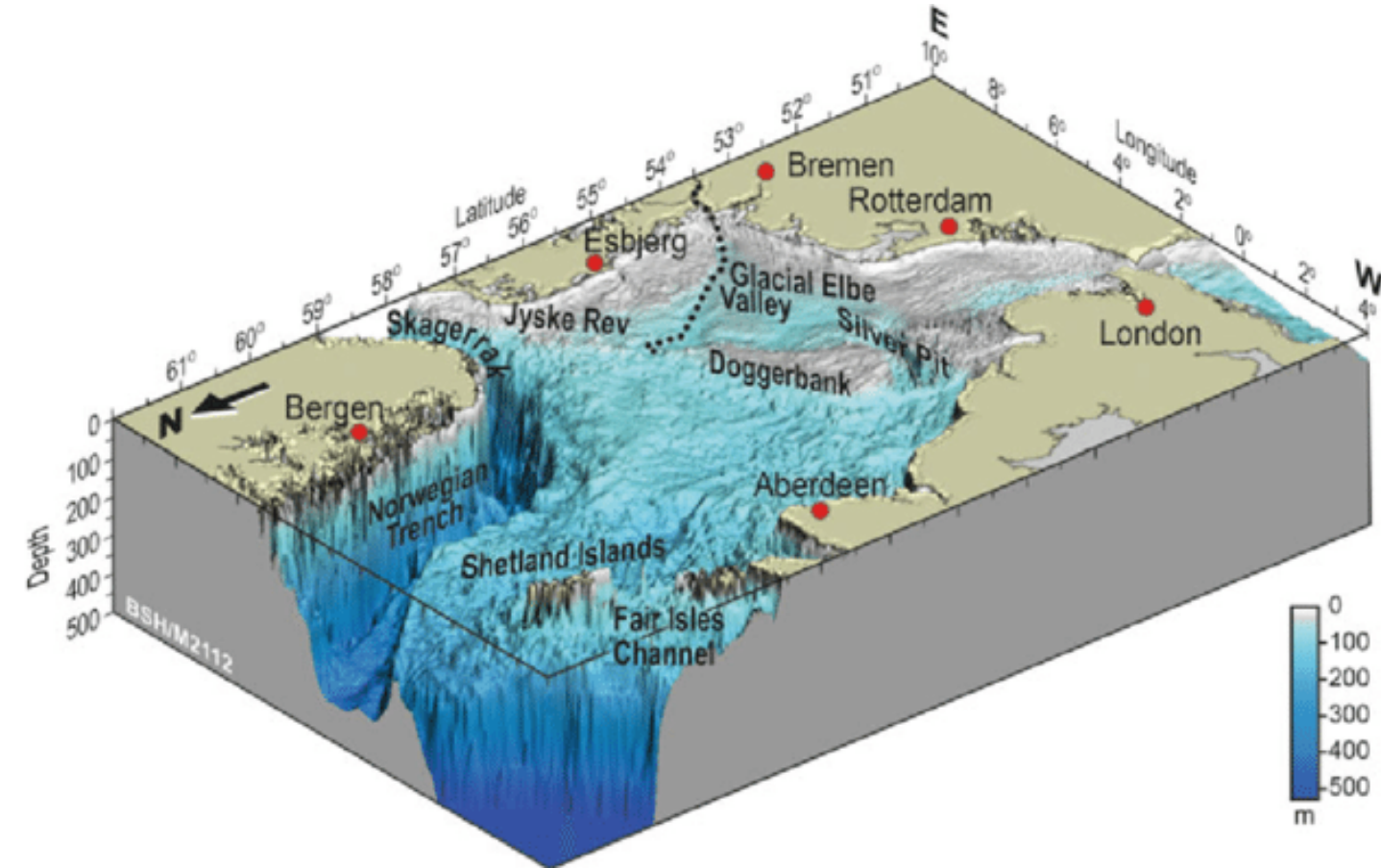


Reductionism/ Redux

