

Science Communication Experiments in a Research Environment

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Wellcome Collection, London



Medical Museion, Copenhagen

Science Communication Experiments in Research Environments

.....*the next half hour*...

- Evolving trends and different styles of science communication
- Research/museum-based science communication – character, history & methodology (*epistemology*)
- Combining science with art – some projects
- Experimenting with stakeholder engagement ('Appendix' initiative)
- Applying 'museum method' more broadly

Science Communication... as Old as Science Itself...



Joseph Wright of Derby,
An Experiment on a Bird in the Airpump
(1768): National Gallery, London



'Science is fun cruise': Chicago

The Evolution of Science Communication

- **Public Understanding of Science**
(linear transfer from experts to audiences – some active, some defensive; increasingly professionalized)
- **Public Engagement with Science – 1990s/2000s**
(P.U.S. not working and is it patronizing? So replace with practices based on reciprocal relationship.)
- **Ethical Turn with Increasing Concern for Social Justice Issues – 2010s/now**
(Missing voices? For whose benefit? Political context is key.)
- **Plural Conclusions... Apply Good Versions of all these Methodologies**
(Use diverse approaches to appeal to different people & interests. More interesting projects.)

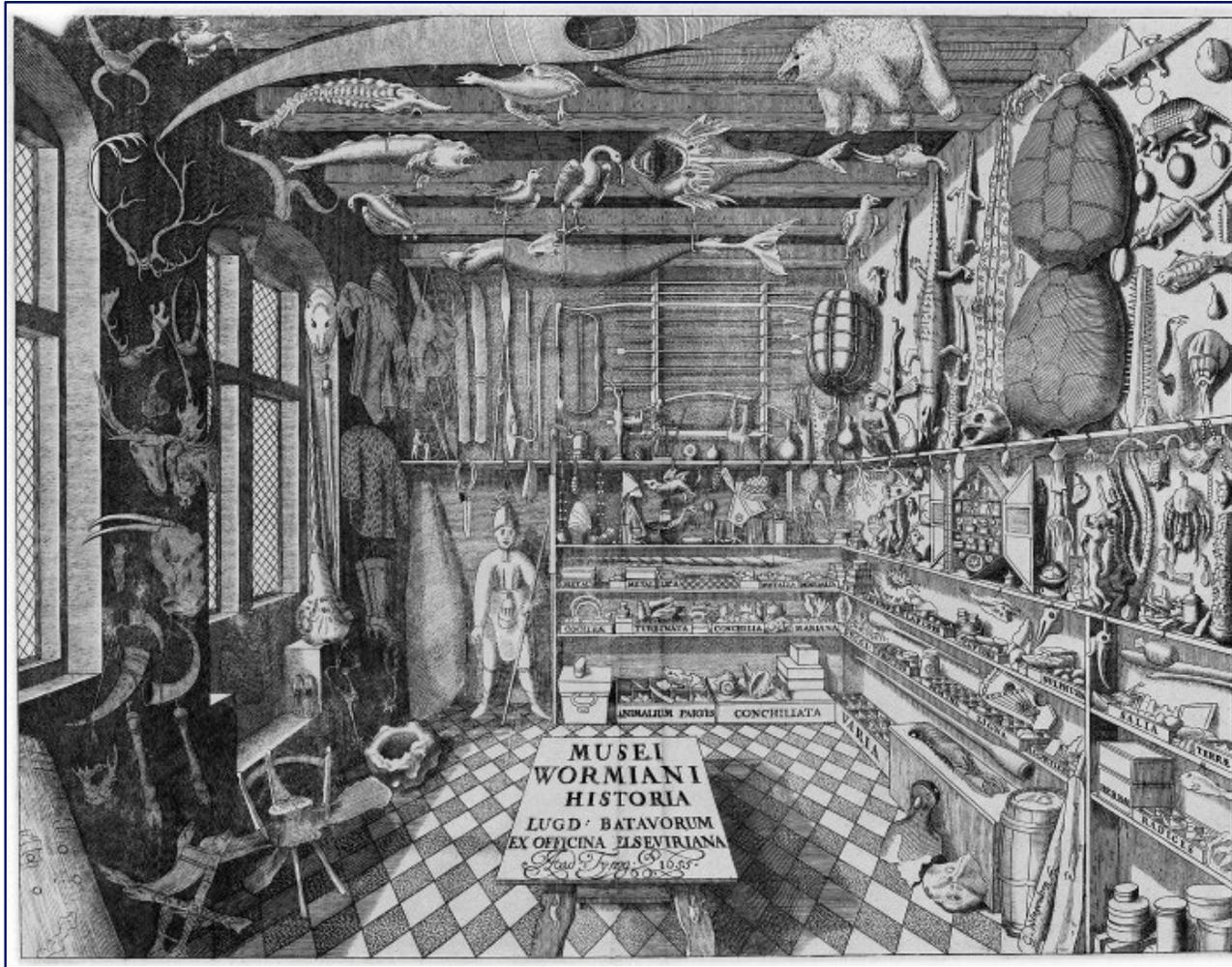
Another Method: Character of Museum-Based Science Communication

