THE ANALYSIS OF CHOICE

(Thesis submitted for the degree of Ph.D. in the University of Edinburgh.)

by

K. W. Rankin
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CHAPTER I

The Paradox of Libertarianism

If we suppose that there is some sort of necessary or causal connection between events or occurrents it appears possible to distinguish between a number of ways in which they may thus be interconnected. Corresponding to these ways there are a number of theories about necessary connection which, as a preliminary, I wish to examine. The basic concept of necessary or causal connection will be left undefined even though some of these theories may be logically connected with one particular analysis of that concept rather than another.

In formulating these theories we must adopt a sufficiently sensitive principle of division and this has been supplied by C.D. Broad. There may be several dimensions in which an occurrent is determinable, and furthermore, there may be a limited range of indeterminacy within which the characteristics of an occurrent are unpredictable. Broad illustrates the first possibility as follows:

1. Suppose that a certain flash happened at a certain place and date. This will be a manifestation of a certain determinable characteristic, viz., colour, in a perfectly determinate form. It may e.g. be a red flash of a perfectly determinate shade, intensity and saturation. We may call shade, intensity and saturation the three 'dimensions' of colour.

Of the second possibility he writes:

2. Suppose that our flash is indeterminate in respect of the intensity of its colour. There may be a set of true propositions....which together entail that a flash, whose

2. Ibid., p. 32ff.
intensity falls within certain limits, happened at the same time and place at which the flash happened. This range of indetermination may be wide or narrow. Complete determination in respect of a given dimension of a given characteristic is the limiting case where the range of indetermination shuts up to zero about the actual value of this dimension for this event.

By means of this principle of division we can distinguish between two main types of theory about necessary connection as follows.

**Determinism** - Every occurrent is in a one-one necessary relation both to antecedent and subsequent occurrents (if there are any) with respect to any distinguishable dimension and with a zero range of indetermination.

**Indeterminism** - Every event is not in a one-one necessary relation of the kind specified by Determinism.

Since Indeterminism has merely been defined as the contradictory of Determinism it must comprehend a wide range of mutually exclusive theories. The two extremities of this range will indicate sufficiently the theories which fall between.

(1) Every occurrent is in a one-one necessary relation to antecedent and subsequent occurrents (if any) with respect to any distinguishable dimension but not in every instance with a zero range of indetermination.

(2) No occurrent is in a one-one necessary relation to any other in any distinguishable dimension with any finite range of indetermination.

If, however, we exclude (2) which is the ultimate extremity of Indeterminism it is sufficient to distinguish between the various types of Indeterminism in the following way. We can
conveniently ignore the distinction between qualitative and quantitative indeterminacy for which Broad allows, and concentrate upon whether the indeterminacy converges or diverges towards the future, or whether it remains constant. In the following diagram the indeterminacy diverges towards the later moments in time.

A, B and C represent three successive moments in time and the numbers represent incompatible events. A
\[ \begin{array}{c}
1 \\
2
\end{array} \]
may be followed by either B
\[ \begin{array}{c}
1 \\
2
\end{array} \]
or B
\[ \begin{array}{c}
2 \\
3
\end{array} \], and A
\[ \begin{array}{c}
1 \\
2
\end{array} \]
by either B
\[ \begin{array}{c}
2 \\
3
\end{array} \] or B
\[ \begin{array}{c}
3 \\
4
\end{array} \]. Similarly each event at B may have either, but not both, of two effects at C. Accordingly, each event at A may have as its effect at C one but no more than one of three effects. We can illustrate convergent indeterminacy by reversing the diagram, and likewise it should be sufficiently obvious how to construct a diagram which illustrates an indeterminacy that remains constant by combining the convergent and divergent relations.

