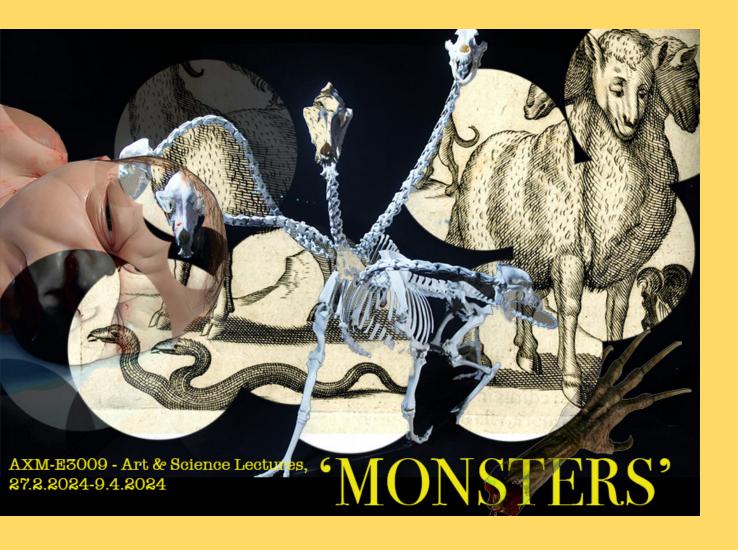
## A content warning / SV – sisältö varoitus

The content and discussion in this course will engage with MONSTERS; how we define them, how we use them in comparison to normativity ('normal'). Some of the materials can be emotionally and intellectually challenging. I want to flag especially images that represent various categories of monsters, as well as well-known practices in history of science and today.

I have no control over visiting lecturers' presentations – but many of them work in the arts and will mainly discuss their own work.

I wish we can do our best to make this classroom a space where we can engage bravely, empathetically, and thoughtfully with potentially sometimes challenging content.



Introduction to the Art & Science course and this spring's topic:

## **MONSTERS**

#### The tight time schedule of TODAY:

- My lecture (due to the evaluations)
   17:15 -18
- Info on the course and its requirements 18 – 18:20 (readings, lectures by visitors, films, tasks to do. Also found in MyCourses.)
- Break 18:20-18:40
- 2nd lecture Marco Donnarumma + discussion 18:40-20