.....more focused on active pursuit of CURIOSITY

- **Follow vital & universal aspect of human condition:** (fysigunkus) takes persistence, rewards agility...
"It's not that I'm so smart, it's just that I stay with problems longer." Albert Einstein
"...cognitive flexibility married to cognitive persistence." Jyoti Mishra
- **Be interested in puzzles:** stay with the 'strange', not just focused on the already explained...
...when great discoveries are being made, more often you hear people say "that's funny," rather than "aha." Isaac Asimov
- **Draw on different disciplines:** combine perspectives; understand through conversation...
"the world has problems, but universities have departments." Gary Brewer
- **Focus on the material & specific** – investigate particulars ... (Carlo Ginzburg's 'science of singularities')
importance of: slow close observation, juxtaposition, story-telling...
- **Create & share knowledge simultaneously:** less linear process from knowledge into dissemination...

17th Century Curiosity-Driven Enquiry

'Curiosity Cabinets' ... 'Cabinets for the Curious'



Ole Worms' Cabinet of Wonders, Denmark (1655)



- 17th century microscope & telescope

Museum/object-based research & education (19th & early 20th c. Universities)



Clockwise from top right...

- Woman's Medical College of Pennsylvania, c. 1890s
- Paris School of Medicine, 1890
- Western High School, Washington, D.C

The rise and fall of a 'museum age' in research (& engaging the public)... (John Pickstone)

