

MARVIN KOHL

BERTRAND RUSSELL ON VAGUENESS*

The purpose of this paper is to examine and evaluate Bertrand Russell's claim that all language is vague.¹ The discussion which follows will be divided into two parts. Part I will consider Russell's empirical argument, that language is vague because all words are vague. Part II will be concerned with his *a priori* argument that language is a system, and that since the system as a whole is vague, its components must be vague.

I

Russell begins his analysis by showing how words which describe sensible qualities are vague. Consider the word 'red'. 'It is perfectly obvious,' he writes, 'since colours form a continuum, that there are shades of colour concerning which we shall be in doubt whether to call them red or not, not because we are ignorant of the meaning of the word 'red', but because it is a word the extent of whose application is essentially doubtful.'² It is clear that Russell is not saying that 'red' is vague because it lacks a meaning in the sense of lacking an intension. Nor is he saying that we do not understand what is meant by the word every time it is used. It is vague only because the extent of its application is essentially doubtful. But what does he mean by 'essentially' in that phrase?

Suppose after looking through several mail-order catalogues, sweaters of the following colours are purchased: bittersweet, carmine, claret, English vermilion, mallow, and red. None of the sweaters looks exactly like another although all look 'reddish'. We also purchase a green and a blue sweater. On one table we place the green and blue sweater as well as the one the catalogue labelled red. On another table we place the other sweaters. Someone is told:

- (1) Bring the red sweater from the first table.

Someone else is told:

- (2) Bring the red sweater from the second table.

*Part I of this paper was read before a meeting of the Tri-State Philosophical Association of New York, Pennsylvania, and Ohio held at Allegheny College, Meadville, Pa., April 8, 1967. Part II was read at a meeting of the Eastern Division of the American Philosophical Association, Washington, D.C., December 29, 1968.

¹ *Australasian Journal of Psychology and Philosophy*, vol. 1 (1923), pp. 84-92. Unless otherwise indicated all references are to this article. A similar claim is made in *Human Knowledge*, (New York: Simon and Schuster, 1948), pp. v-vi, 58-63, 146-147, 259-261.

² 'Vagueness', p. 85; *Human Knowledge*, pp. 259-261.

The first request is understood and easily fulfilled. The second meets with difficulty because it is not clear which sweater we want.

Is the word 'red' in (2) vague? No; at least most fluent speakers would not say so. They might say that the instructions were vague. Or that the speaker was being too vague. But not that the word 'red' is vague. The reason for this, or at least a likely explanation, is that most speakers understand that it does not make much sense to blame the word. If, no matter how adequately a word is defined, it is always theoretically possible to find (or construct) cases where the extent of application of the word is in doubt, then why blame a word for being a word? No; it is not the word but the speaker who is at fault. It is up to the speaker to qualify his statement by adding words that will clarify his instructions.

Is 'red' in (1) vague? No; most fluent speakers would not say so,³ for the request has been clearly understood. That is, given the situation it is sufficiently clear what the speaker wants when he utters (1).

Then why would Russell insist that 'red' is vague in both (1) and (2)?

Obviously there is a difference between being doubtful and being essentially doubtful. According to Russell the extent of application of 'red' in (1) is not doubtful; it is essentially doubtful. That is, the occurrence of (1) does not cause a state of unsettled judgment. But it has the potentiality of causing such a state. Hence, when Russell says that a word is 'essentially doubtful' he is in effect saying that that word always can cause a state of unsettled judgment.

But what does this mean? It means that we have been misled by Russell's use of language. For it is one thing to say that the extent of application of a word is in doubt. It is another to say that the extent of application of a word *can be* in doubt. Similarly, *it is one thing to say that a word is vague. It is another to say that a word can be vague.* Instead of saying that 'red' is vague 'because it is a word the extent of whose application is essentially doubtful', Russell should say that the word 'red' can be vague 'because no matter how the word is used the extent of its application is always open to doubt.'⁴

³ College students were given the information about the sweaters and then asked:

1. Is the word 'red' in (1) vague? -----
2. Is the word 'red' in (2) vague? -----
3. The word 'red' in (1) is (or is not) vague because -----
4. The word 'red' in (2) is (or is not) vague because -----

Out of 158 replies, 148 answered the first question in the negative; that is to say, 93% of the students interviewed were of the opinion that the word 'red' in (1) was not vague. Of the 10 students who said it was vague, 5 misunderstood the instructions and 5 maintained that 'red' is always vague because 'who is there to determine and really say what red is?'

