

Agenda

Theme 1:
*Scientific outcomes
are social*

1. Modernity
2. Science vs. technology
3. Small-group discussions

Modernity

What does 'Modern' even mean?

- ∴ Not the same as 'current' or 'contemporary'.
- ∴ **Modernity** describes a major and ongoing shift in the way Western culture understands, interacts with, and talks about the world.
- ∴ **Shift from:**
 - Rural to urban*
 - Spiritual to rational*
 - Communal to individual*
 - Local to global*



Themes of modernity

Anthony Giddens, *Modernity and Self-Identity* (1991)


Separation of time and space

- ⋮ Shift in understanding of time and space from entangled and tied to place to independent and universal
- ⋮ Knowledge should be universal, not contextual
Mechanical clocks and precise maps
- ⋮ Objective truth exists outside human experience

Disembedding of institutions

- ⋮ Institutions compartmentalized, so government, religion, family, science, etc. are distinct components of society
- ⋮ Expert systems standardize knowledge Trust in expertise (e.g. medicine)

Scientific method

 **STEMLORD LORD OF THE STEMM**
@upulie

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12:50 AM · Aug 8, 2019

2,118 Reposts **147** Quotes **7,865** Likes **204** Bookmarks

Scientific method

 **STEMLORD LORD OF THE STEMM**
@upulie

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 **Ricardo Diaz-Rincon**
@rdiazrincon

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5:09 PM · Aug 9, 2019

2 Reposts **17** Likes

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 **Elena Conti, PhD**
@Elen_biota

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12:20 PM · Aug 9, 2019

3 Reposts **20** Likes

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Scientific method is viewed as

Universal

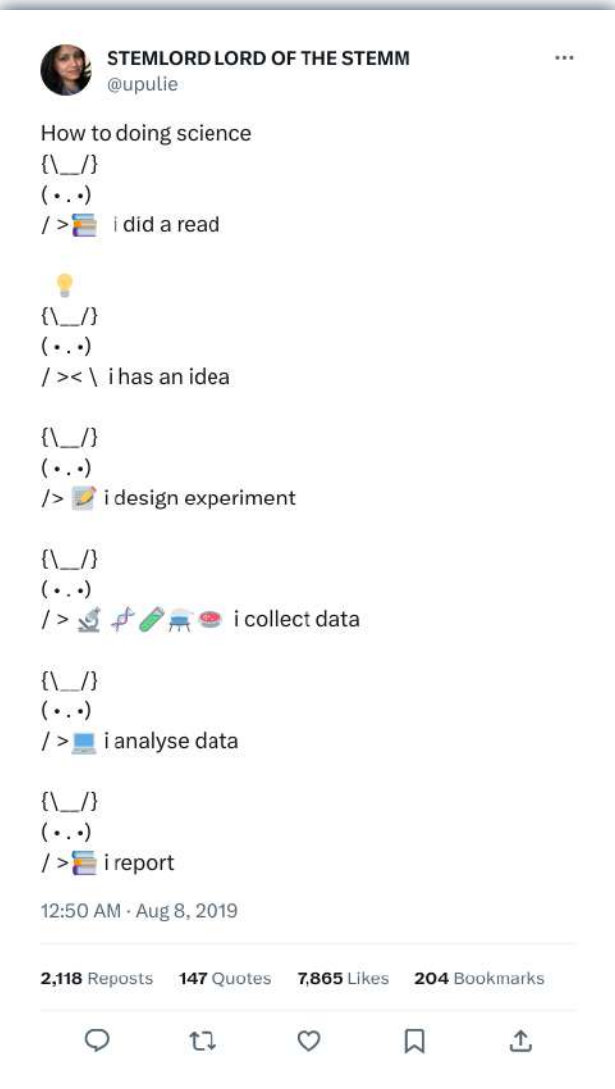
| ∴ Applicability to any question

Reliable

| ∴ Reproducibility of research

| ∴ Accessible to anyone

Represents an extremely *Modern* ethos



Science vs.
technology



Science vs. technology

- ⋮ Distinction between the 'pure' *search* for scientific knowledge and 'practical' *application* of that knowledge.
- ⋮ **At best:** 'science' and 'technology' describe idealized endeavors that are rarely realized.
- ⋮ **At worst:** the terms create a false dichotomy that hinders understanding of what scientists do.
- ⋮ ***Technoscience***



Discussion

In person



Form groups of 4–5

- ⋮ At tables or outside of the classroom. Join a Teams room for your table

Online



Form groups of 4–5

- ⋮ Choose a "discussion room" channel on Teams

Small-group discussions:

- ⋮ Choose **one facilitator** who will keep the discussion focused and make sure everyone is able to participate.
- ⋮ Choose **one secretary** who will take notes and summarize the group's responses for submission.
- ⋮ Download Word Doc (linked from syllabus) and type your names/roles at the top
- ⋮ Type your responses directly in the document and submit one document per group

Notes:

- ⋮ You do not need to reach consensus on the questions. Your write-up should mention the different points your group thought were relevant. **One or two paragraphs** worth of text per question should be sufficient.
Please avoid bullet-point format.
- ⋮ You can discuss the questions in **any order** you like, and you do *not* need to respond to all of them. Read over them before you begin!

Image credit



Animation from [TCM](#) on [Giphy](#)

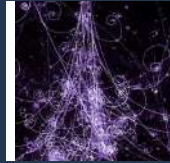


Image via [elapsus.it](#)



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