

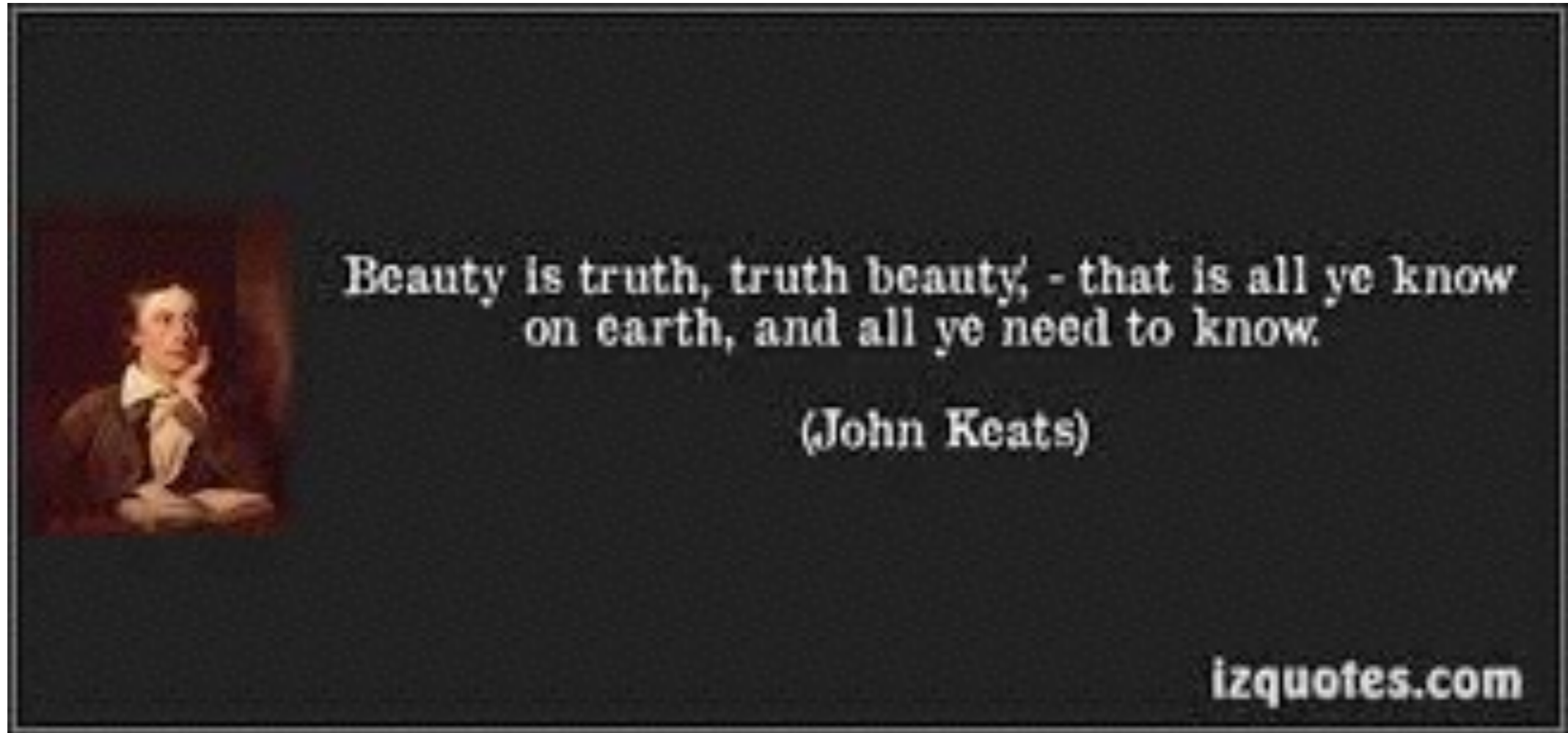


Lecture 12

Science vs Humanities
Some comments



An overview of scientific methods in the Humanities



Beauty is truth, truth beauty, - that is all ye know
on earth, and all ye need to know.

