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# Belief as a Disposition to Act: Variations on a Pragmatist Theme

## *A Crença como uma Disposição para Agir: Variações acerca de um Tema Pragmatista*

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**Abstract:** One of the most familiar themes of pragmatist philosophy is the idea that belief is a disposition to act or a habit of action. Peirce took it from Alexander Bain and made it one of the cornerstones of his pragmatism. Since then it has been associated to the core of doctrines of classical pragmatism. Within analytic philosophy, the thesis that belief is a disposition to act has been equally influential, and much discussed from Ramsey to contemporary functionalist philosophy of mind.

In this paper I want to show that, although it is a common thread of many pragmatist or pragmatist-inspired doctrines, the belief-as-disposition-to-act theme is played on very different tunes by the various philosophical performers. A whole book could be devoted to the topic. I shall limit myself here to the views of Peirce, James, Ramsey, contemporary functionalists, and Isaac Levi. Depending on how they interpret this theme, the pragmatist philosophers can emphasise more or less the role of theory and practice in their respective account of thought, truth and inquiry. When they stress the former pragmatists are what I shall call *theoria-pragmatists*, when they put the stress on the latter, I'll call them the *praxis pragmatists*. I suggest that the first variety is much more appealing than the other, and I side with the theoreticist pragmatists.

**Keywords:** Belief. Habit. Disposition to act. Pragmatism. Analytic philosophy. Functionalism.

**Resumo:** *Um dos temas mais familiares da filosofia pragmatista é a idéia de que a crença é uma disposição para agir ou um hábito de ação. Peirce tomou-a de Alexander Bain e a transformou numa das pedras fundamentais do seu pragmatismo. Desde então, essa idéia tem sido associada ao cerne das doutrinas do pragmatismo clássico. Na filosofia analítica, a tese de que a crença é uma disposição para agir tem sido igualmente influente e muito discutida, desde Ramsey até a filosofia da mente funcionalista da contemporaneidade.*

*Neste artigo, quero mostrar que, embora seja uma linha comum de muitas doutrinas pragmatistas, ou inspiradas no pragmatismo, o tema da crença-como-disposição-para-agir é tocado em tons muito diferentes pelos vários executores filosóficos. Todo um livro poderia ser dedicado ao tópico. Limitar-me-ei aqui às visões de Peirce, James, Ramsey, os funcionalistas con-*

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*temporâneos e Isaac Levi. Dependendo de como eles interpretam esse tema, os filósofos pragmatistas podem enfatizar mais ou menos o papel da teoria e da prática em suas respectivas abordagens do pensamento, da verdade e da inquirição. Quando reforçam a primeira, os pragmatistas são o que chamo de pragmatistas teóricos; quando põe ênfase na segunda, chamo-os de pragmatistas da práxis. Sugiro que a primeira variedade é muito mais interessante do que a outra, e alinbo-me aos pragmatistas teóricos.*

**Palavras-chave:** *Crença. Hábito. Disposição para agir. Pragmatismo. Filosofia analítica. Funcionalismo.*

## 1. Bain, Peirce and the Pragmatic Maxim

It is well known (FISCH, 1954) that Peirce got his definition of belief from Alexander Bain, of which he heard in the discussions of the Metaphysical Club:

[1] In particular, he [Nicholas St. John Green] often urged the importance of applying Bain's definition of belief, as "that upon which a man is prepared to act." From this definition, pragmatism is scarce more than a corollary; so that I am disposed to think of him as the grandfather of pragmatism. (CP 5.12, 1907)

This kind of definition seems to us so common today that it is hard to understand why it was considered as so new and exciting at the time. Before Bain, and especially in Hume, belief was defined as the particular vividness of an idea in the mind, hence as a necessarily conscious and "occurrent" state. This kind of conception is still present at the end of the XIX<sup>th</sup> century, for instance in Cardinal Newman's (1870) conception of belief as mental assent, or in the conception defended by Walter Bagehot (1878) as a certain kind of conscious feeling or "emotion of conviction." Against this kind of conception, Bain, as a physiologist and psychologist, tied belief strongly to the motor system and the will, and to action:

[2] It will be readily admitted that the state of mind called belief is, in many cases, a concomitant of our activity. But I mean to go farther than this, and to affirm that belief has no meaning except in reference to our actions; the essence, or import of it is such as to place it under the region of the will. (BAIN, 1859, p. 568)

To say that belief is a habit is to imply that belief is not necessarily conscious:

[3] Belief is not a momentary mode of consciousness; it is a habit of mind essentially enduring for some time, and mostly (at least) unconscious; and like other habits, it is (until it meets with some surprise that begins its dissolution) perfectly self-satisfied. Doubt is of an altogether contrary genus. It is not a habit, but the privation of a habit. Now a privation of a habit, in order to be anything at all, must be a condition of erratic activity that in some way must get superseded by a habit. (*What Pragmatism Is*, CP 5.417, 1905)

But what is the nature of the readiness to act or disposition in what a belief consists? Peirce is clear on the fact that a disposition is not an actuality, but a potentiality. Belief is not a set of actual behaviours, but of possible behaviours. Peirce insists that habits are potentialities which are not actualised. This because every habit implies the existence of a law or general fact, which has the character of a "would be" or, in modern terms, of a counterfactual conditional:

[4] For every habit has, or is, a general law. Whatever is truly general refers to the indefinite future; for the past contains only a certain collection of such cases that have occurred. The past is actual fact. But a general (fact) cannot be fully realized. It is a potentiality; and its mode of being is *esse in futuro*. The future is potential, not actual. (*Minute Logic*, CP 2.148, 1902)

