

The Joy of Research

“It's an experience like no other experience I can describe, the best thing that can happen to a scientist, realizing that something that's happened in his or her mind exactly corresponds to something that happens in nature. It's startling every time it occurs. One is surprised that a construct of one's own mind can actually be realized in the honest-to-goodness world out there. A great shock, and a great, great joy.” (Leo Kadanoff, Chaos)

Can we systematically study human social behavior?

YES!

- Research methods = rules
- Theory vs. observation
- Theories & paradigms
- Observations & social regularities



Percentage Voting for Presidential Candidates (2000), by Sex

<u>Candidate</u>	<u>Men</u>	<u>Women</u>
Gore	42	54
Bush	53	43
Nader	3	2
NA	2	1
Total	100%	100%

Source: New York Times, Nov. 12, 2000 (sample: n=13,279 voters)

Percentage Voting for Presidential Candidates (2000), by Race

<u>Candidate</u>	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Asian</u>
Gore	42	90	67	54
Bush	54	8	31	41
Nader	3	1	2	4
NA	1	1	0	1
Total	100%	100%	100%	100%

Source: New York Times, Nov. 12, 2000 (sample: n=13,279 voters)

Percentage Voting for Presidential Candidates (2000), by Age

<u>Candidate</u>	<u>18-29</u>	<u>30-44</u>	<u>45-59</u>	<u>60+</u>
Gore	48	48	48	51
Bush	46	49	49	47
Nader	5	2	2	2
NA	1	1	1	0
Total	100%	100%	100%	100%

Source: New York Times, Nov. 12, 2000 (sample: n=13,279 voters)

Percentage Voting for Presidential Candidates (2000), by Region

<u>Candidate</u>	<u>East</u>	<u>Midwest</u>	<u>South</u>	<u>West</u>
Gore	56	48	43	48
Bush	39	49	55	46
Nader	3	2	1	4
NA	2	1	1	2
Total	100%	100%	100%	100%

Source: New York Times, Nov. 12, 2000 (sample: n=13,279 voters)

Percentage Voting for Presidential Candidates (2000), by Education

<u>Candidate</u>	<u><HS Grad</u>	<u>HS grad</u>	<u>Some college</u>	<u>College grad +</u>
Gore	59	48	45	48
Bush	39	49	51	48
Nader	1	1	3	3
NA	1	2	1	1
Total	100%	100%	100%	100%

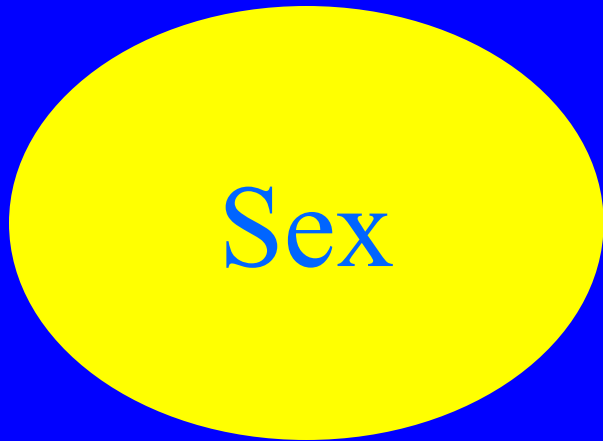
Source: New York Times, Nov. 12, 2000 (sample: n=13,279 voters)

Percentage Voting for Presidential Candidates (2000), by Family Income

<u>Candidate</u>	<u>< \$15,000</u>	<u>\$15,000- \$29,999</u>	<u>\$30,000- \$49,999</u>	<u>\$50,000+</u>
Gore	57	54	49	45
Bush	37	41	48	52
Nader	4	3	2	2
NA	2	2	1	1
Total	100%	100%	100%	100%

Source: New York Times, Nov. 12, 2000 (sample: n=13,279 voters)

Social Regularity:



1=Male
2=Female

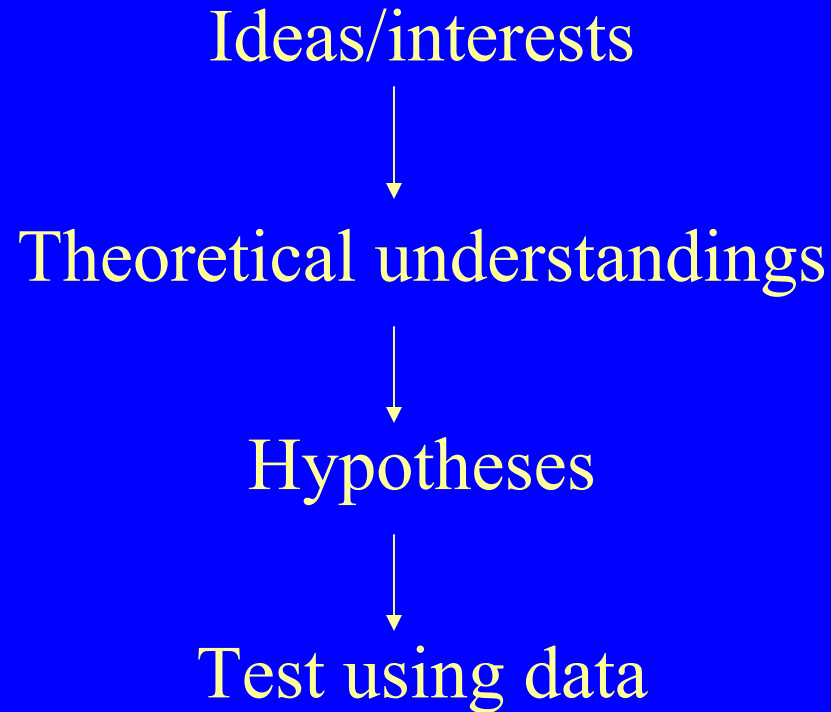
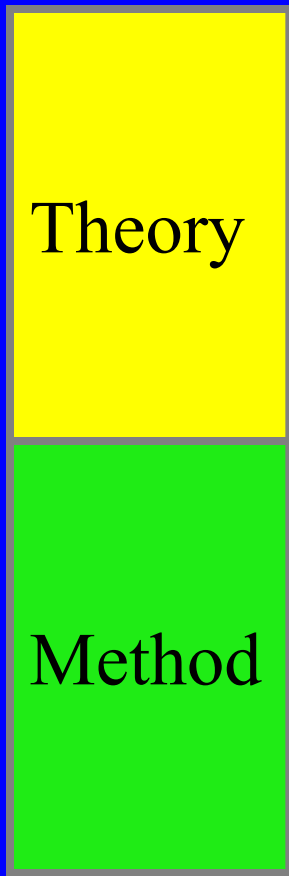


