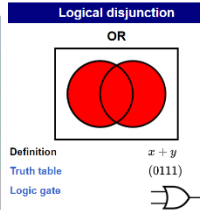


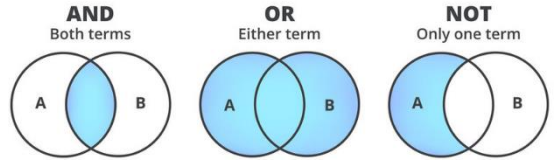
Logical addition (disjunction)

A	B	F=A∨B
0	0	0
0	1	1
1	0	1
1	1	1

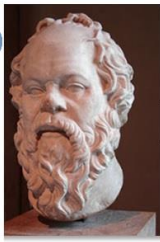
A	B	A ∨ B
True	True	True
True	False	True
False	True	True
False	False	False



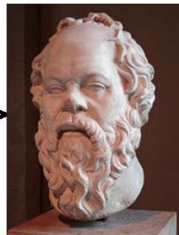
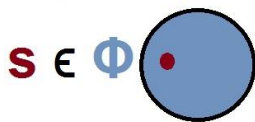
BOOLEAN LOGIC



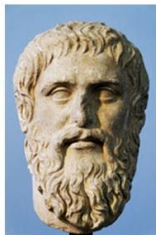
Good logic



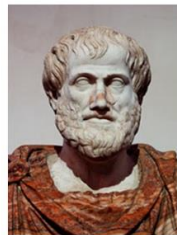
Socrates was a philosopher



Socrates

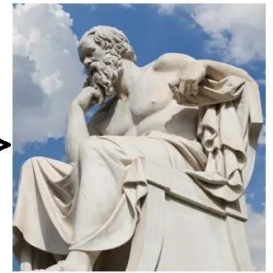
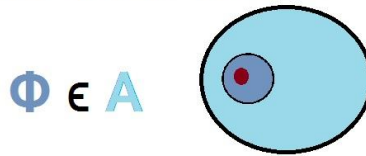


Plato

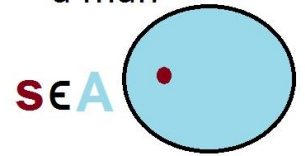


Aristotle

philosophers are men



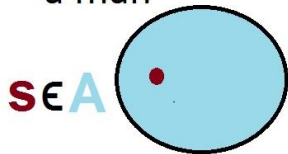
Socrates was a man



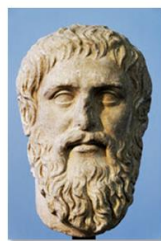
Bad logic



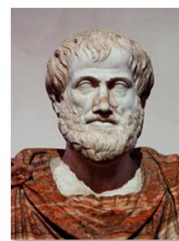
Socrates was a man



Socrates

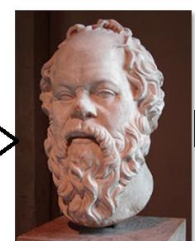
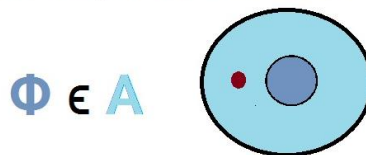


Plato



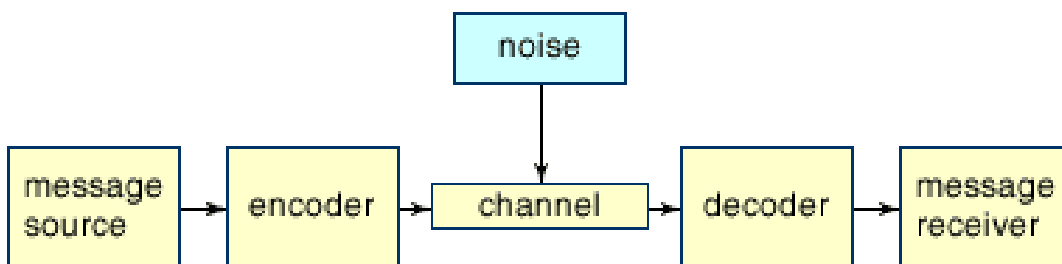
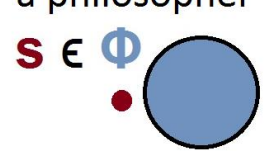
Aristotle

