It is well known that, for example, the Continuum Hypothesis can’t be proved or disproved from the standard axioms of set theory or their familiar extensions (unless those axiom systems are themselves inconsistent). Some think it follows that CH has no determinate truth value; others insist that this conclusion is false, not because there is some objective world of sets in which CH is either true or false, but on logical grounds. Claims of indeterminacy have also been made on the basis of such considerations as the existence of non-standard models of arithmetic, with similar rejoinders. We’ll read some representative examples of the various positions and replies. (For background on second-order logic, see Stewart Shapiro, Foundations without Foundationalism: a Case for Second-Order Logic, (Oxford: Oxford University Press, 1991), chapters 3-5, and W.V. Quine, Philosophy of Logic (Englewood Cliffs, NJ: Prentice Hall, 1970), pp. 64-68.)

**Second-Order Logic**


**Plural Logic**

George Boolos, ‘To be is to be a value of a variable (or to be some values of some variables’), in his Logic, Logic and Logic, (Cambridge, MA: Harvard University Press, 1998), chapter 4.

--------, ‘Nominalistic platonism’, Logic, Logic and Logic, chapter 5.

**Schema Logic**


**First-Order Logic**


**Additional reading**