Brit. J. Phil. Sci. **58** (2007), 379–386

Truth and Simplicity

F. P. Ramsey

1 Preamble

'Truth and Simplicity' is the title we have supplied for a very remarkable nine page typescript of a talk that Ramsey gave to the Cambridge Apostles on April 29, 1922.[1] It is a relatively early work but it already touches even in such brief compass on several topics of fundamental philosophical interest: truth, ontological simplicity, the theory of types, facts, universals, and probability, that are recurrent themes found in most of Ramsey's papers, published and posthumous. The present paper has not appeared in any of the classic collections, and it comes as a pleasant surprise—just when we thought we had seen it all.[2]

In the paper, Ramsey develops two ideas he thinks are related: that 'true' is an incomplete symbol, and 'the only things in whose existence we have reason to believe are simple, not complex'. The first relies on Russell's notion of an incomplete symbol and the second he says is a view now (1922) held by Russell, and, as he generously says, he got it from Russell in conversation and doubts whether he would ever have thought of it by himself. Ramsey is very clear as to what simplicity requires:

> I mean that there are no classes, no complex properties or relations, or facts; and that the phrases which appear to stand for these things are incomplete symbols.

Ramsey says later in this paper, that the statements that 'true' is an incomplete symbol and that everything in the world is simple are part of the same view. Russell had already argued that classes and definite descriptions are incomplete symbols, and to that list, Ramsey proposes the addition of 'truth', complex properties or relations, and facts. The ontological havoc that

[1] The typescript with Ramsey's inked in corrections is on deposit in the King's College Archives (FPR/4/1). It appears here with the most kind permission of Mrs. Jane Burch, Ramsey's daughter. Very special thanks are also owed to Hugh Mellor, Nils-Eric Sahlin, N. Rescher, and Dr R. Moad, Archivist of King's College Cambridge.

[2] The standard collections are (Braithwaite [1930]; Mellor [1991]; Galivotti [1991]; Rescher and Majer [1991]).

doi:10.1093/bjps/axm029

this kind of simplicity might raise is apparent. Ramsey also made it apparent in this paper, that he was in favor of simplicity even though he admitted that

> To this view there are objections which I do not know how to answer, but I believe that an answer can be found by anyone who has sufficient ingenuity and patience.

The difficulties or objections are on a par with those that Russell faced in providing analyses of key phrases involving classes and definite descriptions to justify that they are incomplete symbols. Here similar difficulties arise for the analysis of key phrases involving 'truth', complex properties or relations, and facts.[3]

Since this is the text of a talk, Ramsey provided no footnotes, so we hasten to say that all the following footnotes are editorial footnotes that have been added.

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Ramsey, April, 29th. 1922.

I am going to discuss in this essay two related questions, namely what types of things there are, and the nature of truth. In particular I shall consider the view that the word 'true' is an incomplete symbol, that is to say not the name of a property which has no meaning but only as part of a sentence and not 'in isolation'; and that the only things in whose existence we have reason to believe are simple, not complex. To this view there are objections which I do not know how to answer, but I believe that an answer can be found by anyone who has sufficient ingenuity and patience.

The second of those propositions, that everything is simple, is now held by Russell. I got it from him in conversation and doubt if I should have thought of it myself. I shall begin by discussing it and leave truth till afterwards.

First to explain what I mean by saying that everything is simple. If you were making a list of the types of things that there are you would naturally enumerate the following: individuals or particular things, classes, properties, relations and facts. Further you might distinguish complex properties and relations from simple ones; for example to be yellow is a simple property, to be

[3] An exploration of these and further ontological themes in Ramsey's corpus can be found in the collection of essays in (Nils-Eric Sahlin [2005]).

taller than I am, and to be liked by most people are complex properties. You might then group together individuals and simple properties and relations as being simple, and classes, complex properties and relations, and facts as being complex. So in saying that every thing in whose existence we have reason to believe is simple, I mean that there are no classes, complex properties or relations, or facts; and that the phrases which appear to stand for these things are incomplete symbols. For example such a proposition as 'The satellites of Jupiter are three in number' apparently asserts a predicate of a class; on the view we are considering this cannot be the case but the proposition is of a different form having among its constituents no such entity as the class satellites of Jupiter, not even as the complex property, being a satellite of Jupiter, but only the simple entities in terms of which that complex property would ordinarily be said to be analysable.