# Art & Science:

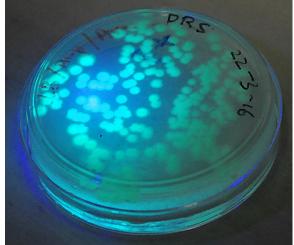
Bioart Biological arts Biotech Art

Environmental art Ecoart

Art & Technology
New Media Art / Media Art
Sound Art







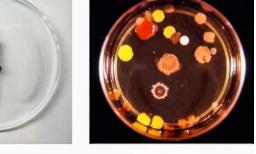




In the 1990's cosmetic surgery as performance+video / Orlan





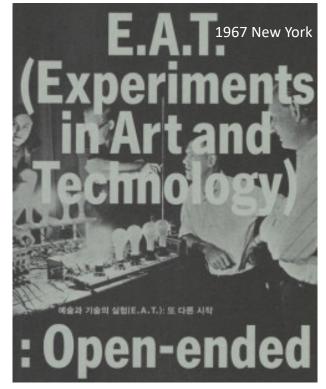


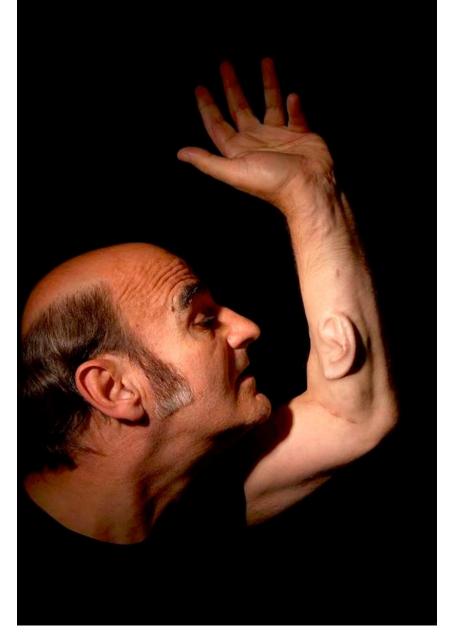




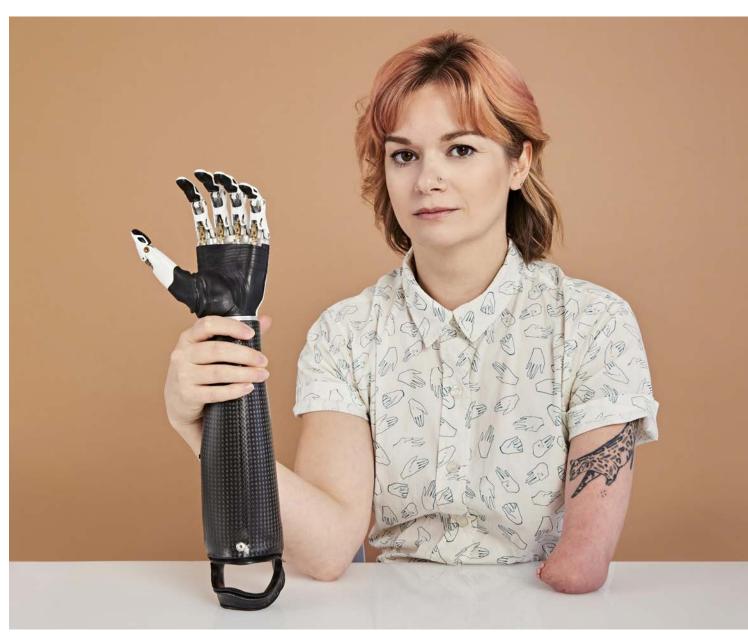


transgenic organisms > gmo > synthetic biology > crispr cas9 >...

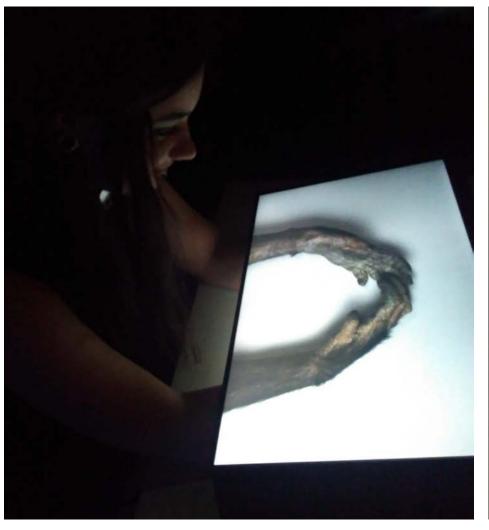




Stelarc / Ear-On-Arm -new capacieties, new senses



Robotic arm; -"repair" of the body







Potentiality for Love ; a part of the installation Eija-Liisa Ahtila 2018

Mirror therapy
- neuroscience, neuroplasticity

https://crystaleye.fi/eija-liisa ahtila



Edward Steichen's Delphiniums at Museum Of Modern Art, NY, June 24, 1936

Edward Steichen, Delphiniums,1940, dye imbibition process.



George Gessert



Hybrid 487 (90-36F) Hybrid 22 (83-7D) x Hybrid 175 (86-47C) First bloom 1995 Flower diameter 4° Stem 16°



Died.

## **MONSTERS - part 1**



#### Etymology of **MONSTER**

- early 14c., monstre, "malformed animal or human, creature afflicted with a birth defect," from Old French monstre, mostre "monster, monstrosity" (12c.), and directly from Latin monstrum "divine omen (especially one indicating misfortune), portent, sign; abnormal shape; monster, monstrosity"...
- "capable of being proved or made evident beyond doubt," c. 1400, from Old French demonstrable and directly from Latin demonstrabilis, from demonstrare "to point out, indicate, demonstrate," figuratively, "to prove, establish," from de- "entirely" (see de-) + monstrare "to point out, show," from monstrum "divine omen, wonder"...
- https://www.etymonline.com/word/monster

