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| <b>Title</b>        | Introduction to the Philosophy of Rudolf Carnap |
| <b>Facilitators</b> | Hunan Rostomyan, Kezia Chuaqui                  |
| <b>Sponsor</b>      | Prof. Sherrilyn Roush                           |
| <b>Department</b>   | Philosophy                                      |

### **Overview**

The aim of this student-run course is to introduce undergraduate students to the philosophy of Rudolf Carnap. Although no official course has yet been offered exclusively on Carnap by our philosophy department, philosophy undergraduates have no doubt been exposed to several important aspects of Carnap's thought through courses in philosophies of science, language, logic, mathematics, meaning, metaphysics, modality, probability, and so on. What they might not have gotten the chance to see is how the various aspects of Carnap's thought fit together. Hence the goal of this course: to present, in unified fashion, several of the central aspects of Carnap's thought through a careful reading of select passages and accompanying secondary literature.

The selection of topics to be covered is based roughly on two considerations: importance and availability. As regards the first, care has been taken to identify the important threads in Carnap's philosophy so as not to dismiss any of his major contributions. The second consideration has been a factor that has limited our attention to only those books and papers that have been translated into English and published somewhere. Until the complete works are published, due to the second consideration we have been forced to entirely neglect Carnap's important contributions to the foundations of geometry, physics, simple theory of types, and so on. Luckily, there is still a lot of important available material, around which this course is organized.

This course is aimed at an advanced introductory level. Although no philosophical background is required, basic acquaintance with logic through 12A or an equivalent is presupposed. The rest of the technical machinery needed (formal semantics, basic modal logic, theories of identity, relations, and sets), along with an overview of first-order logic, will be covered during the second week of class (see the Schedule below).

### **Expectations**

- (1) Attend class regularly. No unexcused absences.
- (2) Read the primary and as much of the secondary material as you can. \* = recommended.
- (3) Participate in class discussions.
- (4) Write weekly a paragraph summary of one of the required readings.
- (5) For 1 unit: write *either* a 3-page midterm essay *or* a 3-page final essay.
- (5) For 2 units: write *both* a 3-page midterm essay *and* a 3-page final essay.

### **How to Enroll**

Attend the first week of class to receive a course enrollment code.

### **Materials**

The readings will be made available on <http://rudolfcarnap.org/decad>

## Schedule

Week 1: Course Introduction (January 24)

Week 2: Logic Review (January 31)

Week 3: Historical Context (February 7)

Primary: (1) Carnap, R. "My Philosophical Development."  
(2) Carus, A. W. (2007) "Carnap's intellectual development."

Secondary: (a) Friedman, M. (2007) "Carnap's Revolution in Philosophy."  
(b) Gabriel, G. (2004) "Carnap Brought Home."  
(c) Richardson, A. (2012) "Carnap's Place in Analytic Philosophy"  
(d) Ricketts, T. (2004) "Frege, Carnap, and Quine"  
(e) Richardson, A. (2007) "Carnapian pragmatism."

Week 4: Metaphilosophy/Methodology (February 14)

Primary: (1) Carnap, R. *Logical Foundations of Probability*, Chapter 1.  
(2) Reck, E. (2012) "Carnapian Explication: A Case Study and Critique."

Secondary: (a) Carus, A. W. (2012) "Engineers and Drifters: The Ideal of Explication and its Critics"  
(b) Creath, R. (2012) "Before Explication."  
(c) Friedman, M. (2012) "Rational Reconstruction, Explication, and the Rejection of Metaphysics."  
(d) Kienzler, W. (2012) "Carnap's Conception of Philosophy."

Week 5: *Logische Aufbau Der Welt* (February 21)

Primary: (1) Carnap, R. *The Logical Construction of the World*, selection.  
(2) Mormann, T. (2007) "Geometric leitmotifs in Carnap's early philosophy."

Secondary: (a) Friedman, M. (1987) "Carnap's *Aufbau* Reconsidered."  
(b) Savage, C. Wade (2003) "Carnap's *Aufbau* Rehabilitated."  
(c) Pincock, C. (2007) "Carnap, Russell, and the external world."  
(d) Richardson, A. (1990) "How not to Russell Carnap's *Aufbau*."

Recommended: --- Mormann, T. (2004) "A Quasi-Analytical Constitution of Physical Space."  
--- Friedman, M. (2004) "Carnap and the Evolution of the A Priori."  
--- Mormann, T. (2003) "Synthetic Geometry and Aufbau."

Week 6: *Logical Syntax of Language* (February 28)

Primary: (1) Carnap, R. *The Logical Syntax of Language*, selection.  
(2) Wagner, P. (2009) *Carnap's Logical Syntax of Language*, Introduction.

