Did you get the Gettier Joke? :
An Exercise in Disambiguation

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Pun : A humorous use of words that involves a word or phrase which has more than one possible meaning

Abstract

There is a pun which has been doing the rounds in philosophy circles for the last 44 years. Perhaps the funniest aspect of this particular pun is that most philosophers don't seem to get the joke. This pun is commonly known as The Gettier Problem, inaugurated in 1963 by the publication, by Edmund L. Gettier, of two classic cases of alleged "problems" which seem to cast doubt on either the soundness or the completeness of the traditional Justified True Belief (JTB) analysis of knowledge. Through a detailed, logical and rational analysis of the ambiguities inherent in these Gettier-type cases we show how the pun is constructed, and by disambiguating the Gettier argument we conclude that the JTB analysis is in fact quite complete and quite sound. Disambiguation of these cases clearly reveals Gettier's joke – but will philosophers see the funny side?

Introduction

A pun is a joke which exploits the ambiguities inherent in the meaning of certain words or phrases within a language to create a humorous effect. Simple examples include :

He : "I feel like a banana". She : "You look like a lemon". This pun exploits the ambiguity in the meaning of the phrase "I feel like" – it might mean "I would like to eat (a banana)", or it might mean "I actually feel like I am (a banana)".

And another : "She kept calling him 'flower'. I wonder if she meant plain or self-raising?" This example only works verbally – it relies on two words which are spelled differently but which are pronounced the same : "flower" and "flour".

And my all-time favourite : "Time flies like an arrow; but fruit flies like a banana." (see Figure 1). This example exploits the ambiguities in the meanings of both "flies" (either based on the verb "to fly", or the plural of the noun "fly") and "like" (either in a comparative sense, "X is like Y", or in the sense of enjoyment, "Young people like to dance").

Most of us can readily see the ambiguities, and the humour that is the result of this ambiguation, in the examples above. It is actually in the process of conscious disambiguation that the pun is revealed, and we see the joke. Most such examples are language-dependent – they do not necessarily work when translated into other languages.

I shall show below how ambiguities in meaning within language are also exploited in the infamous Gettier-type cases, which allegedly challenge the 2000-year-old Justified True Belief (JTB) analysis of knowledge (reference 1). These Gettier-type cases are not language-dependent, they work equally well when translated into other languages. I wonder how many philosophers have actually been able to see the Gettier Joke, and conversely how many have been taken in by it?

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Figure 1 : "Fruit Flies Like a Banana" : The Piasecki HRP-1 Rescue Helicopter – otherwise known as the "Flying Banana"

The so-called Gettier Problem

Gettier's 1963 paper (reference 2) provides two examples of alleged "knowledge" analysis which (if we do accept them as genuine examples of knowledge analysis) both seem to run counter to our intuitions about knowledge. This inconsistency leads Gettier (and his followers) to question the validity of the JTB analysis upon which they are based.

Gettier's examples are described in detail below. In the interests of historical accuracy, these examples are quoted almost word-for-word from Gettier's original.

Gettier Case 1

Suppose that Smith and Jones have applied for a certain job. And suppose that Smith has strong evidence for the following conjunctive proposition:

(1a) Jones is the man who will get the job, and Jones has ten coins in his pocket.

Smith's evidence for (a) might be that the president of the company assured him that Jones would in the end be selected, and that he, Smith, had counted the coins in Jones's pocket ten minutes ago. Proposition (a) entails:

(1b) The man who will get the job has ten coins in his pocket.

Let us suppose that Smith sees the entailment from (1a) to (1b), and accepts (1b) on the grounds of (1a), for which he has strong evidence. In this case, Smith is clearly justified in believing that (1b) is true.

But imagine, further, that unknown to Smith, he himself, not Jones, will get the job. And, also, unknown to Smith, he himself has ten coins in his pocket. Proposition (1b) is then true, though proposition (1a), from which Smith inferred (1b), is false. In our example, then, all of the following are true: (i) (1b) is true, (ii) Smith believes that (1b) is true, and (iii) Smith is justified in believing that (1b) is true. But it is equally clear that Smith does not know that (1b) is true; for (1b) is true in virtue of the number of coins in Smith's pocket, while Smith does not know how many coins are in

Smith's pocket, and bases his belief in (1b) on a count of the coins in Jones's pocket, whom he falsely believes to be the man who will get the job.

