#### THE PROBLEM OF NEGATION

#### Eric Toms

#### Summaries.

Firstly, it is argued that ordinary thinking presupposes negative facts, and that negative facts cannot be explained away linguistically. Secondly, a paradox concerning negative facts is explained, and it is argued that standard theories of negation fail to dispose of the paradox. Thirdly, a solution in line with the first part is put forward, and some difficulties incurred by this solution are discussed.

En premier lieu, nous affirmons que la pensée ordinaire présuppose les faits négatifs et que ces faits ne peuvent être expliqués par une théorie linguistique. Deuxièmement, nous expliquons un paradoxe concernant ces faits négatifs et nous prétendons que les théories classiques de la négation ne resolvent pas ce paradoxe. Troisièmement, nous présentons une solution relative à la première partie et discutons quelques difficultés soulevées par cette solution.

Zunächst wird die These aufgestellt, das gewöhnliche Festellungen negative Tatsachen voraussetzen und das negative Tatsachen durch eine Theorie der Sprache nicht wegerklärt werden können. Zweitens wird ein Paradoxon in bezug auf negative Tatsachen erklärt und es wird die Behauptung aufgestellt, dass Standardtheorien der Negation das Paradoxon nicht lösen. Drittens, es wird eine Lösung vorgelegt, die mit dem ersten Teil übereinstimmt, und es werden einige Schwierigkeiten besprochen, die in dieser Lösung enthalten sind.

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## 1. Analytical theory of negative fact.

(a) By a 'claim' I mean the type of thought which we express, when we assert an ordinary indicative sentence such as "The cat is on the mat."

A claim is a claim that something is the case. In making a claim, we commit ourselves to admitting that there is a certain state of reality. The claim contains a specification of the kind of state admitted to exist.

The specification of the *kind* makes a distinction of thought within the claim. Thus on the one hand we conceive how reality would be if the claim were correct, and on the other hand we conceive how reality would be if the claim were incorrect. A claim thus distinguishes between two conceivable determinations of reality. One of these determinations could not be conceived without the other. It is only because the claim first makes this distinction, that it is able to go on to choose one of the two determinations as actual, against the other which is implied to be non-actual.

(b) To avoid a difficulty which might side-track us, I shall now confine myself to *logically contingent* claims. It is not logically necessary either that such a claim should be correct, or that it should be incorrect. Many such claims are made. Of these, many are affirmative. It is ordinarily supposed that many of these affirmative claims are correct, and many incorrect.

Consider the logically contingent affirmative claim "The cat is on the mat," made about a certain particular cat and a certain particular mat. It distinguishes between two logical possibilities: how reality would be if the claim were correct, and how reality would be if the claim were incorrect. Let us now add the supposition that the claim is correct. (Notice that we ordinarily suppose there are many situations of this kind). Here, the first of the two logical possibilities is actualised.

How are we to describe this actualised possibility? In the first place, there must be one particular state of reality, making the claim correct. We could express this by saying that what makes the claim correct has both to exist and to be individuated. But secondly, although there has to be just one such state, we could equally well have had any one such state, so long as it belongs to a certain class of possible states specified

by the claim. Which one of this class is in fact actualised will depend upon such factors as the particular place occupied by the cat on the mat.

From this it might seem that the claim is ambiguous. But it is not. For not only is there a particular state of reality making the claim correct, there is also a fact making the claim correct. This is the fact that the cat is on the mat. If the cat moves to a different place on the mat, there will now be a different particular state making the claim correct, but the fact making it correct is the same as before. We still apply the same definite description: "the fact that the cat is on the mat." The fact is what is common to just all the particular states. The conception of a claim requires the admission of the fact, for otherwise the claim would be ambiguous. It would be equivocal in use. The fact is thus implied to be present in whatever particular state is actualised.

A fact is thus a real universal. Consequently a nominalist would not want to admit facts, and would naturally be averse to a correspondence theory of truth. In the modern context, I think he would be strongly inclined to explain away facts as linguistic entities, i.e. as a category of thinking which arises in the course of the development of language, and which remains determined by language.

The plain man makes no clear distinction between fact and particular state. But at least he regards them both as belonging to reality, not to language or thought. At least in this respect he keeps to the logic of the conception of a claim.

So far I have not argued that there are facts. What I have argued is that if there are affirmative claims, in the sense of 'claim' here understood, and if any such claims are correct, then there are facts, in the sense of something characterising reality, and not merely linguistic.

