Semantic Theory 2019: Exercise sheet 4

Exercise 1

Give the truth conditions for the following sentences, interpreting the (complex) determiner as a relation between sets. You can interpret each VP as a property (i.e., a set of entities). Illustrate your answer with a graphical representation of a model in which the sentence is true.

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

b. Every wizard but Harry fears Voldemort.

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. at least five

b. at most five

c. exactly five

d. some but not all

Exercise 3

Prove that the following statement holds:

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