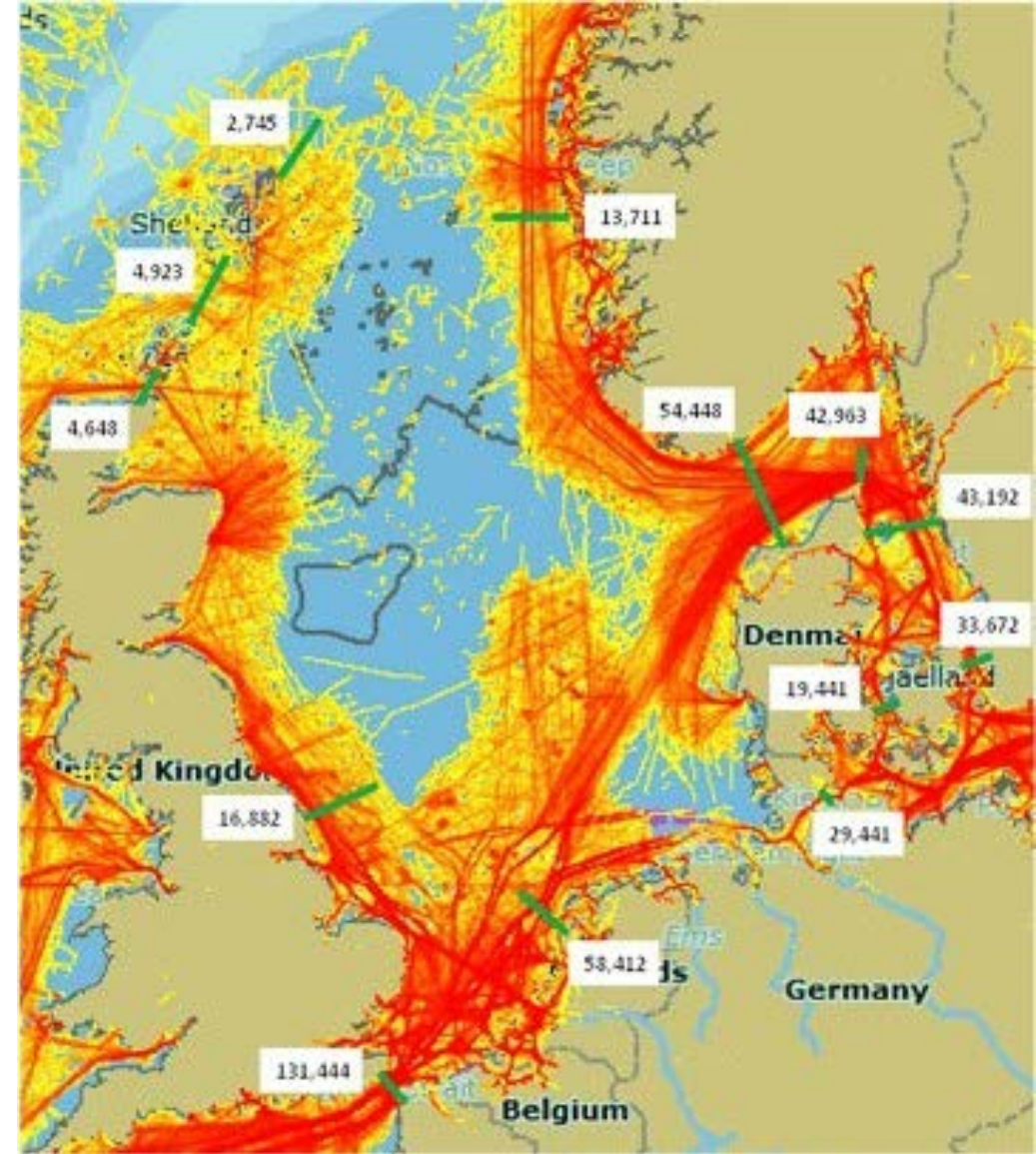


Olaus Magnus/Public Domain



Quante et al., 2016.