(c) In making a claim we specify the kind of state which would make the claim correct. The kind of state is thus a feature present in the claim, in any case, whether the claim is correct or whether it is incorrect. Therefore the kind of state cannot be identified with the fact which would make the

claim correct if it were correct. For the fact exists only when the claim is correct. The generality of the fact is more restricted than the generality of the kind of state.

(d) Let us now suppose that the claim is incorrect. (Notice that, as in the other case, we ordinarily suppose there are many situations of this kind.) In this case the second of the two possibilities distinguished by the claim is actualised, viz. how reality would be if the claim were incorrect. This reference to reality is unavoidable, for we have seen that a contingent claim *must* make the distinction between the two possibilities.

We can express this by saying that, if we admit that an affirmative claim is incorrect, we thereby introduce a second claim which negates the first. So negating the first claim means that the second of the two determinations distinguished by the first claim is now chosen as actual.

That the second claim refers to reality can also be seen by the fact that it would be correct only under certain conditions. These conditions are limited by the conditions which would make the first claim correct, viz. the cat's being somewhere on the mat. Thus the conditions making the second claim correct are specific. They are specified implicitly by the first claim and explicitly by the second claim. They are ordinarily specified as "the fact that the cat is not on the mat," but more accurately as "the fact that it is not the case that the cat is on the mat." What we have here is an actuality, which could be called the *negative fact*. It contrasts with the *positive fact* which would have made the first claim correct, had it been correct.

(e) It was pointed out earlier that the claim, in distinguishing between the two possibilities, presupposes that there is a kind of state which would make the claim correct. When a particular state actually exists, i.e. when the claim is correct, the state is therefore an instance of this kind. The positive fact is therefore the instantiation of the kind, whatever particular state it is which instantiates the kind. The negative fact, on the other hand, is the non-instantiation of the kind.

It might be thought that the negative fact has an instance underlying it, as the positive fact had. This might be thought to be a particular state of the cat's being off the mat. But no such state is essential to the negative fact. The negative fact would still exist, if there were no such particular things as the cat and the mat referred to, and even if there were no physical world at all. Thus the negative fact, though general, includes the whole actuality making the negative claim correct. This is a sort of generality which is real, without the need of particularisation.

- (f) A negative claim makes the same distinction between two possible determinations of reality as the corresponding affirmative claim makes, but it chooses the second determination as actual. If an affirmative claim is made and is correct, then there is the positive fact and state of reality making it correct; if a negative claim is made and is correct, then there is the negative fact making it correct. In either case, the word 'fact' refers to something real, not e.g. to a creation of language. If someone wanted to say there are no facts in this sense of referring to something real, then he would have to deny that any claim could be made and be correct. This is surely mistaken. For a person denying anything is making a claim, and is taking that claim to be correct.
- (g) I shall now examine the linguistic theory of facts, that is, the theory, that facts are linguistic entities, not real features of reality as I have argued above. I believe that what the linguistic theory claims fundamentally is simply that there are no facts, and, in particular no negative facts, in the sense of 'fact' which I have developed. Thus I believe I have already given the fundamental answer to the linguistic theory in the last paragraph.

However, since the linguistic theory seems to maintain that facts *must* be linguistic, it seems to deny the legitimacy of using the word 'fact' in any alternative way, such as the way in which I have been using it. Now the definition of a word is normally an arbitrary matter. It ceases to be arbitrary only

if a contradiction would result from a certain use of it. It is only then that we can claim that the proposed use is *illegitimate*. So the question arises, whether a contradiction is involved in using the word 'fact' to refer to real, extra-linguistic entities.

Now the argument actually used to support the linguistic theory is that when some particular fact is under consideration, we habitually specify it in terms of a *proposition*, e.g. the fact that the cat is on the mat. Thus, it is said, we imply that a fact has the form of a proposition, i.e. a linguistic form.

Does this show that a contradiction is involved in defining a fact as something real? In other words, is it a contradiction to suppose both that a fact is real and that it has a linguistic form? So far, I think there is no contradiction. Propositions are designed to express forms of reality, and unless they were able to do so no proposition could be true. If a proposition is to be true, it must at least have the form of the reality which it expresses. We may think, like Kant, that the chances of thought and reality having the same form are very slight indeed. But this is not to show, or even claim, that a contradiction is involved in supposing that thought and reality could have the same form. Thus there is no argument, so far, to show that it is illegitimate to define 'fact' as something real. Such argument as there is would show at best only that there are no facts, if 'fact' is so defined. And if that were proved. we would inevitably have the extraordinary consequence that there are no true propositions.