Now Peirce is cautious not to say that belief is any sort of habit or disposition (such as the disposition to sneeze when one catches a cold). Two features distinguish belief from other sorts of dispositions. In the first place, belief is “active in the imagination”:

[5] What particularly distinguishes a general belief, or opinion, such as an inferential conclusion, from other habits is that it is active in the imagination. If I have a habit of putting my left leg into my trouser before the right, when I imagine that I put on my trousers, I shall probably not definitely think of putting the left leg on first. But if I *believe* that fire is dangerous, and I imagine a fire bursting out close beside me, I shall also imagine that I jump back. Conversely - and this is the most important point - a belief-habit formed in the imagination simply, as when I consider how I ought to act under imaginary circumstances, will equally affect my real action should those circumstances be realized. (*Minute Logic*, CP 2.148, 1902)

In the second place, Peirce connects closely the existence of this habit as a disposition to act in ways which would make the proposition *true*. Belief is a habit of react in certain ways towards the truth of a given proposition.

[6] A belief in a proposition is a controlled and contented habit of acting in ways that will be productive of desired results only if the proposition is true. (*New Elements*, EP 2:312, 1904)

We shall see that these ingredients, the counterfactual element and the truth element, are central to other dispositional analyses.

Now, why is Bain's definition so important for pragmatism? Because it defines belief neither through its causes, nor as a certain kind of feeling, but through its effects upon our actions. The spirit of the pragmatic maxim is clearly the same:

[7] Consider what effects which might conceivably have practical bearings, we conceive the object of our conception to have. then our conception of these effects is the whole of our conception of the object. (*How to make our ideas clear*, CP 5.404)

And Peirce illustrates precisely what he means with the example of something hard:

[8] Evidently, that it will not be scratched by many other substances, the whole conception of this quality, as of every other, lies in its conceived effects. (CP 5.403)

The pragmatic maxim is a method of clarification of propositions (a proposition is clarified by listing the experiential consequences that we expect the proposition to have if it were true) and it incorporates a theory of meaning: the propositions are really meaningful are those the effects of which we can assign.

What are, however, the “effects” of our beliefs and conceptions? Are these particular pieces of behaviour or actions in broad sense? Peirce did not intend to give a behavioural definition of belief. What he meant by “effects” were *cognitive* effects, other conceptions and other beliefs.

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It is essential to understand Peirce's conception of belief to remember that for him beliefs are connected to other beliefs through a process of *reasoning*, of *inference*, and of *inquiry*. This means, first, that there is no such thing as a belief taken in isolation from other beliefs, and that a belief gets its identify and its meaning through its inferential links with the other belief to which it leads and from which it comes. Second, this means that belief is individuated through its aim or purpose, which is truth. *The Fixation of Belief* notoriously describes this process as the sequence: irritation of surprise or doubt, inquiry, and satisfaction of relief.

Now we hit a snag: inquiry, as a form of fixation of belief through inference, is a purposive *activity*, which has truth as its aim. But how can we reconcile this with the claim that belief is a *disposition* or *habit*? For a disposition, unlike an action, is neither intentional nor voluntary. We do not have control over our habits, or at least not on the processes to which they lead. How can we reconcile the passive element in belief with the active element? This is classical problem, which was not born with pragmatism. And it will, indeed, be the source of a major conflict within the pragmatist school, some thinkers insisting more on the active than on the passive side of belief.

We may ask this question more sharply: was Peirce a voluntarist about belief, like Descartes or Newman, or was he an involuntarist like Hume or Locke? On the one hand, we cannot choose a number of our beliefs, nor can we alter on demand our dispositions to act. So we cannot choose to believe. On the other hand, the conduct of inquiry is necessarily active and controlled, and its outputs are beliefs. Most of Peirce's descriptions of inquiry suggest that belief is for him the product of an activity on the part of the subject and a controlled one. Reasoning is a matter of *control*, and reasoning according to the standards of logic is a matter of self-control. Otherwise it would be a brute sequence of events, and it could not be criticised.<sup>1</sup> Doubt, suspension of judgement, and inquiry suppose an activity and a form of deliberation. Now, from this fact it does not follow that we can "decide to believe," to use Bernard Williams' phrase, or believe at will anything whatsoever that we want, and that we are free to believe in the sense in which we are free to act. In this respect, Peirce says:

[9] [The inquirer] is under a compulsion to believe just what he does believe [...] as time goes on, the man's belief usually changes in a manner which he cannot resist [...] The force which changes a man's belief is [...] in all cases, called *a gain of experience*. (MS 1342, CP 1.129, 1905)

Belief is not voluntary because we are forced to believe what is justified by our *evidence*. To do otherwise would be wishful thinking or sham reasoning. What Peirce calls "sham reasoning" is precisely reasoning which is not made for the sake of attaining truth (CP 1.57-8). Peirce defines inquiry as the process of stabilisation and settlement of belief. But not any sort of settlement of belief can fix belief in the proper way, for otherwise belief obtained through methods of indoctrination, drugs, or torture would could as "settled". Otherwise the bad methods of fixing belief, such as the methods of tenacity and the method of authority would fix belief. But only belief, which is controlled by a proper desire for attaining truth, is the proper kind of belief to have. The only

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<sup>1</sup> CP 5.108; 2.182; 2.204; 5.55; 7.444; cf. MISAK (1991, p. 89).

proper beliefs are not those which are “agreeable to reason”, but those which agree with experience. This is why, as we shall see, Peirce cannot agree with William James’ “will to believe” doctrine.