# Keywords and terms surrounding the concept of 'a monster':

- 1 UNCANNY
- 2 UNCANNY VALLEY
- 3 CYBORG

\_\_

4 FREAK

5 MUTANT, mutation

6 BESTIARY

#### 1 UNCANNY

Freud, S. (1999). The "Uncanny". In S. Freud (Ed.), The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XVII (1917-1919): An Infantile Neurosis and Other Works (pp. 217-256). London: Vintage. (Originally published in 1919)



#### 1 UNCANNY

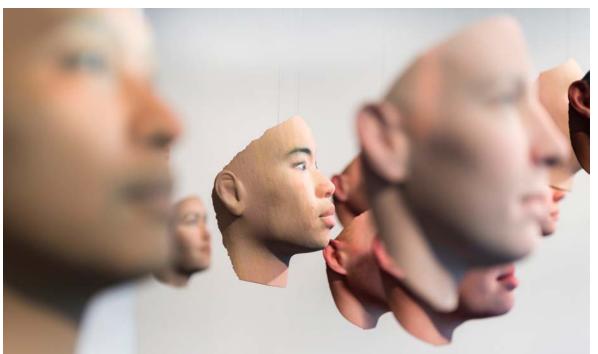
"an uncanny effect often arises when the boundary between fantasy and reality is blurred, when we are faced with the reality of something that we have until now considered imaginary, when a symbol takes on the full function and significance of what it symbolizes"

(Freud 1919)

Freud, S. (1999). The "Uncanny". In S. Freud (Ed.), The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XVII (1917-1919): An Infantile Neurosis and Other Works (pp. 217-256). London: Vintage. (Originally published in 1919)









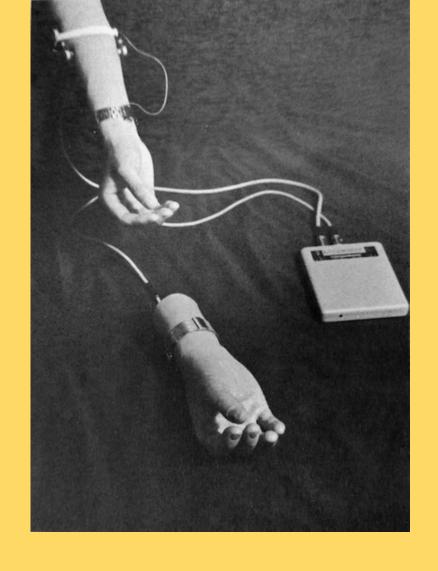




Damien Hirst 1991 The Physical Impossibility of Death in the Mind of Someone Living