However, a further complication is involved in the linguistic criticism. This arises on account of the distinction, pointed out earlier, between fact and state of reality. The fact is general and remains the same for a given correct claim, but the state of reality is particular and could have been different for the same given correct claim. Sensing this, a nominalist would at once consign the fact to language, and try to explain truth solely in terms of the particular state of reality. Here as elsewhere, linguistic philosophy is largely a tool of nominalism. But if, following the linguistic theory, we take this step, the same difficulty is incurred as before. If a particular state does not actually have the general form of the

cat's being on the mat, then it cannot make the proposition "The cat is on the mat" true. So we are driven, as before, into a general denial of the possibility of truth. But still no contradiction has emerged, which forces us to this extraordinary result. The only thing that has driven us to the result is the difficulty that some people have in admitting the reality of something which is general. So I still conclude that it is not illegitimate to define 'fact' as a real general form of states of reality.

The only conclusion now left to the linguistic criticism is that, *if* we define fact in this way, then there *are* no facts. But this position has already been answered.

### 2. Statement of the paradox of non-existence

The paradox can be viewed as concerning statements of non-existence, or as concerning facts of non-existence. If we talk in terms of statements, the significance of contradiction is liable to become obscure. I think the paradox concerns facts fundamentally, and on the whole I shall keep to this form of it.

Let us admit it to be a fact that there is no such thing as the Loch Ness Monster. It is surely certain that there are facts of this kind, so this will do as an illustration. Here it seems that a certain thing does not exist. We cannot specify the fact of non-existence except in terms of the thing itself which does not exist. Thus the existing thing seems to be involved in this fact, as a constituent of it. Thus the thing has to exist as a condition that it should not exist. It seems that non-existence is a logical impossibility, which is surely absurd.

The paradox is more striking in the case of a thing or person that once existed but now does not exist. Thus the fact of the non-existence of Socrates seems to involve inescapably the person himself. It is precisely the person as alive and existing, who now does not exist.

### 3. Escape through theories of negation

Traditionally negation was, I believe, first conceived in terms of *non-being*. Non-being is non-existence. Because non-existence is paradoxical there are therefore famous traditional paradoxes concerning negation, e.g. those of Parmenides.

These paradoxes drove philosophers to formulate theories of negation in terms other than non-being. The best known ancient theory of this kind is, I believe, that of Plato in the Sophist. Here negation is interpreted in terms of difference, or otherness. A negative fact, e.g. the fact that Socrates was not a sophist, would here be understood to be the fact, apparently positive, that Socrates was someone other than a sophist.

Unfortunately, for such a theory to be genuinely a theory of negation, the fact taking the place of the negative fact has still to exclude from existence the opposite positive fact. The fact that Socrates is someone other than a sophist does not fulfill the function of the negative fact, if it is still allowed that Socrates could at the same time be a sophist. But this means that the opposite positive fact does not exist. So we have returned to the paradoxical conceptions of non-existence and non-being, which the theory aimed at avoiding.

If we examine each of the well known theories of negation in turn, we will find that they all, in a similar manner, presuppose in the end that negation is to be understood in terms of non-being. (1) They do so because any theory of negation has to satisfy the cited test for negation, viz. that a negative fact must, by the law of non-contradiction, exclude from existence the opposite positive fact. (2) Thus instead of shaking off the paradox of non-existence, the standard theories of negation have the effect of showing that the paradox extends to the whole field of negation. (3)

# 4. Escape through the conception of an intentional object (4)

The theory of intentional objects includes the claim that an intentional object can be singled out for attention, regardless of whether it exists or not. Existence is taken to be a property

which might or might not belong to such an object. There are at least two possible determinations of such an object, viz. existence and non-existence. But it is not supposed that, when the intentional object has the determination non-existence, there is then no such intentional object. On the contrary it is assumed that the object remains throughout, as a condition that it should be determined the one way or the other. So in the strict sense it is not supposed at all that the object could be referred to but not exist, i.e. not be there at all. So the condition issuing in the paradox of non-existence remains. In treating non-existence as a determination of the intentional object, the theory is treating the relation between the intentional object and its non-existence as analogous to the relation between a universal and its non-instantiation.

### 5. The two theories of the logical structure of negation.

At one time I thought that the paradox of negation could not be avoided. I now think it can perhaps be avoided. Its avoidance depends upon distinguishing between two theories of the logical structure of negation. These I shall call the 'A theory' and the 'B theory' respectively. (5)

In defining the A and B theories below, it will be seen that the A theory involves the paradox but that the B theory does not, at least prima facie. An examination of the two theories will then show that only the B theory is, in the end, acceptable.