So what is voluntary and what is not voluntary, according to Peirce, in belief? What is not voluntary is the fact that we get beliefs depending on our evidence. It is not invented by us, it is forced upon us. This is not simply a fact about belief, but also a norm: we *ought to believe* according to what evidence presents to us. In that respect Peirce subscribes to the doctrine known as *evidentialism*, which is simply what is often called “Locke’s rule for the ethics of belief”: a man should believe only in proportion of the evidence that he has at his disposal. The norm that one should believe according to evidence is also forced upon us. But the inquirer, as soon as he recognises this norm, has a form of control over his belief. He can take certain decisions about it: he can doubt it, withhold it, or maintain it firmly. In that respect belief is active. So there is a passive side of belief, which goes with its habitual or dispositional character, but there is also an active side, which goes with its nature as a *commitment* of the inquirer.

Now what is the relationship of belief to truth? We have seen that belief is a disposition to act as if a belief were true [quote 6]. So truth is *internally* related to belief. But this is too weak. Truth is also the proper *object* of inquiry; hence it is *externally* linked to belief.<sup>2</sup> And, as it is well known, truth is the ultimate “aim of inquiry”, or its end. I am not going to enter here in the difficulties of interpreting Peirce’s conception of truth. (see MISAK, 1991).

Whether we interpret Peirce’s conception of truth as an idealist one (truth is relative to an ideal community of inquirers who *would* or *will* converge on it at the end of inquiry<sup>3</sup>) or as a realist one (truth is an idealised correspondence to an ultimate reality), two things are clear:

- a) truth for Peirce is objective, non relative
- b) truth is an independent norm or value

The second feature is what is most important for our purposes here. At no point Peirce’s version of pragmatism is committed to the idea that practical values can override theoretical ones. This is closely related to his evidentialist stance. At no point is Peirce saying that we could choose to believe, or orientate our conceptions according not to evidence or truth, but utility or practical interests. The only “effects” or “consequences” of beliefs which Peirce attends are *epistemic*, not practical or laden with other values that those of truth and experience. Intellectual or theoretical values always override the practical ones, and are always distinct. When it comes to science, Peirce is quite clear that it has nothing to do with belief and action. The proper goal of belief is actually *knowledge*, or the settlement of opinion in firm and stable truth:

[10] I hold that what is properly and usually called belief that is, the adoption of a proposition as a *ktēma es aei* to use the energetic phrase of Doctor Carus, has no place in science at all. We *believe* the proposition we are ready to act upon. *Full belief* is willingness to act upon the proposition in vital crises, *opinion* is willingness to act upon it in relatively insignificant affairs. But pure science has

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<sup>2</sup> For more on this distinction see ENGEL (2004).

<sup>3</sup> For this distinction cf. MISAK (ibid, p. 67 ff.). I have myself tended to interpret Peirce’s conception as a form of idealism (ENGEL, 2002, ch. 2).

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nothing at all to do with *action*. The propositions it accepts, it merely writes in the list of premisses it proposes to use. Nothing is *vital* for science; nothing can be. Its accepted propositions, therefore, are but opinions at most; and the whole list is provisional. The scientific man is not in the least wedded to his conclusions. (*Reasoning and the Logic of Things*, CP 1.635, 1898)

This is what post-modern pragmatists, such as Rorty, strongly dislike in Peirce, and do not want to call Peirce a pragmatist. But Peirce was a pragmatist, albeit what I would like to call a *theoria driven* pragmatist.

## 2. James and the will to believe

Things are not the same with James. Superficially James seems to adopt Peirce's conception of belief as a "rule of action" in defending the principle of pragmatism according to which

[11] to develop a thought's meaning, we need only determine what conduct it is fitted to produce; that conduct is for us its sole significance. and the tangible fact at the root of all our thought distinctions, however subtle, is that there is no one of them so fine as to consist in anything but a possible difference in practice. (JAMES, 1907, p. 29)

If we look more closely, however, at James' conception of belief, the differences are striking. James was acquainted with Bain's conception of belief, and he mentions Bain a number of times in *the Principles of psychology* and elsewhere. But he never explicitly mentions the thesis that belief is a disposition to act or a habit. In fact, when he writes on belief, as in his paper "The psychology of Belief" (*Mind*, 1889) and in *the Principles of Psychology* (xxi), James attends more to the emotional character of belief, and he seems not to disagree with Bagehot's view of belief as an emotion of conviction closely tied to a mental assent. Where Peirce borrows from Bain the passive side of his definition of belief as a disposition, James insists upon the conscious and emotional character of it, and its close ties with the will. He quotes Bain approvingly when the latter says (quote 1) "In its essential character, belief is a phase in our active nature – otherwise called the will."

But nowhere, to my knowledge, does James subscribe to the habit conception of belief. In the chapter on habits and in the chapter on the will of *The Principles of psychology*, he does mention Bain, but not in this connection. At the end of his chapter on belief, James raises the question: how can we believe at will? He admits that if belief is an emotion, we cannot control our emotions, and a man cannot believe at will abruptly. But nature can lead us to repeat the emotive feelings that we have in the presence of a habit, and to act as if the thing question were real. This is the way James explains the relationship between belief and habit, but it does not come down to a dispositional analysis of belief.

