

A disproof of representationalism Robert M Ellis

A definition of representationalism

I am here concerned with representationalism as a basic belief about meaning. A 'representation' I take to be a linguistic formulation in the mind that is believed to be actually or potentially true or false. 'Representationalism' is thus the belief that language takes its meaning from an actual or potential relationship with states of affairs. This includes the truth-correspondent theory of meaning, but also subsumes a Wittgensteinian variant that makes the meaning of language dependent on a relationship with social states of affairs (such as the expectations of the language-users). Representationalism in this sense should not be confused with the senses in which it is sometimes used in epistemology (where it is equivalent to indirect realism) or in aesthetics. My goal here is not to refute representations in the mind in order to argue for a direct account of perception, but rather to disprove representationalism in meaning, which is a belief that both direct and indirect realists are likely to share, along with the vast majority of philosophers in the analytic tradition. Direct realists are just as much representationalists on my account, because even if they believe that perception is of actual objects, they must also concede that *language* represents those objects in a form different from perception.

Goal of the paper

My goal in attempting a disproof of representationalism is not merely negative, but is undertaken in the hope that it might persuade some of the many philosophers in the analytic tradition who are still devoted to the moribund paradigm it supports to abandon it and help develop a better one. An alternative

and far more adequate paradigm already exists in the embodied meaning thesis of Lakoff and Johnson (Lakoff 1987; Lakoff & Johnson 1980, 1999; Lakoff & Nuñez 2000; Johnson 1987, 2007). I am not going to expound their alternative in this paper, but merely note that it exists, and recommend it for wider and closer attention than it has yet received from those who continue to pursue a 'business as usual' approach to analytic philosophy, despite the massive challenge offered by the embodied meaning thesis to key assumptions made in every branch.

I am attempting a *disproof* of representationalism, rather than a mere argument against it, because the very terms in which representationalism is framed create contradictions that can be used to show its inadequacy. My argument thus takes the form of a *reductio ad absurdum* to demonstrate these internal contradictions. Whilst I would not attempt *proof* of a positive theory, as positive theories are in my view only capable of provisional justification, disproof is possible within the (in my view wholly unjustifiable) terms that representationalism assumes.

Infinity and probability

My *reductio* argument relies on the concepts of infinity and of probability, and the contradictions that arise when the two are brought into contact with each other. Infinity is an entirely abstract concept, whereas probability offers a summation of the implications of observation based on experience as a guide either to generalities or to future events. These two concepts can be used as proxies to explore the absurdities that result when representation (in which pure abstraction is apparently possible) is juxtaposed with experience (where it is not).

The null probability principle

Firstly, the probability of any finite event (or any concatenation of finite events) in a context of infinity is infinitesimal – that is, practically null. That probabilities in a context of infinity are null should be uncontroversial, whatever version of epistemic probability you are using. This is reflected, for example, in the first Kolmogorov probability axiom, which states that probabilities must be real numbers. Infinity is not a real number and thus cannot be a matter of probability. “Null probability” is equivalent to the irrelevance of probability.

The null probability principle in relation to infinity implies that any set of claims dependent on inductive justification, when understood as claims about an infinite set of possible events, must have a null probability of being correct. For example, the laws of physics, if understood as a set of claims about an infinite universe based on finite evidence, have a null probability of being correct.

The universe may or may not be infinite in terms of space and time, but I am concerned here, instead, with infinite divisibility. As established in Zeno’s Paradoxes, both space and time can be infinitely divided in conceptual terms: that is, our *representation* of both space and time is infinitely divisible, as any measurements of space and time can be measured in numbers that can be divided into smaller numbers to a potentially infinite number of decimal places. The null probability principle also applies to infinite divisibility, in the sense that any given particular claim based on measurements with a finite level of exactitude, in a context of infinite divisibility, has a null probability of being precisely correct.

Representation and delimitation

The claim of representationalism, as defined above, is that a proposition can gain its meaning from a relationship (usually described as one of truth or falsity) between that proposition and a state of affairs. Such a claim about the meaning of a proposition is assumed to be immune to any type of sceptical criticism raising doubts about the justification of the relationship between a proposition and a state of affairs, because in representationalism that relationship is assumed to be hypothetical. However, I argue that representationalism is not immune to a more profound type of sceptical criticism that points out the lack of justification for any relationship of representation.

For any given relationship of representation between a proposition and a state of affairs, delimitation must exist both in the representational space of the proposition and in the state of affairs referred to. Delimitation must exist in the proposition in order to distinguish the meaning of that proposition from other propositions with alternative or contradictory meanings.

Such delimitation may be relatively precise or relatively vague, but must exist for a relationship of representation to exist. Similarly, in the potential state of affairs referred to by the proposition, delimitation must exist for the proposition to be referring to that particular state of affairs rather than other possible states of affairs, and again it makes no difference to this point whether the delimitation is precise or vague, as long as the vagueness is finite.