Natural history museum stuffed sharks on display

#### 2 UNCANNY VALLEY

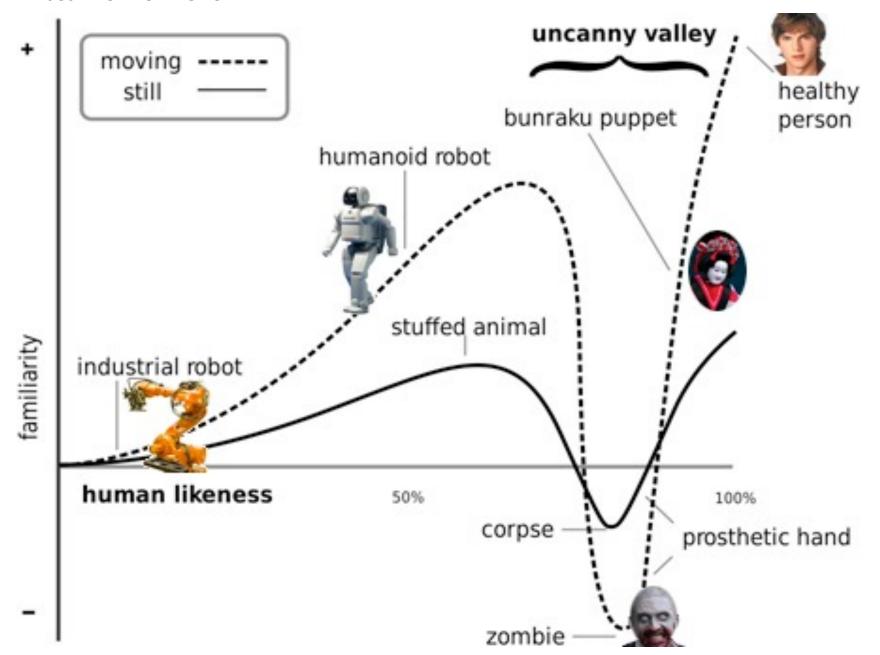


Mori, Masahiro. "The Uncanny Valley." *IEEE Robotics & Automation Magazine* 19, no. 2 (2012): 98-100. -Original article published in Japanese in 1970.















HAND by Golan Levin, Chris Sugrue, Kyle McDonald, 2014

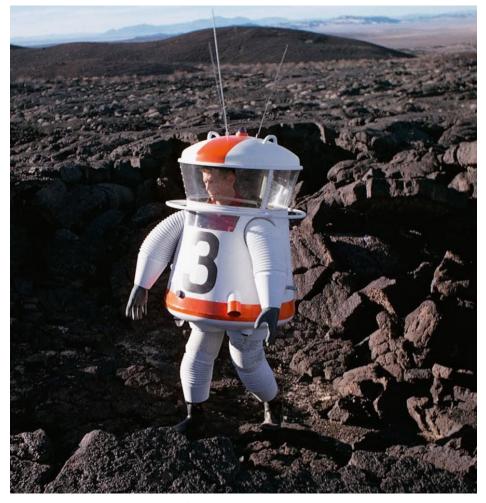
#### 3 CYBORG

Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in Simians, Cyborgs and Women: The Reinvention of Nature (New York; Routledge, 1991), pp.149-181 (classic feminist reading)

Warwick, Kevin (2014). The Cyborg Revolution. NanoEthics 8 (3):263-273. (Science & technology paper)



Clynes & Kline,
Coined the term 'cyborg'
1960 in an article Cyborgs
and Space



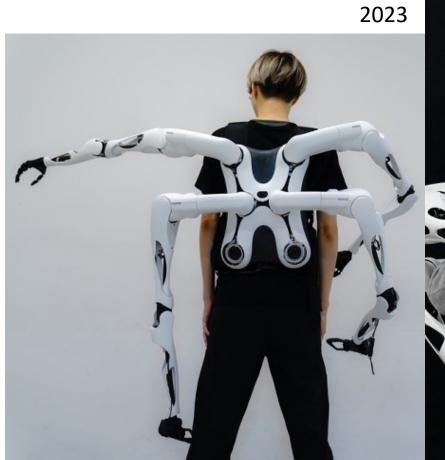
NASA testing an early space suit design in the Mojave Desert (1962)

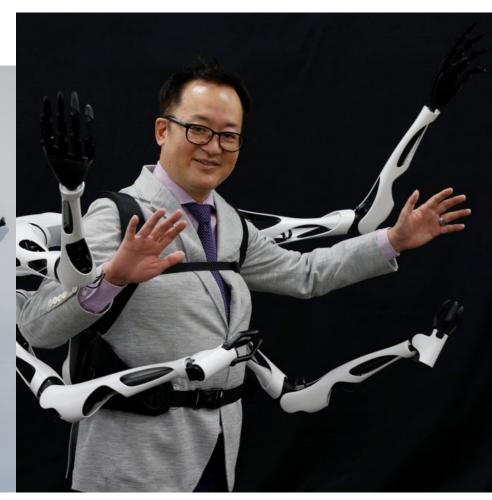




Neil Harbisson – antenna was installed in 2004







https://www.youtube.com/watch?v=6\_rEcu91yYY

#### 2018

https://www.nbcnews.com/mach/science/these-wearable-robotic-arms-head-let-two-people-share-one-ncna905896

## **MONSTERS – part 2**

#### 4 FREAK

Garland-Thomson, R. (2018). "From Wonder to Error: A Genealogy of Freak Discourse in Modernity," from Freakery: Cultural Spectacles of the Extraordinary Body. In A. S. Mittman & M. Hensel (Eds.), *Classic Readings on Monster Theory* (pp. 117–128). Amsterdam University Press.