James interpretation of the pragmatist maxim is also quite different from Peirce, even when he quotes it approvingly (PERRY, 1948; HOOKWAY, 1997, p. 148). For him pragmatism is first and foremost:

[12] The attitude of looking way from first things, principles, "categories" supposed necessities, and of looking forward to last things, fruits, consequences, facts. (JAMES, 1907, p. 32)

Pragmatism for James, is mostly an opposition to *intellectualism* in philosophy, to logic. This is just the reverse of what Peirce was proposing.

The real nature of James' theory of belief, and his overt opposition to Peirce, is prominent in his celebrated doctrine in *The will to believe* (JAMES, 1897).

As it is well known, there James argues, against Clifford's view that "it is wrong, always, and everywhere, to believe anything on the basis of insufficient evidence", that there are cases, when we confront lived and forced options, where we can choose to believe on insufficient evidence. In such cases, James argues, we have to choose on other than "purely intellectual grounds", and we have to follow our "passionate nature".

This is, as many critics were prompt to remark, a very bold doctrine, which Peirce called a "suicidal" one (PERRY, 1948, p. 291). James has complained that he was misunderstood, but it is in large part his fault, since the article is full of obscurities and confusions (see HAACK, 1997). There are two aspects of the doctrine, one descriptive or psychological – *can* we, in actual fact, believe at will and control our beliefs? – the other normative – *ought* we to believe at will in certain circumstances? (cf. ENGEL, 2000) It is not clear that James's answer to the first question is positive. On the contrary he ties belief to our emotional nature, and insists that in many ways we are forced to believe as we do, and that our emotions are not under our control. As we saw above, he does not hold the view that belief can be voluntary in the sense that we could, as we do for actions, decide to believe or believe at will directly. Now his mention of Pascal's wager shows that he probably accepts the commonsensical view that we can manipulate our beliefs voluntarily, and, through various devices, end up believing what we want. In *this* sense, belief may be said to be voluntary. But James means to argue for the normative claim: in some cases, there can be prudential or practical *reasons* to believe on the basis of insufficient evidence, and practical rationality can override theoretical rationality.

There are two main difficulties with this view. The first is that it is not clear that the normative claim, if we formulate it in deontological terms – there are cases where we *ought* to believe on the basis of insufficient evidence – is correct. For if we ought, in such cases, to believe something, it must be that we can, as a matter of fact, believe so, hence to be actually able to believe at will – *ought* implies *can*. But we cannot have obligation towards things that we cannot do. The second difficulty is that it is not evident at all that we can have prudential arguments for the rationality of our beliefs. If the will to believe doctrine implies that there is no sharp distinction between purely epistemic reasons to believe something and practical or prudential reasons, it is wrong. For me to believe that smoking does not cause cancer may be useful because I am a smoker and value more my present pleasure than my health, even though I have evidence that smoking causes cancer. The fact that I might consider as rational my belief because I have certain values does not make this belief *epistemically* rational. Now if the will to believe doctrine is the weaker claim that, in spite of the difference between practical and epistemic standards of rationality, there are cases where the first override the second, one can accept this view, without granting epistemic rationality is at bottom a form of practical rationality.<sup>4</sup>

These difficulties are closely linked to James' theory of truth. Here too James

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<sup>4</sup> For a discussion of some of these matter, see HARMAN (1998).

should not complain that he has been misinterpreted, for his statements on truth are typically elusive and ambiguous, in spite of the fact that he claims to propose a distinctive new view. On the one hand he rejects explicitly a correspondence theory of truth in favour of a form of verificationism; on the other hand he accepts that truth is “agreement with reality”. He does pronounce the infamous words that “truth is but the expedient in the way of our thinking” and as what “pays”, but he also seems to subscribe to a view close to Peirce when he says that truth is the expedient “in the long run” (for these oscillations, see PUTNAM [1997]).

James’ critics, BRADLEY (1905) and RUSSELL (1910) in particular, were prompt to attack the view that truth could be in some sense reduced to utility, and identified with its practical consequences. The arguments are so well known that it is not necessary to rehearse them here. It is interesting to notice in the present context that Bradley makes the following lucid remark in a footnote:

[13] I would be interested to know our new gospel conceives its relation to Bain’s theory of belief. It might seem to have taken that theory, and without considering the objections to which it is liable, to have gone beyond it by simply writing “truth” for “belief”. (BRADLEY, 1905)

In response JAMES (1909) said that he had never held such a philistine doctrine and never wanted to reduce truth to utility. Nevertheless, he does insist on the anti-intellectualist character of pragmatism, and on the fact that its concern is with “concrete” as opposed to “abstract” truths, and defends the primacy of practice over theory. In strong contrast with Peirce, James understands the pragmatist idea of evaluating a thought through its consequences as implying that one looks at its *actual* consequences, whereas Peirce understands the maxim as implying that one attends to the *counterfactual* consequences of a thought. Whereas Peirce sees the ultimate end of cognition as knowledge, for James the ultimate end is action. He was, in my view, a *praxis* pragmatist, and very ambiguously or not at all a *theoria* pragmatist.

### 3. Ramsey

It is somewhat ironical that the philosopher who did most to revive Bain’s conception of belief in the first half of the XX<sup>th</sup> century, Frank Ramsey, took his inspiration from Russell, one of the sternest critics of James’ pragmatism.

In his famous paper “Facts and propositions”, Ramsey sets himself the task of defining the concept of belief, and he defines it through the set of actions that an individual is prepared to take. Like Peirce, he takes pragmatism to be mostly a claim about meaning.

