

## LECTURE 21: THEORETICAL TERMS

Reading for today: “Logical foundations of the unity of science”; Reading for Wed: Hempel, “The theoretician’s dilemma”.

1. theoretical constructs / demarcation / empirical content
2. Reduction and explicit definition
  - (a) Examples
    - i. Russellian logical constructs
    - ii. Thermodynamics and statistical mechanics
    - iii. Mental states and brain states
  - (b) What is an explicit definition?
  - (c) Reduction bases
    - i. Sense data
    - ii. The physical language
    - iii. The thing language: sublanguage which is the common part of the prescientific language and the physical language
  - (d) Why did Carnap give up on explicit definition?
3. The empirical content of disposition terms
  - (a) The problem with the naive analysis [material conditionals]
  - (b) Conditional definitions
4. Physicalism: the whole language of science is reducible to the language of physics
5. The later Carnap: partial interpretation