philosophers are men



Socrates

Socrates was a philosopher



Resume of Lecture by Pr. Bob Gallager from MIT

George Boole (1815-1864) developed Boolean logic

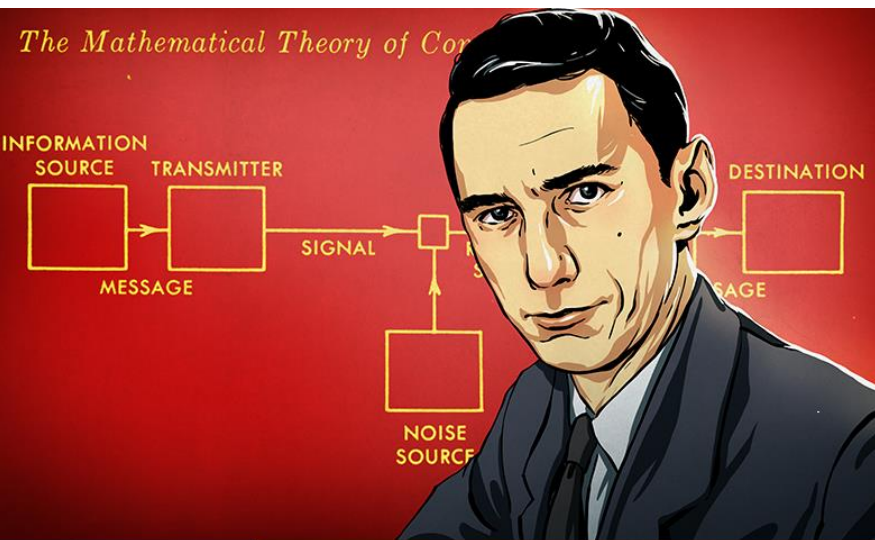
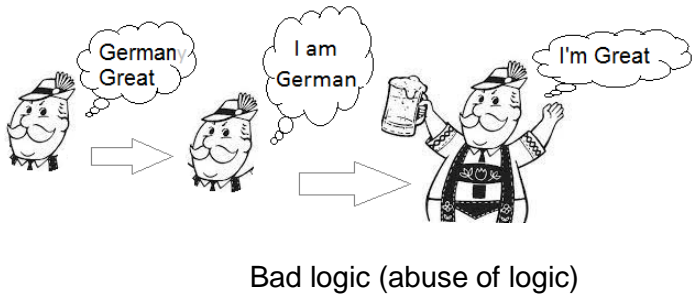
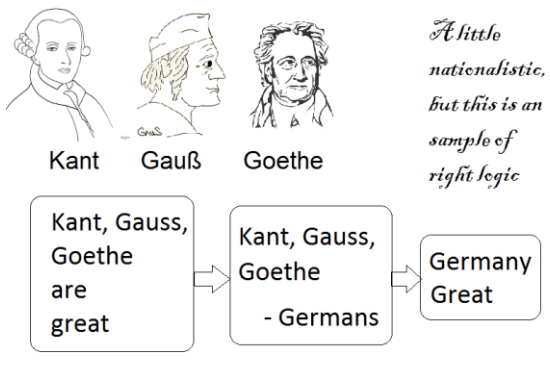
The principles of logical thinking have been understood (and occasionally used) since the Hellenic era.

Boole's contribution was to show how to systemize these principles and express them in equations (called Boolean logic or Boolean algebra).

Claude Shannon (1916-2001) showed how to use Boolean algebra as the basis for switching technology. This contribution systemized logical thinking for computer and communication systems, both for the design and programming of the systems and their applications.

Logic continues to be abused in politics, religion and most non-scientific areas

Logic continues to be abused in politics, religion, and most non-scientific areas.



Creating a reliable connection over an unreliable (noisy) channel that's what IT is about

and that's what Shannon did