Argument from delimitation in an infinite context

Delimitation is finite, and occurs in a context of infinite divisibility. A simple example of this can use the grayscale between black and white. The grayscale is infinitely divisible, and there are thus a conceptually infinite number of possible gradations between black and white. However, when we use the terms 'black', 'gray', or 'white', we delimit the meanings of those terms – that is, we make certain assumptions about where the boundaries lie between them. The proposition "Fido is black" for example, in representationalist terms thus implies a delimitation both in the speaker's representation of the boundaries of black, and in the presumed actuality of the colour of the dog's coat referred to, such that "Fido is black" must mean "The object f (Fido's coat) delimited by the assumed parameters of f^b has a property of colour equivalent to that at a given specific point or points within the range $b-d$, where both b and d are dividing lines on an infinitely divisible grayscale spectrum, b is the darkest possible black and d is a dividing line that lies between black and gray. The dividing lines d' and b' in my representation of f (f') are exactly equivalent to the dividing lines d^b and b^a in the equivalent state of affairs f^a ."

Without such an equivalence, in representationalist terms, we *would not understand* the meaning of the language "Fido is black", and could not differentiate it from incompatible alternatives such as "Fido is gray". For that meaning consists in a set of conditions of truth or falsity that we need to be able to recognise if they were to occur. Without delimitation we would not have any way of knowing whether or not the conditions of truth or falsity have occurred.

If we apply probability to the supposed meaning relationship between these two delimitations, we must find that the probability of their correspondence is null. The representation involves an assumed delimitation (*b* and *d*) out of an infinitely divisible scale (in this case of colour), whilst the actual or potential objects referred to, if representationalism is correct, also involve a delimitation *f* out of an infinitely divisible scale, which must correspond to that in the representation.

Even if we avoid the implicit essentialism of assuming there must be an absolutely correct delimitation amongst actual objects, accepting the nominalist contention that such delimitations are conventional, this will make no difference to the requirement for that delimitation to be equivalent to the one we have in our representation in order to make that representation meaningful. We only require there to be a correlation between the representation and the state of affairs, for there to be a null probability of that correlation actually occurring.

This argument applies to any possible proposition that a representationalist would regard as meaningful, since whenever we refer to any type of quality or quantity as the subject or object of a propositional statement, delimitation must take place. In the case of "Fido is black", delimitation applies not only to the blackness of Fido but to the concept of Fido himself (which could be isolated in "Fido exists"). Given the vagueness of any reference to an object in experience, delimitation must occur for the meaning to be representational, even if the delimitation itself remains vague to any degree. Does 'Fido' include all the hairs on his coat, even the ones on the point of falling out? Does it include microscopic flaking skin particles or half-digested dog food? Whatever delimitations we assume here will

not be the delimitations of the 'Fido himself' that we may assume (if we are representationalists) we are referring to.

This argument also applies to single words or other representational utterances, which may be taken to be meaningful in alternative forms of representationalism to the correspondence theory. If we take any forms of language to be meaningful because of their correlation with states of affairs, even if those states of affairs are those of the social and linguistic expectations of speakers or auditors, we will encounter the same problems of delimitation. For example, if one workman calls out 'tea!' in the context of a work session that has been going on for a while, his auditors (given the state of affairs that, for Wittgenstein, gives the word meaning) are likely to assume that this means "Let's stop for a break and drink a cup of tea!", but there is still an assumed representation with accompanying delimitations both for "tea" in the minds of anyone who hears and interprets the term, and for the state of affairs of linguistic and social expectations that are said to give it its meaning. Whether or not you accept the term "representationalism" as a label for this Wittgensteinian account of meaning, it raises precisely the same problems of correlation that are raised by representationalism.

I thus conclude that the probability of any representational correlation is null.

Since representationalism relies entirely on the possibility of such representational correlations, the probability of representationalism being correct is also null.

Implications of null probability

The goal of my argument here is not to establish null probability as a serious hypothesis. Rather, the null attribution of probability in contexts of infinity involves a recognition of the absurdity of applying probability to infinite quantities. To point out, then, that the probabilities of representationalism offering a correct account of meaning, given its requirement to delimit meaning in a context of infinite divisibility, are null, is to point out that representationalism involves rational assumptions with absurd, contradictory implications that cannot be justified in the evidential terms assumed by probability.

It needs to be reiterated here that this argument is concerned with the correlation between representation and reality, and the null probability of this correlation. This is another way of arguing that meaning is not about precise relationships and is not dependent on potential states of affairs, but is rather an embodied response formed by the neural conditioning that has occurred through experience throughout our lives. The argument about correlation should not be confused with one about the truth or falsity of propositions. However, the lack of correlation between representation and reality does also imply that we could never establish either the truth or falsity of any proposition, because one of the basic conditions for such truth or falsity (that our representations match, or fail to match, reality) is not present. At the same time we could assign any degree of *probability* (dependent on the evidence) to a representation, on the understanding that this probability is thoroughly epistemic and pragmatic – that is, it records an estimate of the chances of us having correct beliefs for the fulfilment of a particular assumed purpose, given our own epistemic limitations as well as the disposition of phenomena.

Conclusion

However, in order to limit the scope of this argument, I will leave the question of its further implications only in terms of such a sketchy pointer. The point I seek to assert here is only that representationalism is rendered untenable by the juxtaposition of the concept of infinity with the evidential basis offered by probability. We cannot justifiably appeal even to the hypothetical truth or falsity of a proposition to establish its meaning, or indeed to any state of affairs to establish the meaning of any piece of language, because of the untenable correlations assumed in any such hypothetical relationship.

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