Ramsey's belief –> action –> truth theory.

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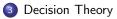
1. Truth and Probability (1926)

2. Facts and Propositions (1927)

3. Decision Theory

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Ramsey considers the notion of partial belief. We have to establish what a partial belief is and how it is to be measured because a degree of belief has no precise meaning, unless we specify exactly how to measure it. Therefore, Ramsey presents his first definition of a degree of a belief.

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> *This is the harder part of the task, but it is absolutely necessary; for we do calculate numerical probabilities, and if they are to correspond to degrees of belief we must discover some definite way of attaching numbers to degrees of belief. [TP, 64]*

Ramsey considers two ways in which we can deal with this task. The first one is assuming that a belief is perceptible by its owner and accompanied by a feeling of conviction to which a definite number could be ascribed. This method, however, is dismissed on a few very obvious grounds, i.e. the inability to ascribe numbers to feelings, or that we often have no feelings at all about our strongest beliefs. Ramsey suggest another, the only sound method "the kind of measurement of belief with which probability is concerned" [TP, 67] – to assume that the degree of a belief is a casual property of it – the extent to which we are prepared to act on this belief.

As soon as we regard belief quantitatively, this seems to me the only view we can take of it. It could well be held that the difference between believing and not believing lies in the presence or absence of introspectible feelings. But when we seek to know what is the difference between believing more firmly and believing less firmly, we can no longer regard it as consisting in having more or less of certain observable feelings; at leat I personally cannot recognize any such feeling. The difference seems to me to lie in how far we should act on theses beliefs: this may depend on the degree of some feeling or feelings, but I do not know exactly what feelings and I do not see that it is indispensable that we should know. [TP, 66]

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Ramsey proposes to construct a general and more exact theory of quantities of belief. A theory which assumes that "we act in the way we think most likely to realise the objects of our desires, so that a person's actions are completely determined by his desires and opinions" [TP, 69]. Admittedly, such theory cannot apply adequately to all possible situations, nevertheless, Ramsey decides to use it claiming for the results only approximate truth. He formulates what is now known as a Bayesian principle of the "maximisation of expect utility". Distancing himself from the utilitarians, for whom the pleasure had a dominating position, Ramsey holds that agents choose the act which is for them of the greatest utility, given their desires and their degrees of beliefs.

The theory I propose to adopt is that we seek things we want, which may be our own or other people's pleasure, or anything else whatever, and our actions are such as we think most likely to realise those goods. [TP, 69]

The focus remains on measuring the beliefs via basis of action. Ideally, our subject, having no doubts and only certain opinions about everything will always act in a way, which in her opinion, will lead to the greatest sum of good – maximum expected utility. Our agent, however, being human, is not always certain to what degree she holds at least some of her beliefs. Therefore, Ramsey suggests another definition of a degree of belief, which takes account of varying degrees of certainty in the agent's beliefs.

I suggest that we introduce as a law of psychology that his behaviour is governed by what is called the mathematical expectation; that is to say that, if p is a proposition about which he is doubtful, any goods or bads for whose realization p is in his view a necessary and sufficient condition enter into his calculations multiplied by the same fraction, which is called the 'degree of his belief in p'. We thus define degree of belief in a way which presupposed the use of the mathematical expectation. [TP, 70]

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Def. *degree of belief* in $p = \frac{m}{n}$;

which means that an agent's action is such as she would choose it to be if she had to repeat it exactly n times, in m of which p was true, and in the others false [in each of the n times he has no memory of the previous ones]. [cf. TP, 70]

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He has shown that the measure representing the degree of belief that an agent has in p satisfies the axioms of probability theory.

We find, therefore, that a precise account of the nature of partial belief reveals that the laws of probability are laws of consistency. They do not depend for their meaning on any degree of belief in a proposition being uniquely determined as a rational one; they merely distinguish those sets of beliefs which obey them as consistent ones.
Having any definite degree of belief implies a certain measure of consistency, namely willingness to bet on a given proposition at the same odds for any stake, the stakes being measured in terms of ultimate values. Having degrees of belief obeying the laws of probability implies a further measure of consistency, namely such a consistency between the odds acceptable on different propositions as shall prevent a book being made against you. [TP, 78-9]

Ramsey's aim was to show that we are able to measure the degree of belief an agent has in a proposition, and that provided the agent follows some principles of rationality, the measure by which we can represent this 'degree of belief' is a probability measure. Moreover, Ramsey in fact has shown that "the obtained measure of degree of belief is a probability measure".

In "Truth and Probability" (1926), Ramsey laid the foundations of the modern theory of subjective probability and of modern decision theory. Seen like this, it is important to understand TP as a theory of rule-following: we can describe a person's actions in terms of rule-following. If our distribution of degrees of belief follows the rules of probability, a book cannot be made against us.

For Ramsey the problem of truth is not separate from the problem of the analysis of judgement or the content of belief, hence the problem of truth is transferred to the problem of the truth conditions of beliefs, that is why Ramsey says that "if we have analysed judgement, we have also solved the problem of truth". [FP, 39]

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In "Facts and Propositions" Ramsey deals with full beliefs, which he defines as a set of actions for whose utility p is a necessary and sufficient condition. Moreover, Ramsey connects his theory of belief to a theory of truth, adding that the given belief is true if p, i.e. if these actions are useful. Thus any belief used as a basis for action is true, if and only if, the agent having the belief is successful acting on it. That is Ramsey's Principle.

