Analysis of Belief and its application to opacity

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Definition of Belief

I've been thinking about the "belief" relation. (In trying to understand opacity.) My idea is:

R believes R(a,b,c) at t =df believes(S,t,R,a,b,c)

=df $(\exists w)(\exists x)(\exists y)(\exists z)$ (belief_r(S,t,w,x,y,z) & symbol_1r(S,t,w,R) & symbol_0r(S,t,x,a) & symbol_0r(S,t,y,b) & symbol_0r(S,t,z,c)

Here

- S is the subject – believer

- R(a,b,c) is the fact S thinks is true .

- w is a symbol for R (for S) at time t

- x is a symbol for a (for S) at time t

- y is a symbol for b (for S) at time t

- z is a symbol for c (for S) at time t

.

Notice:

- The believes relation I am defining is different than the belief_r relation it is defined in terms of.

- The believes relation I define is about objects in the world, which although they could be symbols they generally are not.

- belief_r is relates symbols and is what we are aware of.

- It takes the combination of belief_r with the relations of the symbols, it relates, to the objects in the world, specified by the symbol_0r and symbol_1r relations, to say something (or at least believe it) about the world.

- I try to explain belief_r & symbol_0r & symbol_1r better at http://dennisdarland.com/philosophy/belief.pdf

- I explain what a proposition is at http://dennisdarland.com/philosophy/proposition.pdf

- I explain the truth of beliefs and propositions at http://dennisdarland.com/philosophy/truth.pdf

- NOTE: (8/1/2008) Usually we would attribute a belief to a person if only the belief_r holds.

- In that case a person may have not only a false belief, but one when the 'objects' of the belief do not exist!

- The x, y or z may exist and be such that they could be a symbol for a,b and c without a, b or c existing.

- There would have to be an employment of the x, y and z, such as a fictitious person, that the believer does not know is fictitious.

- Even in the case where a,b and c exist and the symbol relations hold the relation between a,b and c may not hold.

- In this case the subject has not only a belief_r but also a 'belief' about the actual objects, which may still be false.

- (Additions here 12/9/2009) The symbols may often be words. The words a that person knows varies from person to person, and between the same person at different times.

- An example (using words) might be belief-r(Tom,2;00pm December 9, 2008,'loves','George','Mary')

- This indicates that at 2:00pm on December 9, 2008 that Tom's mind is in a state of belief-r between the symbols (words in this case) 'loves', 'George', and 'Mary'.

- This relation is one just between the objects (words thought) in Tom's mind at that time.

- The belief-r itself does not guarantee that 'loves', 'George' or 'Mary' exists.

- The connection between 'George' (the word) and George (the person) is made by the symbol-0r relation. (and likewise for the other symbols)

- That 'George' is a symbol for George may vary from person to person and at different times.

- We learn and forget names.

- Different people know different names even at the same time.

Why the existential quantifiers?

- Well Tom believes loves(George,Mary) at 2:00pm December 9, 2008 if belief-r(Tom. 2:00pm December 9, 2008, 'George', 'Mary')

- And the symbol relation also hold – e.g, symbol-0r(Tom.2;00pm December 9, 2008, 'George', George).

- But Suppose Tom knows George by the name 'Alfred' (same person different name)

- Then we have belief-r(Tom, 2:00pm December 9, 2008, 'Alfred', 'Mary')

- And also have symbol-0r(Tom.2:00pm December 9, 2008, 'Alfred', George) -- The symbol 'Alfred' standing for the person George in Tom's vocabulary.

- The definition of belief above is still satisfied even if Tom doesn't know George by the symbol 'George'. – Substitute 'Alfred' for the variable x.

- Any name (or other symbol – like a mental image) for George will do.

- The connection between the symbol for George ('George' or 'Alfred') and George himself is made by the use of the symbol – e.g. how Tom could explain who he calls 'George' or 'Alfred' – whether he had met him – or met his wife etc.

- Whether Tom uses the name 'George' or 'Alfred' (in the belief-r) the belief itself is about George.

Expressed belief

But beliefs are *expressed* with the *symbols* so

S believes expressed belief w(x,y,z) at time t

Iff

Belief_r(S,t,w,x,y,z,t)

here w, x, y, and z are symbols.

Definition of Opacity

Now opacity as Quine defines it occurs when

believes(S,t,R,a,b,c) is not equivalent to believes(S,t,R,a,b,d) but c = d (I am just showing triadic relations R but imaging equivalent ones for other cases)

e.g.

- Tom believes denounced(Cicero,Cateline)

- But Tom believes ~denounced(Tully,Cateline)

- But (which Tom doesn't know) Tully = Cicero

Note:

- Quine does say we can insist that Tom does believe denounced(Tully,Cataline) in spite of the fact that he denies it.

- But then Quine is saying Tom does not believe not denouncedI(Tully,Cataline).

- For me both Tom believes denounced(Tully,Cataline) and Tom believes not denouncedI(Tully,Cataline)

- I explain this more below – it is a matter of applying the definition.

- We also have belief_r(Tom,now,'denounced','Tully','Cataline') (as Tom asserts) but not belief_r(Tom,now,'denounced','Tully','Cataline') (as Tom denies).

- This is also explained more below.