Thus, on the above account, it would seem that there is something wrong with our JTB analysis.

Gettier Case 2

Let us suppose that Smith has strong evidence for the following proposition:

(2a) Jones owns a Ford.

Smith's evidence might be that Jones has at all times in the past within Smith's memory owned a car, and always a Ford, and that Jones has just offered Smith a ride while driving a Ford. Let us imagine, now, that Smith has another friend, Brown, of whose whereabouts he is totally ignorant. Smith selects three place names quite at random and constructs the following three propositions:

(2b) Either Jones owns a Ford, or Brown is in Boston.

(2c) Either Jones owns a Ford, or Brown is in Barcelona.

(2d) Either Jones owns a Ford, or Brown is in Brest-Litovsk.

Each of these propositions is entailed by (2a). Imagine that Smith realizes the entailment of each of these propositions he has constructed by (2a), and proceeds to accept (2b), (2c), and (2d) on the basis of (2a). Smith has correctly inferred (2b), (2c), and (2d) from a proposition for which be has strong evidence. Smith is therefore completely justified in believing each of these three propositions, Smith, of course, has no idea where Brown is.

But imagine now that two further conditions hold. First Jones does not own a Ford, but is at present driving a rented car. And secondly, by the sheerest coincidence, and entirely unknown to Smith, the place mentioned in proposition (2c) happens really to be the place where Brown is. If these two conditions hold, then Smith does not know that (2c) is true, even though (i) (2c) is true, (ii) Smith does believe that (2c) is true, and (iii) Smith is justified in believing that (2c) is true.

Thus, again on the above account, it would seem that there is something wrong with our JTB analysis. Gettier's conclusion from his examples : The JTB analysis does not state a sufficient condition for someone's knowing a given proposition.

Let us examine these Gettier-Type cases in detail. In what follows I make reference to a "primitive belief", which in this context means a relatively simple and unconnected belief proposition of the form "Jones will get the job" or "Jones has 10 coins in his pocket"; as compared to what I call a "compound belief", which is generated by combining or connecting two or more apparently unconnected primitive beliefs, such as "Jones will get the job, and Jones has 10 coins in his pocket".

Analysing Gettier Case 1

In Gettier's Case 1, what Smith actually believes is both that (1c) "Jones is the man who will get the job" is true, and that (1d) "Jones has 10 coins in his pocket" is true. Gettier concatenates these two apparently unconnected primitive beliefs into a compound belief (1b) "The man who will get the job has 10 coins in his pocket". Gettier is correct that the truth of (1c) and (1d) jointly entails the truth of (1b), but what he does not point out is that the reverse is not the case – that the truth of (1b) does NOT entail the truth of either (1c) or (1d) – BECAUSE the meaning of (1b) is ambiguous. Indeed, there are a potentially infinite number of pairs of primitive beliefs of the form "X will get the job" and "X has 10 coins in his pocket", every pair of which entails (1b) (see figure 2). Does Smith believe every one of this potentially infinite number of primitive beliefs? No, of course not. He believes only one – the one where X = Jones, namely (1a) "Jones will get the job", and "Jones has ten coins in his pocket".

Thus, when we ask whether Smith actually believes that (1b) is true, we must answer : Not necessarily – and that's where the pun comes in. It depends on exactly what we mean by (1b). Imagine, referrring back to the pun about time flying like an arrow, that someone asks you

whether the proposition “fruit flies like a banana” is true? It depends of course on precisely what we mean by “flies” and “like” (unless of course you happen to believe in flying bananas!). Thus, in the context of the Gettier Case 1, asking the question whether Smith believes that (1b) is true presupposes a particular meaning for the ambiguous words “the man” – and in Smith’s case “the man” means, and clearly only means, “Jones”.

