

Zimmermann and Sternefeld (2013) *IntoSem*  
Chapter 6: Quantifiers

**Exercises**

**Exercise 1: The verb *to be* or not the verb *to be***

In Section 5, Zimmermann and Sternefeld suggest that in a predicative construction like (1), both the verb *be* and the indefinite article *a* are vacuous.

- (1) Devil is a wolf.



What support for this view could be got from translating (1) into Russian?

Zimmermann and Sternefeld cite in support (page 137) that in German, the indefinite article is optional “in these contexts”.

How accurate is that, considering cases like (57b), rendered here as (2)?

- (2) Paul is a nerd.

If you do not have reliable intuitions about German, try Norwegian.

### Exercise 2: *most* and *many*

Give a definition of the determiner *most* patterned on the definitions of *a*, *every* and *no* in Chapter 6, Section 1 (page 117).

(The number of elements in a set  $S$  – the **cardinality** of  $S$  – can be written as  $|S|$ .) Example:

(3) Most HF students are women.

Next, discuss whether it is possible to give a definition of *many*, and what it might look like.

Is *many* **intersective** and thus **symmetric**? Example:

(4) Many EU countries are monarchies.

### Exercise 3: (Anti-)Persistence and *most*

Some determiners, like *some*, are **persistent**, others, like *every*, are **anti-persistent**:

(5) Some mountainbikes have gears  $\Rightarrow$  Some bikes have gears

(6) Every bike has gears  $\Rightarrow$  Every mountainbike has gears

What about *most*?

(7) a. Most bikes have gears  $\Rightarrow$  Most mountainbikes have gears ?

b. Most mountainbikes have gears  $\Rightarrow$  Most bikes have gears ?

Try to illustrate the argument with Venn diagrams – pretending that region sizes reflect cardinalities.

### Exercise 4: Quantifier Raising and Scope Ambiguities

In Section 4.1, Zimmermann and Sternefeld note that QR “can also be used to deal with multiple quantification” (page 132), but they do not go into it.

(8) At least two employees control every product.

(9) At least two cineasts have seen every film at the festival.

The preferred reading of (8) is obtained by QRing the object *every product*. However, how can the preferred interpretation of (9) be obtained, given that an object quantifier is always QRred for the sake of simple composition?

Fill in the rudimentary LF in (10):

(10)

