

# **SCIENTISM AND ITS DISCONTENTS**

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## **PART II:**

**SCIENTISTIC PHILOSOPHY, NO;  
SCIENTFIC PHILOSOPHY, YES**

“The kind of philosophy that interests me and must, I think, interest everybody, is that philosophy which uses the most rational methods it can devise, for finding out the little that can as yet be found out about the universe of mind and matter from those observations which every person can make in every hour of his waking life. It will not include matters which are more conveniently studied by students of special sciences such as psychology...”

“It is true that philosophy is in a lamentably crude condition at present; that very little is really established about it; while most philosophers set up a pretension of knowing all there is to know---a pretension calculated to disgust anybody who is at home in any real science. But all we have to do is turn our backs upon all such vicious conduct, and we shall find ourselves enjoying the advantages of having an almost virgin soil to till...”---C. S. Peirce, “Scientific Philosophy,” c.1905



Peirce urged that philosophy be undertaken in the same spirit as the best work of the sciences, and that it should rely on experience as well as reason---though not recondite experience

today's cultural landscape is very different

- & philosophy today very different than in Peirce's day
- it is no longer dominated by theologians (given to "sham reasoning" according to Peirce)
- & by now the threat from "lawless rovers of the sea of literature" is receding

## moreover

- though much recent philosophy remains thoroughly a priori (& endlessly disputatious)
- of late there has been dissatisfaction with this model, and an interest in allying our discipline, somehow, with the sciences
- so many would say Peirce's advice is old hat



I couldn't agree less!

# because

- what's happening is that philosophy is becoming more *scientistic* rather than, in the desirable sense, more *scientific*
- some hope just to turn philosophical questions over to the sciences, others claim that questions that resist such treatment are illegitimate, etc.; this is “unphilosophical” in the extreme

# why is this so disturbing?

- for successful scientific inquiry to be even possible
- there must be a real world, in which there are kinds, laws, etc.
- we humans must have the necessary (sensory and intellectual) capacities

&

- begin to marshal and record our understanding of the world so we can build our knowledge over generations
- all scientific work presupposes this
- *but today's scientific philosophy ducks the very questions on the answers to which the possibility of the scientific enterprise depends*

An inflated balloon -  
impressive to look at  
but hollow at the core  
and easily punctured.

Dianne Feinstein

QuoteAddicts

.. it is hollow at the core

# **1. Diagnosing a Disaster: The Hollow Core of Scientistic Philosophy**

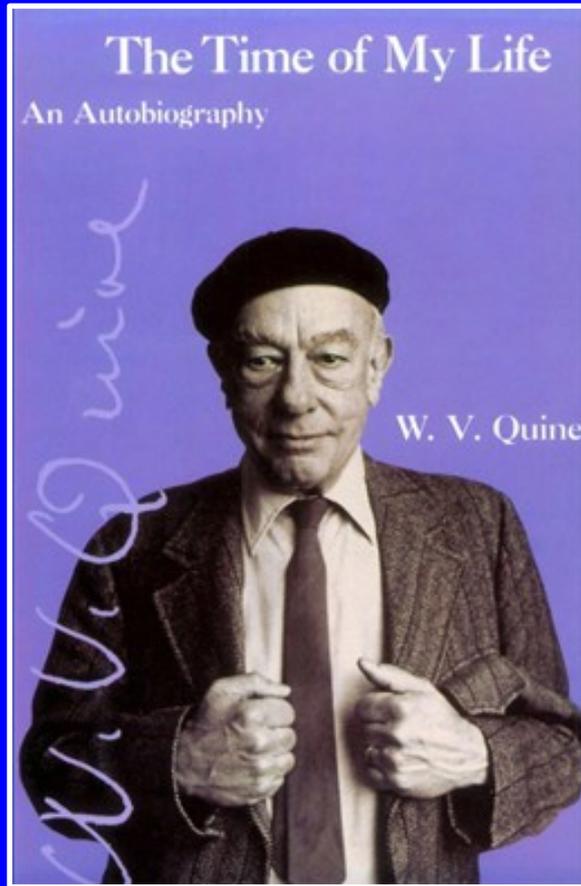
# I can't be comprehensive

- I will have to set aside e.g., evolutionary ethics, neuro-aesthetics, etc.
- & won't engage in detailed exploration of scientism in C20th philosophy
- except to mention

