

# Power, a philosophical analysis

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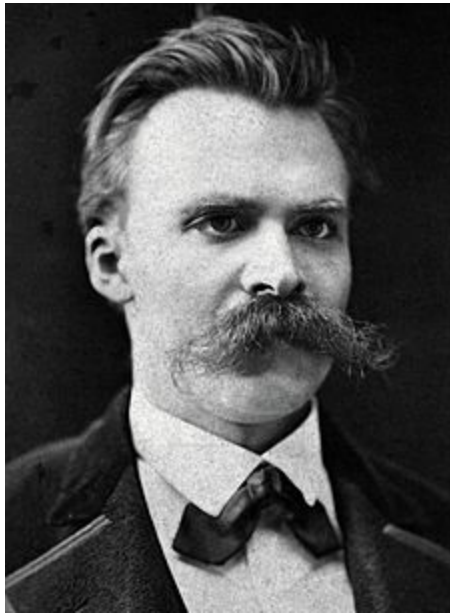
The fundamental concept in social science is  
Power, in the same sense that Energy is a  
fundamental concept in Physics

—Bertrand Russell



Where I have found the living, there I found will  
to power

—Nietzsche



- Power-to (capability)
  - Affirming, optimistic, inspiring
- Not power-over
  - Corrupting, evil

# Formal Definition

Power of an individual = maximum of the difference between any two future states of reality obtained via a course of action available to that individual

$$\Omega = \max |s_i - s_j|,$$

where  $s_i, s_j$  is the state of the world resulting from course of action  $i, j$

# Kinds of Power

- Group power is individual power aggregated across all individuals
  - National power
  - Species power
- Other kinds of power
  - Physical
  - Military
  - Economic
  - Political
  - Scientific

# The Ultimate Goal

*Long term viability of the human  
species/lineage*

The best way to achieve it is to  
maximize long term species power

# Elements of a plan

To maximize long term species power  
humankind should pursue:

1. Global political unification
2. Enhancement of science and technology
3. Expansion into space



# The Kardashev Scale

$$K = (\log_{10} W - 6) / 10,$$

Where  $W$  is the civilization's power output in watts

Type I civilization ( $K=1$ )      planet

Type II civilization ( $K=2$ )      solar system

Type III civilization ( $K=3$ )      galaxy

(humankind currently sub-Type I,  $K=0.7$ )

Questions?