(John Keats)

izquotes.com

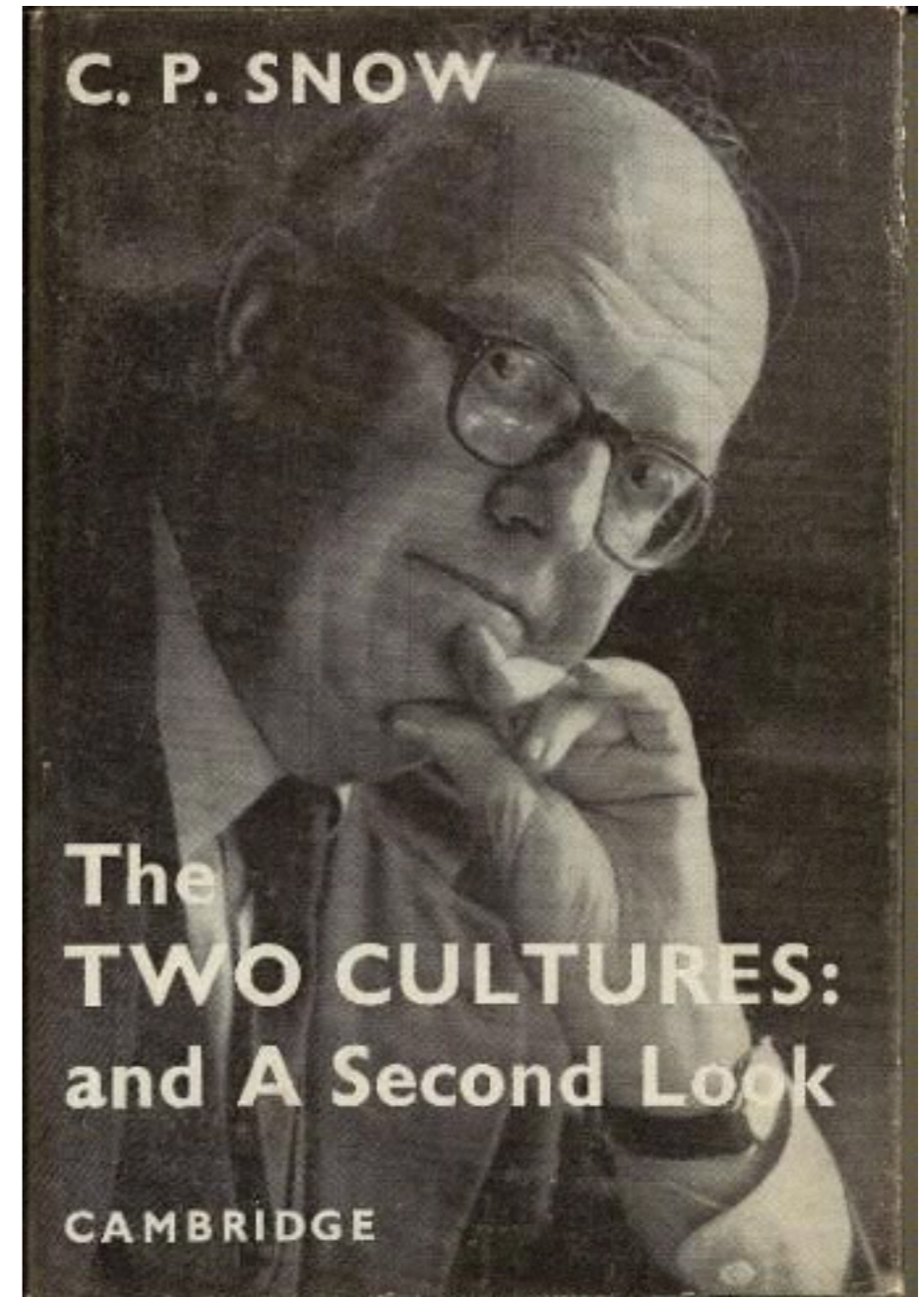
The two cultures

Science - Humanities

Why do we have the division?

Do we want it?

Is it necessary?



Three ways to classify Sciences

- What is the conception of truth ?
- What methods are used?
- What are the goals you want to achieve?

Examples of sciences

How would we classify the following areas based on the previous questions?

Psychology ?

History?

Political Science?

Literary Theory ?

Gender Studies ?

Economics ?

Mathematics and Natural Science

Truth: An objective truth.