## two important antecedents

- Logical Positivists' efforts to banish traditional metaphysical, aesthetics, ethics, etc. as cognitively meaningless, and remake philosophy as “Queen of the Sciences” whose task is to explain the “logic of science”
- Quine's “Epistemology Naturalized” (1969)

even *before* this



Quine's critique of the analytic-synthetic distinction, skepticism about meaning, doubts about the intensional, prefigured a break with the analytic paradigm

but the ambiguities of “EN” are crucial

- reading (i): epistemology is in part empirical, not wholly a priori
- reading (ii): epistemological questions should be handed over to psychology, biology, or maybe even physics, to resolve
- reading (iii): these epistemological questions are illegitimate, and should be displaced in favor of scientific questions

## on its most modest reading

- a step in the right direction; but it was the more radical readings that caught on
- Goldman, *Epistemology and Cognition*: psych can determine what theory of justification is correct
- cognitive science (Stich) or neuroscience (the Churchlands) shows that epistemology is misconceived

at the time



these seemed like  
bizarre aberrations;  
now, it's clear they  
were harbingers of  
what was to come

# Quine had suggested

- that the theory of evolution might offer something to epistemology
- by explaining why our innate quality spaces should roughly correspond to real kinds
- of course, the idea of “evolutionary epistemology” wasn’t new

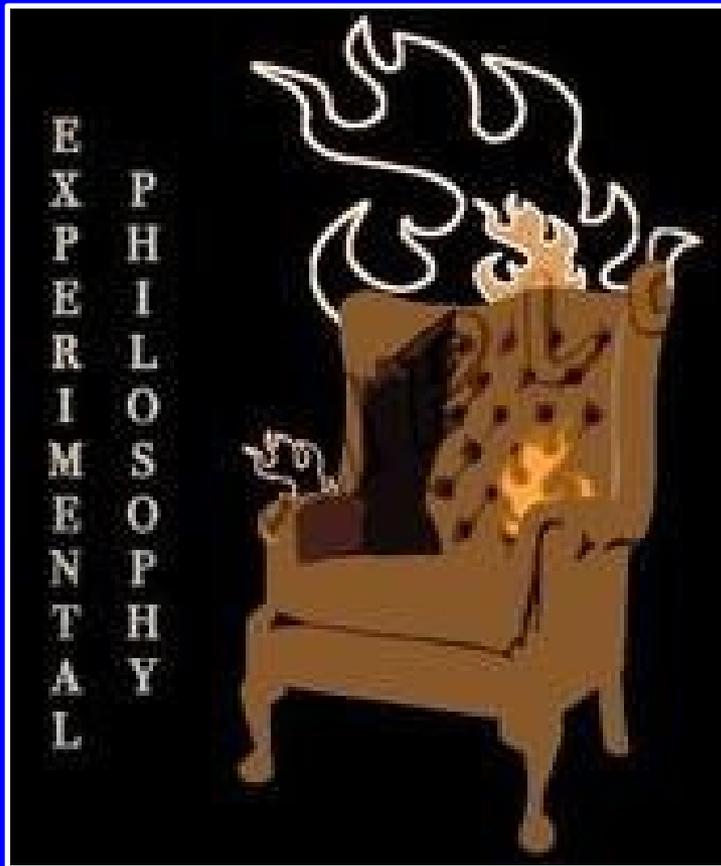
e.g.

- found in Chauncey Wright, Konrad Lorenz, Donald T. Campbell; & later
- in Popper (where, however, it wasn't much more than a metaphor)
- in Ruse (where, however, it was casual and off-hand)

but I will mention specifically

- Kornblith's 1993 book, for an important insight---and an important blind spot
- insight: two key questions must be answered: what is the world, that we may know it? What are we, that we may know the world?
- blind spot: follows Quine in equating "empirical" and "scientific"

then, around the turn of the present  
century



we heard the first  
announcements of  
the birth of  
“experimental  
philosophy” --- a  
“movement” with  
a brand name, a  
logo, even an  
anthem (!)