[14] 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, but its possible causes and effects. (RAMSEY, 1991, p. 51)

Ramsey subscribes to Bain’s and to Peirce’s conception of belief as a disposition to act. He insists that belief is neither specifically conscious nor tied to a conscious feeling, that it has an habitual character. The novelty in his own account comes from the fact that he thinks of beliefs in terms of their possible causes and effects, an insight which he

takes from Russell's *Analysis of mind*. What we believe is determined by what belief causes us to do. What are the causes of beliefs? Other beliefs, together with desires, which determine the values or utilities upon which someone acts. What are their effects? Possible actions. Ramsey takes the example of a certain chicken who

[15] 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. (RAMSEY, 1991, p. 40)

The chicken 's decision matrix is

states of the world		
actions	<i>poisonous caterpillar</i>	<i>edible caterpillar</i>
<i>eat</i>	upset stomach	good dinner
<i>refrain from eating</i>	avoid upset stomach	missed dinner

Ramsey's analysis is now so familiar from decision theory that his originality can be missed. His point is that belief is identified by his causal role, in connexion with desires, in producing actions, a conception which anticipates, as we shall see, the functionalist conception in contemporary philosophy of mind. This account for the nature of belief as a mental state. But Ramsey also has a conception of the *contents* of belief as a propositional attitude. This is where his pragmatist analysis comes in:

[16] An exact analysis of this relation would be very difficult, but it might 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 caterpillar was actually poisonous. 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 there are useful. (RAMSEY, *Facts and propositions*. In: RAMSEY, 1991)

This has been taken, in my view rightly, as an anticipation of the familiar functionalist conception of belief. But it can also be taken as a pragmatist definition of the contents of beliefs in terms of their utility conditions. In the same paper Ramsey says:

[17] 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, but its possible causes and effects. (*ibid.*, p. 51)

This sounds very much like Bain's slogan. But Ramsey gave it a particular twist. He associated the truth of a belief to its successful consequences in action. In other words he associated truth with success in acting (see MELLOR, 1990; DOKIC; ENGEL, 2002). The idea can be spelled out in a few steps.

a) Truth is the property of a belief that suffices for your getting what you want when you act on it. When an action results in getting what one wants, i.e. when it leads to the satisfaction of one's desires, the action is said to be successful. So, according to this principle, there is an internal relation between truth and success:

**(RP)** True beliefs are those that lead to successful actions whatever the underlying motivating desires.

We can call this "Ramsey's Principle". The important point is this: (RP) is not a *definition* of truth, and it does not define truth as utility. Ramsey did not defend a pragmatist theory of truth, but a version of the deflationist's theory of truth, according to which "It is true that *p*" and "*p*" are equivalent.

b) (RP) states an internal relation between truth and the success of actions. It is a thesis about the *meaning*, or *content*, or *truth conditions* of beliefs, i.e. of the propositions, which are the objects of belief or judgment. Ramsey's claim is that a belief's truth-conditions are determined by its success-conditions. So (RP) should rather be formulated thus:

**(RP')** A belief's truth-conditions are those that guarantee the success of an action based on that belief whatever the underlying motivating desires.

c) An immediate objection to (RP) and (RP') is that a belief's content or truth conditions will change depending on the nature of the success or our actions, which are in turn relative to our desires, which can be changing. For instance relative to my desire to stay dry my action of not taking my umbrella is unsuccessful, but relative to my desire to dance in the rain it is successful. How are we, in each circumstance, to evaluate the content of the belief, which leads me to the action of not taking my umbrella? Truth-conditions are not to be identified with the results of action, which change according to the desire (or set of desires) involved. They are to be identified with the *invariant* conditions in the world that guarantee success whatever goal is pursued. According to Ramsey's Principle, these conditions are nothing but the state of affairs corresponding to the belief or the belief's truth-conditions. So strictly speaking, Ramsey's "success semantics" works mostly for *general* beliefs, those which have enough stability in the long run, and not for those which are short lived or about particulars. Remember that it was also a feature of Peirce's conception.

Now a notorious feature of Ramsey's conception of belief as a disposition to act is that he does not simply has a theory about the content of beliefs but also a theory of the strength or degree of belief, which are degrees of probability. In "Truth and Probability" (1927) he defines the principles of the measurement of beliefs and desires through action. In order for beliefs and desires to be measured on a scale, certain kinds of actions have to be considered: bets, and the odds that the agent is prepared to put on a proposition. This is called the betting quotient *conception of belief*. For instance suppose that I am ready to bet at 3:1 that the proposition that it will rain tomorrow is false. My degree of belief in this proposition is of  $3/(3+1) = 0.75$ . One can tell the degree of belief of an agent if one knows his degree of desires and his bets; one can tell the degree of his desires if one knows his degrees of belief and his bets; but the difficult problem is to tell his degrees of belief and of desire from his bets alone. This is were Ramsey had an

original measurement procedure. I am not going to detail it here. It gives a precise meaning to the idea that belief is a disposition to act, for certain kinds of acts. But it is also highly idealised, and relative to specific assumptions about probabilistic coherence and rationality. It is actually the basis of all modern Bayesian decision theory, which is nothing but the formal development of Bain's and Peirce's idea<sup>5</sup>.