The theory that symbols, which apparently stand for classes, are incomplete is put forward in Principia Mathematica, and I shall not discuss it here.

The theory that there are no such things as facts, I defend at length in a paper I read to the Moral Sciences Club and I shall only give a sketch of the argument here.[4] By a fact is meant an entity which consists in the possession of a property by a term or of the holding of a relation between terms; the only important reasons which have been given for the existence of such things are of two kinds. Reasons derived from considering the nature of truth, for example it is supposed that facts are entities to which our beliefs correspond when true, and do not correspond when false, and reasons arising from the supposition that events of occurrences are facts, that for example, the event which is my blushing consists in the possession by me of the property of blushing. The reasons connected with truth I leave till later, when I shall discuss truth, but I do not think there is much in them. The supposition on which the other rests, namely that events are facts is, I think, clearly false, for it can be shewn to imply the absolute theory of time.[5]

For the event which is my blushing at a given time t may be thought to consist either in the possession by me of the property of blushing or in the possession by me of the property of blushing at time t. On the first alternative any two blushes of mine would be identical with the possession by me of the property of blushing; this is therefore impossible. The second alternative is also impossible, for th [sic] blush or to have any other property at time t is to do so at a given time interval from a certain event E (that is except on the absolute theory of time); if we now analyse E, it cannot be held to consist in the

[4] This was in a paper read to the Moral Sciences Club. I believe that this is the paper 'The Nature of Propositions' read to the Moral Sciences Club on 18 Nov. 1921, and now published in (Rescher and Majer [1991]) and in (Galivotti [1991]).

[5] This argument already occurs in an earlier talk, 'The Nature of Propositions' published in (Rescher and Majer [1991]).

possession by something of a property at zero time interval from E, without a vicious circle.

We come now to complex properties and relations; this is the weak point of the theory that everything is simple. The best way of approaching the question seems to be as follows. If we take a relational proposition 'A is before B'. This asserts that a relation 'before' holds between the two terms A and B. Now we can make such statements as 'All the things which are before B are before C', 'Some of the things which are before B are after D', 'The things which are before B are more than 10 in number'. It is supposed that in these statements we are talking about the complex property 'being before B'. If there is this complex property besides the proposition 'A is before B', there will be the different propositions 'A has the property of being before B' and, of course, 'B has the property that A is before it'. Such a group of propositions will be related to one another by a relation that would not hold between a member of the group and any proposition not of the group. The best name for this relationship is, I think, 'equivalence', and I shall use the word equivalent to stand for this relation, and not its usual logical sense, meaning implying and implied by. This relation equivalence will, I think, have to be taken as indefinable, and we should define in terms of it what we mean by calling a property φ the property of being before B. For we cannot do this by defining A has φ to mean the same as A is before B since 'A has φ' is not to mean the same as 'A is before B' but only something equivalent to it.[6]

If however there are no complex properties, there will not be this relation of equivalence. 'A has the property of being before B' will be another verbal expression of the relational proposition 'A is before B'. In parenthesis I consider 'A is before B', 'B is after A' to be alternative sentences expressing belief in the same proposition.

Now what reasons can be given for the existence of complex properties? The only kind of reason I can think of is that there are propositions which cannot be satisfactorily analysed unless complex properties are admitted as possible constituents. There are various groups of propositions which might be thought to be of this kind. The ones I have thought of fall into three kinds (with some overlapping); propositions in whose assertion we should naturally use the phrase 'some property' or 'all properties', propositions asserting probability and propositions about what we believe.

First those in whose expression we should naturally use the phrase 'some property' or 'all properties' or which in symbolism would contain an apparent variable whose values are functions. The simplest case is 'A has some property'

[6] The word 'phi' has been replaced in all its occurrences in the original by the Greek letter φ. This is consistent with the last paragraph of the paper in which that Greek letter is inked in by Ramsey.

