

# The Power of Ideology in Science

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- What is science?
- Mixing Dewey and Kuhn...
- Science is made up of a set of metaphors which purport to have predictive power and whose predictions are replicable.
- Pragmatic
- Conflict between thinking and doing, pragmatism and ideology
- Ideology or philosophies are collections of beliefs, usually consistent, which guide and order thought.

- Pragmatic thinkers are not free from ideology.
- Doing requires beliefs
- What these ideas are...
- To what extent are we guided by these ideas...
- Question to keep in mind: sacrifice

# Mememes

- Ideas compete for our sacrifice
- Ideologies are mememes
- Mememes: an illuminating metaphor
- Mememes and Genes
- Reproduction and survival
- Sacrifice
- Institutions

# Power

- ...is to owe goods, service, or conformity to someone or something... to sacrifice
- To what extent do scientists owe sacrifice to
- Institutions
- Ideologies

# Ideologies in History

- Scientific revelation requires a break with previous ideologies and institutions
- Problems and paradoxes: a new explanation
- Structuralists and Behaviorists: a Parable of thesis-antithesis-synthesis
- Saussure
- B. F. Skinner

# Institutions

Scientists and academics are employed by universities and governments which require their sacrifices in order to exist.

- Paycheck: Generate interest which generates money.
- Continued employment: Politics
- Example: light as a wave vs. particle
- Corpuscularians: Malus, LaPlace, Biott
- Young: the English outsider guy, published but ignored, diffraction
- Arago: estranged from the institutions by Biott's theft of ideas
- Fresnel: the new guy, unindoctrinated
- Distortion of research by Biott
- Contest couched in corpuscularian language
- Small group opposes larger institution which seeks it's own power.
- Opposition coheres, institution continues... until...

# Ideologies in History... Continued!

- Our modern view of the self and the brain will change in the flux of history... it is not “final”.
- It is absurd to subordinate ourselves to a static ideology of science.
- It is equally absurd to imagine that in pragmatism there is no ideology.
- Both are ways a scientist becomes trapped in the ideologies of contemporary science and lose track of their place in a historical process which must ultimately reject the current assumptions.
- Scientists must reject the necessity of service to both the current ideology and current institutions
- Depth of ideology and analogy

# Works Cited

Lewontin, R.C. Biology as Ideology

Kuhn, Thomas. The Structure of Scientific Revolutions

Dewey, John. The Quest for Certainty

[www.wikipedia.org](http://www.wikipedia.org)

Frankel, Eugene. "Corpuscular optics and wave theory of light: The science and politics of a revolution in physics"  
Journal: Social Studies of Science; 1976;Vol:6(2); pag:  
141-184

Stringfellow, William. Free In Obedience: The Radical  
Christian Life

Dawkins, Richard. The Selfish Gene