The 'strong programme' and scientific anti-realism

- **Agenda** 1. Administrative
  - 2. David Bloor and the strong programme
  - 3. Reading discussion

#### Discussion prompts

- **Very** good work overall!
- EDiscussions must focus on the readings and ideas for the assigned date
- Try to be specific when you refer to ideas or link to other concepts/readings. A good prompt will do more than just ask "what do you think about X?"
- Grades soon!

- Assignments on Teams

  ! It is very easy to upload a document without "turning it in"

  ! Be sure to click "Turn in" after uploading

# David Bloor & the strong programme

# Structure of the chapter

## Define the 'strong programme' in the sociology of science

- ! Motivation and four central tenets
- Ecausal, impartial, symmetrical, reflexive

## Anticipate and refute arguments against the strong programme

- The *autonomy of knowledge* counter-argument
  - Certain knowledge does not need explanation to be considered true
- The *empiricism* counter-argument
  - Certain knowledge-producing processes tend to generate true knowledge
- E The self-refutation counter-argument
  How can we reject judgements of truth or falsehood without considering the truth or falsehood of our own theories?
- The future knowledge counter-argument
  A causal model of knowledge would allow us to 'pre-discover' future discoveries, which is inconsistent with our ideas of what knowledge is

## This can be a confusing way to structure an argument!

#### STRONG PROGRAMME

## The Sociology of knowledge should be:

(Bloor 1976, 7)

#### 1|Causal

It would be causal, that is, concerned with the conditions which bring about belief or states of knowledge. Naturally there will be other types of causes apart from social ones which will cooperate in bringing about belief.

#### 2 Impartial

It would be impartial with respect to truth and falsity, rationality or irrationality, success or failure. Both sides of these dichotomies will require explanation.

### 3 Symmetrical

It would be symmetrical in its style of explanation. The same types of cause would explain, say, true and false beliefs.

#### 4|Reflexive

It would be reflexive. In principle its patterns of explanation would have to be applicable to sociology itself. Like the requirement of symmetry this is a response to the need to seek for general explanations. It is an obvious requirement of principle because otherwise sociology would be a standing refutation of its own theories.

#### **Functionalism**

- Eventionalist accounts explain scientific processes in terms of the kind of knowledge they produce.
- EMerton looked for the kinds of structures that produce true scientific knowledge, differentiated from false.

#### "Sociology of error" (Bloor 1976, 12)

- History of science as the triumph of correct knowledge over incorrect (Whig history).
- i Aims to explain incidence of incorrect knowledge.
- i E.g. Goodyear (2016), Gould (1981), ...

**Bloor**: non-symmetric approaches rely on 'internal' explanations for things deemed true and 'external' explanations for those deemed false.

#### Knowledge as object of study

- Bloor and the other strong-programmers say that the sociology of science should incorporate a sociology of scientific *knowledge* itself.
- If They promote a search for *general, causal explanations* for emergence, maintenance, and demise of knowledge.

#### Impartial and symmetrical

- if explanations are *general*, then they should be *agnostic* to judgements of truth or falsehood.
  - Historically, such judgements are malleable.
- We should aim to explain all types of knowledge (*impartiality*), and explain them using the same theories and mechanisms (*symmetry*).

EWithout recourse to internal determinations of rationality or truth, strong programmers need a more general way to identify *knowledge*.

Rationality and truth should themselves be objects of study.

**Social criterion** for knowledge allows sociologists of scientific knowledge to define the scope of what needs to be explained.

"Of course knowledge must be distinguished from mere belief. This can be done by reserving the word 'knowledge' for what is collectively endorsed, leaving the individual and idiosyncratic to count as mere belief." (Bloor 1976, 5)

#### Feminist epistemologies

Haraway (1988)

Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective

Martin (1991)
The Egg and the Sperm