Logical Thought
Fall 2004

Homework 15

For each of the following, find an equivalent sentence in one of the four standard
categorical forms. Indicate clearly what the subject and predicate terms of the
proposition are, and the form of the proposition (A, E, I, or O).

Example:
Rhonda is considering what to do.

Answer:
All people identical to Rhonda are people who are considering what to do. (A)
Subject: people identical to Rhonda
Predicate: people who are considering what to do.

1. All my friends came to see me.
All people who are my friends are people who came to see me. (A: All S are P)
S = people who are my friends
P = people who came to see me

2. A dog is a good companion.
This statement seems that it could be interpreted as either a universal or a particular
statement:
All dogs are good companions (A: All S are P)
Some dogs are good companions (I: Some S are P)

3. I have not been able to contact some people who are listed as references.
Some people who are listed as references are not people I have been able to contact.
Form: Some S are not P (O)
S = people who are listed as references
P = people I have been able to contact

Notice how the negation appearing in the original statement has been integrated into
the paraphrase by using a negative proposition.

Why not: All people identical to myself are people who have not been able to contact
some people listed as references. ? Because this paraphrase fails to integrate the
quantifier that appears in the original statement – the original statements says, ‘some
people...’. So, in paraphrasing, we should try to capture that quantifier in our
standard form paraphrase.

4. Samantha knows everyone here.
All people here are people known by Samantha.
S = people here.
\( P = \text{people known by Samantha.} \)

Form: All \( S \) are \( P \) (A)

Note that this problem also illustrates the need to capture the quantifier in the paraphrase, in particular, the universal quantifier appearing in ‘everyone’. So the following paraphrase would be incorrect:

All people identical to Samantha are people who know everyone here.

This alternative leaves the original quantifier unaddressed.

5. Squirrels are foraging for the nuts we threw.

Some squirrels are things foraging for the nuts we threw.

\( S = \text{squirrels} \)

\( P = \text{things foraging for the nuts we threw (or, foragers for the nuts we threw).} \)

Form: Some \( S \) are \( P \) (I)

Here, we are assuming that no one would ever claim that all squirrels are involved, for surely there are some squirrels somewhere that are not foraging for the nuts we threw.

6. Everyone but the professor dreads the exam.

With this statement, we need to take the set that contains all people, and ‘subtract’ the professor. That is, we want to talk about ‘all people not identical to the professor’. This gives us:

All people not identical to the professor are people who dread the exam.

\( S = \text{people not identical to the professor.} \)

\( P = \text{people who dread the exam.} \)

Form: All \( S \) are \( P \) (A)

7. I am not upset!

No people identical to me are people who are upset.

\( S = \text{people identical to me.} \)

\( P = \text{people who are upset.} \)

Form: No \( S \) are \( P \) (E)

Why not: “All people identical to me are not upset!” Because this statement appears to have a non-standard form: All \( S \) are not \( P \). The standard form equivalent is ‘No \( S \) are \( P \)’.

If we interpret ‘not upset’ as expressing the complement of people who are upset, then the paraphrase should be written as either ‘All people identical to me are people who are not upset’, or ‘All people identical to me are non-upset’. Since at the time of this homework we had not covered complements, the ‘No people identical to me are
people who are upset’ paraphrase was favored.

8. I only read books with pictures.

This sentence uses ‘only’, so, by are rule of thumb, we should expect the ‘only’ to preface the subject of the categorical claim. However, if you try to do this, you’ll find out that it doesn’t work. This is because the sentence as given actually involves the use of the phrase ‘the only’. We can appreciate this by considering an intermediate paraphrase:

"The only books read by me are books with pictures."

This says the same thing as the original sentence. Now, applying our rule of thumb for dealing with ‘the only’, we get:

All books read by me are books with pictures.
S = books read by me.
P = books with pictures.
Form: All S are P (A)

No nonP are S is also acceptable (E) – the converse of the obverse of All S are P (as we shall see).

9. Max does not have a clue.
No clues are things had by Max.
or All things had by Max are non-clues.
S = clues
P = things had by Max.
Form: All S are P (A)

10. Not everywhere can you see that!
Some places are not places where you can see that.
S = places
P = places where you can see that.
Form: Some S are not P (O)