What is the relationship between Ramsey's Principle that a belief's truth condition are determined by the success of the actions to which it leads, and Ramsey's probabilistic measure of belief? There is none. For Ramsey's Principle applies only to *categorical* or *full beliefs*, as he calls them, and not to *degrees of belief* or *partial beliefs*. Why? Because we cannot, from the success of an action, compute the degree of a belief. Suppose that my degree of belief that one can drink a good *caipirinha* in a certain distant bar is only 50%. That partial belief can combine with, say, a desire not to spend too much energy to go to this bar, and cause me to stay at my hotel instead. But it is not part of the success condition of my staying at my hotel that either there is *caipirinha* at this bar or there isn't. Success semantics works only for full beliefs, which means that the determination of the content of our beliefs through our actions is prior to the assignation of degrees of belief to them.

Ramsey defended a particularly pure version of the dispositional conception of belief. He associated quite clearly Peirce's conception of pragmatism with the analytic conception of philosophy defended by Russell and Wittgenstein. A number of his views, nevertheless, have an operationalist and instrumentalist ring. But he subscribed to the conception of truth as the end of inquiry, and, although he famously said that we should take seriously the idea that philosophy is nonsense and that we should not, like Wittgenstein, take it as important nonsense, he defended the *theoria* based conception of pragmatism.

But is the dispositional conception of belief correct? If it is a disposition what kind of disposition is it? I turn next to some well-known objections to it.

#### 4. Dispositionalism and Functionalism about Belief

Richard Braithwaite, Ramsey's friend and editor, published in 1932 an essay where he gives explicitly a dispositionalist definition of belief inspired by Ramsey's, and which he places directly under the invocation of Bain's definition<sup>6</sup>:

[18] To believe that  $p$  is to be disposed to act as if  $p$  were true. (BRAITHWAITE, 1932)

In substance this is Peirce's definition. But is extraordinarily ambiguous and it raises many difficulties, in particular the following.

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<sup>5</sup> Bain himself never envisaged it in this way, even though there are trace of it in Pascal's wager's argument, and in Venn's *Logic of Chance*. Peirce envisaged the subjective meaning of probability, but his overall conception was an objectivist or frequentist one. I shall not deal with this point here.

<sup>6</sup> See BRAITHWAITE (1932, n. 2, p. 31).

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**(i)** *The many-track nature of belief dispositions and the holism of belief.* A first ambiguity has been removed when we noticed that it holds not for actual actions but for possible actions. But the problem, if the “is” in [18] indicates a definition (or a necessary and sufficient condition) is that, even on a counterfactual reading of dispositions, no set of actions, even potential, can ever account for a belief. To take a well known example of Ryle’s, if I believe that the ice on the lake is thin, I may manifest my belief by being disposed warn children not to walk on it, by not going myself on ice, by making gestures, or, if I happen to desire the death of my worse enemy, by advising him to step on the icy lake, etc. For this reason Ryle proposed to identify beliefs with open ended sets of dispositions, or “many track” dispositions. In doing so he tried to cope with the well-known holistic feature of belief: belief cannot be defined through a set of actions, but only through a set of actions *given* other beliefs and desires.

**(ii)** *The ontology of dispositions.* Dispositions are strange creatures. On the hand a number of philosophers – the positivist, and Ryle himself – doubt that they exist at all, and adopt a purely phenomenist view of them. In this sense the counterfactual conditionals, which are supposed to express them, report simply phenomenal regularities. On the other hand, some philosophers are realists about dispositions, but they can diverge on the question whether the disposition is a real nature associated to real possibles – this was more or less the Aristotelian position – or whether it can be reduced in some sense to its “categorical basis” (see ARMSTRONG, 1973; MUMFORD, 1998). Peirce was clear in his acceptance of real “would-bes” in reality, and in this respect he was a realist about dispositions and in laws. The matter is less clear with other pragmatists. James was considered by Peirce himself to be an actualist. Ramsey is more of a realist, but in some of his more operationalist tones he is less clearly realist.

**(iii)** *The manifestation conditions of dispositions.* Another well-known difficulty concerns the way a disposition is manifested. In what circumstances will the disposition manifest itself? In particular could it be such that the disposition be *caused* by its very manifestation? If we define a dispositional belief as one which is merely tacit and which might become explicit or conscious, what about those beliefs we acquire just by noticing them, like the belief that I am presently speaking loudly which I did not have one moment ago, but which I come to acquire when someone tells me that I speak loudly? The belief was not a disposition of mine: I did not believe that I was speaking loudly; but I acquire the disposition at the moment when I acquire the conscious explicit belief. Another difficult case is when the very manifestation of the disposition *binds* the belief. Suppose for instance a glass, which is fragile when it is not struck but which, as soon as it is struck, ceases to be fragile. Similarly we could imagine someone who believes that spiders are awful, but who, as soon as he meets one, get a disposition to believe the contrary. Such cases are odd, but there is no logical impossibility in such “finkish dispositions” (MARTIN, 1994; LEWIS, 1997). This has led to doubt the adequacy of the conditional analysis of dispositions.

**(iv)** *Aiming at truth and being disposed to act as if true.* Braithwaite’s and similar definitions crucially invoke an *as if* clause. But it is trivial to remark are a number of cases where we are disposed to act as if a proposition were true without actually believing the proposition. Pretence, make believe, or lies are

compatible with the definition. The point is not simply the familiar objection to behaviourism. One of the main characteristics of belief is that it is an attitude, which is such that it “aims at truth”. It is difficult to analyse this feature which does not simply amount to the familiar idea that beliefs have a certain “world-to-mind-direction of fit”, but to say that the relationship between a believer and a proposition is such that the believer has to act *as if* the proposition were true seems much too weak to the nature of this relation (see ENGEL, 2004).