#### Etymology of **FREAK**

- -1560s, "sudden and apparently causeless turn of mind," of unknown origin.
- -The sense of "capricious notion" (1560s) and that of "unusual thing, fancy" (1784) preceded that of "abnormally developed individual or production" (first attested in **freak of nature**, 1839, which later was popular in variety show advertisements for bearded ladies, albinos, etc.; compare Latin lusus naturæ, which was used in English from 1660s). As "drug user" (usually appended to the name of the drug) it attested by 1945. The sense in **health freak**, **ecology freak**, etc. is attested from 1908 (originally Kodak freak "a camera buff"). **Freak show** is attested from 1887. https://www.etymonline.com/word/freak

The term's original neutral connotation became entirely negative during the 20th century; therefore, freak with its literal meaning of "abnormally developed individual" is viewed purely as a pejorative today. However, the term is also recently used playfully to refer to an enthusiast or obsessive person.

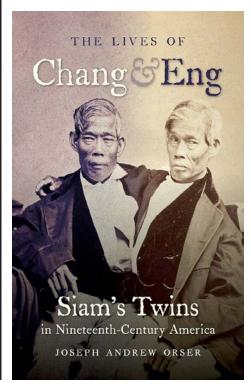
- Garland-Thomson writes in her genealogy of the freak discourse: "Milton's Lycidas seems to have iniated freak into English in 1637 to mean a fleck of color. By the seventeenth century freak broadens to mean whimsy or fancy. Not until 1847 does the word become synonymous with human corporeal anomaly. (Garland-Thomson 2018)
- Garland-Thomson also points that the word 'freak' was stigmatized enough by 1898 that the Barnum & Bailey Circus replaced it with the term "human curiosities" by 1903.

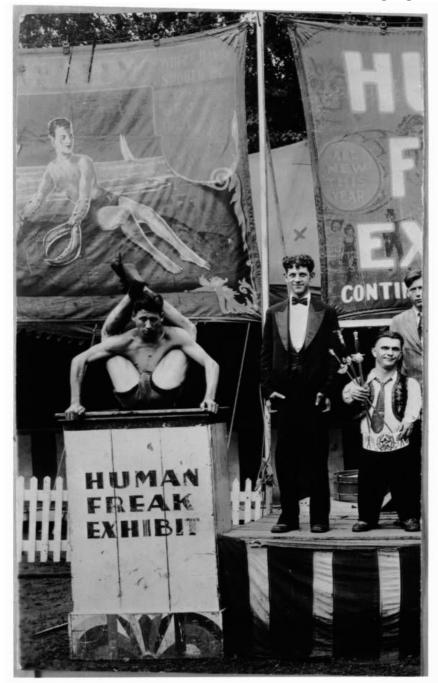


### Chang & Eng 1811-1874

Born in Thailand in 1811, Chang and Eng Bunker toured as a curiosity act for three years before settling down in North Carolina. They married a pair of sisters and fathered 21 children.

Freak shows 16<sup>th</sup> century >>



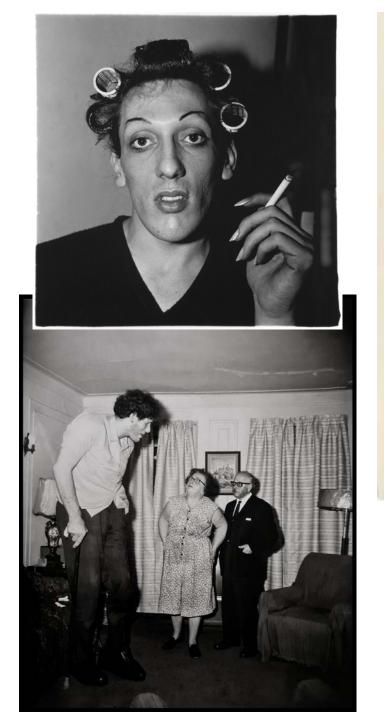


#### Teratology

Teratology *is* the study of malformations or serious deviations from the normal type in developing organisms <a href="https://www.merriam-webster.com/dictionary/teratology">https://www.merriam-webster.com/dictionary/teratology</a>