Method: In essence deduction and hypothetical - deductive method linked to experiments.

Objectives: Knowledge of the objectively existing world and the mathematical world .

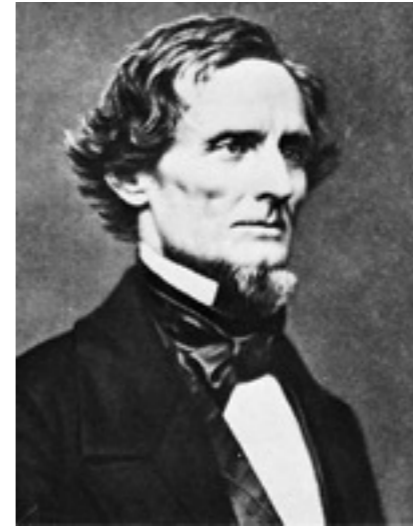
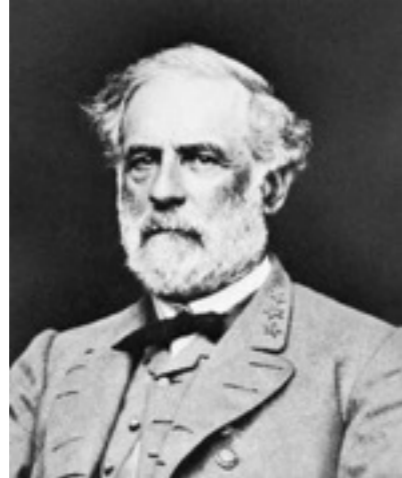
The Humanities

Truth: Very diverse perceptions.

Method: The hermeneutic method
(understanding) seems the most important.

Goal: Very diverse perceptions. Most likely,
they are all about understanding the world in
all aspects related to humans.

The American Civil War



- What started the war?
- What was it all about?
- Could it have ended differently?

Collectivism versus individualism

To answer the first question , there are different strategies.

Methodological individualism : Analyze what the most important actors in the historical process did and thought .

Methodological collectivism : Analyse the ideas and forces that existed in society and what they led to .

What was the war about?

- It is thought to be about the existance of slavery.
- It could also have been about the federal goverments right to control over the states.
- Who is right?

Narration

One view is that a historical explanation must be given by a narration.

Narration = Story (but narration sounds more professional)

An explanation of war must therefore be given through a story about the war.

The story must meet certain logical requirements .
What are they?

Demands an a Narration

Are there scientific criteria for a correct story?

The story should have a clear horizon of understanding of background knowledge.

Cause and effect in the story should be clear relative to this horizon of understanding.

Contrafactuals

An example : What if the Confederacy had not lost the Battle of Gettysburg in 1863 ? Would the United States have existed now?

Would there have been a WW2?

Most historians seem to regard contrafactual thinking as an example of "bad science".

This is probably because history is not concerned with scientific laws .

Psychology

Modern psychology works with experiments and statistical analysis .

The classical Freudian psychoanalysis seems rather motivated by a story.

The same applies to Jung's psychology .

... But what stories they are!

What is the truth here? A controversial question-

Humanities - An overview

Some examples:

Theory of literature

Art History

Parts of Philosophy

History of Ideas

Politics (perhaps)

On the whole, everything that are cultural products.

Understanding

The concept of *understanding* appears to be central in the humanities.

Hermeneutics = study of what understanding is , and how we should go about achieving understanding.

Hermeneutics is also important in the social sciences

Why does Hamlet hesitate?



Hamlet's uncle has murdered Hamlet's father and married Hamlet's mother .
Hamlet wants revenge but he waits and hesitates through almost the whole play .
Why ?

Technical explanation: (Freud) Guilt holds him back. He would himself
have wanted to murder his father and married his mother. (Oedipus Complex)

Explanation by intention: We have to somehow understand what Shakespeare was
thinking.

Thoughts on works of art

If we want to understand a work of art , there are at least three methods to gain understanding of it.

We can analyze the work of art itself and try to understand its intrinsic " properties " .

We can analyze the artist's intentions and try to understand them.

We can analyze the viewers and try to understand the work's effect on them.

Systematic hermeneutic

We can try to find a bridge between Science and Humanities

We can talk about an almost scientific approach:
Hermeneutics is the hypothetical - deductive method applied to meaningful material.