I define the theories as follows. According to the A theory a negative proposition is the result of performing a certain operation, viz. negation upon the opposite proposition. This follows standard procedure. We normally represent a given unspecified proposition by the letter 'p', and its negation by 'not-p' or by '~p'. This leads straight to the paradox of negation. For a negative fact would correspondingly be the result of an operation upon the opposite positive fact. That is, the negative fact would involve the positive fact as a constituent of it, and would therefore presuppose its existence.

According to the B theory, affirmative and negative proposi-

tions result from performing different operations upon a third entity which is neither affirmative nor negative. The third entity cannot be an intentional object, because it has to exist whichever operation is performed upon it. The only possibility seems to be that it is a universal. (6) Affirmation would then be due to the operation of claiming instantiation, negation to the operation of claiming non-instantiation. For a negative existential proposition such as "There are no unicorns," the universal would be a comparatively simple one, in this case unicorn. For a negation not plainly existential, such as 'It is not the case that the cat is on the mat', the universal would be a complex kind of situation.

The general theory of propositions and truth involved in the B theory is the same as the theory developed in section 1.

## 6. Rejection of the A theory.

The paradox of negation arises because a negative fact seems to exclude a positive fact from existence. The paradox occurs only because what is operated upon by the negation is taken to be, or seems implied to be, an actual fact. Now an actual fact would have to be individuated, i.e. there would have to be, associated with it, a particular state of reality. I shall argue that in every case of a negative fact the opposite fact cannot be individuated. It will follow from this that a negative fact does not after all imply that there is an opposite positive fact operated upon; and that therefore the negative fact cannot be claimed to have the kind of structure alleged by the A theory. I shall consider progressively four cases which present increasing difficulty for my contention.

Consider first the proposition (assuming it true) that there are no unicorns. We might want to say here, following the A theory, that the fact of there being no unicorns has the function of excluding unicorns from existence. Here unicorns would, according to the paradox, be implied to exist, because each individual unicorn is excluded from existence. But the number of creatures which logically could exist conforming to the description 'unicorn' is indefinitely great. Even if we

tried to enumerate the possibilities, we would arrive only at finer specifications, never at actual individuals. So the negative fact can only be related to the universal *unicorn*, not to any individual unicorns excluded from existence.

Consider next the proposition (assuming it true) that the Loch Ness Monster does not exist. It is much more plausible here to think of the negative fact as excluding a certain particular animal from existence, viz. the Loch Ness Monster. Now if there actually had been a Loch Ness Monster, it would have been an individual thing. But numerous other individual things are possible, any one of which, if it had existed, would equally have made it true that the Loch Ness Monster exists. Though the positive fact would have comprised only one of these numerous individuals, the negative fact has to exclude from existence any and every such individual. This indefinitely large class of individuals cannot be excluded by relating the negative fact to each such individual, but only by relating it to the universal specifying the class of such individuals.

Thirdly consider the more general case of a negative proposition such as 'The cat is not on the mat' (assuming it true for some particular cat and some particular mat.) I take this to mean 'It is not the case that the cat is on the mat.' Now the opposite affirmative proposition, if it had been true, would have been made true by only one particular (individual) state of affairs. We commonly believe that we can take account of such a state of affairs by using a phrase such as 'the cat's being on the mat'. But we cannot. The phrase could equally well refer to any other of an indefinitely large class of states of reality, depending e.g. upon the position of the cat on the mat. The negative fact has to exclude from existence any and every such state of reality. It cannot do this by relating to every particular one of these states, but only by relating to the universal specifying such states.

Fourthly, there are propositions concerning the past such as 'Socrates does not (now) exist.' These, if any, do seem to deny the existence of an individual thing. They seem to do so because what is denied existence seems to be precisely something which once existed as present. To accept this in the case

of an admittedly true proposition is to accept that a certain *individual* does not exist. It seems unavoidable here that the admitted negative fact relates to the individual and so implies its existence. This results in the paradox.

This outcome, however, can be avoided in the following way. By an individual we understand a being extended in time. But a given part of the extension of that being in time is not necessarily part of the definition of that individual. Thus if Bertrand Russell had lived to be 100 years of age instead of 97, he would still have been the same individual, viz. Bertrand Russell, at that later age. So if I say that Bertrand Russell is not alive now, this can be regarded as a denial not of the existence of the individual himself, but of the existence of a logically possible extension of the individual up to the present time. But this possible extension is not an individual thing. For there are numerous possibilities, any one of which, if it had occurred, would have been such an extension. Thus the negative fact involves only a universal specifying such extensions of the individual up to the present, it does not involve either the past individual or a present individual.