⁴ If it is misleading for Russell to say that all words which describe sensible objects are vague then it is also misleading for Max Black ('Vagueness: An Exercise in Logical Analysis', *Language and Philosophy*, New York: Cornell University Press, 1949, pp. 30-34), John Hospers (*An Introduction to Philosophical Analysis*, New Jersey: Prentice-Hall, 1953, pp. 40-42), and William P. Alston (*Philosophy of Language*, New Jersey: Prentice-Hall, 1964, pp. 84-85) to suggest that all material or physical object words are vague. In other words, if we are forced to admit that Russell's definition of 'vague' is persuasive then I fail to see how we can avoid drawing similar conclusions about the latter characterizations.

Bertrand Russell on Vagueness

Let us turn to Russell's explanation of why quantitative words are vague. He writes.

All words describing sensible qualities have the same kind of vagueness which belongs to the word 'red'. This vagueness exists also, though in a less degree in the quantitative words which science has tried hardest to make precise, such as metre or a second. I am not going to invoke Einstein for the purpose of making these words vague. The metre, for example, is defined as the distance between two marks on a certain rod in Paris, when that rod is at a certain temperature. Now the marks are not points, but patches of a finite size, so that the distance between them is not a precise conception.⁴

Russell seems to be denying that there are two kinds of vagueness. Quantitative words, he maintains, are vague in the same way that qualitative words are vague. The only discernible difference is that quantitative words are vague to a lesser degree.

But how does he know this? How does he know that quantitative words are less vague than words that describe sensible qualities? Why, for example, is 'metre' less vague than 'red'?

If 'less vague' is taken to mean what it means in ordinary usage then the answer would be as follows. Quantitative words are less vague than qualitative ones because we have less trouble with the former than with the latter. To be more precise, an X-kind of word is less vague than a Y-kind if the occurrence of vague tokens is greater with the Y-kind than it is with the X-kind. Therefore, if quantitative words are less vague (as I suspect they are), it is because the number of contexts in which there is genuine doubt whether or not a word applies is much greater in the case of qualitative, than it is in the case of quantitative words.

But Russell does not use the ordinary sense of the word 'vague'. For Russell a word is vague if it always can cause a state of unsettled judgment concerning the extent of its application. For Russell, it is not the facts of usage, not the actual occurrence of unsettled judgments, which determine a word's vagueness; it is the *possibility* of a word causing unsettled judgments. But given this notion of vagueness, what sense does it make to say that one kind of word is less vague than another? Is it not like saying that jumping over the moon is logically less possible than jumping over the sun?

Russell would have us believe that 'red' is vague because it denotes a quality usually evoked by wave lengths of 760 millimicrons and we can always raise questions as to where redness ends. 'Metre' is vague because it denotes a distance equal to 39.370113 inches and we can always raise questions as to where this distance ends. Now if both words are vague because with each it is possible to raise doubts, then to say that one word is less vague than the other, is to say that it is less possible to raise doubts about the extent of the application of one word as compared to the extent of the application of the other. But how can it be less possible to raise these doubts? If one can doubt whether or not a colour evoked by a wave length

⁴ 'Vagueness', p. 86.

of 759.9 is red then it is just as possible to doubt whether or not a rod measuring 39.37011299 is a metre. If the vagueness of a word is determined by the possibility, and not the actual occurrence, of unsettled judgments, then given any two vague words it is just as possible to raise doubts about the one as about the other.

Let us consider what Russell has to say about proper names. They must be names of sense qualities that are known by acquaintance.⁸ They are words which have meaning in isolation, and psychologically are 'words which have been learnt without its being necessary to have previously learnt any other words.' They are words which in essence have a reference but not a sense—proper names denote but they do not connote.⁹

'Red' is a name but it is not a proper name. It is a name because we directly experience the quality called redness. It is not a proper name because in considering redness 'we are supposing that there are only qualities, not also instances of qualities.'¹⁰ Qualities, such as redness, in a sense exist, 'without our having to suppose that they have instances.'¹⁰ On the other hand, 'in the case of a true proper name, the name is meaningless unless it names something, and if it names something, that something must occur.'¹¹ 'Ebenezer Wilkes Smith' is a true proper name. It is a true proper name because, first, it names sense qualities that are known by acquaintance, and, second, there actually is an individual known as Ebenezer Wilkes Smith.