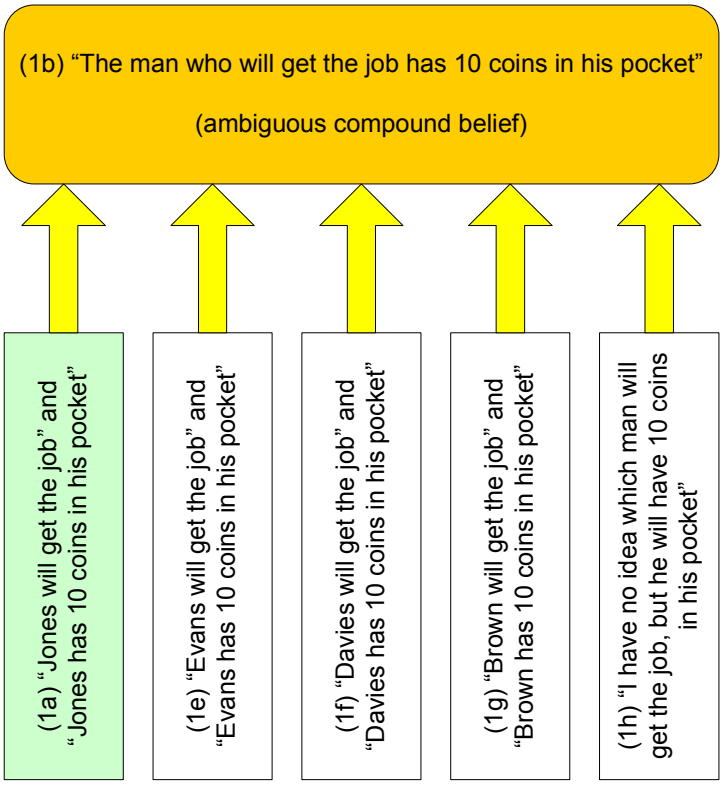

Figure 2 : The ambiguous compound belief “The man who will get the job has 10 coins in his pocket” is entailed by a potentially infinite number of pairs of primitive beliefs of the form “X will get the job” and “X has 10 coins in his pocket”, only ONE pair of which Smith actually believes to be true (namely where X = Jones). Gettier’s Case 1 thus rests on ambiguity inherent in the compound belief.

Referring to figure 2, if we take (1b) to mean any one of a potentially infinite number of beliefs where X does not equal Jones (such as (1e) “Evans will get the job, and Evans has 10 coins in his pocket”, or even (1h) “I have no idea which man will get the job, but he will have 10 coins in his pocket”) then clearly Smith does not believe this. However, if by (1b) we mean precisely (1j) “The man (who is Jones) who will get the job has 10 coins in his pocket” (which is effectively the same as (1a)) then (on the facts presented) this is indeed exactly what Smith believes. In effect the words “the man” in (1b) is simply a placeholder for “Jones” – these words mean nothing else in the context of Smith’s belief.

Now, in the Gettier Case 1, which meaning of (1b) is implied? Intuitively, most of us would naively ignore the fact that “the man” stands for “Jones” and instead read (1b) to take the meaning as in (1h), which is precisely why we then conclude that there must be something wrong with the JTB analysis of knowledge. If Smith genuinely and justifiably believes that “I have no idea which man will get the job, but he will have 10 coins in his pocket”, then (since he has 10 coins in his pocket, and he got the job), it apparently stands to reason (according to Gettier and JTB) that Smith must have known that “a man with 10 coins in his pocket” would get the job.

But, setting JTB aside, our intuitions quite rightly cry out that Smith did NOT know that “a man with 10 coins in his pocket” would get the job. This inconsistency leads us (if we ignore Gettier’s

ambiguity) to conclude that there must then be something wrong with JTB. That's precisely the joke. There is nothing at all wrong with JTB – what is actually wrong is that we have intuitively accepted the incorrect meaning of the ambiguous words "the man" in the compound belief (1b). We swallowed the pun – hook, line and sinker. In fact (1b) does NOT take the meaning of (1h), instead it should take the meaning of (1j) - this is Smith's actual compound belief. Combine (1j) with JTB and we clearly conclude that Smith did NOT know that Jones would get the job – and JTB triumphs again.