This seems to show that the A theory is not acceptable in any of the cases.

# 7. Problems concerning the B theory

Our examination of the four cases of negative fact seems to show not only that a negative fact does *not* relate to the opposite positive fact, but that it *does* relate to a universal distinct both from positive and from negative facts. So not only is the A theory discredited by the analysis, the B theory is supported by it.

Let us look at the last of the four cases again. A further conclusion can be drawn. On the B theory, the negation operates upon a universal specifying possible extensions of the past individual in the present. It does *not* operate upon the past individual itself. So it seems that the past individual remains in existence. Thus in spite of the common sense conviction that the event, when it is past, no longer exists, we irresistibly

treat past events as actual, discoverable items in an actual historical series of events. This, of course, is a version of the paradox of non-existence. The B theory seeks to escape the paradox by preserving only the second side of the contradiction. It insists that the past event remains and has not vanished into non-existence.

This gives rise to two problems in regard to the B theory. The first is that the B conception of negation seems not to accord with our ordinary conception of negation. But this discordance is perhaps due not to the B theory as such, but to a mistaken attempt to apply the conception of negation to time. In that case, the process of an event becoming past is not to be viewed as in any sense a negation of the event, whether the ordinary sense or the B sense of negation.

But a second problem now arises out of the attempt to avoid applying negation at all to the process of becoming past. It is that the distinction between present and past seems to be destroyed. If the past event remains in existence, what is this but to admit that the past event is still present?

We might attempt to distinguish an event's past existence from its present existence in the following way. We use the word 'process' for the distinguishing characteristic of something ordinarily called 'present'. Process has two forms. First it occurs overtly in the changes which obviously affect present events. But secondly it occurs in a concealed form in the enduring of a present thing. For however persistently a thing endures, we assume that it is affected by an invisible process of decay, against which it endures. We assume that this invisible process will ultimately bring the thing to an end, unless it is counteracted by a regenerating process. In either case, the meaning of the word 'endure' involves the meaning of the word 'process.'

I shall use the expression 'logical unchangingness' for the distinguishing feature of something ordinarily called 'past'. This is justified by the fact that we all assume that, once past, an event or an individual thing is logically incapable of change. This perhaps suggests that the capacity for change is negated by the passage into the past. But this is not easily substan-

tiated, for there is still a sense in which change is possible. At least some changes which occur in the present can be relived when they have become past. The past can be revived, complete with the process which once affected the events and things which have passed.

On the other hand, there is one aspect of change which seems logically incapable of being revived, viz. the aspect of freedom, if indeed any changes do have that aspect. However perfectly a certain process were relived, the very perfection of the repetition automatically excludes freedom, since what is going to happen at any later stage in the process is already settled from the start. This may result in a real difficulty for the B theory. But so far as I can see, the theory is saved by the fact that what is negated here is something general not individual.

Another less serious difficulty is this. Since logical unchangingness does not negate individual existence, a past event or thing is implied to exist now. This entirely alters our usual picture of serial time. What we ordinarily refer to as past events or things here become present, in the properly temporal sense of 'present'. The distinction between process and logical unchangingness is not a truly temporal distinction at all, but a distinction within the present. The solution here is simply to give up our ordinary conception of temporal distinction as somehow mistaken. Our actual experience is of process and logical unchangingness, the relation between which we mistakenly identify with the temporal relation between present and past. In the temporal sense of 'past' there is nothing past. The supposed exit from the present leads only to another, though rather strange, compartment of the present.

#### **NOTES**

<sup>(1)</sup> Toms, Being, Negation and Logic, ch. 4, §§ 1-4, (Blackwell, Oxford, 1962) (Subsequently 'BNL')

<sup>(2)</sup> BNL ch. 4, § 5

<sup>(3)</sup> BNL ch. 4, § 7(e)

<sup>(4)</sup> BNL ch. 3, § 2

- (5) I use the letters 'A' and 'B' because the distinction corresponds to the distinction made by McTaggart and others between A and B theories of time. See R. M. Gale (ed.), *The Philosophy of Time*. (Macmillan, London, 1968). Note the paradox of the past, corresponding to the paradox of negation, in BNL ch. 5.
- (6) See BNL p.95. The criticism there depended upon my assuming that negation is an A-like operation.