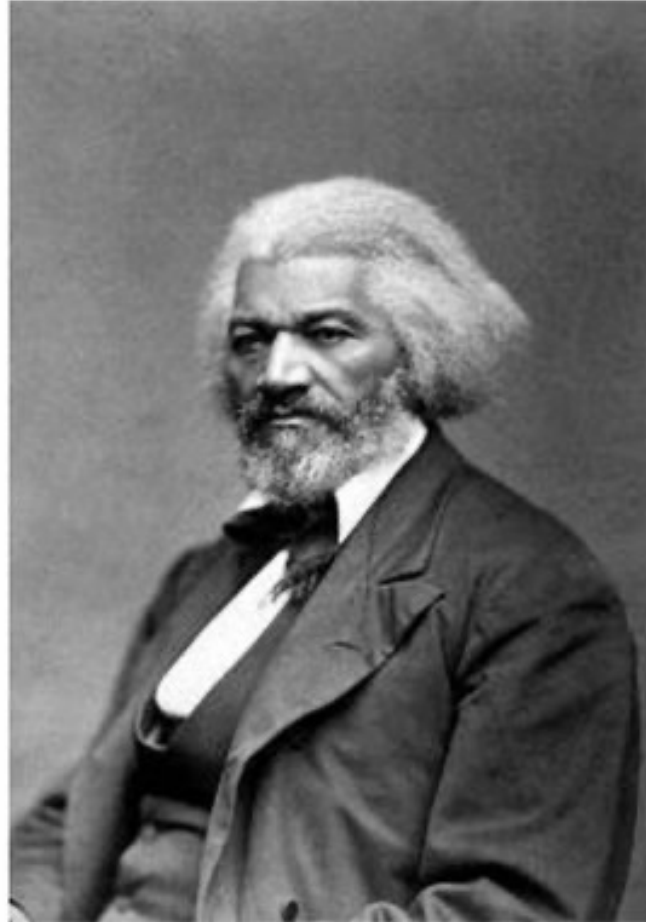
# Modelling an *Ecology of Images*

- Caldwell & Gedeon identify “how images can be mapped to the ecologically-based flows of lifecycle, abundance, scale, distribution, interaction, habitat and temporality” (2021, p.13) in order to understand images as reflections of the real world and to examine how we interact with them
- C&G use Sontag’s *Ecology of Images* as an organizing principle for understanding the dominant place of images in our culture and for acknowledging their capacity to reflect, organize and mediate reality
- The following slides (7-11) use their examples in order to consider how “to frame a system of manufactured artefacts” (p. 2) such as images

For more on Caldwell & Gedeon’s interpretation of Sontag’s framework:

Caldwell, S. & Gedeon, T. (2021). Framing photos in the digital dark age: towards a socio-technological 'ecology of images'. Proc. SPIE 11842, *Applications of Digital Image Processing XLIV*, 118420N. <https://doi.org/10.1117/12.2598440>

# Temporal patterns



Frederick Douglass, social reformer and writer, 1818-1895

# Abundance and scale



Erik Kessels, 24 hours of Flickr, 2011



# Interaction

## Logic

Participants often used their pre-existing experience and beliefs about the subject matter of the image – *sometimes the logic was good, sometimes not...*

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"><li>✗ There aren't any lizards that small</li><li>✗ The lizard couldn't have been on the match when it burnt or would have been killed</li><li>✗ Matches aren't black</li></ul> | <ul style="list-style-type: none"><li>✓ The girl in the front isn't smiling like the others</li><li>✓ The lighting on the girl in the front is wrong</li></ul> | <ul style="list-style-type: none"><li>✗ The cow must have been cold I'm from a farm; I know how much a cow weighs</li><li>✗ In Russia we can train them to do that</li></ul> |
|---|--|--|

Logic used out loud by %

18%

13%

20%



[21]

Uncertainty expressed out loud by %

30%

23%

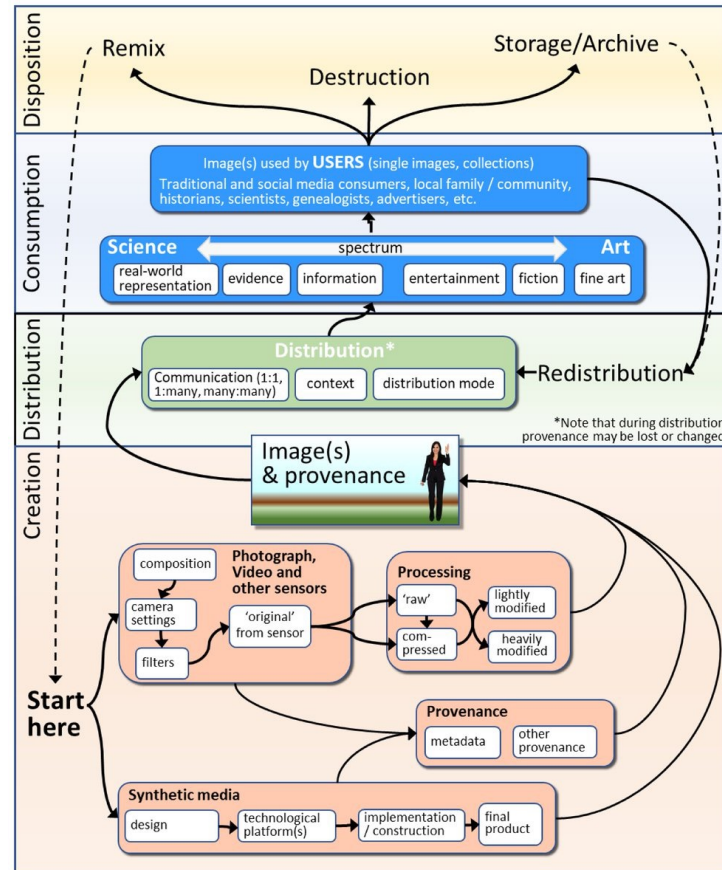
28%

The use of logic and element of uncertainty by viewers of photographs of unknown veracity

# Distribution & Habitat



# Lifecycle of an image



Lifecycle of images, in which an image is brought into being during the creation phase, then distributed, consumed by users of the image, and ultimately disposed of. The disposition may incorporate a feedback loop in which the image is stored for future disposition or remixed into a new image.

# Resources:

- Sontag, S. (1977). *On Photography*. Farrar, Straus and Giroux.
- Manghani, S. (2013). Looking at Images: A Researcher's Guide. [http://blog.soton.ac.uk/wsapgr/files/2014/10/Looking\\_at\\_images\\_MANGHANI.pdf](http://blog.soton.ac.uk/wsapgr/files/2014/10/Looking_at_images_MANGHANI.pdf)
- Caldwell, S. & Gedeon, T. (2021). Framing photos in the digital dark age: towards a socio-technological 'ecology of images'. Proc. SPIE 11842, *Applications of Digital Image Processing XLIV*, 118420N. <https://doi.org/10.1117/12.2598440>