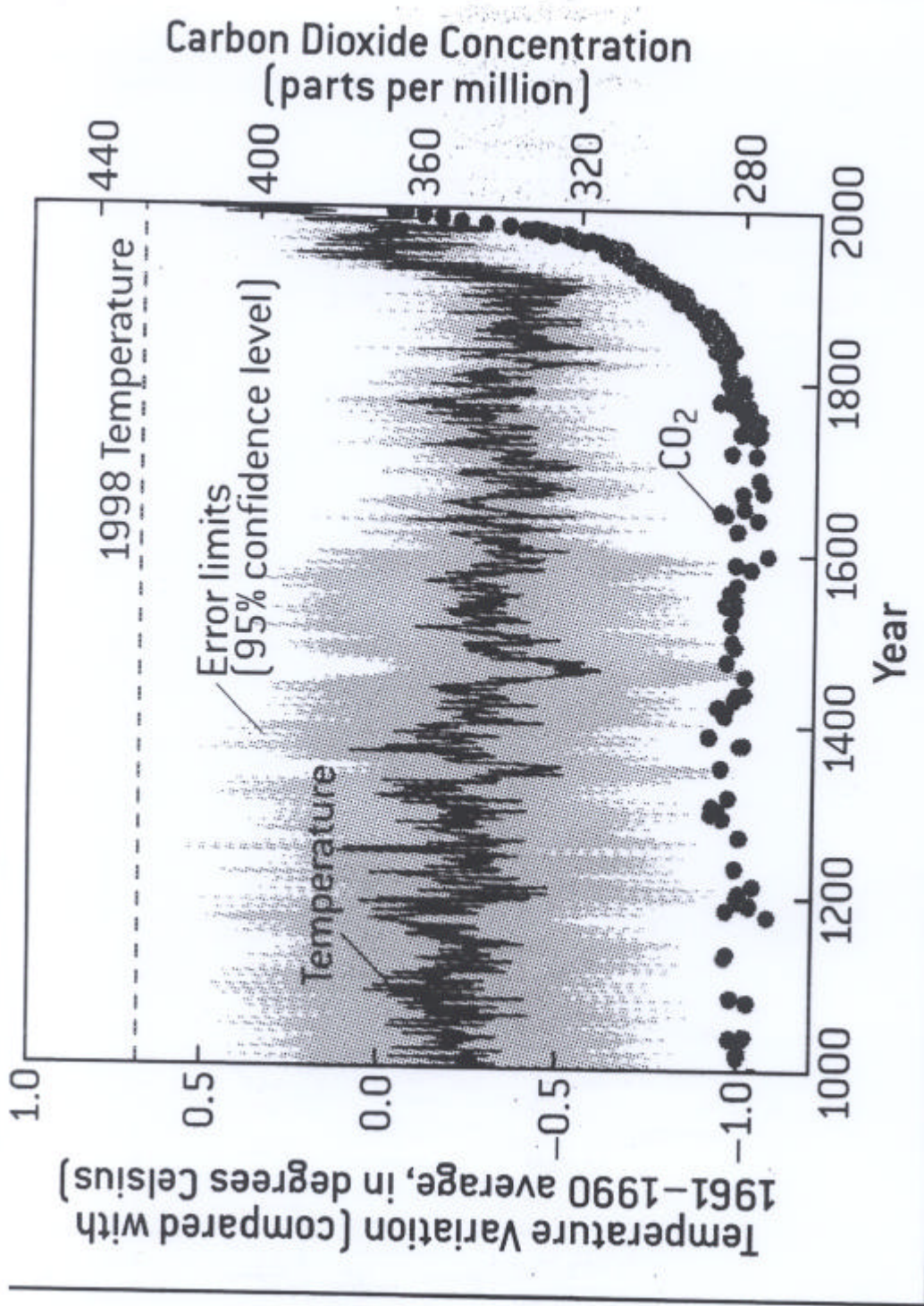


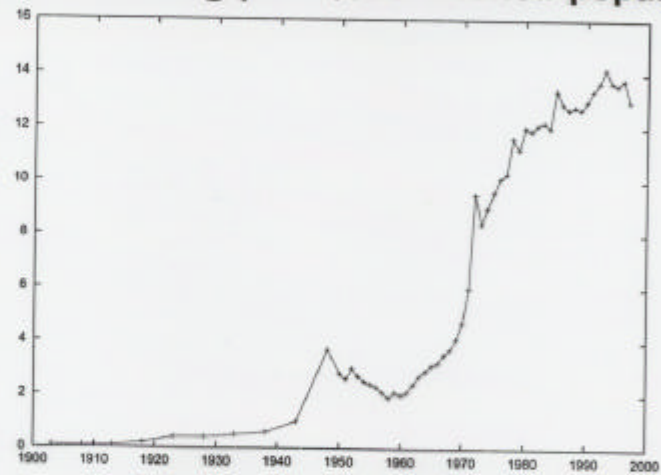
If Watson and Crick had not discovered the nature of DNA one can be virtually certain that other scientists would eventually have determined it.

With art - whether painting, music or literature - it is quite different.

If Shakespeare had not written Hamlet, no other playwright would have done so.



Trends in divorce in England and Wales Persons divorcing per 1,000 married population