Analysing Gettier Case 2

In Gettier's Case 2, Smith believes that (2a) "Jones owns a Ford" is true, but he has no particular belief about the truth or falsity of (2e) "Brown is in Barcelona". Gettier concatenates these two primitive beliefs into a compound belief (2c) "Smith believes either that 'Jones owns a Ford' is true, or that 'Brown is in Barcelona' is true". Once again, we must ask : Does Smith actually possess the belief described in (2c)? And once again we must answer : Not necessarily – that's again where the pun comes in. It depends on exactly what we mean by (2c). In this case, there are a large number of different possible meanings of this ambiguous compound belief, of which just three different ones are as follows :

(2f) "Smith believes that 'Jones owns a Ford' is true, but has no particular belief about the truth or falsity of 'Brown is in Barcelona'".

(2g) "Smith believes that 'Brown is in Barcelona' is true, but has no particular belief about the truth or falsity of 'Jones owns a Ford'".

(2h) "Smith has no particular belief about the truth or falsity of either the proposition 'Jones owns a Ford', or the proposition 'Brown is in Barcelona', but for some inexplicable reason he believes that one of these two propositions IS indeed true".

As shown in figure 3, the truth of each one of these propositions entails the truth of (2c), but once again the truth of (2c) does NOT entail the truth of any particular one of the propositions (2f) to (2h).

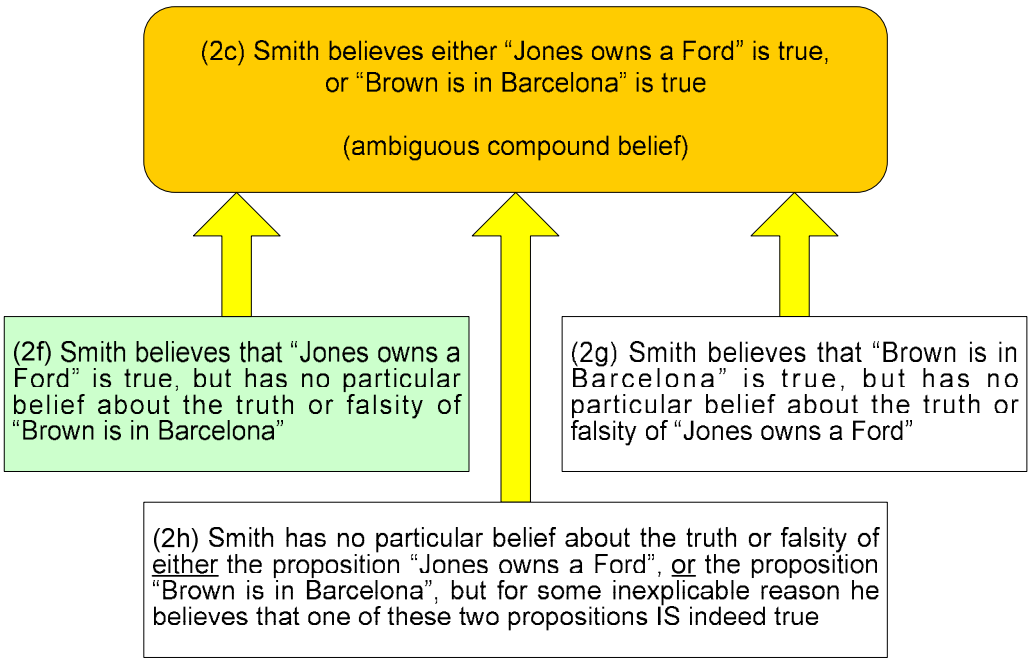

Figure 3 : The ambiguous compound belief "either 'Jones owns a Ford' is true or "Brown is in Barcelona' is true" is entailed by a number of primitive beliefs, only ONE of which Smith actually believes to be true. Gettier's Case 2 thus rests on ambiguity inherent in the compound belief.