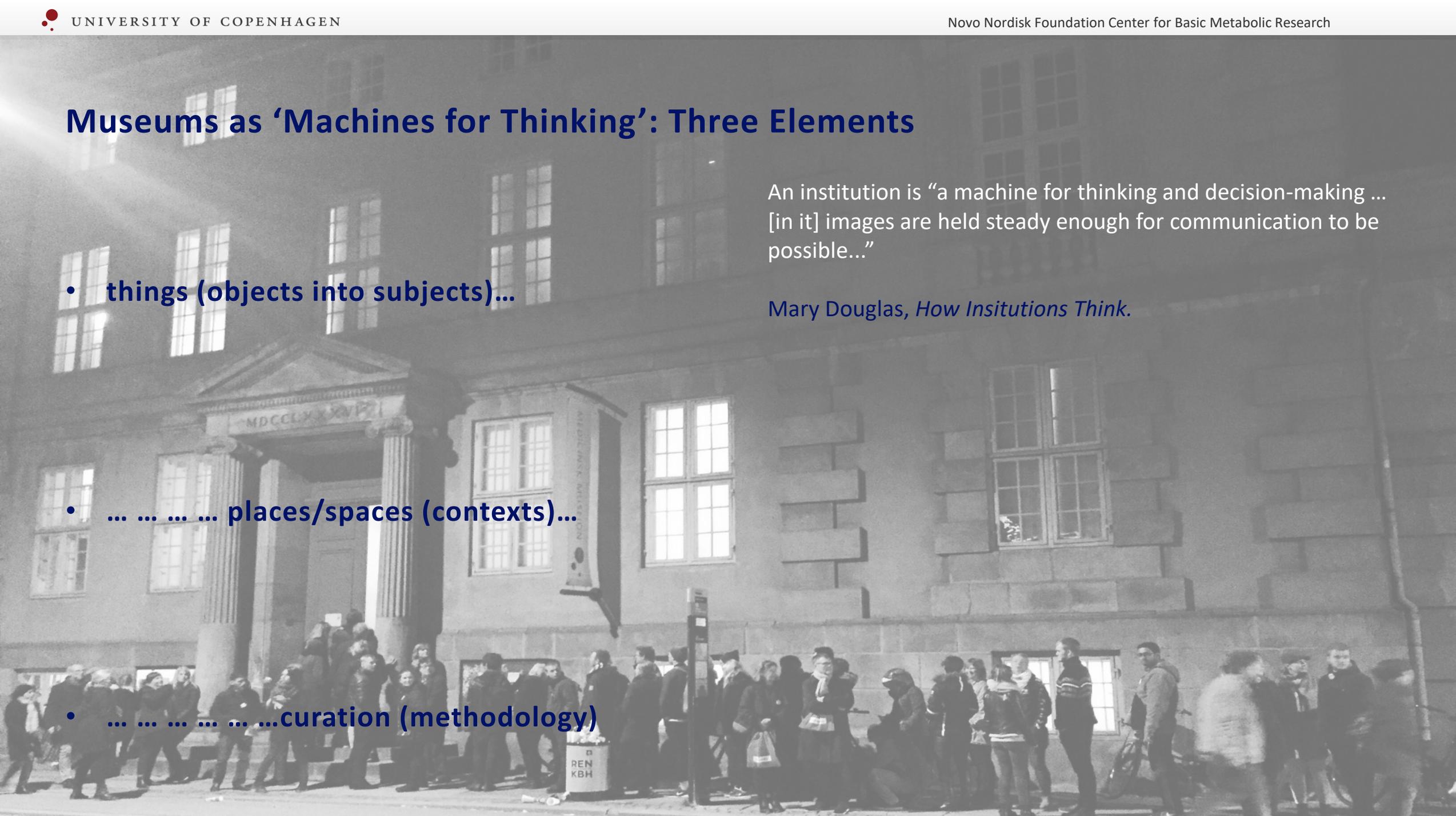
- **17th c. – Emergence of Curiosity-Driven Enquiry:**
finding & studying middle-sized parts of the physical/visible world...
- **19th c. – 'Museum Age' in Science:**
object-based epistemology... collecting, examining & classifying, theorizing...
- **20th c. – Rise of 'Laboratory Age' in Science:**
experimental/theoretical study of invisible phenomena (electromagnetism, chemistry, relativity & quantum mechanics, ...)
- **Later 20th c. – Eclipse of Museum Science... with 'Orphaned Collections'**
- **21st c. – Resurgence of 'Museum Thinking'?:**
new relevance for museum collections that combines research with stakeholders & public engagement