1=Gore
2=Bush
3=Nader

Remember:

DATA ARE!

Traditional Model of Science

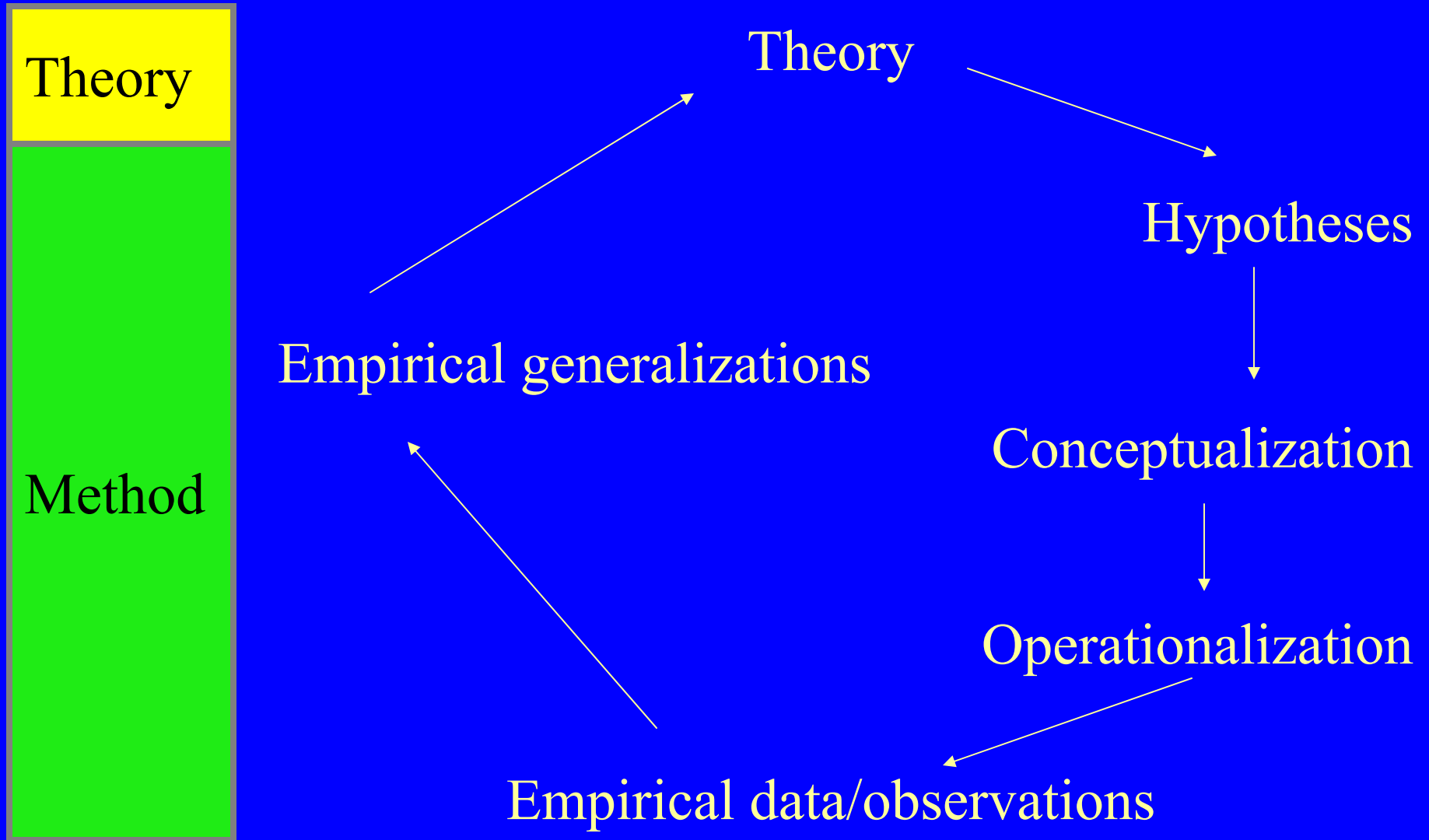


Traditional model of science:

Definitions

- **Theory:** proposition to explain social regularity
- **Hypothesis:** expectation derived from theory
- **Method:** translate into testable hypotheses
- **Deduction:** using theory to derive hypotheses
- **Problems?**
- **Induction:** reformulating theory

How Science Really Works



How Science Really Works: Definitions

- **Theory:** proposition or set of propositions
- **Hypothesis:** formal statement (express direction)
- **Conceptualization:** how to measure
- **Operationalization:** exact measurement
- **Empirical data collection/Data analysis**
- **Empirical generalization**
- **Reformulating theory:** feedback

Empirical example

Sex



Political
Attitudes

1=Male
2=Female

1=?
2=?
etc.