

Assignment 3

Question 1 [5 points]:

Using the rules in Handout 5, produce the computation for the sentence **Some city is polluted.**

[[Some city is polluted]] =

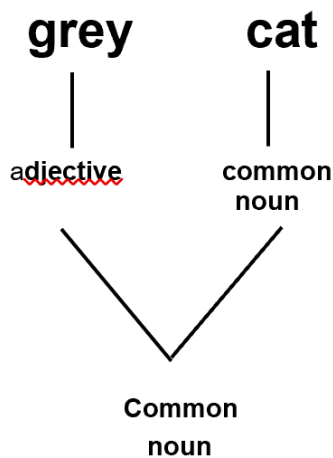
Question 2 [5 points]:

In class we decided that we would treat the denotations of common nouns as functions from situations to sets of individuals. So

$$[[\text{cat}]](s) = \{a: a \text{ is a cat in } s\}$$

In this exercise you will use this fact to figure out what the denotations of some adjectives might be. You will be looking at adjectives like **grey** in **grey cat**. These are called intersective adjectives. We'll consider what other types of adjectives there might be in a moment.

First notice that **grey cat** is itself a common noun.



As such, its denotation should also be a function that takes a situation and returns a set of individuals. Which set of individuals? Clearly it should return the set of individuals that are grey cats in s . Now let's think about that for a moment. We want the set of individuals in any given situation that are both grey and cats at the same time.

Perhaps it is becoming clear why semanticists call adjectives like **grey** intersective adjectives. If not, I'm sure it will make sense soon. The denotation of our common noun **grey cat** needs to deliver this set. We know how to get the set of cats in s . What other set do we need, and how can we combine it with the set of cats to get the set of grey cats?

The other set we need should come from **grey**. You should now have enough information to fill in the following blank.

(1) $[[\text{grey}]](s) = \underline{\hspace{10em}}$

You should also be able to put the sets together by completing the adjective rule below.

(2) AR

If α is an (intersective) adjective and β is a common noun, then $\alpha\beta$ is a common noun.

and for all situations s

$[[\alpha\beta]](s) = \underline{\hspace{10cm}}$

Now use the rule you developed to compute the value of $[[\text{grey cat}]](s)$.

(3) $[[\text{grey cat}]](s) =$

Put your answers to (1) – (3) above on a separate piece of paper to hand in with the rest of your assignments.

There are adjectives that are not covered by our rule. Intersective adjectives allow inferences like the following:

YoYo is a grey cat

YoYo is a pet

YoyYo is a grey pet

Notice that we can't do the same with an adjective like **skillful**. The following is not a valid inference:

YoYo is a skillful cellist

YoYo is a swimmer

YoYo is a skillful swimmer.

That YoYo is a skillful cellist allows us to say that he is a special kind of cellist. Adjectives like **skillful** are non-intersective. They are called subsective. There are still other adjectives that are non-intersective, but not subsective. These are adjectives like **alleged** and **fake**. Notice that an alleged criminal is not a special kind of criminal. He or she may not be a criminal at all.