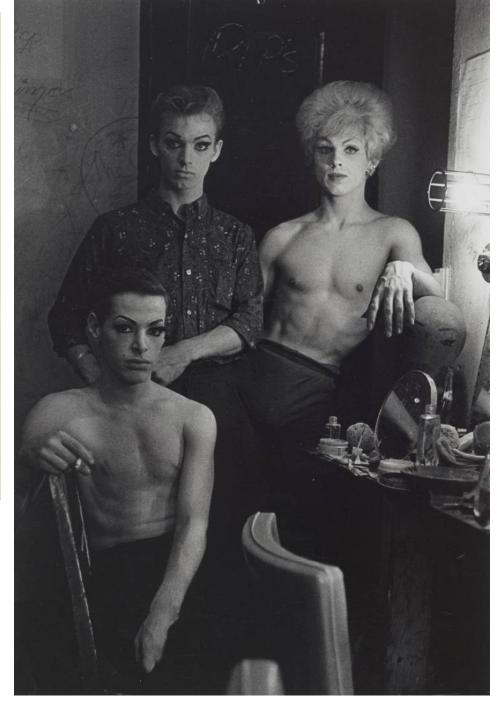
**Teras, Terata (plural) -** an organism that is grossly abnormal in structure due to genetic or developmental causes. <a href="https://www.merriam-webster.com/medical/teras">https://www.merriam-webster.com/medical/teras</a>

MacCormack, P. (2020). **Posthuman Teratology**. In J. A. Weinstock (Ed.), The Monster Theory Reader (Issue 2, pp. 522–539). University of Minneapolis Press. https://doi.org/10.5565/REV/BRUMAL.840





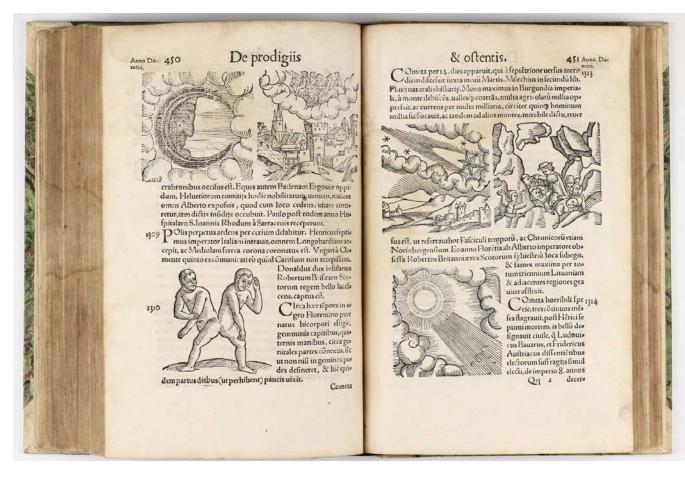
Diane Arbus, a photographer 1923-1971 > Photos from 1960's



## Freak discourse: "wonder becomes error"

Garland-Thomson, R. (2018). "From Wonder to Error: A Genealogy of Freak Discourse in Modernity," from Freakery: Cultural Spectacles of the Extraordinary Body. In A. S. Mittman & M. Hensel (Eds.), *Classic Readings on Monster Theory* (pp. 117–128). Amsterdam University Press.

## **Prodigiorum ac ostentorum chronicon** by CONRAD LYCOSTHENES 1557 'A Wonder Book'



#### 5 MUTANT, mutation

#### **MUTANT**

1900 in the biological sense, "individual or form which has arisen by or undergone (genetic) mutation," from Latin mutantem (nominative mutans) "changing," present participle of mutare "to change" (from PIE root \*mei- (1) "to change, go, move"). In the science fiction sense, it is attested by 1954. As an adjective from 1903.