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explicitly given – it is evident that 'It is true that Caesar was murdered' means simply that Caesar was murdered, and 'it is false that Caesar was murdered' means that he was not murdered. We add 'is true' and 'is false' for emphasis or stylistic reasons. We also say 'it is a fact that' which means the same. In the case of explicitly given propositions, if we substitute 'p' for 'Caesar was murdered' we do not have to add 'is true' to 'p', for 'it is true that Caesar was murdered' means simply that Caesar was murdered, hence the use of the variable 'p' is substitutional.

described – here, we get statements from which we cannot in ordinary language eliminate the words 'true' and 'false', e.g. 'He is always right' means that the propositions he asserts are alway true, The matter seems more complicated in the case of described propositions, although Ramsey is determined to hold that that it is just as simple. For as soon as we present our propositions in a clear logical notation, 'For all p if he asserts p, then p (is true)' the predicate 'is true' can easily be eliminated, since the propositional function 'p is true' is the same as p, like the value of 'Caesar was murdered is true' is the same as 'Caesar was murdered'. It could, however, be argued that the quantification here, is one over the objects, and not sentences, as in the case of explicitly given propositions. For Ramsey it was not, but he suggests yet another interpretation, i.e. to express it as a relation of the form 'aRb'; then 'He is always right' could be expressed by 'For all a, R, b, if he asserts aRb, then aRb (is true)' the elimination of the predicate 'is true' does not present any difficulties.

For all p iff p then p

which amounts to simply stating p itself.

To sum it up, on Ramsey's redundancy account of truth to say that p is a fact, or that it is a fact that p means the same as to say that p is true, which in turn amounts to simply stating p.

This short statement has, however, been misinterpreted by the deflationists. Ramsey's redundancy conception of truth only makes sense together with his theory of belief which, in turn, is dependent on his complete theory of truth. Hence, his theories of belief and of truth are interdependent. Ramsey's goal in FP is to present a logical analysis of judgement and belief, and he is determined to account for the truth conditions of beliefs and judgements. He wants to establish the factor that makes the truth predication of these notions possible, or more precisely, what these mental states have in common that enables us to state their truth or falsity.

As Michael Dummett notices, it is not possible that Ramsey held a redundancy conception of truth which amounted to the given equivalence, and at the same, using this equivalence wanted to determine the truth conditions of our beliefs, or generally, of all our mental states. Moreover, Ramsey was definitely aware that if one holds that "it is true that p" amounts simply to "p" one needs to know the content or the meaning of "p".

The following quote makes it clear that for Ramsey any discussion of truth is strictly connected to his theory of belief.

> It is, perhaps, also immediately obvious that if we have analysed judgement we have solved the problem of truth; for taking the mental factor in a judgement (which is often itself called a judgement), the truth or falsity of this depends only on what proposition it is that is judged, and what we have to explain is the meaning of saying that the judgement is a judgement that a has R to b, i.e. is true if aRb, false if not. We can, if we like, say that it is true if there exists a corresponding fact that a has R to b, but this is essentially not an analysis but a periphrasis, for 'The fact that a has R to b exists' is no different from 'a has R to b'. [FP, 39]

On Ramsey's account given in FP, a belief is a disposition to act if certain preferable circumstances were present and a disposition to act as if believed proposition was true. He considers the mental factors in a belief and holds that

> *Their nature will depend on the sense in which we are using the ambiguous term belief: it is, for instance, possible to say that a chicken believes a certain sort of caterpillar to be poisonous, and mean by that merely that it abstains from eating such caterpillars on account of unpleasant experiences connected with them. The mental factors in such a belief would be parts of the chicken's behaviour, which are somehow related to the objective factors, viz. the kind of caterpillar and poisonousness. An exact analysis of this relation would be very difficulty, but it might well be held that in regard to this kind of belief the pragmatist view was correct, i.e. that the relation between the chicken's behaviour and the objective factors was that the actions were such as to be useful if, and only if, the caterpillars were actually poisonous.[FP, 40]*

	Poisonous	Edible
Eat	Upset stomach	Excellent dinner
Refrain	Avoids upset stomach	Missed dinner

[1]

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[1]Sahlin, 1990, 72.

Thus any set of actions for whose utility p is a necessary and sufficient condition might be called a belief that p, and so would be true if p, i.e. if they were useful.[1]

and he adds in a footnote that

It is useful to believe aRb would mean that it is useful to do things which are useful if, and only if, aRb; which is evidently equivalent to aRb. [FP, 40]

This brings us back to the problem of the truth conditions of beliefs, hence a combined theory of truth and belief, understood as the basis of our actions, which leads us to yet another formulation of what has been called Ramsey's Principle

a belief that p is true, if and only if it is useful to do the things of which the truth of p is a necessary and sufficient condition.

The essence of pragmatism I take to be this, that the meaning of a sentence is to be defined by reference to the actions to which asserting it would lead, or more vaguely still, by its possible causes and effects. Of this I feel certain, but of nothing more definite.[FP, 51]

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A decision theory tells us how to handle our desires and beliefs and provides an account of how to combine these into a rational decision. We can describe a person's actions in terms of rule-following. If the chicken doesn't know whether the caterpillar is poisonous or not, it should act in a way that maximizes his expected utility. If, on the other hand, the chicken has a full belief that the caterpillar is poisonous, it will refrain from eating it – an action that is useful iff the caterpillar is, in fact, poisonous.

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It is perspicuous how Ramsey's ideas on truth presented in FP (1927) are dependent on the ideas on probability presented in TP (1926). Moreover, the same ideas are clearly visible in Ramsey's latest unpublished and far from completed manuscript – *On Truth*.

Thank you.