It is, incidentally, only in terms of divergence or convergence of indeterminacy that I can make any sense of the traditional distinction between determination a fronte and determination a tergo. If A
\[ \begin{array}{c}
1 \\
2
\end{array} \] is in a one-one necessary relation to B
\[ \begin{array}{c}
1 \\
2
\end{array} \], then each is equally necessitated by the existence of the other. If, on the other hand, A
\[ \begin{array}{c}
1 \\
2
\end{array} \] is in one-one necessary connection with either B
\[ \begin{array}{c}
1 \\
2
\end{array} \] or B
\[ \begin{array}{c}
2 \\
3
\end{array} \], then B
\[ \begin{array}{c}
1 \\
2
\end{array} \] rather than B
\[ \begin{array}{c}
2 \\
3
\end{array} \] (or vice versa) is not necessitated by A
\[ \begin{array}{c}
1 \\
2
\end{array} \], but A
\[ \begin{array}{c}
1 \\
2
\end{array} \] is necessitated by B
\[ \begin{array}{c}
1 \\
2
\end{array} \], or by B
\[ \begin{array}{c}
2 \\
3
\end{array} \], depending upon which occurs. Since B is a later moment in time than A, this could be interpreted
as determination a fronte, and the opposite type of relationship as determination a tergo. Each type of determination is postulated by a different form of Indeterminism.

We can now formulate the problem for solution in later chapters: but I must first emphasize a point the full significance of which I cannot explain till later. In my preliminary survey of theories about necessary connection I assume that the temporal order of, and necessary connection between, events are logically independent. If this assumption is questioned as I shall question it later, the logical possibility of some of the theories specified above will also come into question.

Our problem likewise rests on this assumption. The two main theories about necessary connection between events, viz., Determinism and Indeterminism, exhaust the theories which, upon this assumption, are logically possible. Each contradicts the other. Accordingly, voluntary actions, which are a class of events, must take place in accordance with one or other of these theories. If we don't give a deterministic account of voluntary action we must adopt Indeterminism. Consequently, the theory about action known as 'Libertarianism' must be a form of Indeterminism, for it is specifically opposed to Determinism. To be a theory about voluntary action at all, however, Libertarianism must be a theory about responsibility: and, hence, it is frequently alleged, it must be inconsistent with the requisite form of Indeterminism. This form nullifies the responsibility of the agent for his action. Libertarianism must then be self-contradictory.

To examine more carefully the justice of this claim, we must first formulate the precise type of Indeterminism which Libertarianism entails. The Libertarian must believe that
(a) the indeterminacy postulated is of a limited kind,
(b) it doesn't converge towards the future at a rate which leaves no indeterminacy in the results which follow the immediate antecedents of voluntary acts - that in fact it diverges, or remains confined within the same limits, or converges at a slower rate during the period for which it is postulated.

Condition (a) recognises that, without a limit to the range of indeterminacy in the future at the moment of action, choice - or at least human choice - would be impossible. This limitation need not, of course, be a limitation in the number of alternatives open for choice. Space, for instance, being infinitely divisible, there are ideally an infinite number of ways in which I could voluntarily recoil from a precipice, if I were equipped with the requisite niceties of perception and muscular control. Yet even under such ideal conditions the infinite number of ways in which I could act would be limited. Lacking the power of sustained levitation, I would, in the first place, have in the main to keep to the ground: and lacking the ability to burrow, I would, furthermore, be confined to its surface. Accordingly, although the number of alternatives in that situation are infinite, they still exclude as causally impossible an equally infinite number of imaginable alternatives. Without this limitation to the possibilities of action, there would be no necessity whatever to take the situation and its causal properties into consideration at the moment of action in order to form and execute one's purpose. Action would become as simple as day-dreaming where the limitations of actual situations are ignored.

Condition (b) recognises that the future alone is subject to
the agent's choice, and not the past. This I take to be a tautology rather than a contingent fact: but as in the instance of condition (a), I am concerned with its truth just now rather than with its logical status. If, then, we assume with the Libertarian that whatever is chosen must fall within a range of indeterminacy, this indeterminacy must characterise what at the moment of choice is the future. The fact that the future alone is subject to choice cannot, of course, be cited as sufficient evidence for the indeterminacy of the future without at this stage begging the question.