Source: OPCS/ONS, various years, Marriage and Divorce Statistics, Series FM2.

“Statements are:

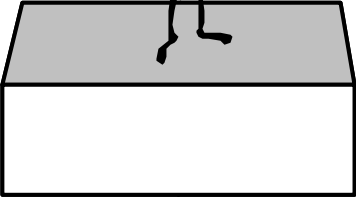
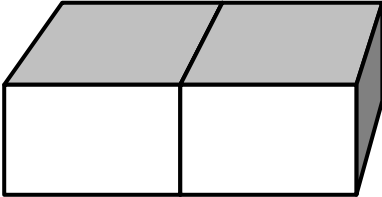
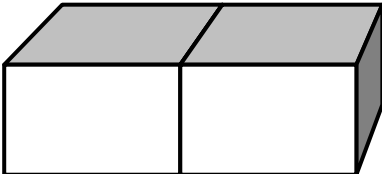
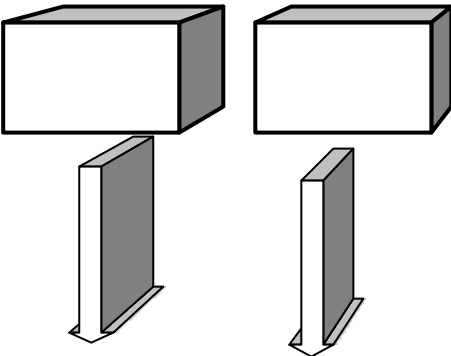
- ◆ **analytically true**
or
- ◆ **empirically**
disconfirmable
or
- ◆ **meaningless”**

Gallileo Gallilei and the falling cannon-balls

The text-books say:
classic experimental
disconfirmation
(leaning tower of Pisa .)

BUT

it was primarily a thought
experiment ...



