

6.1.3. Identity

Although all the connectives that figured in our analyses of logical form received special notation and had logical properties we studied, only one predicate will count as **logical vocabulary** in this sense. Other predicates and all unanalyzed individual terms will be, like unanalyzed component sentences, part of the **non-logical vocabulary** which is assigned a meaning only by an interpretation.

The predicate that is part of our logical vocabulary will be referred to as **identity**. It is illustrated in the following sentences:

George Bush is the U.S. president

The winner was Funny Cide

$$n = 3$$

The morning star and the evening star are the same thing.

We will refer to such sentences as **equations**; they constitute a particular kind of predication.

In our symbolic notation, we will follow the third example and use the sign = to mark identity. As English notation, we will use the word **is**. We will represent unanalyzed individual terms by lower case letters, so we can analyze the sentences above as follows:

George Bush is the U.S. president

George Bush = the U.S. president

$$g = p$$

$$g \text{ is } p$$

[g: *George Bush*; p: *the U.S. president*]

The winner was Funny Cide

the winner = Funny Cide

$$w = f$$

$$w \text{ is } f$$

[f: *Funny Cide*; w: *the winner*]

$$n = 3$$

$$n = t$$

$$n \text{ is } t$$

[n: n; t: 3]

The morning star and the evening star are the same thing
the morning star = the evening star

m = e

m i s e

[m: *the morning star*; e: *the evening star*]

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