If this is the case then how can Russell maintain that 'Ebenezer Wilkes Smith' is vague? Does not his very definition of a proper name preclude the possibility of any proper name being vague? He cannot, for example, say that the connotation is vague since it lacks (strictly speaking) such a connotation. Of course he might want to say that its extent of application is in doubt. But how is it possible for someone who is acquainted with Ebenezer Wilkes Smith to be in doubt about the extent of application of his name? It would seem that if any symbol would be precise in its application it is a proper name.

Russell does not (and I believe cannot for the reasons cited) meet this objection. Nevertheless he insists that proper names are vague. And he supports this contention by offering a most ingenious argument. Mr. Ebenezer Wilkes Smith was born, and, being born, Russell informs us, is a gradual process.

It would seem natural to suppose that the name was not attributable before birth; if so, there was doubt, while birth was taking place, whether the name was attributable or not. If it be said that the name was attributable before birth, the ambiguity is even more obvious, since no

⁸ *An Inquiry into Meaning and Truth*, (New York, W. W. Norton & Co., 1940), pp. 37, 121-124, 369-371.

⁹ *Ibid.*, p. 80.

¹⁰ This does not mean that proper names cannot connote but only that they need not connote.

¹¹ *Inquiry*, p. 126.

¹² *Ibid.*, p. 128.

¹³ *An Inquiry into Meaning and Truth*, p. 37.

Bertrand Russell on Vagueness

one can decide how long before birth the name become attributable. Death also is a process; even when it is what is called instantaneous, death must occupy a finite time. If you continue to apply the name of the corpse, there must gradually come a stage in decomposition when the name ceases to be attributable, but no one can say precisely when this stage has been reached. The fact is that all words are attributable without doubt over a certain area, but become questionable within a penumbra, outside of which they are again certainly not attributable.¹²

Since we can always find cases where we can doubt whether or not a proper name is attributable it allegedly follows that all proper names are vague.

Before proceeding to analyze this difficult passage it is necessary to distinguish between two types of mentioning. Namely, the difference between mentioning a name for the purpose of providing some sort of linguistic description and mentioning a name for the purpose of giving that name to something, that is, mentioning a name for the purpose of assigning it to some new and unique object.

Consider the statements:

- (3) 'Ebenezer' has eight letters.
- (4) 'Ebenezer' is monosyllabic.
- (5) The name 'Ebenezer' should only be given after the child is born.
- (6) The name 'Ebenezer' should no longer be used if Ebenezer has died and his body has decomposed to a point where we cannot recognize Ebenezer merely by looking.

Examining these statements we note that they are composed of two types. Statements (3) and (4) mention 'Ebenezer' for the purpose of describing characteristics of that expression. (3) and (4) are either true or false. But statements (5) and (6) do not describe. They prescribe. They mention the name and then state whether or not it should be given to or used of an object. We cannot say the statements are either true or false; we can only give reasons why we agree or disagree.

When we ask

- (7) Should the name 'Ebenezer' be given to the foetus?
- (8) Should the name 'Ebenezer' be given to the child?
- (9) Should we continue to give the name 'Ebenezer' to a body that has decomposed beyond visible recognition?

we mention the name 'Ebenezer' but we do not refer to Ebenezer. And the name is mentioned solely for the purpose of deciding whether or not we should use it. Therefore we are not in doubt as to the extent of application of the name; we are only in doubt as to whether or not the name should be used. That is, we are only in doubt as to whether or not we should label the so-and-so 'Ebenezer'.

¹² 'Vagueness', pp. 86-87.

Marvin Kohl

Russell, I believe, has been misled by his own use of the word 'attributable'. Returning to the passage quoted we find that the word is sometimes used as a synonym for the phrase 'mentioned for the purpose of giving the name' and at other times used as a synonym for the phrase 'correctly used because they are applicable'. The evidence Russell adduces is evidence for the fact that we often mention expressions and are in doubt whether or not to use them as names. But he offers no evidence that we question the extent of application of this type of expression. Instead he uses the word 'attributable' to cover both senses of how an expression can be attributed.