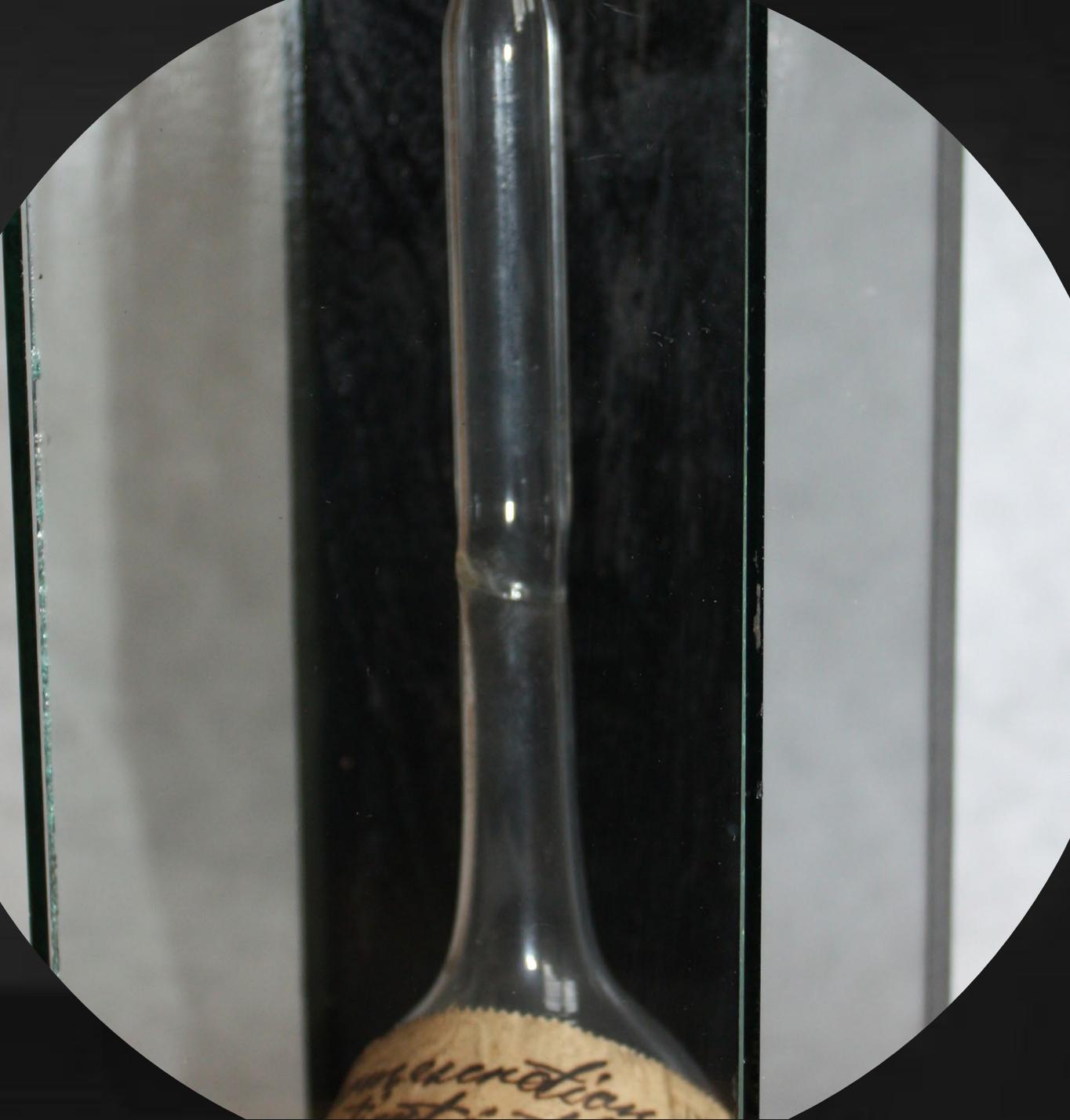
Museums as 'Machines for Thinking': Three Elements

- things (objects into subjects)...
- places/spaces (contexts)...
-curation (methodology)

An institution is “a machine for thinking and decision-making ... [in it] images are held steady enough for communication to be possible...”

Mary Douglas, *How Institutions Think*.





"gut excretion from a patient in cholera outbreak October, 1853"... patient survived

Museum Thinking – One Thing at a Time ...

- World's oldest cholera bacteria? Value of mystery & dilemma...
- Interpret between: history, science, public health, ethics & museology
- What should we do with it?



'Intestinal water' in sealed flask. 1853.