Gettier's Joke, in this case, relies on us naively reading (2c) to actually mean (2h). On the reading of (2h), when combined with the JTB analysis, it would seem that we must logically conclude that Smith did know that Brown is in Barcelona. But once again this runs counter to our intuitions, and we (quite naturally) again conclude that there must then be something wrong with JTB. That's (once again) precisely the joke. There is nothing at all wrong with JTB – what is actually wrong is that we have intuitively accepted the incorrect meaning of the ambiguous compound belief (2c). We again swallowed the pun – hook, line and sinker.

The belief expressed by (2h) is actually an incoherent belief. How can Smith justifiably believe that one of the two apparently unconnected propositions in question (either 'Jones owns a Ford' or 'Brown is in Barcelona') is true, without having any particular beliefs about the truth of the individual propositions? It doesn't make sense (and yet this is precisely the meaning required for (2c) in order for the Gettier Joke to work).

In fact (2c) (in the correctly analysed Gettier case) does NOT take the meaning of (2h), instead it should take the meaning of (2f) - this is Smith's actual compound belief. Combine (2f) with JTB and we clearly conclude that Smith did NOT know that Brown is in Barcelona – and JTB triumphs again.

Other Gettier-Type Cases

Firstly, it is important to realise that Gettier's two examples are both based on a process of concatenation of two unconnected primitive beliefs to form a more complex but ambiguous compound belief, and It is this alleged compound belief which seems (because we intuitively ignore the ambiguity) to run counter to our intuitions about knowledge. Other examples of a similar format (i.e. concatenation of two unconnected primitive beliefs to form an ambiguous compound belief) are commonly known as Gettier-Type Examples of "knowledge problems". It is important to recognise that many other so-called examples of alleged "knowledge problems" (for example the famous Red Barn Country case, discussed in detail in Christie 2006 (reference 3)) are NOT in fact Gettier-Type cases. In summary : To qualify as a Gettier-Type case, the case must be based on the concatenation of two unconnected primitive beliefs to form an ambiguous compound belief.

Conclusion

Do philosophers possess a sense of humour, I wonder? The fact that so many philosophers cannot see the Gettier Joke, and insist instead on taking his examples as a serious challenge to the JTB analysis of knowledge, leads me to think that perhaps many of them do not. If one reads the Gettier-type cases of so-called "knowledge problems" carefully, rationally and logically, one is readily able to disambiguate the meaning of the belief propositions involved, and one can then see the joke which is based on the ambiguity. Is it true that "Smith believes that the man who will get the job has 10 coins in his pocket"? In one sense of the meaning of "the man" the answer is "yes", just as the proposition "fruit flies like a banana" is most definitely true in one sense of the meaning of "fruit flies". But in the sense that Gettier wants us to understand the words "the man" (viz "anybody but Jones"), in the sense that the proposition must be interpreted if his argument is to carry any weight at all, it is most definitely not true. Therein lies the joke.

If you don't disambiguate, you don't see the joke, and you then get suckered into believing there is possibly some inadequacy in the JTB analysis.

Did you get the joke now? I hope so. But perhaps Gettier will still have the last laugh – his so-called problem has been perplexing many philosophers for the last 44 years – which fact alone is highly amusing in itself. Gettier succeeded in pulling the wool over the eyes of many philosophers for long enough - it's now time to wave goodbye to the Gettier Joke and put it into the history books.

References

(1) We may define “knowledge” with a simple, crisp, concise and accurate set of three necessary and sufficient conditions (often referred to as the standard analysis of knowledge, which dates back to Plato), as follows :

For any subject S to be able to claim that “S knows that P”, the following three conditions must be satisfied :

a. P is true

b. S believes that P is true

c. S is evidentially justified in believing that P is true

This is the so-called Justified True Belief (JTB) definition of knowledge. According to the JTB definition, if all three conditions are satisfied, then it follows that “S knows that P”.

(2) Gettier, Edmund L; "Is Justified True Belief Knowledge?" Analysis, Vol. 23, pp. 121-23 (1963).

(3) Christie, A.; “Epistemic Perspectives : The Real Knowledge Problem (or : Ungettiering Gettier)” at : http://www.moving-finger.com/papers/knowledge.pdf