Let us now briefly consider Russell's reasons for saying that logical words are vague. He admits that words such as 'or' and 'not' might seem at first sight to have a perfectly precise meaning. To illustrate the apparent precision of 'or' he defines it as follows: 'p or q' is true when p is true, true when q is true, and false when both are false. But he immediately tells us that the trouble with this definition is that it involves the notions of 'true' and 'false'; in fact all the concepts of logic involve these notions, directly or indirectly.

Now 'true' and 'false' can only have a *precise* meaning when the symbols employed—words, perceptions, images, or what not—are themselves precise. We have seen that, in practice, this is not the case. It follows that every proposition that can be framed in practice has a certain degree of vagueness; that is to say, there is not one definite fact necessary and sufficient for its truth, but a certain region of possible facts, any one of which would make it true. And this region is itself ill-defined: we cannot assign to it a definite boundary. . . . Logical words like the rest, when used by human beings share the vagueness of all other words.¹²

This passage indicates, among other things, a shift in Russell's position. He is no longer saying that words are vague because the extent of their application can be doubted. For Russell logical words are vague because they share the vagueness of other words. Being used in propositions along with other words, logical words, apparently 'catch' the vagueness of other words. It is like 'catching' a contagious disease. If some word-types have it then all the other parts of the language have to get it.

Evidently 'vague' is now being described as a word which applies to a proposition which contains some concept such that one *can* always raise questions about whether or not certain facts are necessary and sufficient for determining the designation of that concept. The difficulty is that by placing 'can' in the definiens the word 'vague' is emptied of almost all descriptive meaning and can therefore effectively function only as a term of disapprobation. 'Vague' then becomes, like the word 'bastard', so stripped of descriptive meaning that it merely signifies some sort of disapproval. But why do this? Does it make the language better? If anything it seems to do quite the opposite. For Russell seems to be stripping away, i.e. reducing, the descriptive meaning of a word, which if anything, needs just the opposite to be done to it.

¹² 'Vagueness', p. 88; *Human Knowledge*, pp. 147-148.

Bertrand Russell on Vagueness

To put a word that signifies a contingency that may only be possible, i.e. to put 'can' in the definiens of 'vague' makes about as much sense as it would to put it in the definiens of such words as 'fat' and 'ugly'. Instead of defining 'fat' as 'having an abundance or over-abundance of fatty tissue' we could define it as 'having the potentiality for an abundance or over-abundance of fatty tissue.' We could then 'argue' that all human beings are fat. If, instead of defining 'ugly' as 'being offensive to the sight' we define it as 'being potentially offensive to the sight', then it would follow that all human beings are ugly. Similarly, if Russell is permitted to put the word 'can' in the definiens of 'vague' it would follow that all propositions are vague. But what of it? What does it mean to say that all human beings are fat if they are fat because they can be fat? What does it mean to say that all human beings are ugly if they are ugly because they can be ugly? And finally what does it mean to say that all propositions are vague if they are vague because they can be vague?

We would suspect, would we not, that we were being deceived? We would suspect that someone is giving a new conceptual meaning to a familiar word and therefore substantially changing its meaning. And we would have such suspicions because the evidence indicates that someone, in this case Russell, is using a persuasive definition.

We come now to Russell's second argument, i.e. the argument that since the language system as a whole is vague, it follows that component parts of the system are vague. The argument is presented in two parts. He begins by defining 'vague'. '... a representation is *vague*,' he writes, 'when the relation of the representing system to the represented system is not one-one but one-many.'¹⁴ He then proceeds to explain why--given this definition--it follows that language is vague. In an accurate language he explains

meaning would be a one-one relation; no word would have two meanings, no two words have the same meaning. In actual languages, as we have seen, meaning is one-many. (It happens often that two words have the same meaning, but this is easily avoided, and can be assumed not to happen without injuring the argument.) *The fact that meaning is a one-many relation is the precise statement of the fact that all language is more or less vague.*¹⁵

Russell's position is that language--the language of science as well as the language of daily life--is more or less vague because language as a system is not very accurate. It is not very accurate because the relation of the representing system to the represented system is not one-one but one-many.