Museum Thinking: Communicating differently in Specific Spaces



- Auditorium
- *Body Collected* exhibition
- 'Appendix' Room



Museum Thinking: Multi-disciplinary Curation



'Sleeping and Dreaming', Wellcome Collection, 2008



'Margarine', Medical Museion, 2024

Museum Thinking: Science & Art

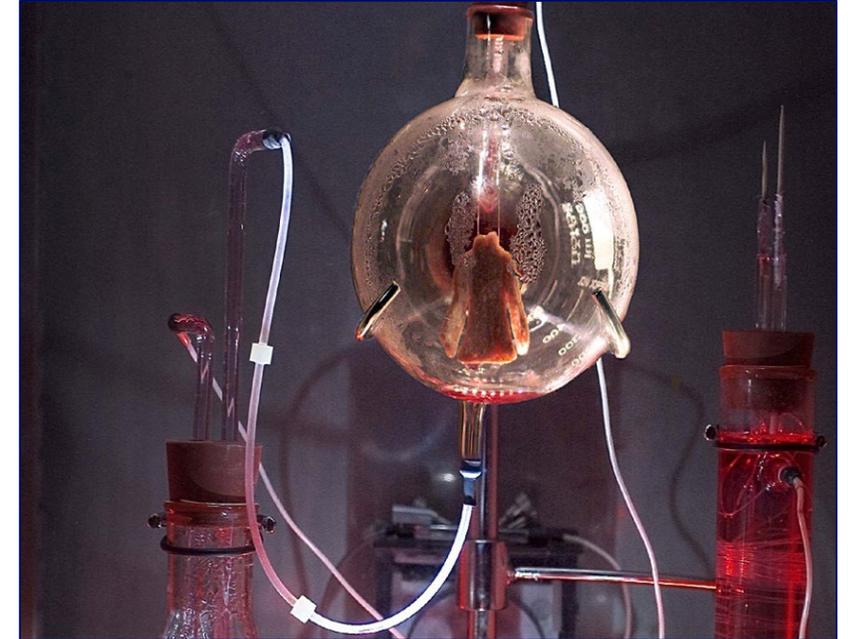


Pharmacopia, *Femme Vitale*, 2013



Alexa Wright, *After Image RD2*, 1997

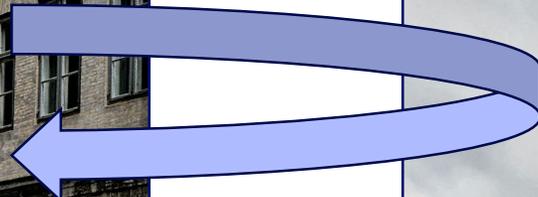
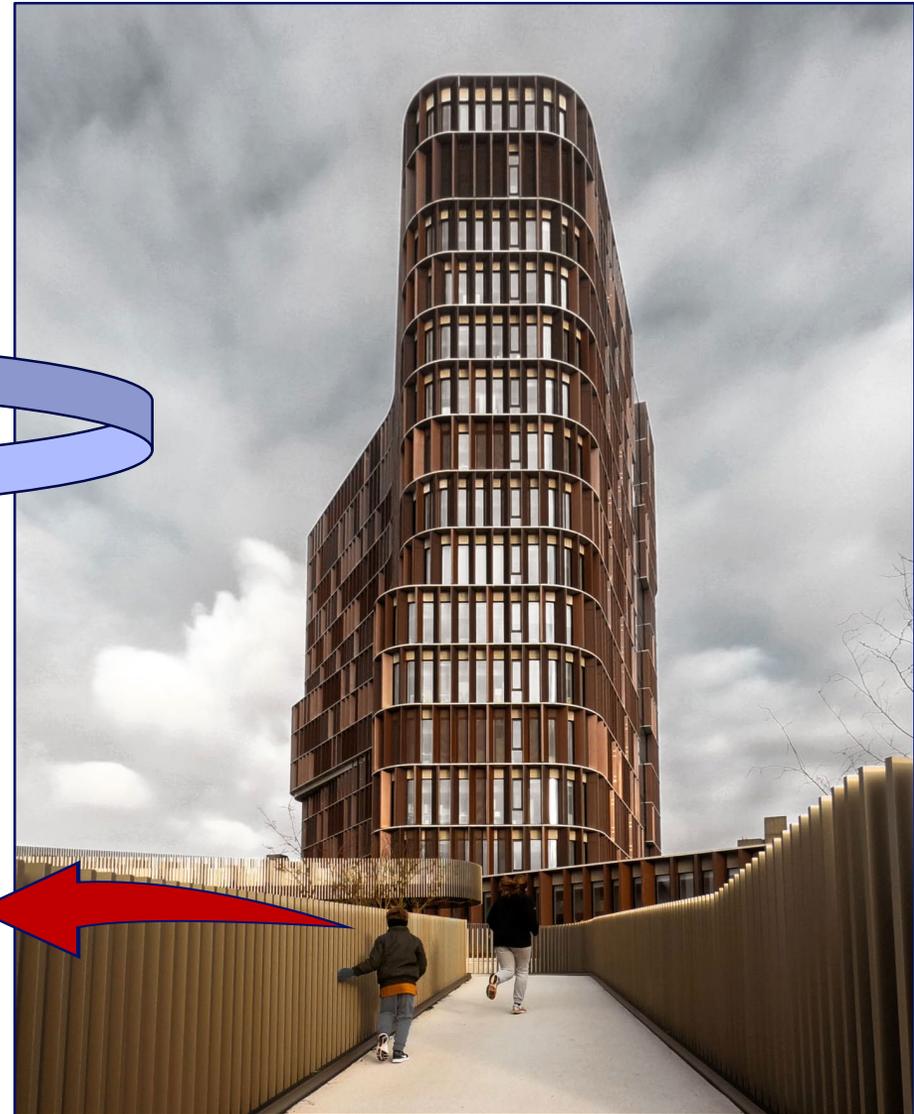
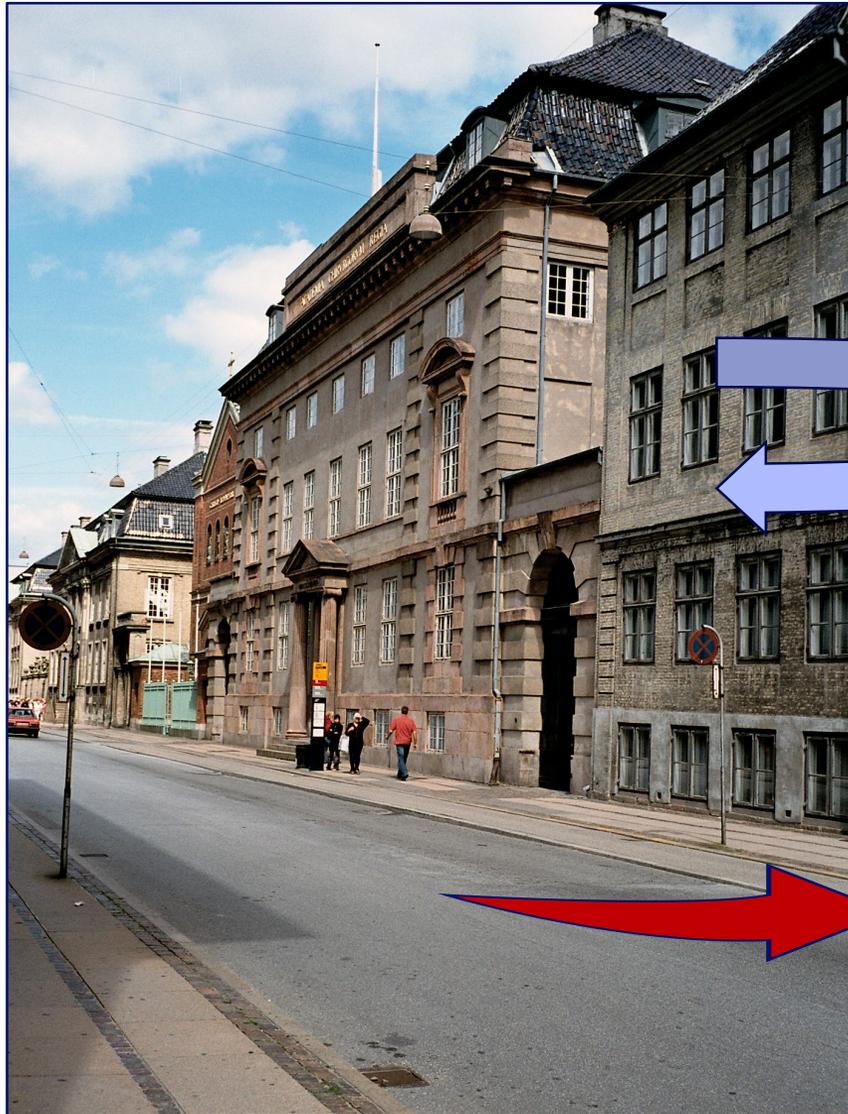
Collaborators: John Kew (neurologist) & Peter Halligan (neuropsychologist)



'No science without fancy, and no art without fact.' Vladimir Nabokov

Symbiotica, *Victimless Leather*, 2004

Medical Museion: Research into Engagement, and *vice versa*





Applying Museum Thinking to other Science Communication Contexts...

- **Curiosity:** practicing/following our innate fascination with the world, & in the company of others...
- **Multi-disciplinary:** bringing together different perspectives & expertise ('voices')
- **Create & share simultaneously:** not only disseminating what's already known: gather round what isn't...
- **Apply 'museum as method':**
 - slowing down & examining 'the particular'...
 - thinking about/ making the most of places where science communication happens...
 - curating - interpreting & telling stories through juxtaposition and co-imagination...