We have can form hypotheses about this material. We test what these hypotheses have consequences and choose to accept or reject hypoteses.

The hermeneutic circle

The concept of hermeneutic circle appears in various forms of methodological issues . What does the term mean?

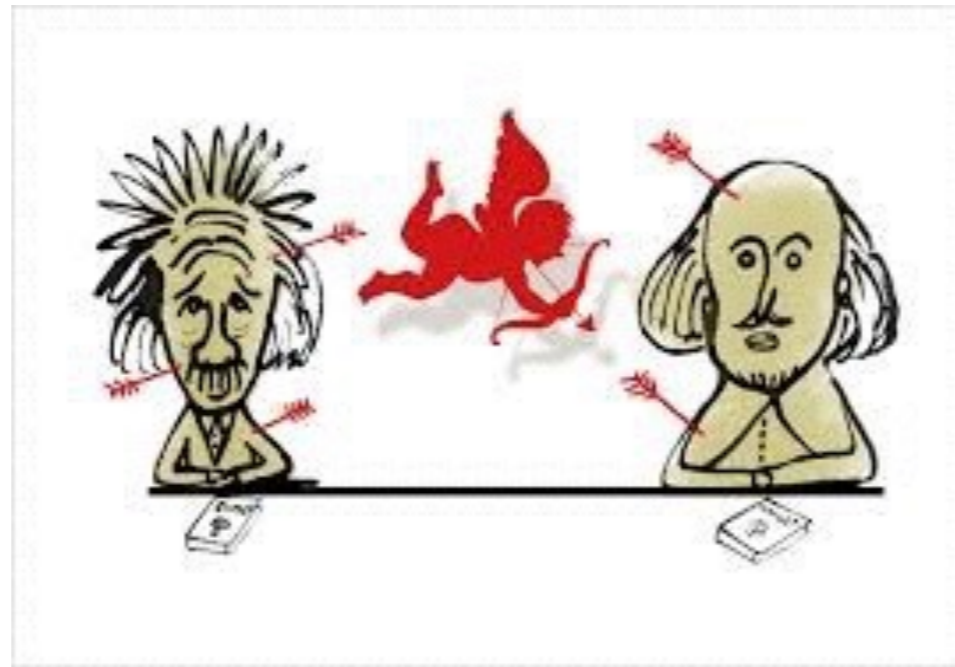
There are various forms of this circle. What is it all about can probably be summarized as follows :

If we have a theory (eg in form of a story) we might want to analyse its parts. Starting from the analysis we modify the parts. It will affect the whole story. It can lead to other parts needing to be modified which affects the whole ... and so on.

Another similar "circle"

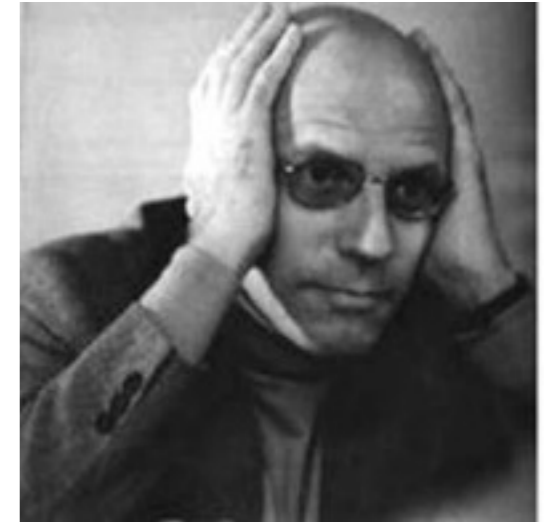
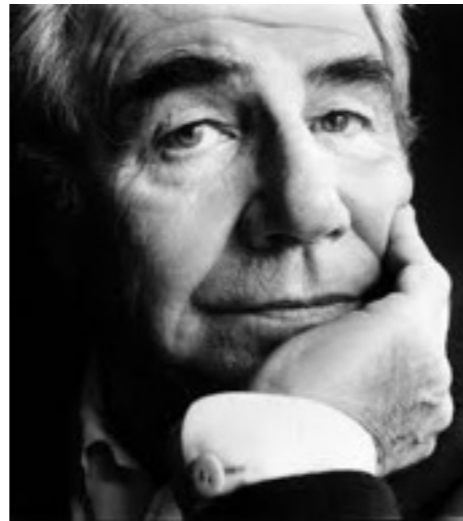
The hypothetical - deductive method : We set up hypotheses and test them against observations. If we are critical to it the hypothesis we modify it and test again against observations. If ... and so on.