(v) *The missing action.* The dispositional analysis of belief implies that a state which would have the kind of relationship to truth which is characteristic of belief but which would never have any effect whatsoever on the psychology of an agent and, at least potentially, on his actions would not be a belief. Some philosophers deny this and argue that there could exist creatures who had beliefs but whose beliefs would have no effect, even potential, on their behaviour (STRAWSON, 1996).

Construed narrowly and almost behavioristically, the dispositional thesis is certainly open to such difficulties. But a number of philosophers have argued that a wider dispositionalist thesis construed along the lines of the functionalist conception of mind avoids most of these difficulties.

Let us leave aside the ontological issue (ii). As we have already seen above, no strictly dispositional definition of belief is correct. A belief is associated to disposition to act in certain ways only *given* desires, other beliefs and other mental states (see e.g. LEWIS, 1966). On the functionalist thesis, which we can ascribe to Ramsey, a belief is the potential cause of actions, in relationship to other beliefs, desires, and other mental states, and given its role in various inferences an agent is likely to make. Braithwaite’s definition should be reformulated more or less like this:

[19] X believes that  $p$  = X is disposed to act and to have mental states in ways such as X’s desires would be satisfied if  $p$  were true and would cause or be caused by have other mental states and inferences.

Such a more liberal definition would answer the holistic objection (i) and the missing action objection (v) at least.<sup>7</sup> We could answer the latter by pointing out that although beliefs could exist in the absence of a corresponding disposition to act, it is very unlikely that a creature could have a belief without it making *any* difference in her psychology at all. Some people can be so secret that their thoughts are forever hidden, may be to themselves. But the idea that one could believe that  $p$ , and that this state in no way is caused by any other of her mental states nor causes any mental state is – you can say that again! – *unbelievable*.

The most pressing objection to the dispositional view, it seems to me, is (iv). We could reformulate it in the following way. Although dispositionalism can account for the habitual (and largely unconscious) character of a number of our beliefs, it cannot account for these of our beliefs, which involve a distinctive *commitment* to the truth of a proposition, which is explicitly considered by the agent. We have already encountered this problem, and seen how Peirce in particular oscillates between the view that belief

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<sup>7</sup> On similar definitions, formulated in terms of possible worlds, see STALNAKER (1984).

is habitual and not necessarily conscious and the view that belief is a kind of voluntary commitment. We have seen how James, choosing the second branch of the alternative, is led to exaggerate the voluntaristic character of belief. But in fact there is no tension between the dispositional or habitual conception of belief and the commitment conception. This will be my last point.

## 5. Belief and Commitment: Dewey and Levi

One of the essential ideas of classical pragmatism is that beliefs do not come one by one, but are part of the general activity of inquiry. Inquiry is the procedure whereby we *change* and revise our beliefs. Now there is way to understand change of belief as a purely routine or mechanical matter, as when a creature, an animal say, registers incoming information and updates its previous information. A quasi-behaviouristic view and an orthodox Bayesian conception understand belief change in that way.<sup>8</sup> This is not, as we have seen, the way classical pragmatism sees the matter. Change of belief is not an unconscious upgrading of information. It is also, as Peirce insisted, a controlled and reasoned activity, which implies reflexivity and will on the part of the agent. In changing his beliefs, the agent has to revise his previous commitments, and to uphold new ones. This means not only acquiring habits of action, but also being able to see what one is committed to when one has certain beliefs. If one did not make a distinction between belief as habit or disposition and belief as commitment, there would be no difference between changing one's beliefs through therapy, hypnotism, indoctrination or any sort of training on the one hand, and changing one's beliefs through conscious inquiry. In the former case, we typically lack control over what we believe, and much of our activity can happen, after a certain stage, on automatic pilot. In the latter case, our activity is conscious and voluntary. In change of belief through mere training or drill, we do not attend to the truth of our beliefs: we just get them. In change of belief through commitment, we do attend to the truth, which becomes the aim of our conscious belief attitude.

This distinction between dispositional belief and commitment can be spelled out in many ways. As we saw Peirce sometimes spelled it out as a distinction between mere opinion (in insignificant matters) and full belief (in vital matters), sometimes as a distinction between belief and controlled reasoning or inquiry. In many respects it overlaps the distinction between *partial* beliefs (possibly assigned in the Bayesian way) and *full beliefs*, which Ramsey emphasised. Other writers have formulated it as a distinction between *belief* proper and *acceptance* (see ENGEL, 2000a). One classical pragmatist who emphasised strongly a belief/ commitment distinction is DEWEY (1938). Dewey took it point of departure in Peirce's belief-doubt model of inquiry and developed it. He considered changes of full belief as a species of attempt to adjust means to ends. The inquirer seeks to answer an as yet unsettled question. The conjectures, which constitute the potential solutions to a problem, are, in Dewey terminology, the "propositions". The conclusion is a "judgment". Dewey likened the undergoing of a commitment to the

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<sup>8</sup> JEFFREY (2000) is ready to understand belief in men and in animals as well in that way.

subscription to a contract. When the inquiry is well conducted, the judgment is asserted and “warranted”, and becomes a resource for further inquiry.