# “experimental” philosophers are *against*

- “mainstream” philosophers’ reliance on their own conceptual intuitions
- but what exactly are they *for*?
- & are they really revolutionaries, or only (as Knobe and Nichols say in 2008) adding a new tool?

there seem to be three different projects

- conduct little surveys to elicit more people's intuitions, or
- slightly more complex surveys to detect some factors leading to variation in responses
- “experimental philosophy of mind”

the first and second are nothing new

- Arne Ness: survey on “true” in 1938!
- classical pragmatists: deeper insight into the growth of meaning with the growth of knowledge
- the third brings to the fore

an ambiguity in “psychological”



Ambiguity

- (i) to do with the workings of the mind
- (ii) falling in the sphere of the science of psychology

# psychological truths

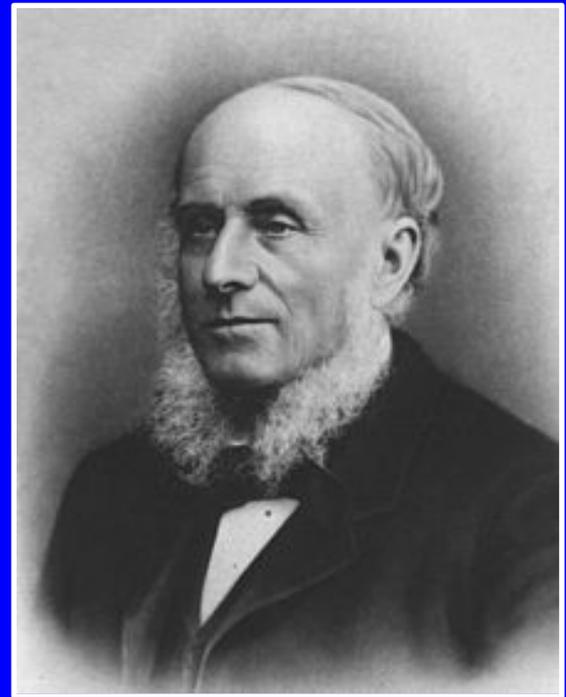
- in the first sense are known to all of us (and to novelists, etc.)
- & while psychological experiments may teach us more about the details
- we DON'T need the science of psychology to know them; which is why “experimental philosophy of mind” falls into a kind of scientism

## by the way

- experimental philosophers conduct their OWN surveys, usually in classroom settings
- why? Their questions about Gettier paradoxes, etc., wouldn't be of much interest to professional psychologists
- classroom surveys are cheap and easy----and avoid baffling members of the general public!

the suggestion that

today's experimental philosophy is an advance on old-time psychology is also seriously misleading....I'd take Alexander Bain, whom Peirce called "the grandfather of pragmatism," any day!



a different style of scientism



is found in Ladyman and Ross's 2007 book

their sub-title, “*Metaphysics Naturalized*”

- echoes Quine
- they reject analytic (and a priori) metaphysics
- but claim they are more like the pragmatists than the positivists
- sounds promising?---BUT...

... NO!

- it's a false promise, to put it very mildly indeed
- really, they offer something like a repackaged positivism
- the only legitimate task of metaphysics is the search for a “global consilience network” unifying the ontology of all the sciences

# “ontic structural realism”

- = an ontology consisting of structures, “patterns” or “mathematical models”
- in short: *things are out, patterns are in!*
- but my concern is their scientism