#### **MUTATION**

late 14c., mutacioun, "action or process of changing," from Old French mutacion (13c.), and directly from Latin mutationem (nominative mutatio) "a changing, alteration, a turn for the worse," noun of action from past-participle stem of mutare "to change" (from PIE root \*mei- (1) "to change, go, move"). The genetics sense "process whereby heritable changes in DNA arise" is from 1894.

https://www.etymonline.com/word/mutant

#### **My own interest in this topic** is related to:

- intentional genetic manipulations of diverse organisms
- human-made aesthetical choices impacting evolution
- biotechnology's possibilities to modify organisms
- cultural reponses to science and technology developments
- our continuing fascination with monsters
- the categorisation and our perception of what-is-a-monster is changing
- can gene manipulated organisms (intentional mutations?) be called monsters? If yes, what kind of criteria they are based on?
- do we have a (new/old) definition for normality?



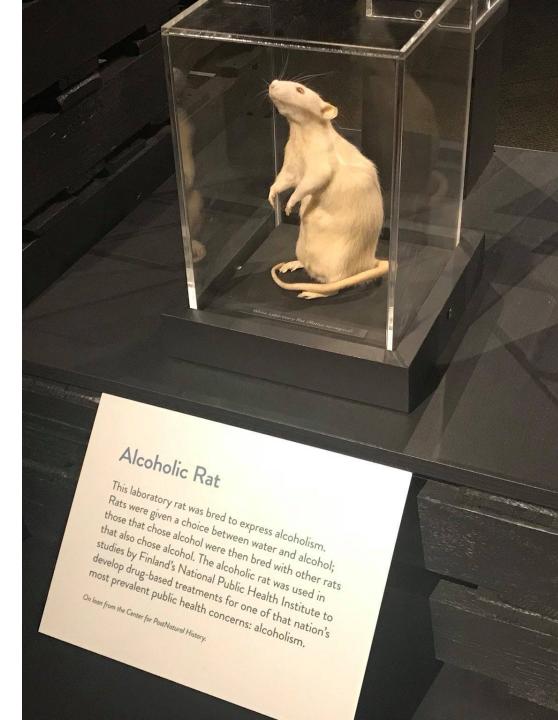


Biologist Brandon Ballengee and artist Louis-Philippe Demers / Artifical Mi[s]tosis 2010 <a href="https://www.behance.net/gallery/4477273/Artificial-Misstosis">https://www.behance.net/gallery/4477273/Artificial-Misstosis</a>





The Center for
PostNatural History is
dedicated to the
advancement of
knowledge relating to the
complex interplay
between culture, nature,
and biotechnology.
<a href="https://www.postnatural.org/">https://www.postnatural.org/</a>









2016 - "The Power of Weak Radiation: What the Nuclear Industry does not tell us



**Hesse-Honegger C, Wallimann P** (2008) *Malformation of true bug* (*Heteroptera*): A phenotype field study on the possible influence of artificial low-level radioactivity. Chemistry & Biodiversity 5(4): 499–539

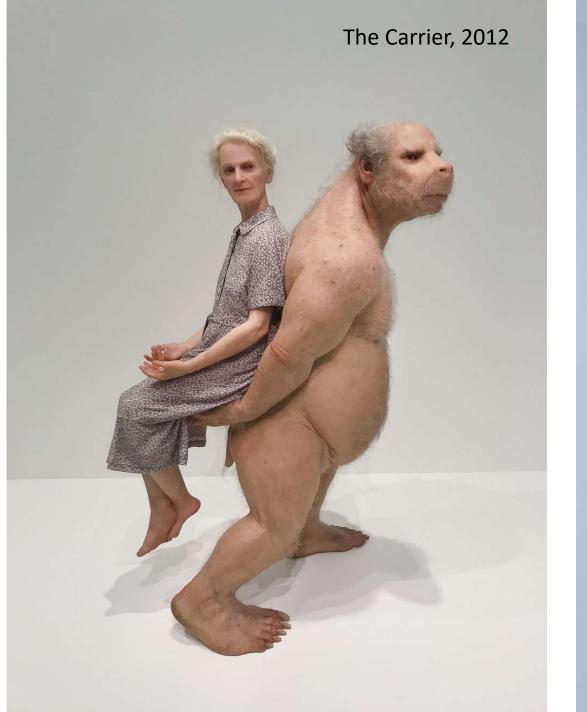




Kathy High, *Embracing Animal* 2004-06, in which three transgenic lab rats, model HLA-B27, were given special housing and made available to the public's view.



