1 The Liar

Let ‘L’ be the sentence ‘L is not true’. Then we can argue,

1. Suppose (L) is true.
2. For any sentence ‘…’, if ‘…’ is true, then ‘…’
3. (L) is not true.

But we can also argue,

4. Suppose (L) is not true.
5. For any sentence ‘…’, if ‘…’, then ‘…’ is true.
6. (L) is true.


2 The Horned Man

1. What you have not lost you still have.
2. You have not lost horns.
3. You still have horns.

The conclusion is obviously false. Is the argument valid? Is it sound?

3 Eating Raw Meat (Buridan, Sophismata 4, Second Sophism)

Yesterday you bought a piece of raw meat, and today you ate it well-cooked.

1. Whatever you bought yesterday is what you ate today.
2. Yesterday you bought raw meat.
3. Today you ate raw meat.

Buridan considers two replies, endorsing the first:

• (1) is false: yesterday, you bought both the substance of the meat, and the accidents inhering in it. Hence you bought a rawness yesterday that you did not eat today.
• The premises are true but the conclusion does not follow. In premise (2), ‘raw’ stands for past or present raw things. In the conclusion, ‘raw’ stands only for presently raw things.
4 Are There More Men Alive or Dead?

Several ancient texts recount a meeting between Alexander the Great and several naked Indian philosophers. Alexander asks them a series of questions, declaring that those who answer incorrectly will be put to death. Here is one of the questions (this version is from Plutarch):

The first one, accordingly, being asked which, in his opinion, were more numerous, the living or the dead, said that the living were, since the dead no longer existed.

So,

1. Something is dead only if it does not exist.
2. Everything exists.
3. Nothing is dead.

5 The Hooded Man

A man walks into a bar, wearing a hood. He is your brother, but you don’t know this. So:

1. This man is your brother.
2. You do not know this man.
3. You do not know your brother.

Response: (2) is false. You know the man, because you know you know your brother, and he is your brother.

1. This man is your brother.
2. You do not know who this man is.
3. You do not know who your brother is.

Response: (2) is false. You know who the man is, because you know who your brother is, and he is your brother.

1. This man is your brother.
2. You do not realize that this man was born in Megara.
3. You do not realize that your brother was born in Megara.

Response: (2) is false. You do know that this man was born in Megara, because you know your brother was born in Megara, and he is your brother.

1. This man is your brother.
2. You do not realize that this man was born in Megara.
3. You do not realize that your brother was born in Megara.

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1 I borrow this presentation from Priest (2005), p. 34ff.
6 Hesperus and Phosphorus

From Frege, “On Sense and Reference” (1892):

1. ‘Hesperus = Hesperus’ is known a priori and analytic.
2. ‘Hesperus = Phosphorous’ is neither a priori nor analytic.
3. Identity is not a relation between objects.

7 Scott and the Author of Waverley

From Russell, “On Denoting” (1905):

1. If a is identical with b, whatever is true of the one is true of the other, and either may be substituted for the other in any proposition without altering the truth or falsehood of that proposition.
2. George IV wished to know whether Scott was the author of Waverley.
3. Scott was the author of Waverley.
4. George IV wished to know whether Scott was Scott.

“But an interest in the law of identity can hardly be attributed to the first gentleman of Europe.”

8 “I owe you a horse” (Buridan, Sophismata 4, 15th Sophism)

“I posit the case that in return for some good service that you performed for me, I promised you one good horse, and that I obligated myself before a competent judge to give you one good horse.”

But,

1. I do not owe you any horse: not this horse, not that horse, nor that horse...
2. I do not owe you a horse.

Buridan’s solution: premise (1) is false. I owe you this horse, and I owe you that horse, and I owe you that horse, ...

9 The Sorites

1 grain of wheat does not make a heap.
If 1 grain of wheat does not make a heap then 2 grains of wheat do not.
If 2 grains of wheat do not make a heap then 3 grains do not.
...
If 9,999 grains of wheat do not make a heap then 10,000 do not.

10,000 grains of wheat do not make a heap.
Eubulides of Megara was a 4th century BCE Greek philosopher. Seven paradoxes are attributed to him: the Liar; the Hooded Man and two variants on the Hooded Man called ‘the Electra’ and ‘the Unnoticed Man’; two versions of the Sorities: the Heap and the Bald Man; and the Horned Man. In the words of a contemporary poet,

“Eubulides the Eristic [...] propounded his quibbles about horns and confounded the orators with falsely pretentious arguments...”

Jean Buridan (~1300–~1360) was a medieval philosopher. One of his most famous works is the Summulae de Dialectica. The last section discusses several “sophisms”—i.e., logical puzzles and paradoxes.

References