This view of language is unacceptable. I object to it:

- (1) Because it confuses vagueness with generality;
- (2) Because it suggests that a language that is less accurate is somehow inaccurate;
- (3) Because it implies that a language can be incomplete in the same way that a map can be incomplete;

¹⁴ 'Vagueness', p. 89.

¹⁵ *Ibid.*, p. 90. The emphasis is my own.

Marvin Kohl

(4) Because it would have us conceive of vagueness in such a way as to guarantee, logically guarantee before any facts come in, that language as system is vague.

(1) *Vagueness vs. Generality.* 'Russell's definition of vagueness as constituted by a one-many relation between symbolizing and symbolized systems is held to confuse vagueness with generality.'¹⁶ A term is not vague because it is general; likewise a term is not general because it is vague. The factors that make for generality are not the same as those that make for vagueness. A term is held to be a general term if it has more than one entity in its extension. But a term is vague when we are in doubt whether or not an entity correctly fits into the extension of that term. Vagueness is therefore a 'feature of the boundary of a term's extension and is not constituted by the extension itself.'¹⁷

(2) *Incompleteness is not the same as inaccuracy.* According to Russell, maps (photographs, etc.) are fully accurate only if they stand in a one-one relation to what they represent. Maps, for example, become (not very accurate and therefore) vague when the relation between the map and what it represents is one-many. He suggests that the wider the disparity, the vaguer is the representation, i.e., that 'a small-scale map is usually vaguer than a large-scale map, because it does not show all the turns and twists of the roads, rivers, etc. . . .'¹⁸ Like maps and photographs, a natural language is a representation. Like the other kinds of representation a language is fully accurate only if it stands in a one-one relation with what it represents. When the relation is one-many this results in a language that is not very accurate and therefore more or less vague. Thus Russell would have us believe that all language is more or less vague because all language is not very accurate.

But what does it mean to say that a representation is not very accurate? Does it mean (as Russell would have us believe) that such a representation is inaccurate? No. Being a 'not very accurate representation' is not the same as being an 'inaccurate representation.' An 'inaccurate representation' is one that adds something to the thing which is being described that the thing itself really does not have. An inaccurate representation is inaccurate because it is at least in part, a 'distorted picture' of the thing it allegedly represents. For example, a road map would be inaccurate if it had a road on it that never existed.

A 'not very accurate representation,' on the other hand, is one that leaves out relevant bits of information. Exactly what is and what is not relevant depends upon the situation. A certain map, for example, may be accurate enough to go cross-country but not very accurate in that it fails to mark the side roads which one would take if interested in exploring the countryside. Similarly, a written passage which describes the location of a cave might be accurate enough to give us a good idea of where that cave is but then again

¹⁶ Max Black, 'Vagueness', op. cit., p. 29.

¹⁷ *Ibid.*, p. 29.

¹⁸ Bertrand Russell, 'Vagueness', p. 89.

Bertrand Russell on Vagueness

it might not be accurate enough if our purpose was to actually find that cave. This would suggest that when we say that a representation or a description is not very accurate we are elliptically saying, that such-and-such is not accurate enough for the purpose at hand. Or perhaps still better, it is an abbreviated way of saying that a description is not complete enough, i.e. not detailed enough for the purpose at hand.

(3) Russell would have us believe that his criticism of language is like the criticism we might make of a map. He would have us believe that just as we often find a map to be inadequate because it, in some respect, is incomplete we would in fact find language to be inadequate because it too is incomplete. But Russell does not say that *a* description or *a* language is inadequate. No; he says that language, i.e. all natural languages are inadequate. This would be like our saying that all maps are inadequate. Now it might be true that all maps may be inadequate for a specific purpose but certainly it is not true that all maps are inadequate for every purpose. Similarly, it might be true that all the available descriptions of a given phenomenon are inadequate for a specific purpose, but certainly it is not true that all descriptions, i.e. that all language is inadequate for every purpose.¹⁹

(4) Consider Russell's definition of 'vague'. 'A representation,' he tells us, 'is vague when the relation of the representing system to the represented system is not one-one, but one-many.'²⁰ Russell, at the very least, is offering us a precisifying definition. But the difficulty with this definition as with many other precisifying definitions, is that it too easily lends itself to the fallacy of begging the question.