Application of definition of belief to opacity

But we have

- Belief_r(Tom,now,'denounced','Cicero','Cateline')

- ~Belief_r(Tom,now,'denounced','Tully','Cateline')

- And 'Cicero' ~= 'Tully' even though Cicero = Tully

We also have both

- Tom believes denounced(Cicero,Cateline) now

And

- Tom believes denounced(Tully,Cateline) now

The second of which is also true because

- Belief_r(Tom,now,'denounced','Cicero','Cateline')

And

- Symbol_0r(Tom,now,'Cicero',Tully)

This is true because Tully = Cicero and Symbol_r(Tom,mow,'Cicero',Cicero).

It is also true

- Tom believes ~denounced(Cicero,Cateline) now

And

- Tom believes denounced(Tully,Cateline) now

But NOTE it is not true (expressed beliefs)

- Belief_r(Tom,now,'denounced','Tully','Cateline')

Nor

- ~Belief_r(Tom,now,'denounced','Cicero','Cateline')

Examining these cases none of them are opaque as defined by Qiuine.

(But we must maintain people may have contradictory beliefs,

but not necessarily contradictory expressed beliefs)

Rudolf Carnap and Alonzo Church and Bertrand Russell on Belief

Carnap in Meaning and Necessity, pp. 230-232 discusses his own and Church's explications of belief. Carnap takes belief to be a relation between a person and a sentence. Church takes it to be a relation between a person and a proposition. So Church would say John believes that the earth is round. Carnap would say John has a relation B to "the earth is round" as a sentence in English. Russell talks about understanding on page 115 of The Collected Papers of Bertrand Russell, The Theory of Knowledge, The 1913 Manuscript. He would handle belief analogously. He would say B(John,round,earth,rf). Where rf is a form. I would say $(\exists f)(\exists x)$ believe_r(John,now,f,x) & symbol_1r(Tom,now,f,round) & symbol_0r(John,now,x,earth). John is related to symbols for round, and earth, e.g. 'round', and 'earth'. Which have the appropriate application for John in, say, the English language.

More explanation of my definition of belief

Question: It seems you hold that when a person M attributes a belief to a person S, the person M lists a relation (or attribute), and the objects that M takes S's belief to be about (whether S realizes it or not).

Answer: Actually the relation involves not the objects that M takes S's belief to be about but S's symbols for those objects. (Otherwise it would be just like Russell's Theory of Knowledge (Collected Papers of Bertrand Russell vol. 7) which I just looked at. And M also is attributing that these are symbols for S of those objects. (The symbols are also objects, but are not the objects the belief is about.)

Question: Do I understand you to say that in attributing a belief to S the person M lists the symbols he takes S to employ in thinking about this or that object? But what are symbols employed by S in thinking? Symbols of what language? Or is it some sort of Chomsky transformational grammar that you have in mind that M is supposedly attributing to S?

Answer: Actually, if you read my definition carefully, it says that for each object in the belief (the belief I define not the belief_r I define it in terms of) another person attributes to S, there is a

symbol (or at least the sort of thing which could be a symbol) (which may be unspecified, i.e. only a variable) which occurs in the belief_r relation and which stands in the symbol_0r relation to the object which the person would say S's belief is about. The person attributing the belief does not need to necessarily know much about what the symbol is. I take pretty much a later Wittgensteinian view of symbols. They might be spoken or written words, or only thought words or even images. What matters is there is a practice of using them in relation to the object. I think other views of the nature of symbols might however be compatible with my definition of belief.

In a way it can be like knowing C is A's grandparent. You know there is a B such that B is A's parent and C is B's parent, but you don't necessarily know who B is. Prolog programs do this sort of thing all the time. The nature of the symbol doesn't matter as long as it can hold both in the belief_r relation and symbol_0r relation. To this extent its nature "divides through" like Wittenstein's "beetle" in a box (Philosophical Investigations, 293). But it cannot be nothing, and we may be able to make inferences about it from the facts of the relations it can be in.

Question: You give an analysis of belief statements which seems a bit complex to me. Why do you need both a "fact" and a logical form for what somebody believes? Wouldn't just one or the other do? Also, how would you handle the implication that, say, if Tom believes that the cat is on the mat, and Tom believes that the dog is in the doghouse, then Tom believes that the cat is on the mat and the dog is in the doghouse?

Answer. I actually don't have a "fact" the person believes - if the belief is false, the "fact" wouldn't exist. The person has symbolic relations to some symbolic objects and the objects, which would be related if the fact exists. He also has a symbolic relation to symbol standing for the relation in the fact, and that relation. The logical form combines the symbols (for the objects & relation in a way to show what fact would correspond). The symbolic relations are enough for the person to "understand" and for there to be a "proposition". I have not entirely worked out "logical form" but I think something like it is needed. It takes the symbols for the objects and relations and combines them in a way to correspond to a fact.

If Tom believes(on,cat,mat) at t & Tom believes (in,dog,dog_house) at t. then

- $(\exists o)(\exists c)(\exists m)$

- Belief_r(Tom,t,o,c,m)

- & Symbol_1r(Tom,t,o,on)

- & Symbol_0r(Tom,t,c,cat)

- & Symbol_0r(Tom,t,m,mat)

If Tom speaks English, probably c = "cat", but it could be in a different language, likewise for o and m, they might equal "is on" and "mat"

Similarly, (∃i)(∃d) (∃h)

- Belief_r(Tom,t,i,d,h)

- & Symbol_1r(Tom,t,i,in)

- & Symbol_0r(Tom,t,d,dog)

- & Symbol_0r(Tom,t,h,dog_house)

Back to Top http://dennisdarland.com/philosophy/index.html