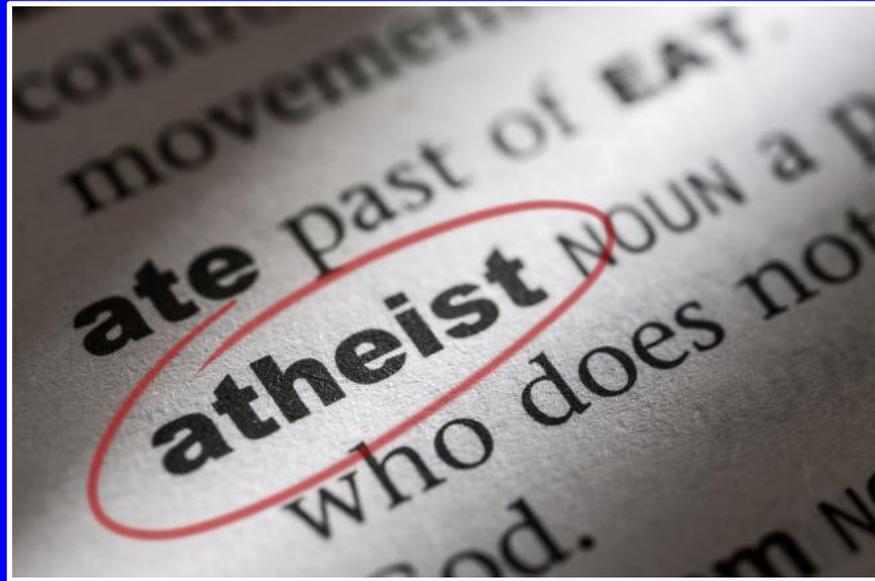
## L & R claim

- with respect to “any putative matter of fact”
- “scientific institutional processes are absolutely and exclusively authoritative”
- WOW! They’ve forgotten questions of history, law, detective work, etc. --- and “which building is the Physics Department in?” or “what did you have for breakfast?”

## & they don't tell us

- **why** (with respect to some factual questions) the best bet is to look to science; which would require real epistemology
- or---beyond “physics constrains, but doesn't determine, psychology” ---**how** brain states and processes relate to mental states and processes like belief and inference; which would require real philosophy of mind

& then, there's Alex Rosenberg



whose 2011 *The Atheist's Guide to Reality* begins by adopting “scientism” as the word for “the view all atheists share”---HUH?

ahem!



isn't there already a perfectly good word for  
that?--- "atheism"

# “physics fixes all the facts”

- Rosenberg tells us umpteen times; and anything physics *can't* explain must be an illusion
- so he adopts “nihilism” about the physical and biological worlds, AND the moral, political
- and as for the mental ...

as the title of his chapter 8 puts it

- “The Brain does Everything without Thinking about Anything at all”
- so, presumably, he wrote his book, and physicists devised their theories, *without thinking about anything at all!*

my reaction (in  
Rosenberg-ese):

OMG ...





... it's no wonder, these days, I often think of Huxley's *Brave New World*, where the Controller asks the Savage what a philosopher is, and he replies, "a man who dreams of fewer things than there are in heaven and earth."

## **2. Coping with Complexity: The Path to Scientific Philosophy**

## as usual

- I'm the cannibal among the missionaries
- amid all this scientific hubbub, I've been trying to do philosophy in a way that's *worldly*
- & that acknowledges the contributory relevance of results from the sciences, but doesn't expect them to do our job for us

## very briefly

- I begin (in the spirit of Peirce's recommendation) with everyday observations
- which reveal a world of enormous variety, but also of regularities
- and, besides natural reality, a huge array of human artifacts, physical, social, imaginative, intellectual

