

PHIL 105 - Cause and Effect

Causal chain

A → B → C

Cattle vaccinated against rinderpest virus caused more giraffes

Cattle vaccinated

prevents

spread to wild wildebeest

so

more wildebeest

prevents

tall grass

prevents

fires

causes

more tall trees

causes

more giraffes

converging and diverging things is what makes these causal chains complicated.

Explaining Difference

a → b

b → a

c → a, c → b

a b

common = shared

Controlled Experiments

Children who play violent video games behave violently more often.

If there is data that shows that children that play violent video games behave more violently than children that don't.

The children that play is called the experimental group, the no violent video game group is the control group.

The independent variable is the children that play violent video games.

The dependent variable is the violent behaviour

So

vvg → vb

vb → vvg

there might also be a common cause

c → vb, c → vvg

there might also be no causal explanation at all

vvg, vb

Confounding Factors and alternative explanations

bullying -> plays violent VG, bullying -> violent behaviour