Quine: Quantifiers and Propositional Attitudes

Ambiguous sentences:

> Ralph believes that someone is a spy.
> Ernest is hunting lions.
> I want a sloop.

"Notional":

> Ralph believes that ∃x (x is a spy).
> Ernest strives that ∃x (x is a lion ∧ Ernest finds x).
> I wish that ∃x (x is a sloop ∧ I have x).

"Relational":

> ∃x (Ralph believes that x is a spy).
> ∃x (x is a lion ∧ Ernest strives that Ernest finds x).
> ∃x (x is a sloop ∧ I wish that I have x).

Referential Transparency and Opacity

Quine's definition (*Word & Object*, §30):

> A mode of containment φ is referentially transparent if, whenever an occurrence of a singular term *t* is purely referential in a term or sentence ψ(*t*), it is purely referential also in the containing term or sentence φ(ψ(*t*)).

Example:

(12) Ralph believes that the man in the brown hat is a spy.

(13) Ralph does not believe that the man seen at the beach is a spy.

The main in the brown hat = the man seen at the beach = Bernard J. Ortcutt.

> *t* = 'the man in the brown hat'

> ψ(*t*) = 'the man in the brown hat is a spy'

> φ(ψ(*t*)) = 'Ralph believes that the man in the brown hat is a spy'.

So the mode of containment 'Ralph believes that …' is referentially opaque, because 'the man in the brown hat' is purely referential in the sentence embedded within (12) (i.e., in the sentence 'the man in the brown hat is a spy') but not purely referential in (12) as a whole.

The Oddity of Transparent Belief

We begin with two of Ralph's beliefs:

(12) Ralph believes that the man in the brown hat is a spy.

(20) Ralph believes that the man seen at the beach is not a spy.

Construing these belief ascriptions transparently, we may apply the principle that Quine calls "exportation" and obtain:

(15′) Ralph believes $z(z$ is a spy) of the man in the brown hat.

(21) Ralph believes $z(z$ is not a spy) of the man seen at the beach.

But since:

- The man seen at the beach = the man in the brown hat = Ortcutt
- 'the man in the brown hat' is referential in (15′)
- 'the man seen at the beach' is referential in (21)

we may infer both:

(15) Ralph believes $z(z$ is a spy) of Ortcutt.

and

(22) Ralph believes $z(z$ is not a spy) of Ortcutt.

That is, in the transparent sense of belief, Ralph believes of Ortcutt both that he is, and that he is not, a spy.