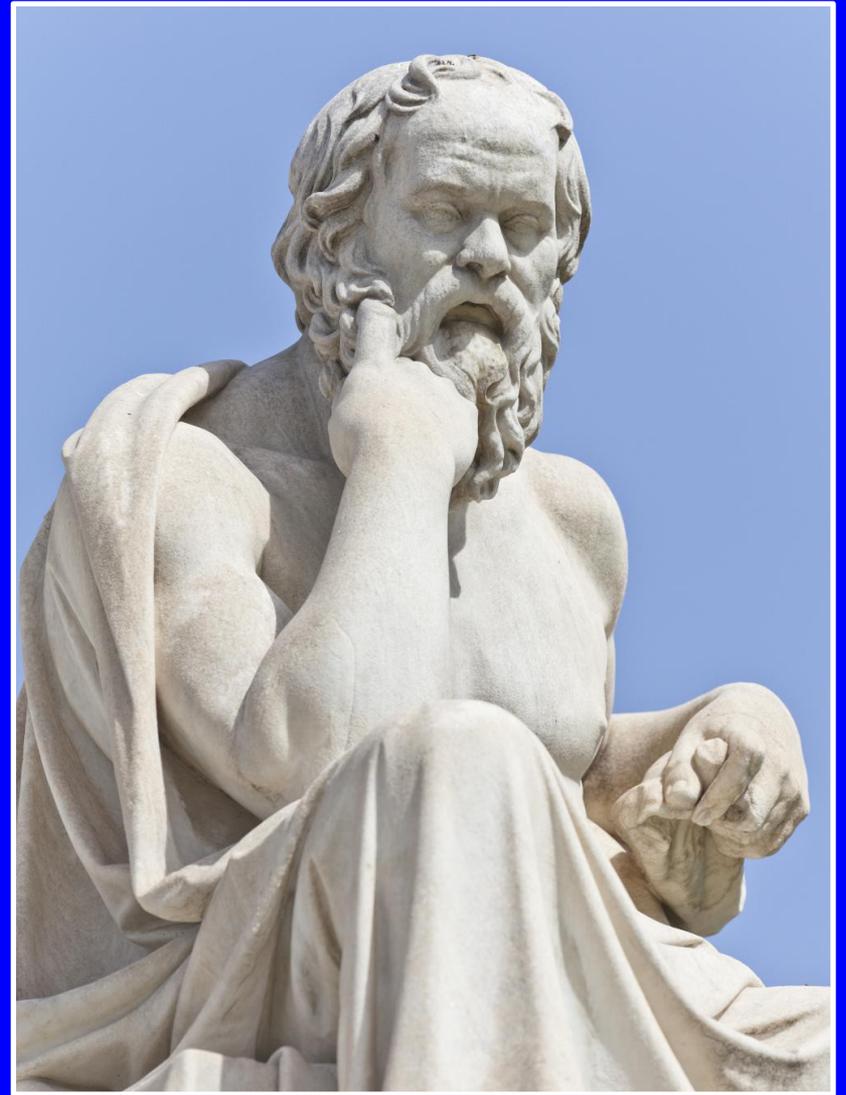
# of course

- even the simplest artifact exploits natural properties for human purposes
- transmission of knowledge (esp. since writing) enables more innovations
- we can sometimes explain and predict how people will behave

## by now

- thanks to the work of generations of scientists, much more is known (and some common-sense “knowledge” rejected)
- BUT it didn't take modern science to teach people that the world is not a chaos of random events, or that we have some ability to represent and explain it

the *philosophical* work begins when we ask: what's the difference between the real and the imaginary? What are laws and kinds? What's involved, exactly, in representing the world? Etc.



and

- it's on the answers to questions like this that the very possibility of successful scientific inquiry depends
- I'll focus on philosophy of mind, arguing
- that human mindedness is not a myth or a mystery, but

it can't be explained exclusively by

- evolutionary theory or neurophysiology---and certainly not by physics
- “it’s all physical, but it isn’t all physics”
- the explanation requires an ineliminable socio-historical cultural element

I assure you



there are no theological or Cartesian cards up  
my sleeve---*none*

# we humans

- are physical creatures in a physical world
- with brains made of physical stuff (which both enables and constrains our mental capacities)
- like every other, our species is the result of a long process of evolution (which explains most of our physical, and some of our mental, capacities)

there are striking continuities



between us and other animals; and yet...

# we really are

- “minded” as no other creature is
- only we are self-aware and able to speak, read, and write, make designs and plans, jokes, pictures, music
- AND to devise explanations and theories, including scientific theories

## scientific philosophers will ask

- if everything is physical, what could the explanation of our mindedness be, if not the size and complexity of our brains?
- and who could tell us about that, if not neuroscientists?
- but I think ...

... they're barking up the wrong tree



---or rather, the mind isn't in *any* tree; it would be impossible without the brain, but *the brain isn't all there is to it*

in a kind of virtuous spiral



culture enables mindedness, and mindedness  
enables culture

## now you may ask

- haven't I just introduced something non-physical?
- I don't think so, because
- “physical” works a bit like “healthy”: there is physical stuff, but also physical laws, kinds, phenomena, relations, including ...