①

A ➤ B ➤ C

②

B ➤ C ➤ A

③

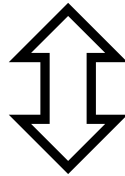
C ➤ A ➤ B

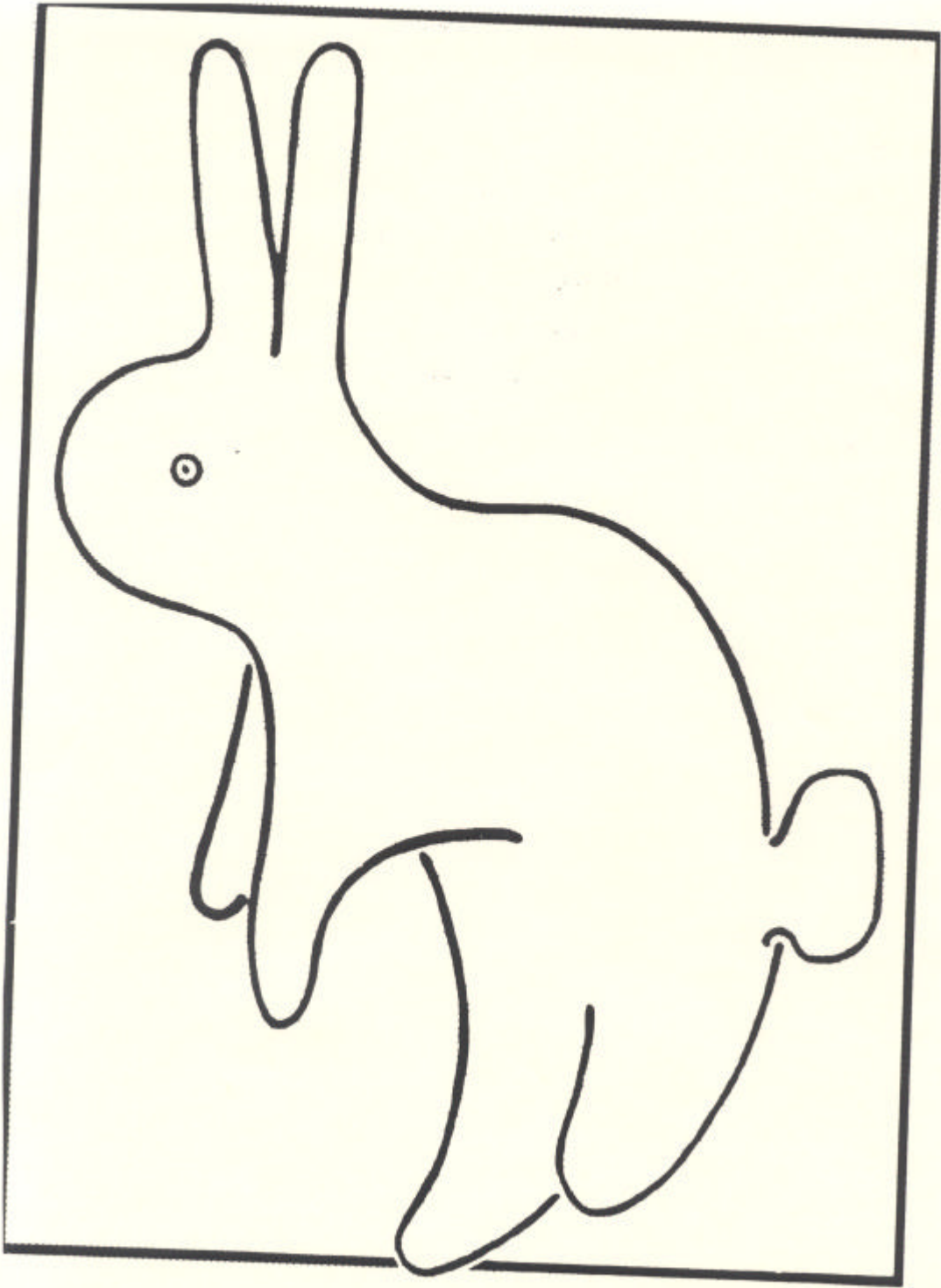
'Solidity,
extension,
figure,
motion or
rest,
and
number'

Premises



Detailed predictive
statements







“Individuals producing in a society,
and hence the socially determined production of
individuals,
is of course the point of departure.
The solitary and isolated hunter or fisherman,
who serves Adam Smith and Ricardo as a
starting point,
is one of the unimaginative fantasies of
eighteenth-century romances *à la* Robinson
Crusoe;

...

They saw this individual not as an historical
result,
but as the starting-point of history;
not as something evolving in the course of
history,
but posited by nature,
because
for them this individual was in conformity with
nature,
in keeping with their idea of human nature.
This delusion
has been characteristic of every new epoch
hitherto.”

The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. Or, to change the figure, total science is like a field of force whose boundary conditions are experience. A conflict with experience at the periphery occasions readjustments in the interior of the field. Truth values have to be redistributed over some of our statements. Reevaluation of some statements entails reevaluation of others, because of their logical interconnections -the logical laws being in turn simply certain further statements of the system, certain further elements of the field. Having reevaluated one statement we must reevaluate some others, which may be statements logically connected with the first or may be the statements of logical connections themselves. But the total field is so underdetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to reevaluate in the light of any single contrary experience. No particular experiences are linked with any particular statements in the interior of the field, except indirectly through considerations of equilibrium affecting the field as a whole.

If this view is right, it is misleading to speak of the empirical content of an individual statement - especially if it is a statement at all remote from the experiential periphery of the field.

American Middle Managers

Average salary

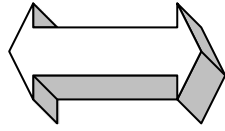
(Fortune 500 companies)

With 'housewife':

\$120,000

Dual-career: \$80,000

Ideas



Economic structure

society

group

individual

?

Levels
of
explanation