But some want two separate cultures

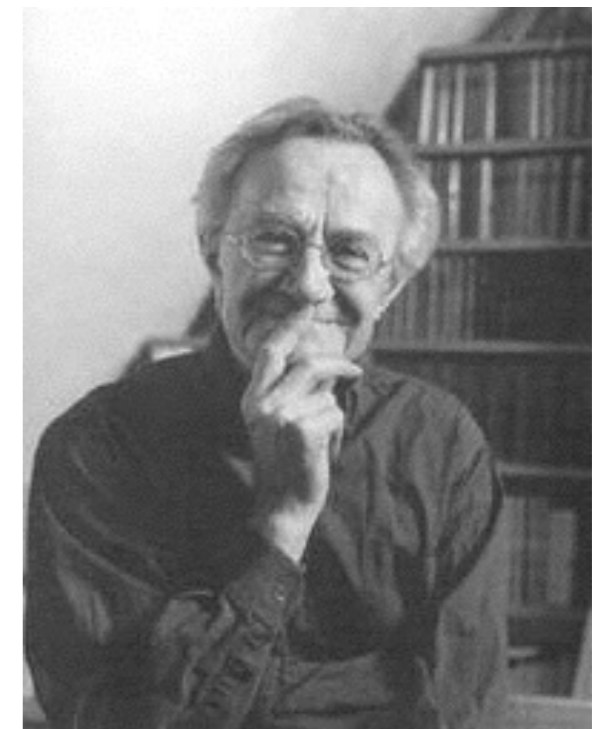


We will discuss a group of philosophers which seem to think that the gulf is unbridgeable.

Postmodernism



Everything's stories
There is no meta-narrative
Relativism!

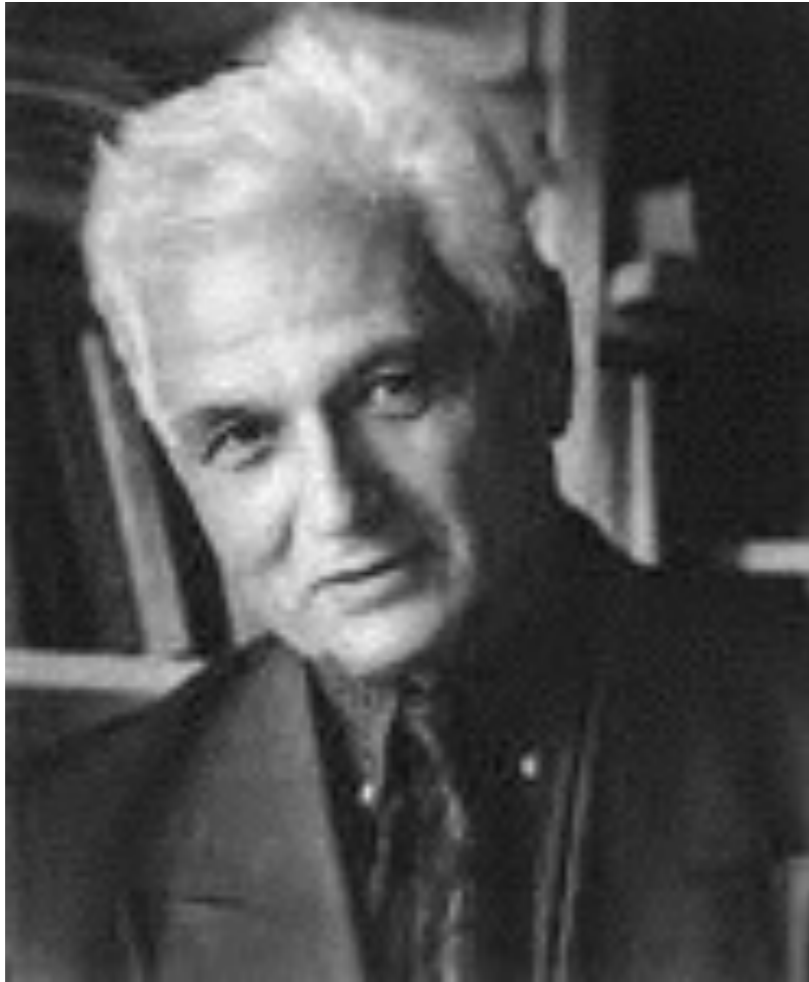


Postmodernism

Some basics of postmodern thinking:

- By tradition, it is considered important to distinguish between symbols and reality.
- A new brilliant insight: Everything's symbols!
- All language is a kind of game.
- It's all stories or meta stories!

Deconstruction



Derrida

- Derrida was a critic of the focus on logic in Western culture.
- For instance, he criticized science.
- He created the method called *deconstruction*.

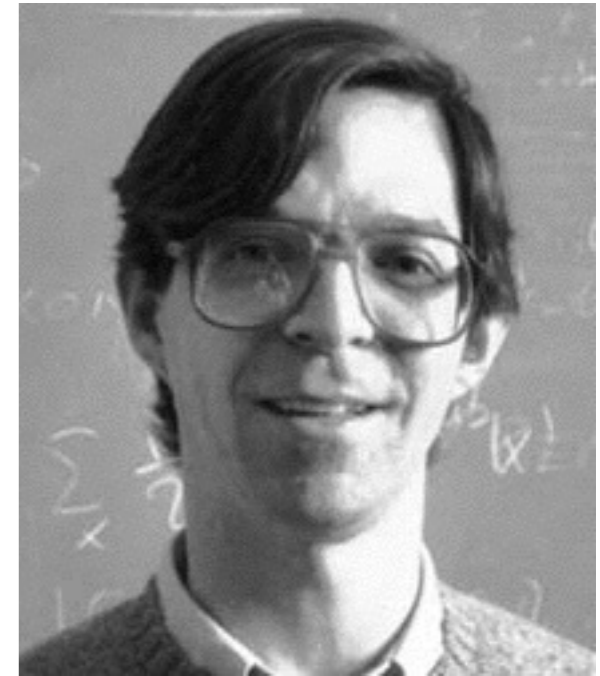
Some thoughts about this

- It is sometimes said that life consists of problem-solving.
- There are two types of problems: those that come from nature and those from humans.
- We seem to be confronted most with the second type of problem.
- The step seems not far to just take an interest in the human-generated problems.

The Sokal Affair

(From Wikipedia)

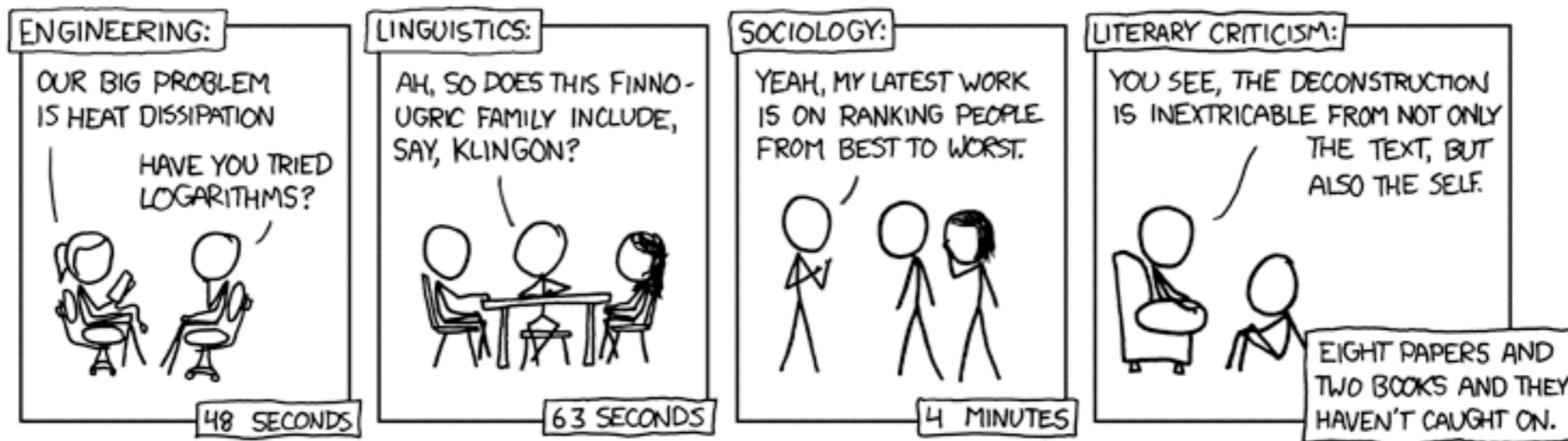
The Sokal affair, also known as the Sokal hoax, was a publishing hoax perpetrated by Alan Sokal, a physics professor at New York University. In 1996, Sokal submitted an article to *Social Text*, an academic journal of postmodern cultural studies. The submission was an experiment to test the journal's intellectual rigor and, specifically, to investigate whether "a leading North American journal of cultural studies – whose editorial collective includes such luminaries as Fredric Jameson and Andrew Ross – [would] publish an article liberally salted with nonsense if (a) it sounded good and (b) it flattered



