Semantic Theory 2022: Exercise sheet 5

Exercise 1

Give the truth conditions for the following sentences using Generalised Quantifier Theory: interpret each VP as a property (i.e., a set of entities) and interpret quantified noun phrases as sets of properties. Illustrate your answer with a graphical depiction of a model in which the sentence is true.

a. Every wizard but Harry fears Voldemort.

b. Some but not all Muggles are afraid of magic.

c. At most five girls play Quidditch.

d. Few Gryffindors are lazy.

Exercise 2

Determine the monotonicity properties (left and right) of the following determiners. Show how you derived these monotonicity properties.

a. some but not all

b. at most five

c. exactly five

Exercise 3

Prove that the following statement holds:

- The external negation of an upward monotonic quantifier is a downward monotonic quantifier.