Inside-out, reductionist thinking



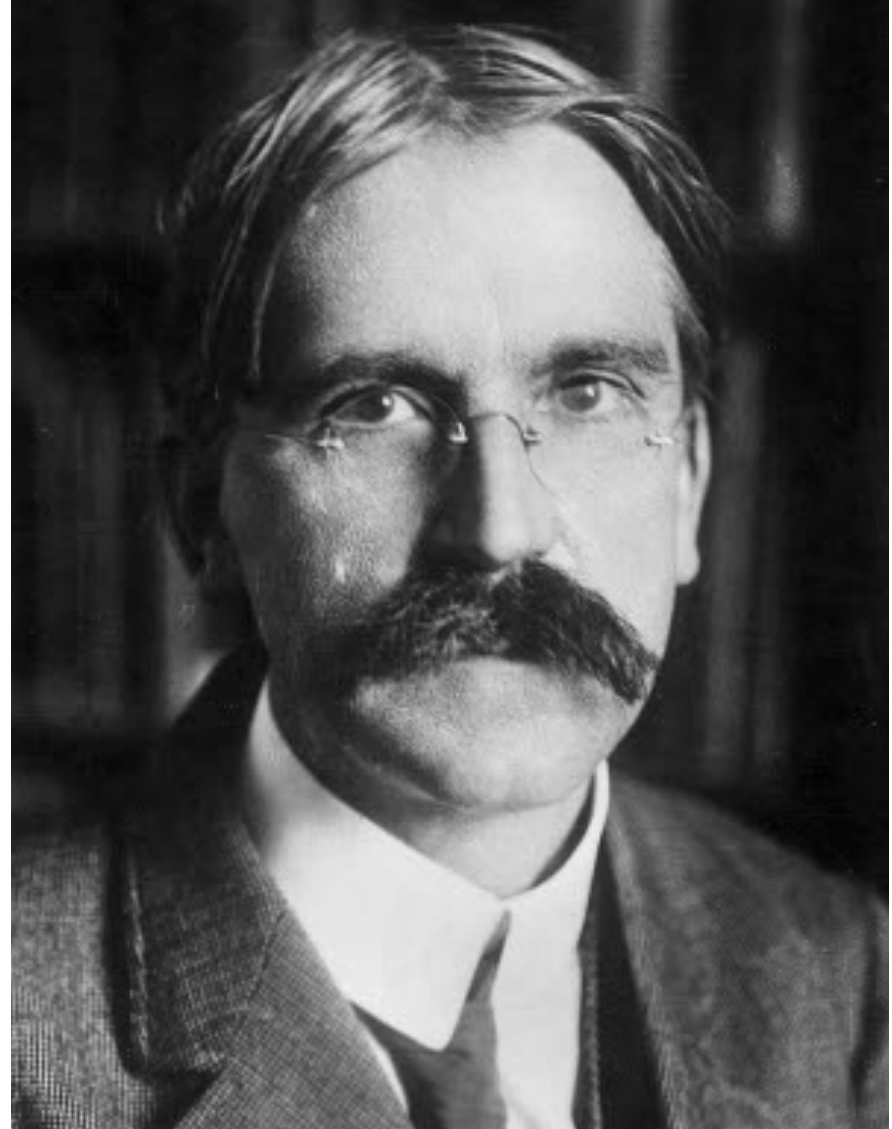
Credit: ACCSEAS

Outside-in, holistic thinking



These simple, semi-mechanical phenomena are the fundamentals of human learning also.

E. L. Thorndike, 1913



The school is the one form of social life which is abstracted & under control.

John Dewey, 1894

FIELDS ARRANGED BY PURITY

→
MORE PURE

SOCIOLOGY IS
JUST APPLIED
PSYCHOLOGY

PSYCHOLOGY IS
JUST APPLIED
BIOLOGY.