Consider an example of the simplest kind. Suppose someone is arguing that all buildings are skyscrapers. Suppose he rejects the definition—a 'skyscraper' is a very tall building—because it is too vague. Instead he offers a precisifying definition. He suggests that a building be considered a skyscraper only if it is 1.0007 metres in height. Now this is certainly being more precise. But it is equally obvious that such a move begs the question. By making 'skyscraper' precise in this particular manner our definition-maker is guaranteeing that the proposition 'all buildings are skyscrapers' will be true.

I suspect that Russell is also begging the question. But we have to be careful how we phrase this accusation. For it is not true that he *only* begs

¹⁹ A similar point has been made by Alice Ambrose. Miss Ambrose writes that 'even the fact that a symbolism L_1 is part of another, L_2 , does not necessarily make L_1 incomplete, although it may be inadequate for certain purposes. The language of arithmetic can be said to be part of the language of real numbers: it lacks certain symbols and the rules for their usage. But although arithmetic is *inadequate* for certain purposes, e.g., for solving algebraic equations, it is not an *incomplete* arithmetic. No parts of it are *missing*, as there would be from a symbolism which purported to be our arithmetic but which lacked the operation 4×4 . Taken by itself it is the whole language. It is completely unlike a dictionary with missing pages. Any inadequacy which at a given moment *a language* comes to have is not due to incompleteness. The classification 'incomplete' (and hence also the classification 'complete') is not properly applicable to a language.' 'The Problem of Linguistic Adequacy', in Black's *Philosophical Analysis*, p. 33.

²⁰ 'Vagueness', p. 89.

Marvin Kohl

the question. After all, more than half of his paper on vagueness is an empirical defence of his thesis that all language is vague. We therefore do not want to say that Russell's entire argument begs the question. But only that the shoring up of his empirical argument begs the question. Or to be still more specific, we are saying that the argument that results from the conjunctions of the proposition 'all language is vague' and the definition 'a representation is vague when the relation of the representing system to the represented system is not one-one, but one-many' begs the question.

The difficulty stems from Russell's use, or as I will shortly show his abuse of a certain word. It is the word 'represent' and its cognates. 'Represent' among other things, can mean 'to stand for' or it can mean 'to portray or carry information about.' When we say that words like 'animal' or 'man' represent, that is, when we say that general terms represent we usually are suggesting that these words stand for as well as carry information about the things that they represent. That is to say, general terms are symbols as well as signs of the things that they represent. But in Russell's ideal language representations have only a singular function. 'The would-be one-one relation between the representing system and the represented system will be meaning.'¹¹ The only 'meaning' a representation in this ideal language has is its relation with that which it stands for; the representation 'means' and 'means' only this one thing. It is not a sign but only a symbol.

With symbols, pure symbols, meaning would be a one-one relation. With signs, with actual language, meaning is one-many. Thus when Russell makes being not one-one, but one-many a necessary condition for vagueness he *eo ipso* necessitates that all signs be vague. For vagueness, as Russell now conceives of it, is a necessary condition of being a sign. It is not something a sign may or may not have. Vagueness is something a sign must have. It is something that must 'happen' to any entity which purports to be a sign, because Russell will not call it a sign unless it first be vague. By this move he guarantees, logically guarantees before any facts come in, that all signs have to be vague.

This provides the additional 'proposition' that he needs. For he has already assumed, assumed without question, that language, as a system, is a sign. And these two 'propositions'—'All signs are vague' and 'Language, as a system, is a sign'—are all that Russell needs to make a logical case. They provide the premises for a valid argument which if expressed would read as follows:

All signs are vague.

Language, as a system, is a sign.

Therefore language, as a system, is vague.

But since the truth of the major premiss has not been empirically established but results from a carefully constructed definition, and since the conclusion asserts exactly what is explicitly asserted by the premises, the argument

¹¹ 'Vagueness', p. 90.

Bertrand Russell on Vagueness

(though perfectly valid) is utterly incapable of establishing the truth of its conclusion. The argument begs the question because Russell has assumed in his premises something that should have been proven on empirical grounds.

Received September 1967

*State University of New York
College at Fredonia*