Secondary: (a) Bar-Hillel, Y. (1963) "Remarks on Carnap's Logical Syntax of Language."

Week 7: Philosophy of Science (March 7) (**First Paper Due**)

Primary: (1) Carnap, R. *Logical Foundations of Physics*, selection.  
(2) Carnap, R. *Unity of Science*, selection.

Secondary: (a) Demopoulos (2007) "Carnap and the rational reconstruction of scientific theories."  
(b) Hempel, C. G. (1963) "Implications of Carnap's Work for the Philosophy of Science."

Week 8: Metametaphysics, Metaontology (March 14)

- Primary: (1) Carnap, R. "Empiricism, Semantics, and Ontology."  
(2) Bird, G. H. (2003) "Carnap's Internal and External Questions."
- Secondary: (a) Quine, W. V. (1948) "On What There Is."  
(b) Quine, W. V. (1951) "On Carnap's Views on Ontology."
- Recommended: --- Chalmers, D. J. (2009) "Ontological Anti-Realism."  
--- Eklund, M. (2009) "Carnap and Ontological Pluralism."  
--- Price, H. (2009) "Metaphysics after Carnap: The Ghost Who Walks?"

Week 9: Philosophy of Mind (March 21)

- Primary: (1) Carnap, R. the *Aufbau*, selection.  
(2) Carnap, R. "Physical Language as the Universal Language of Science."  
(3) Carnap, R. "Psychology in Physical Language."
- Secondary: (a) Kim, J. (2003) "Logical Positivism and the Mind-Body Problem."

Week 10: Philosophy of Mathematics (April 4)

- Primary: (1) Carnap, R. *Logical Syntax of Language*, selection.  
(2) Carnap, R. "The Logicist Foundations of Mathematics".  
(3) Carnap, R. *Foundations of Logic and Mathematics*, selection.  
(4) Goldfarb, W. (2009) "Carnap's Syntax Programme and the Philosophy of Mathematics"
- Secondary: (a) Ricketts, T. (2007) "Tolerance and Logicism."  
(b) S. Awodey & A. W. Carus (2004) "How Carnap Could Have Replied to Godel."
- Recommended: --- Godel (1953) "Is Mathematics a Syntax of Language?"  
--- Quine, W. V. (1936) "Truth by Convention."

Week 11: Logic (April 11)

- Primary: (1) Carnap, R. *Logical Syntax of Language*, selection.  
(2) Carnap, R. *Formalization of Logic*, selection.  
(3) Carnap, R. *Foundations of Logic and Mathematics*, selection.  
(4) Carnap, R. "The Old and the New Logic."  
(5) Reck, E. (2007) "Carnap and Modern Logic."
- Secondary: (a) Reck, E. (2004) "From Frege and Russell to Carnap."

Week 12: Semantics, Truth, Analyticity (April 18)

- Primary: (1) Carnap, R. *Logical Syntax of Language*, selection.  
(2) Carnap, R. *Introduction to Semantics*, selection.  
(3) Carnap, R. *Meaning and Necessity*, selection.  
(4) Awodey, S. (2007) "Carnap's quest for analyticity."
- Secondary: (a) Awodey, S. (2012) "Explicating 'Analytic'."  
(b) Friedman, M. (1988) "Logical Truth and Analyticity in Carnap's [LSL]."  
(c) Quine, W. V. (1963) "Carnap and Logical Truth."

Week 13: Modal Logic (April 25)

- Primary: (1) Carnap, R. *Meaning and Necessity*, Chapter 5.  
(2) Carnap, R. "Modalities and Quantification."  
(3) Schurz, G. (2000) "Rudolf Carnap's Modal Logic."

- Secondary:
- (a) Gottlob, G. (1999) "Remarks on a Carnapian Extension of S5."
  - (b) Schurz, G. (2005) "Logic, Matter of Form, and Closure under substitution."
  - (c) Hendry & Pokriefka (1985) "Carnapian Extensions of S5."

Week 14: Probability, Induction, Information (May 2) (**Second Paper Due**)

- Primary:
- (1) Carnap, R. *Logical Foundations of Probability*, selection.
  - (2) Carnap, R. "Two Concepts of Probability."
  - (3) Carnap, R. "On Inductive Logic."
  - (4) Y. Bar-Hillel & R. Carnap (1953) "Semantic Information."

- Secondary:
- (a) Zabell, S. L. (2007) "Carnap on probability and induction."

Recommended: --- Kemeny's, Burks', Putnam's, Nagel's contributions to the Schilpp volume.