# semiotic relations

- are not *not* physical (in my extended sense)
- but *are* distinctive in being triadic relations
- involving persons, words/signs, and things

## let me explain w.r.t. *belief*

- Alexander Bain wrote in 1859 that “as is admitted on all hands”
- the unmistakable sign of whether someone believes something is his “preparedness to act on what he asserts”
- SO: suppose, e.g., that Tom believes that tigers are dangerous....

then

- he has a complex, multi-form disposition to assert/assent to various sentences to that effect in his language, and to behave in appropriate ways
- which is realized in his brain in some mesh of interconnections between “receptors” and “activators”

and

- the relevant words in Tom's language are associated, in the pattern of usage in his linguistic community,
- with the things and events involved in his dispositions to non-verbal behavior

of course

this talk of  
“receptors” and  
“activators” is  
schematic---but,  
quite by chance, I  
found a tiny piece  
of confirming  
evidence



of course, also

- much more work is needed, to include (non-natural) sign-use generally
- to accommodate trickier (e.g., mathematical, theoretical) beliefs
- to extend to other propositional attitudes, such as wondering, conjecturing, inferring

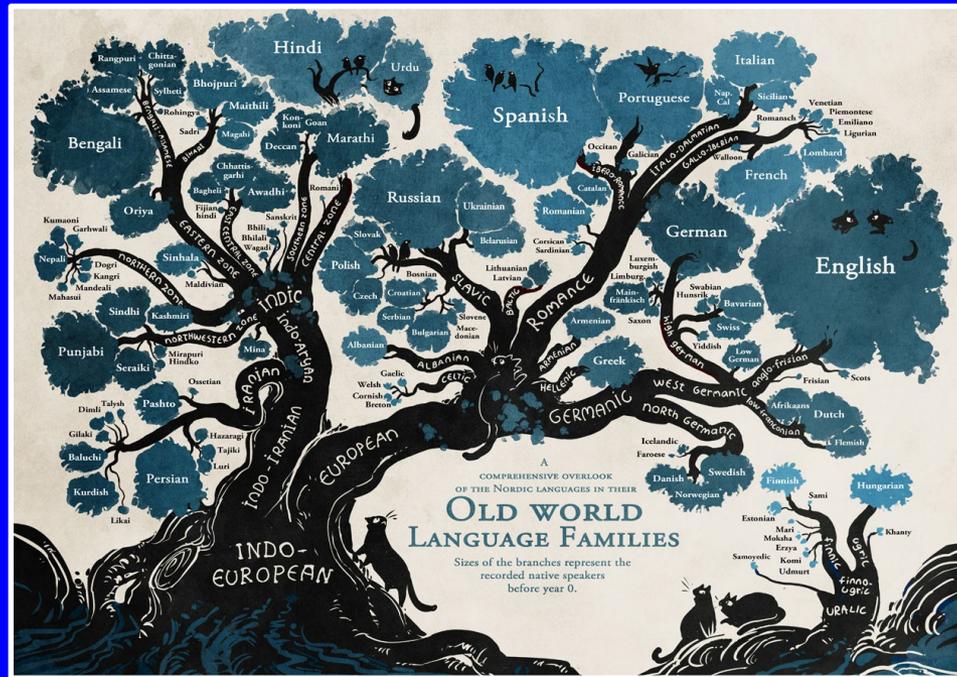
still, even in this crude form

- this account suggests how to distinguish firmness from strength of belief
- how a person's beliefs and desires sometimes explain what he does without requiring non-physical causes of physical movements
- & it is both **worldly** and **social**

SO

- as I said earlier, though the human mind would be impossible without the human brain
- the mind *isn't* (just) the brain
- but it remains to be shown that it isn't, in the end, all physics

could even the fanciest future physics explain



the entire history of all the myriad languages past and present, the meaning of Portia's "quality of mercy" speech, the US tax code in 2016...?

# the mind boggles!

- but anyway, even in principle this would be possibly only in a completely deterministic world
- & the *real* real world isn't like that, but is marked by singularities, elements of randomness
- as even Rosenberg admits when he says that physics explains why there is **random variation!**

# **3. Adjusting our Attitudes: The Problem of Perverse Incentives**

# despite their differences

- today's scientific philosophers share an inchoate sense that something is rotten in the state of philosophy---that we can't go on with business-as-usual
- that's true; but scientism is part of the problem, not the solution

## *many* things are rotten

- ever-increasing fragmentation into cliques, niches, fiefdoms, cartels
- more and more journals crammed with more and more unread articles about X's view of Y's interpretation of Z's conception of W's theory
- relentlessly conventional, and sometimes corrupt, peer-review process

