

The rise and fall of photography

Before photography

- Photography became widely used in the 1840's.
- Before that time, drawing were used in knowledge media.
- To use a drawing as evidence, you have to trust of its source.



“Blemmyes”: how medieval Europeans reported North Africans tribespeople.

After photography?

- Today, you can no longer tell if an image is a photograph just by looking at it.
- Photographs (produced by the photographic process) still have special evidential status.
- But there is no special appearance that indicates trust-worthiness.
- Have we simply returned to the pre-photography era of knowledge media?

Phil 161: AI Imagery

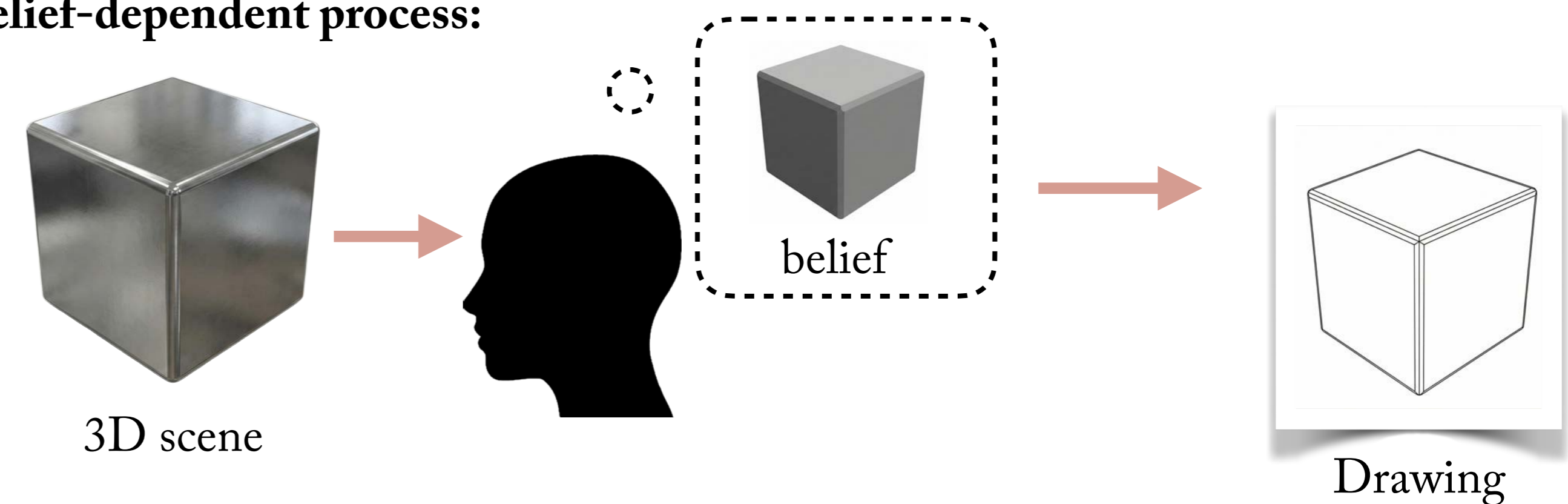
2.17.26 • Prof. G. Greenberg

Modes of Image Making

Belief-independent (mechanical) process:



Belief-dependent process:



Belief dependence, roughly: if the beliefs of the artist had been different (but the source scene stayed the same) then the form of the image would have been different.

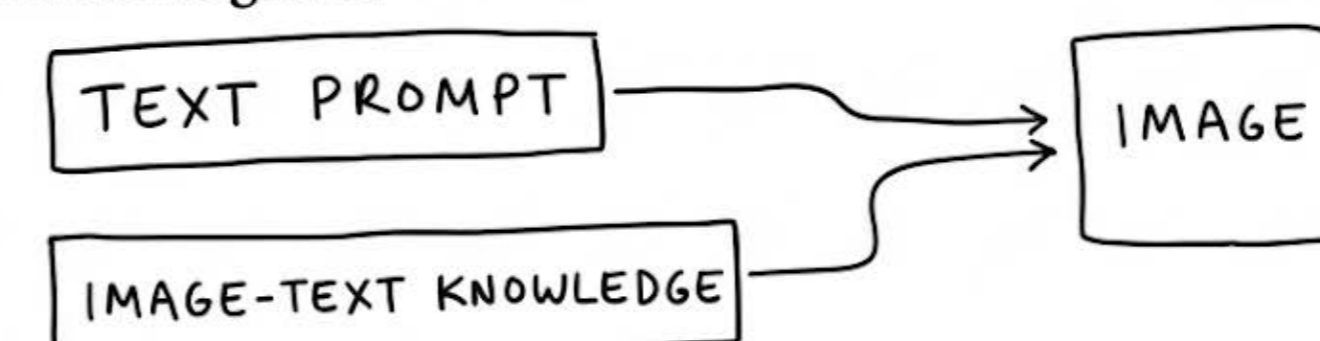


Three models of image-making

Photography:



Artificial intelligence:



Human drawing:

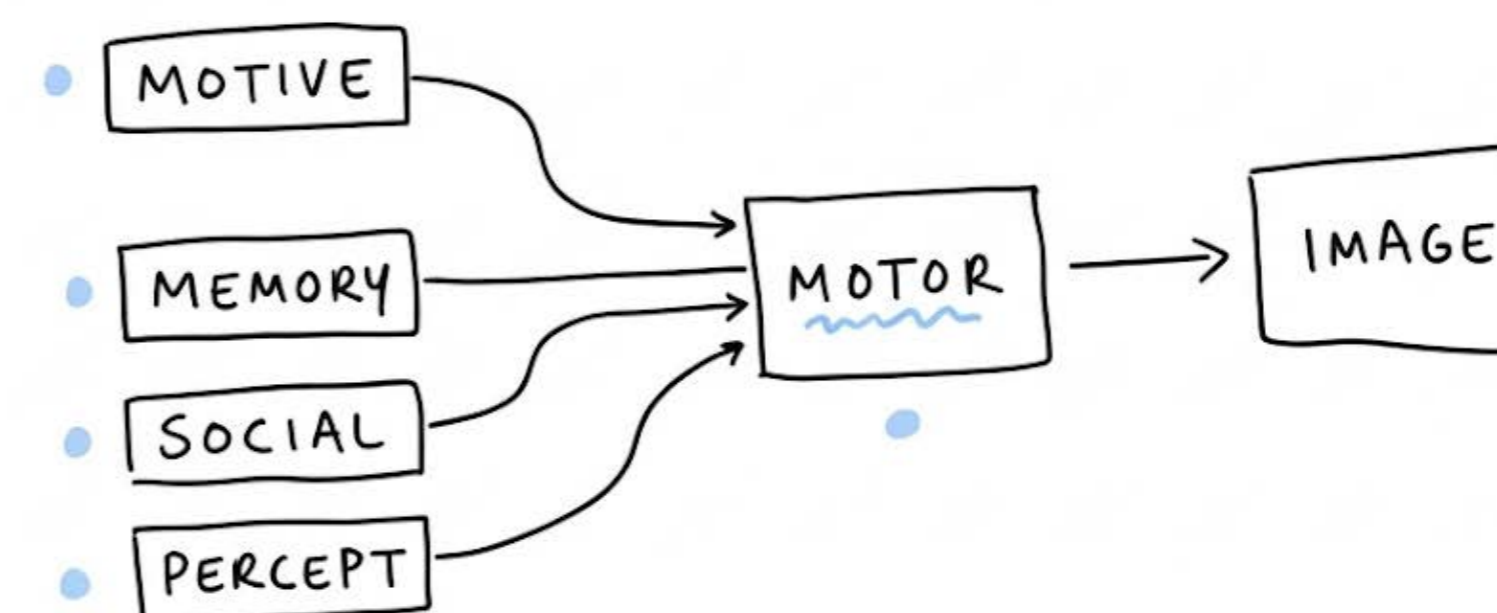


Image-related AI

- Machine vision
- Multi-modal transformers
- Text-to-image diffusion models

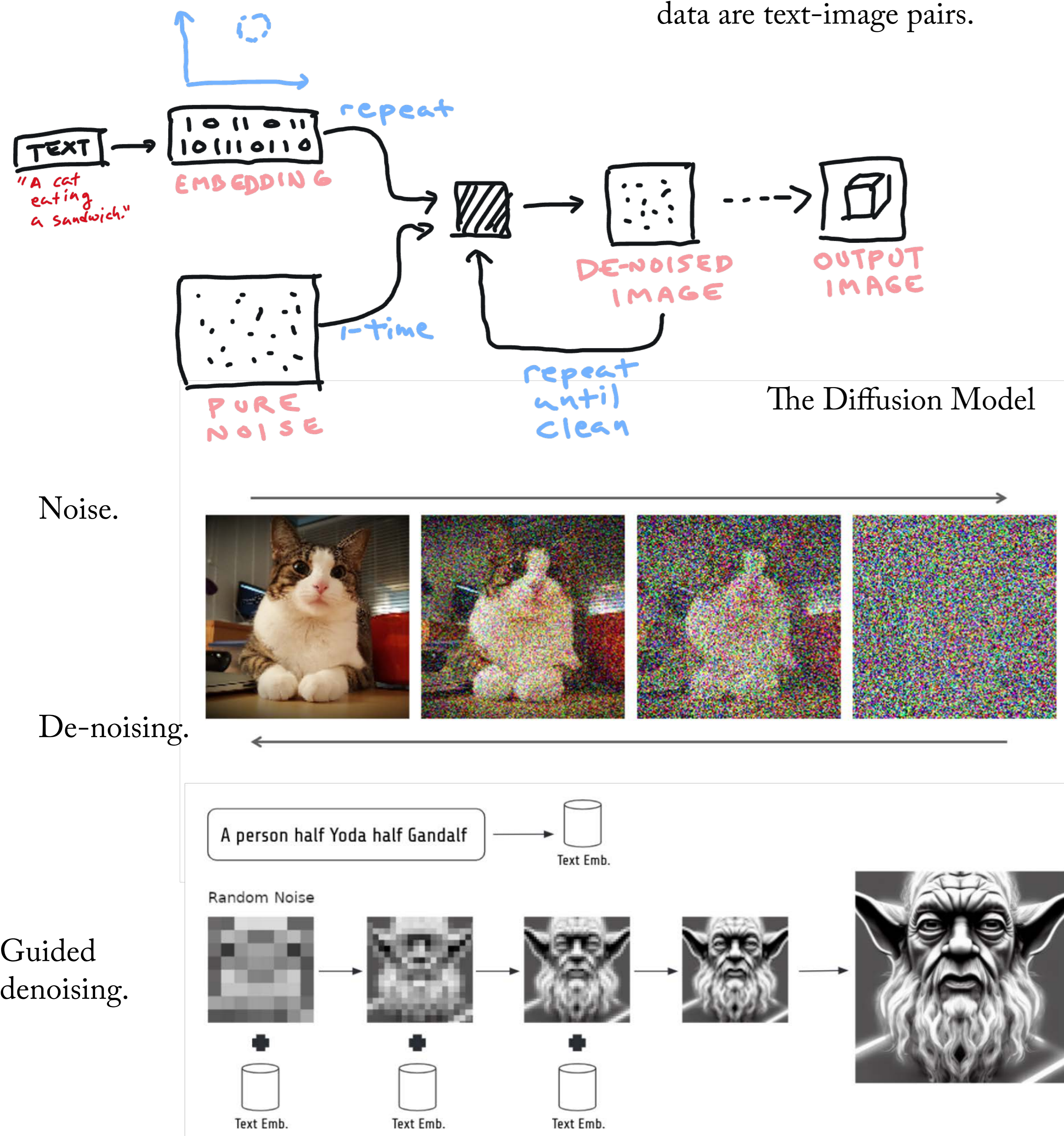
AI Image Generation

Diffusion models: basic elements

- **Text encoder:** encodes text as a "vector embedding" (basically, the meaning of that text, according to the computer model).
- **Noise:** random static that can be added to any image.
- **De-noising:** removing random static from an image to get back to the "clean" image.
- **Guided de-noising:** removing random static from an image as guided by a text's vector embedding.

Where do diffusion models' knowledge come from?

- The non-guided and guided de-noise processes are trained on billions of examples from across the internet.
- They effectively take a snapshot of the internet's visual knowledge, and give you a specific way of extracting it.
- Human labeling is essential.
- For guided de-noising, the key data are text-image pairs.



AI Imagery & Knowledge

Where is AI-Art as compared to drawings and photographs?

- Can they be evidence?
- Are they belief-dependent?
- Should we accept AI images in a newspaper? encyclopedia?

Show we allow AI images in Knowledge Media?

Some positions:

- weak evidence
1. **AI images < drawing.** They should be banned from newspapers and encyclopedias. They have little/no legitimate epistemic function.
 2. **AI images == drawing.** There should be no AI images in newspapers. They could be used in encyclopedias under expert supervision, but not in newspapers.
 3. **Drawing < AI < photographs.** AI images are more reliable or informative than drawings, but less than photographs. They should replace most drawings in encyclopedias (and lectures?), and there may be special cases when we allow them in newspapers.
- strong evidence
4. **AI images == photographs.** They can be used in any media for knowledge sharing. (Of course, they should still be labeled as generated by AI).



Prompt: can you generate an image of an Emu?

“Visuals created by ML tools are statistical renderings, rather than images of actually existing objects. They shift the focus from photographic indexicality to stochastic discrimination. They no longer refer to facticity, let alone truth, but to probability.”

— Hito Steyerl, “Mean Images”