These two basic tenets of Libertarianism, then, definitely make it a form of Indeterminism: and it can be seen that by adhering to this particular form the Libertarian has not escaped the charge of inconsistency mentioned above. This charge presupposes that the relation of necessary connection between events is identical with the relationship of responsibility for something, or efficacy, which is inherent in voluntary action. Accordingly, if one supposes that one determinate group of events is necessarily connected, in accordance with conditions (a) and (b), with any one but no more than one group out of a limited range of subsequent groups, an awkward conclusion must follow. The antecedent group of events must be responsible for the fact that nothing outside the limited range of subsequent groups occurs. On the other hand, it cannot be responsible for one event or group of events within the limited range occurring rather than another from the same range. Thus, if we identify responsibility with necessary connection, the good Samaritan must, according to the Libertarian, be responsible for the fact that he had either to assist the man that fell among thieves or pass by on the other side, but not for the fact that he assisted the man instead of passing by on the other side. But
this implication is paradoxical since we hold the good Samaritan responsible for doing one of the actions rather than the other. Some, then, infer that Libertarianism cannot give an adequate account of responsibility or of being an agent.

There are a number of equivalent ways in which essentially the same criticism of Libertarianism can be and has been made. It will be instructive to consider some of these, since they bring out the close relation between the use of the terms 'responsibility', 'chance', 'accident' and 'randomness' as well as the ambiguities peculiar to each.

Bradley, for instance, writes:¹

The theory was to save responsibility. It saves it thus. A man is responsible because there was no reason why he should have done one thing, rather than another thing. And that man and only that man is responsible concerning whom it is impossible for anyone, even himself, to know what in the world he will be doing next, possible only to know what his actions are, when once they are done, and to know that they might have been the diametrical opposite. So far is such an account from saving responsibility (as we commonly understand it) that it annihilates the very conditions of it. It is the description of a person who is not responsible, who (if he is anything) is idiotic.

This quotation has the peculiar value of showing how the issue we have been considering can easily become confused with certain others. Bradley has apparently confused 'reason' meaning 'cause' with 'reason' meaning 'ground' or 'motive': for it is in the first sense of 'reason' that Libertarians must deny that voluntary actions have reasons.² They would never wish to claim that such actions must be unmotivated, without purpose, or aimless. On the contrary, what they wish to say is that there is no cause for one motive, purpose, end, or aim, rather than certain others being present.

¹. Ethical Studies: The Vulgar Notion of Responsibility, p.12.
². cf. Maurice Cranston: Freedom, pp.169ff. with whose comments on this and other passages I am in substantial agreement.
Bradley puts his point rather more effectively in another passage where he explicitly attacks the Libertarianism of William James.

But 'chance' appears with Professor James to have several senses. In his Will to Believe (p.155) it is said to mean that under absolutely identical conditions the same result need not follow. This is, as I understand it, really to contend that the same A is at once and in precisely the same sense both B and not B, a contention which obviously would destroy and remove the whole notion of truth.

In this passage the central concept has changed from responsibility to its contradictory chance. If responsibility is identical with necessary connection then chance is identical with the absence of that necessary connection. Bradley has here insisted on the strict implications of the words 'conditions' and 'results'. If under absolutely identical circumstances either of two events may follow, then neither of the two events can have in these circumstances a sufficient condition: to that extent neither can be a result of anything. His criticism would have been ineluctible if James had in fact expressed himself in the way which is implied. But in fact James has with considerable care, not to say evasiveness, neglected to give an explanation of how the agent can be responsible for doing one rather than another of the actions that lie within his power.

More recently Ayer has written:

"...if it is not an accident that I choose to do one thing rather than another, then presumably there is some causal explanation of my choice.

And even more recently J. L. Mackie asks

"...if freedom is randomness, how can it be a characteristic of will? And...What value or merit would there be in free choices if these were random actions which were not determined by the nature of the agent?"

