Philosophical Problems in Logic: Logical Subtraction

Fall 2019, Wednesdays 6-8:50pm, Marx Hall 201 **Instructor**: Dan Hoek; dhoek@princeton.edu

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Office hours: Thursday 10-12, or by appointment

Course Summary

In philosophy, as in life, we often have occasion to take something back. Sherlock Holmes was a clever detective who lived on Baker Street, except that he did not exist. Belief is the same as knowledge, except it need not be true. Lying is wrong, except when you have a good reason. There are infinitely many primes, except that numbers do not exist. In all these cases, one intuitively wants to subtract something from what was said before. Conceptually, logical subtraction is something like the inverse of logical addition or conjunction. This course surveys recent theories of logical subtraction and investigates potential applications.

Assessment

This is an ungraded graduate course without official coursework.

Bracketed readings are optional.

October 23: Introduction

Robert Jaeger, 1973, "Action and Subtraction." The Philosophical Review 82(3): 320-329.

(Stephen Yablo, 2006, "Non-Catastrophic Presupposition Failure." In: *Content and Modality: Themes From the Philosophy of Robert Stalnaker*, Thomson and Byrne (eds), 164-190. Oxford University Press.)

October 30th: Halloween Break

November 6th: Subject Matters and Parts

David K. Lewis, 1988, "Relevant Implication." Theoria 54(3): 161-74.

Ch. 1-3 of Stephen Yablo, 2014, Aboutness, Princeton, NJ: Princeton University Press.

(§1.1-§1.5, §2.1-2 of Kit Fine, "A Theory of Truthmaker Content" J. of Philosophical Logic 46(6): 625–681.)

November 13th: Loose Talk and Metaphor

Kendall Walton, 1993, "Metaphor and Prop-Oriented Make-Believe." In: *European J. of Phil.*, 1(1):39-57. §1-3, §4.4-6 of Daniel Hoek, 2018, "Conversational Exculpature." *The Phil. Review* 127(2): 151-186. (Ch. 9-10 of Stephen Yablo, 2014, *Aboutness*, Princeton, NJ: Princeton University Press.)

November 20th: Fictionalism about Mathematics

Gideon Rosen, 2002, "A Study in Modal Deviance." In: *Conceivability and Possibility*, John Hawthorne and Tamar Gendler (eds.), 283-307. New York: Oxford University Press.

(§5-6 of Joseph Melia, 2000, "Weaseling Away the Indispensability Argument." Mind 109: 466-71.)

Mark Colyvan, 2010, "There is No Easy Road to Nominalism." Mind 119(474): 285-306. (Skip §2.)

§4.7 - §5 of Daniel Hoek, 2018, "Conversational Exculpature", 187-193.

(Lloyd Humberstone, 2000, "Parts and Partitions." In: Theoria 66(1): 41-82.)

November 27th: Thanksgiving Break

December 4th: The Limits of Subtraction

Ch. 8, 11 of Stephen Yablo, 2014, Aboutness.

Cian Dorr, 2010, "Of Numbers and Electrons." Proc. of the Aristotelian Society 110(2.2): 133-181.

(§2.4-2.5 of Kit Fine 2017, "A Theory of Truthmaker Content.")

December 11th: Frege's Puzzle

Jennifer Saul, "Substitution and Simple Sentences." Analysis, 57(2): 102–108.

Mark Crimmins, 1998, "Hesperus and Phosphorus: Sense, Pretense, and Reference." In: *The Philosophical Review*, 107.1.

(Samuel Cumming, 2018, "Variabilism." The Philosophical Review 127(3): 323-369.)

(Andrew Bacon and Jeffrey Russell, 2019, "The Logic of Opacity." *Philosophy and Phenomenological Research* 99(1): 81-114.)