A contemporary writer who has developed, with an unprecedented level of sophistication, Peirce’s and Dewey’s conception of inquiry is Isaac Levi (see *e.g.* 1996, 1999). His own way of formulating the belief/commitment distinction consists in distinguishing two kinds of change of belief:

[20]

1. Changes in attitudes as doxastic, affective, or evaluative commitments that are subject to control and inquiry.
2. Changes in doxastic, affective, and evaluative performances that succeed or fail in efforts to fulfil such commitments. (LEVI, 2002, p. 212)

It is one thing to change one’s commitments (a voluntary activity). It is another thing to change one’s performance in an attempt to fulfil a commitment, for the attempt can fail and the performance can be in that respect quite involuntary. The latter is voluntary in the sense in which an ordinary action is voluntary, and we can fail to act in the ways we have decided to act. But there is no incompatibility between the two kinds of doxastic states, beliefs and commitments. It is not as if the doxastic world were divided into a purely passive domain, belief, and a purely active, one, commitment, judgement or acceptance. Some of our beliefs are dispositional and in a large measure tacit. They involve the entertaining of certain content, but they are first-order in the sense that we do not reflect on them. Other beliefs are reflexive, and second order: they are the basis of our commitments. But adopting the latter does not imply attending to them all the time, as if one stood always behind one’s commitments. Disposition can be acquired at the second-order level too. But at this level dispositions are not mere unreflective habits: they are reflective ones, *rational* dispositions. This is why it would be wrong to equate the notion of commitment with the rejection of the dispositional conception of belief.

The logic of commitment or full belief is a logic of belief revision, among those, which have been studied by a number of logicians today<sup>9</sup>, and Levi has been one of its main contributors. A notable feature of Levi’s own model is that it applies primarily to full belief, and not to partial belief. According to this conception, a rational inquirer should try to have a view of his commitments and what they imply. In Peirce’s terminology, he should transform his habits of thought into “leading principles”. In other words, he should become a logician.

The belief/commitment model emphasises the voluntary and controlled character of commitment and change of belief. But, to insist, it does not in any way imply that belief itself is voluntary in the sense in which it could be decided “at will”. For evidence is the benchmark by which inquiry is ruled. In other words, the inquirer controls his belief in so far as he checks his commitments, adheres to them, doubts, suspends judgment, revises his beliefs, and takes other commitments, but he is also, so to say, himself controlled by evidence and *the facts*. Neither does the belief/commitment model

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<sup>9</sup> Notably, as well as Levi himself, David Makinson, Carlos Alchourron and Peter Gärdenfors.

imply that the theoretical value of truth should give way to the practical value of utility. On the contrary a conception such as Levi's, like Peirce's or Ramsey's, makes truth an independent and autonomous goal of inquiry, one that is not preceded by other values. The matter is less clear with Dewey, would wanted to replace truth with warranted assertibility. Nevertheless Dewey maintained the autonomy of truth and knowledge as values. To say that truth is an independent value does not mean that we cannot treat inquiry as a form of means to end or instrumentalistic reasoning parallel to practical reasoning or reasoning about action. In that respect the aim of inquiry would be a form of epistemic utility, reachable through some sort of decision. But this means-end practical reasoning does not imply any reduction of theoretical values to practical values as such. Levi lucidly comments:

[21] For Dewey, the minimal principles regulating intelligently conducted deliberation are applicable not only to economic, political, prudential, and ethical deliberation, but to scientific inquiry as well. to this extent, therefore, there is not difference between "practical" rationality and "theoretical rationality". The core characteristic of the pragmatism of Dewey worthy of the our admiration and serious attention is the thesis that all rationality is in the service of problem solving. To endorse such a pragmatism, as I do, need not, however, entail a reduction of the aims of scientific inquiry to moral, political, economic, personal, or aesthetic goal. Once one concedes the diversity of values, as Dewey clearly does, there is little pressure to conclude that the cognitive goals and values, which ought to be pursued in factual inquiry, should be re-described as moral, political, personal or aesthetic goals. (LEVI, 1999, p. 220)

## Conclusion

The reduction of epistemic to other values, practical in general, is precisely what Bradley and Russell already objected to Schiller's "humanism" and to James' "pragmatism" in their time. But this is not a mistake or a systematic confusion that theory oriented pragmatism makes.

This is not the way a "neo-pragmatist" like Rorty understands the matter. Rorty, contrary to Peirce, is attracted by a purely naturalist, post-Quinean conception of belief as a disposition.<sup>10</sup> But he also strongly emphasises the voluntary aspect of belief, and subscribes to a version of the will to believe doctrine, especially in his anti-evidentialist aspects. In his hands pragmatism is precisely an attempt to overcome the usual dualisms of thought and reality, fact and value, and theory vs practice. Truth becomes what is favoured by our community, evidence becomes what *we* could as evidence, objectivity becomes intersubjectivity, a sharp division between believing and willing, believing and desiring, between what is intellectual and what is practical and emotional is erased. Rorty is, in our days, the leader of *praxis* pragmatism. He pretends to be faithful in that

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<sup>10</sup> It is interesting to note that when he defines belief in *Quiddities* (HARVARD, 1987), Quine adopts the purely dispositional definition. Another neo-pragmatist of the most extreme relativist stripe is STICH (1990).

to James' and Dewey's doctrines. In some respects he may be right, for we have seen that James especially is ambiguous in these respects.<sup>11</sup>

But proper ancestry is only part what matters here. What matters is that we can identify a species of pragmatism, *theoria pragmatism*, which, without renouncing the dispositional conception of belief as a basic tenet of pragmatism, does not throw by the board the basic dualities between believing and willing, fact and value, theory and practice. If it is not pragmatism, let be it, and *amicus pragmatismus, magis amica veritas*. But I think it *is* pragmatism, properly conceived.

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<sup>11</sup> On Rorty's so-called pragmatism, see HAACK (1998). For similar ambiguities in Putnam, see TIERCELIN (2003).

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