$(\exists\varphi\ (\varphi A))$[7]. On our view this could not be taken as an unanalysable statement, unless the property had to be simple or what is ordinarily called a quality. If we meant to include in our statement relational properties also we should have to analyse ‘A has some property’ as a complicated alternative ‘Either A has some quality, or has some two-termed relation to some term or some three-termed relation to some two terms or . . . etc.’

On the theory of types for the words ‘A has some property’ to mean anything ‘property’ must be definite as to type that is to say must mean a ‘property’ in whose analysis occur a definite number of ‘all’ and ‘some’ of definite kinds of things; this simplifies its analysis considerably, e.g. ‘A has some quality, or has some two-termed relation to some term, . . . or some n termed relation to some $n-1$ terms’. Were it not for the fact that the predicative property might consist not in a relation to a term but in not having a relation or in having one relation if not another. In fact we have to make some extra allowances for the truth functions; I do not see exactly how to do this but I don’t think much ingenuity would be required; if it proved impossible our theory will only have to be amended so far as to allow certain complex properties and relations, namely such as can be constructed from simple ones by using truth functions only.

However it might in any case be objected that on our analysis ‘A has some predicated property’ would be infinitely complicated (unless of course there is an upper limit to the number of terms relations can have). I do not see that this is any objection; but it is possible that the analysis is not really infinitely complicated, but only apparently so. For consider ‘x is an ancestor of mine’. This appears to mean that ‘x is a parent of a parent of mine or a parent of a parent of a . . . etc.’; which is infinitely complicated; but a method of analysis by means of ‘hereditary classes’ has been discovered on which this is not so. I think however that the application of this method to ‘A has some predicative property’ would involve a vicious circle. (Wittgenstein says the method does this in any case.)

Let us turn to the question of propositions asserting probabilities. These are generally held to assert relations of probabilities between two propositions the premiss and the conclusion[8]; propositions would be complex if there were any; I think they would be the complex properties of thoughts which we assert of thoughts that they are beliefs that this proposition (sic)[9] so if we are to

[7] The existential expression was inked in the original.

[8] This reference to premiss and conclusion is a reflection of Keynes’ view in *A Treatise on Probability* ([1921], Chapter 10, Section 2), where he writes: ‘Probability is concerned with arguments, that is to say, with the “bearing” of one set of propositions upon another set.’

[9] This ‘(sic)’ is in the original.

hold there are no complex entities we must provide some other analysis of probability propositions. Obviously we must say that 'φ has probability α given h' asserts a multiple relation between the constituents of P(φ ?) and h. The difficulty only occurs in connection with the laws of probability. Our analysis of (abh) $\frac{ab}{h} = \frac{b}{ah} \bullet \frac{a}{h}$[10] will have to be infinitely complicated because of the infinite number of the possible forms for a, b, and h. But this should not be an insuperable obstacle; for if we accept the theory of types we can only make general statements about propositions if the propositions are of definite type; and with this limitation the various cases should be quite manageable. I think they could be arranged in a series similar to that of the cardinal integers in order of magnitude in which each term is formed from the last by a definite law. Wittgenstein has invented a notation containing such a series of cases.

Lastly we must consider propositions about our beliefs saying that they are beliefs that the cat is on the hearthrug or that God exists. How are we to analyse them so as to avoid all complex entities? It is very difficult to see. If my belief is a belief that A is before B, how are we to analyse that; if we believed in complex properties we could say that my belief was multiply related to the property of being before B and the property of being possessed by something, which the former property was asserted to have. But as it is we shall have to say that my belief is related to before and to B and possibly to a mysterious thing called a logical form. If you consider the enormous number of logical forms that can be constructed you will see that to get a coherent account of belief in this way is awfully difficult especially as there is also the problem of the constituents of mathematical propositions. But I am inclined to think any such attempt misguided; for it rests on the assumption either that there are one or many indefinable belief relations, or that if they are definable it is possible to settle their logical form first, and define them afterwards. It seems to me unlikely that there are any such indefinables, that somewhere in the course of evolution, an animal 'thought' in [sic] unanalysable sense for the first time. It therefore supposes belief is to be analysed into other simpler relations, probably causal relations. I admit however, that neither Russell or Mr. Richards[11] who have tried to analyse belief in this way have had any considerable success. But this seems to me