The article, "Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity", was published in the Social Text Spring/Summer 1996 "Science Wars" issue. It proposed that quantum gravity is a social and linguistic construct. At that time, the journal did not practice academic peer review and it did not submit the article for outside expert review by a physicist. On its date of publication (May 1996), Sokal revealed in *Lingua Franca* that the article was a hoax, identifying it as "a pastiche of left-wing cant, fawning references, grandiose quotations, and outright nonsense...structured around the silliest quotations [by postmodernist academics] he could find about mathematics and physics".

MY HOBBY:

SITTING DOWN WITH GRAD STUDENTS AND TIMING HOW LONG IT TAKES THEM TO FIGURE OUT THAT I'M NOT ACTUALLY AN EXPERT IN THEIR FIELD.



The resultant academic and public quarrels concerned the scholarly merit of humanistic commentary about the physical sciences; the influence of postmodern philosophy on social disciplines in general; academic ethics, including whether Sokal was wrong to deceive the editors and readers of *Social Text*; and whether the journal had exercised appropriate intellectual rigor before publishing the pseudoscientific article.

Content of the article

"Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity" proposed that quantum gravity has progressive political implications, and that the "morphogenetic field" could be a cutting-edge theory of quantum gravity (a morphogenetic field is a concept proposed by Rupert Sheldrake that Sokal characterized in the affair's aftermath as "a bizarre New Age idea"). Sokal wrote that the concept of "an external world whose properties are independent of any individual human being" was "dogma imposed by the long post-Enlightenment hegemony over the Western intellectual outlook".