BIOLOGY IS
JUST APPLIED
CHEMISTRY

WHICH IS JUST
APPLIED PHYSICS.
IT'S NICE TO
BE ON TOP.

OH, HEY, I DIDN'T
SEE YOU GUYS ALL
THE WAY OVER THERE.



SOCIOLOGISTS

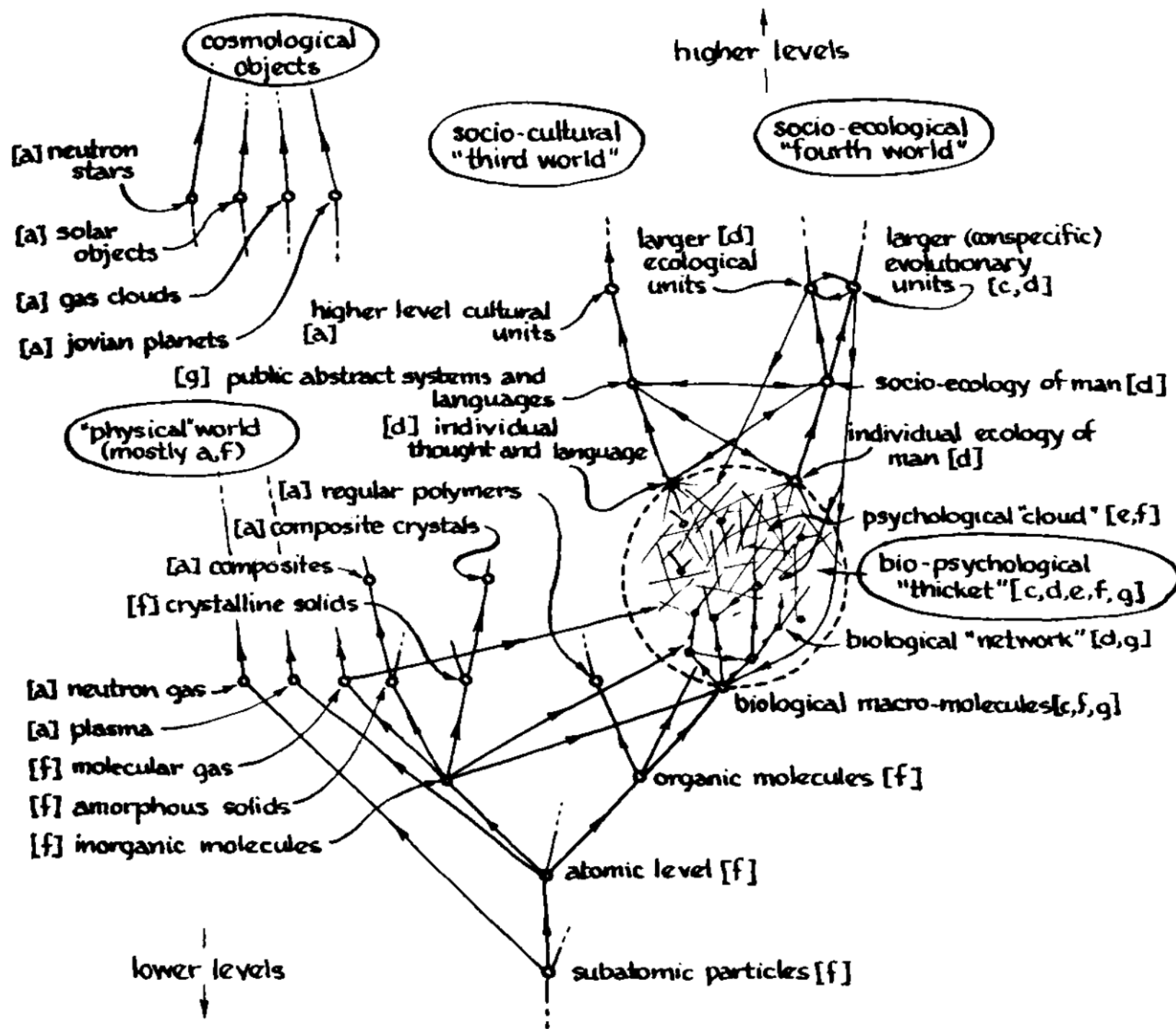
PSYCHOLOGISTS

BIOLOGISTS

CHEMISTS

PHYSICISTS

MATHEMATICIANS



Wimsatt, William C.
 "Reductionism, levels of organization, and the mind-body problem." In *Consciousness and the Brain*, pp. 205-267. Springer, Boston, MA, 1976.