## I won't even *mention*

- decades of over-production of Ph.D.s, or those horrible (and horribly corrupting) “rankings”
- combine this with a neo-analytic establishment well-entrenched but close to intellectual exhaustion, and

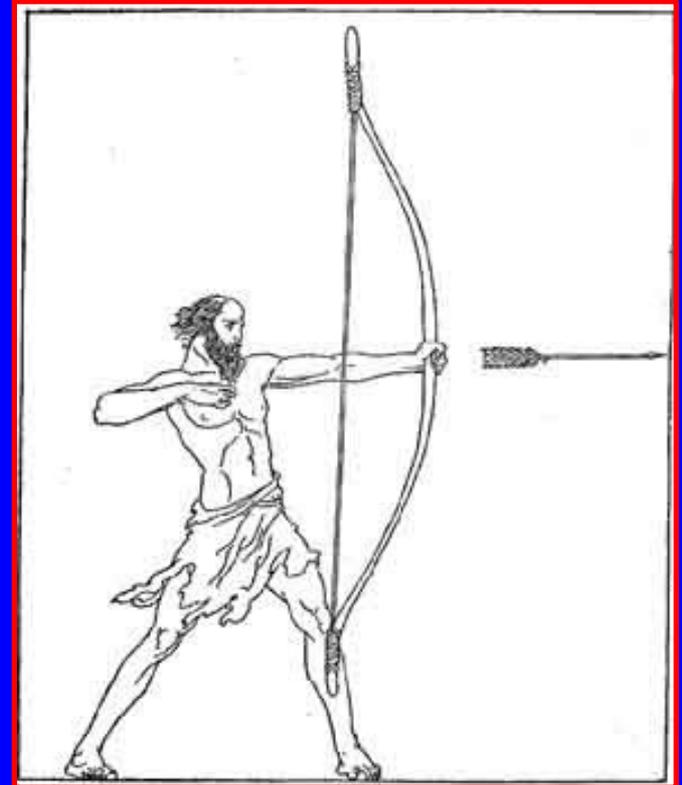


it's no wonder young Turks (and middle-aged Turks and elderly ones, too!) are bored and restive

& this is where Peirce's other theme

- about the motive with which philosophy should be conducted
- kicks in, as we try to understand the more general malaise of which those scientific fads are just one manifestation

serious phil. inquiry, like  
any serious inquiry,  
requires “drawing the  
bow upon truth with  
intentness in the eye,  
with energy in the arm” ---  
i.e., really wanting *the*  
*truth* AND really wanting  
the truth



as

- Peirce knew (“peirceistence” and “peirceverance”)
- Newton: “by always thinking unto them”
- Ramon y Cajal: *esprit de suite*
- Francis Crick: willingness to discard ideas that became untenable, and start over (and over)

## but, these days

- everything about the way universities are organized seems to conspire against this spirit
- all those demands for abstracts of the paper you haven't written, proposals spelling out what you will discover in the next few years, the review of your important achievements *in the last year* (!)
- erode the virtues needed to do real work

the same perverse incentives



threaten the integrity of the sciences---salami publishing, misleading multiple authorship, manipulation of peer review, etc.

# but the consequences

- for the humanities/for philosophy
- where the pressure of facts is less direct, & there's a tradition of unresolved disputation
- seem to me to have been even worse

In 1903, Peirce wrote

“We must expect arduous labours yet to be performed before philosophy can work its way out of the jungle... . But the prospect is no longer so desperately gloomy, if philosophers will only ... recognize that a single generation can make but little headway, but yet may faithfully clear away a few obstacles, and lying down to die, resign the axe to their successors”



but when  
perverse  
incentives tempt  
us from our task,  
the jungle just  
grows thicker  
than ever

## P.S.: a few loose ends

- is Peirce's conception scientific? No. It may appear so; but it isn't really, because he is using "science" in a variant of the old sense, to mean "serious investigation"
- does his account offer a criterion of demarcation?---no, not exactly, but ...

It DOES explain why



the idea that philosophy can be conducted purely a priori is an illusion ... but a seductive one

thank you! ... go raibh maith agaibh!