A few quotes

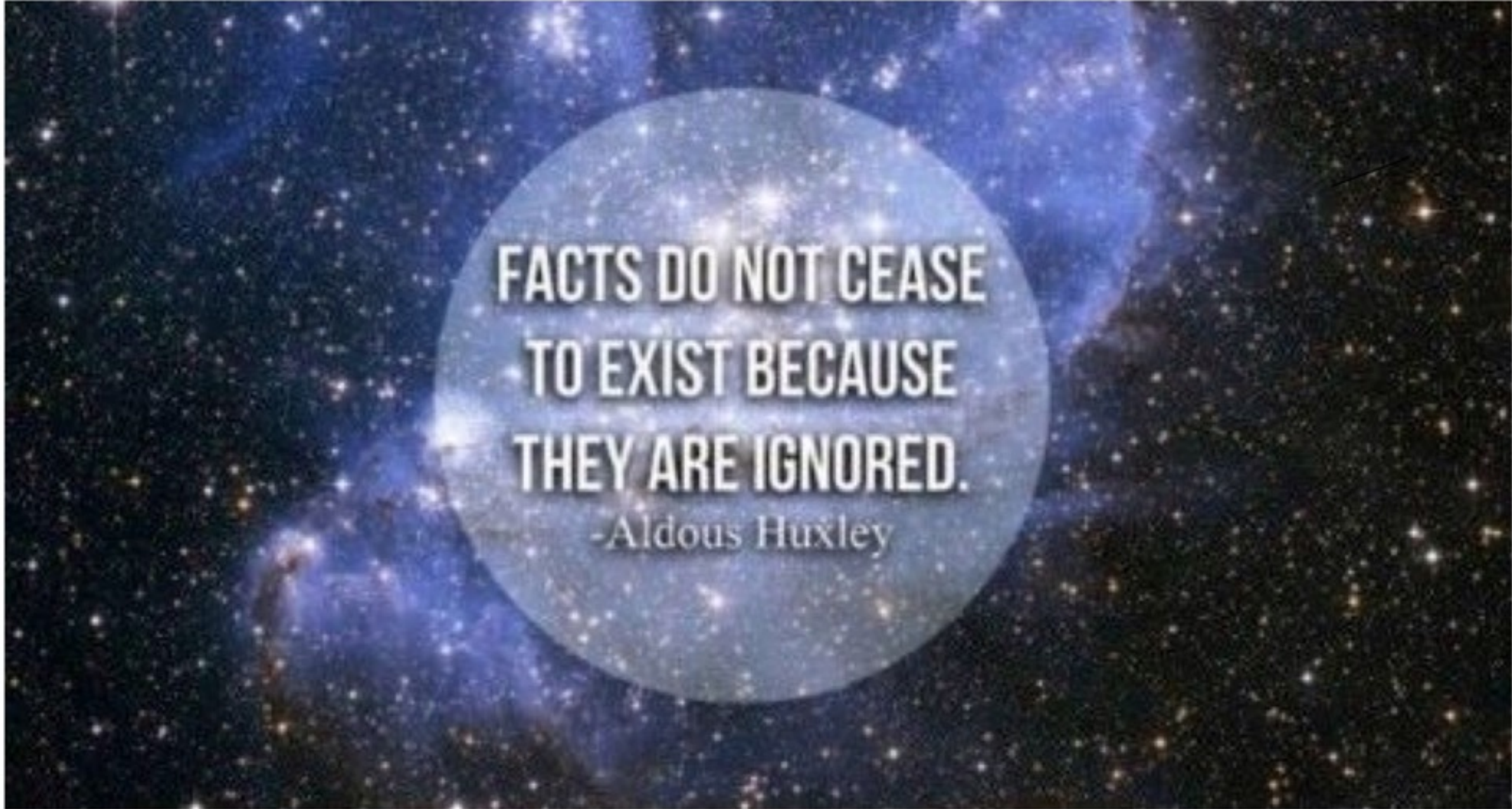
In the article, there were quotes from famous postmodernists regarding science:

- *The Einsteinian constant is not a constant, is not a center. It is the very concept of variability -- it is, finally, the concept of the game. In other words, it is not the concept of something -- of a center starting from which an observer could master the field -- but the very concept of the game ...*

- *This diagram [the Möbius strip] can be considered the basis of a sort of essential inscription at the origin, in the knot which constitutes the subject. This goes much further than you may think at first, because you can search for the sort of surface able to receive such inscriptions. You can perhaps see that the sphere, that old symbol for totality, is unsuitable. A torus, a Klein bottle, a cross-cut surface, are able to receive such a cut. And this diversity is very important as it explains many things about the structure of mental disease. If one can symbolize the subject by this fundamental cut, in the same way one can show that a cut on a torus corresponds to the neurotic subject, and on a cross-cut surface to another sort of mental disease.*

- *... natural objects are also socially constructed. It is not a question of whether these natural objects, or, to be more precise, the objects of natural scientific knowledge, exist independently of the act of knowing. This question is answered by the assumption of "real" time as opposed to the presupposition, common among neo-Kantians, that time always has a referent, that temporality is therefore a relative, not an unconditioned, category. Surely, the earth evolved long before life on earth. The question is whether objects of natural scientific knowledge are constituted outside the social field. If this is possible, we can assume that science or art may develop procedures that effectively neutralize the effects emanating from the means by which we produce knowledge/art. Performance art may be such an attempt.*

Some Final Words

A quote by Aldous Huxley is centered in a semi-transparent blue circle. The background is a deep space scene with a blue nebula and numerous stars.

**FACTS DO NOT CEASE
TO EXIST BECAUSE
THEY ARE IGNORED.**
-Aldous Huxley