[10] This formulation uses the notation of Keynes. In a more modern notation this particular law of probability would be written as $P((A \wedge B)/H) = P(B/(A \wedge H)) \times P(A/H)$ (for all A, B, and H), and is sometimes called the Multiplicative Law of probability, where 'P(A/B)' is read as 'the probability of A, given B'. This paper seems to follow by several months a devastating review of Keynes' Treatise ('Mr. Keynes on Probability'). That review was reprinted in this journal (Ramsey [1989]). It is well known from an observation of R. B. Braithwaite ([1973]), that Ramsey's own version of personal or subjective probability was 'written deliberately as a constructive criticism of Keynes' view.'

[11] Presumably I. A. Richards.

to be the business of the psychologist, and in view of the little that is known about the possibilities of such analysis, chiefly owing to insufficient study of the meaning of 'cause' I should say that difficulties based on the nature of thought were not a very strong ground for rejecting the theory that everything is simple.

I now turn to truth; at the beginning of my paper I coupled the proposition that truth was an incomplete symbol with the proposition that every thing in the world is simple as part of the same view. Suppose we take it that everything is simple. Then I say that p is true is merely a different verbal form for p. If however we consider 'He's said something true' we cannot dispose of the matter as easily as this. The remark would ordinarily be analysed as that there is a proposition which he has asserted and which is true. We are supposing there to be no complex things such as propositions and so cannot accept this analysis; instead supposing the proposition to be elementary as it must be of some definite type, we may give our analysis roughly as follows. 'There are terms and a relation, such that he has asserted the relation to hold between the terms and such that the relation does in fact hold between the terms'. Truth is thus seen to be an incomplete symbol, not the name of a property, because in this analysis no such property is mentioned.

If I believed that there were such complex entities as proposition (sic)[12] I should define truth as that property φ such that to say that p has φ is equivalent in the sense explained above to asserting p. I should suppose φ to be a simple quality; if asked why I should suppose there to be such a property I should say there were the same reasons as for any complex property. It is Principia 9.15: Primitive Proposition. If for some a there is a proposition φa then there is a function $\varphi\hat{x}$ and vice versa. In this case $\varphi\hat{x}$ is $\hat{x}$.[13]

References

Braithwaite, R. B. [1973]: 'Editorial Forward', in *The Collected Writings of John Maynard Keynes, VIII, A Treatise on Probability*, New York: St. Martin's Press, p.xx.

Braithwaite, R. B. (*ed.*) [1931]: *The Foundations of Mathematics and Other Logical Essays*, London: Routledge and Kegan Paul.

Galivotti, M. C. (*ed.*) [1991]: *Notes on Philosophy, Probability, and Mathematics*, Naples: Bibliopolis.

[12] This '(sic)' is in the original.

[13] The function $\varphi\hat{x}$ is what Russell and Ramsey called a propositional function—any function that maps objects to propositions. The citation is to *9.15 of *Principia Mathematica*. Later on Ramsey saw the need to define a more general concept of propositional function, if certain defects in the *Principia* were to be corrected. The new notion of a propositional function in extension is explained in his 1925 paper 'The Foundations of Mathematics' in (Mellor [1991]).

Keynes, J. M. [1921]: *A Treatise on Probability*, London: Macmillan.

Mellor, D. H. (*ed.*) [1991]: *F. P. Ramsey, Philosophical Papers*, Cambridge: Cambridge University Press.

Ramsey, F. P. [1989]: 'Mr Keynes on Probability', *British Journal for the Philosophy of Science*, **40**, pp. 219–22.

Sahlin N.-E. (*ed.*) [2005]: *Ramsey's Ontology*, Special Issue 3 of *Metaphysica (International Journal for Ontology and Metaphysics)*, edited by Nils-Eric Sahlin.