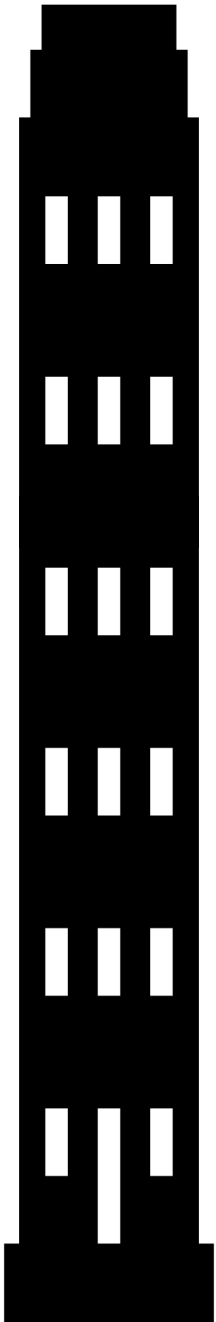


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Aplysia californica



Molecular Neuroscience

Cellular Neuroscience

Brain Systems

Cognitive Psychology

Educational Psychology

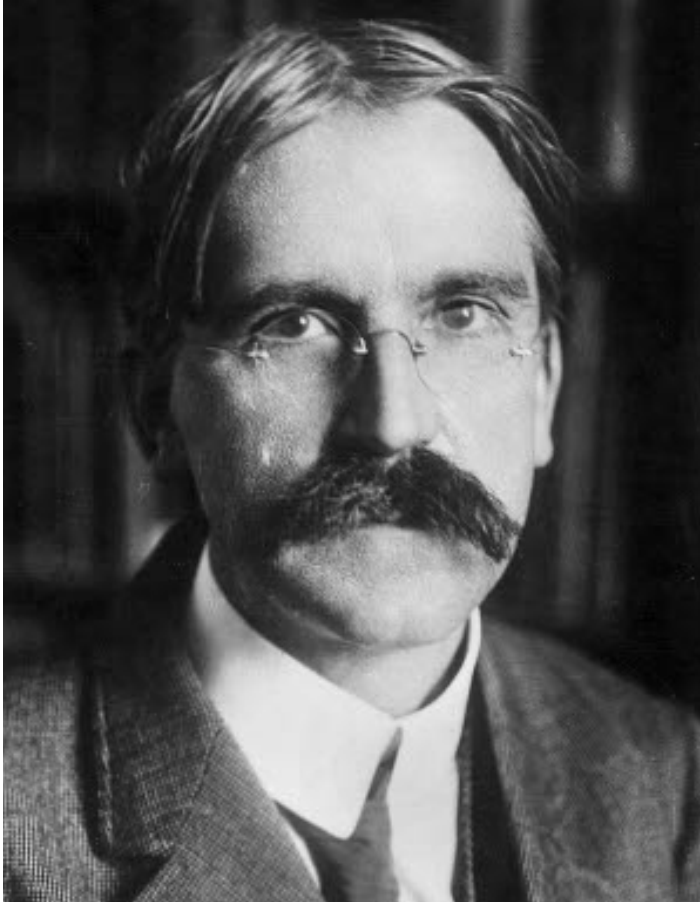
Social Sciences

...and beyond!



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Outside-in thinking



Inside-out thinking



Producing the best
learning outcomes