Patrizia Piccini





#### Chimera

- -a fire-breathing she-monster in Greek mythology having a lion's head, a goat's body, and a serpent's tail
- -an imaginary monster compounded of incongruous parts
- -an illusion or fabrication of the mind
- -an individual, organ, or part consisting of tissues of diverse genetic constitution. > A hybrid created through fusion of a sperm and an egg from different species is a chimera.

https://www.merriam-webster.com/dictionary/chimera





#### Hybrid

- -an offspring of parents that differ in genetically determined traits. The parents may be of different species, genera, or (rarely) families. The term hybrid, therefore, has a wider application than the terms mongrel or crossbreed, which usually refer to animals or plants resulting from a cross between two races, breeds, strains, or varieties of the same species.
- -because of basic biological incompatibilities, sterile hybrids (those incapable of producing living young) such as the mule commonly result from crosses between species. Some interspecific hybrids, however, are fertile.

https://www.britannica.com/science/hybrid







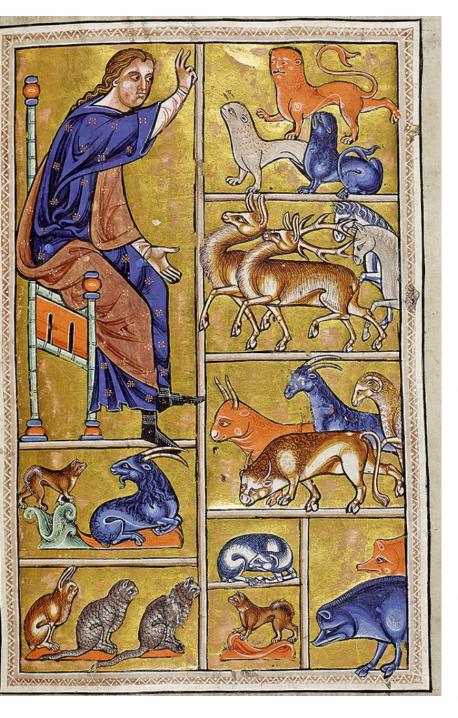
#### **BESTIARY**

1 : a medieval allegorical or moralizing work on the appearance and habits of real or imaginary animals.

2

A: a collection of descriptions or representations of real or imaginary animalsB: an array of real humans or literary characters often having symbolic significance

**3**: an unusual or whimsical collection





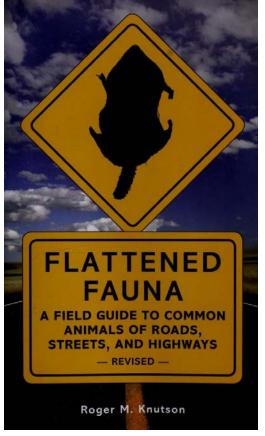




### Examples:

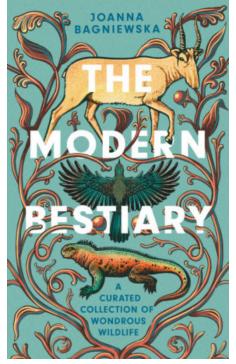
**Aberdeen Bestiary** - first listed in 1542 in the inventory of the Old Royal Library at the Palace of Westminster

https://www.abdn.ac.uk/bestiary/ms24/





Flattened Fauna, Revised: A Field Guide to Common Animals of Roads, Streets, and Highways -by Roger M. Knutson 2013



The Modern Bestiary

– A curated collection
of wondrous wildlife
-by Joanna
Bagniewska 2022

A BESTIARY OF THE ANTHROPOCENE seeks to capture this precise moment when the biosphere and technosphere merge and mesh into one new hybrid body. What happens when technologies and their unintended consequences become so ubiquitous that it is difficult to define what is "natural" or not? What does it mean to live in a hybrid environment made of organic and synthetic matter? What new specimens are currently populating our planet at the beginning of the 21st century?

A Bestiary of The Anthropocene by Nicolas Nova & Disnovation.org 2021