The general assumption underlying all those quotations is that the interrelated concepts of responsibility, chance, accident and randomness have a straightforward connection with the concept of necessary connection. It is assumed that necessary connection unequivocally implies responsibility and that the absence of necessary connection unequivocally implies chance or accident. Strangely enough, many who insist that the will is free are united in this same assumption with the Determinists whom they think they oppose. When we act responsibly and freely, they think, we must act from necessity; but this necessity is of a supernatural or transcendent kind which frees us from the necessary order of natural events. They frequently combine this with the belief that the supernatural influence is without exception a moral one: and that leads to the curious consequence that we are responsible for our actions when we do what is right but never when we do what is wrong. Again the assumption that responsibility is unequivocally identical with necessary connection explains why certain Libertarians (including myself in an earlier draft of this thesis) seek for a tertium quid between Determinism and Indeterminism in the idea of autonomy or self-determinism. They treat necessary connection as in some cases reflexive. This solution has also been adopted by non-Libertarians of the Hegelian kind as a tertium quid between Libertarianism and Determinism. Obviously then it has conflicting interpretations. One alone of these has to my mind any sense. On this interpretation self-determinism is simply equivalent to a form of indeterminism, and accordingly its status as a tertium quid is destroyed.

1. cf. also P. H. Nowell-Smith, Ethics, pp.281-2.
3. My grounds for this judgement are contained in Chapters III, IV and VI but not stated as such.
In the chapters to come I shall show two things, or rather, the negative and positive aspect of the same thing:

(a) that the sense in which the agent is responsible for his voluntary action is not the sense in which we undoubtedly regard one of two necessarily connected events as thereby responsible for the other.

(b) that Libertarian indeterminacy is indeed incompatible with one kind of responsibility, but that it is equivalent to, as well as compatible with, the kind of responsibility peculiar to agents.

Given the negative conclusion (a) by itself, one could always reinstate the paradox which it appears to resolve. Even if two senses of the words 'responsible' etc., have been confused in one formulation of the paradox, the confusion might conceal a real paradox. Perhaps the responsibility peculiar to voluntary actions entails the deterministic type of responsibility for these actions. I remove this possibility in Chapter IV where I show that Libertarian indeterminacy is implied by (i.e. is an indispensable condition of) responsibility of the former type. This may provoke the awkward question 'What, then, are the other conditions?' Accordingly, in Chapter VI I go on to show that Libertarian indeterminacy is a sufficient as well as indispensable condition of the former responsibility - and thus draw conclusion (b).

I come to the first or negative conclusion (a) in Chapters II and III by showing that

(1) no event in necessary connection with another can be regarded as wholly responsible for the other, whereas the agent can in principle be wholly responsible for his actions,

(2) that necessary connection is a symmetrical and timeless
relation, whereas the relation of responsibility between agent and action is asymmetrical and temporal.

In what follows I shall describe the type of responsibility which is equivalent to necessary connection between events as the 'explanatory' type, and the kind peculiar to the agent as the 'narrative' type. These descriptions may seem perhaps to take my conclusions for granted but are used for the sake of brevity alone.
CHAPTER II

When is Responsibility complete?

Two reasons for making a distinction between two kinds of responsibility or efficacy have been detailed in Chapter I. In this chapter I shall show how the distinction follows from the first of these. Where one event is necessarily connected with another we frequently describe the antecedent as 'responsible' for the subsequent event. Alternatively we may describe the antecedent as 'the efficient cause' of the subsequent event: responsibility and efficacy are identified. Where we attribute responsibility or efficacy, however, to one event because of its necessary connection with another, we cannot attribute complete responsibility. Complete responsibility for the consequent event could legitimately be attributed to the antecedent on one condition alone, viz., that its occurrence was the sufficient condition of the occurrence of the consequent. In the first part of this chapter I shall show that no event, antecedent or consequent, can by itself be treated as a sufficient condition of another. If when we say that one event is completely responsible for another we mean that if the one occurs the other occurs as well, then I shall have shown that no event can possibly be completely responsible for another. In the second part of this chapter I shall go on to show, on the other hand, that one can meaningfully attribute complete responsibility for an action to an agent, and, accordingly, that we must distinguish between two kinds of responsibility. In the course of this discussion I hope to examine the one kind of responsibility as meticulously as the other, for although they are distinct, an
understanding of each is essential to the understanding of the other.

To show that no occurrent is the sufficient condition of any other, let us begin with an improbable supposition. Let us suppose that we could specify precisely every fact about the universe at any given moment. Let us suppose, further, that from this encyclopaedia it would, in principle, be possible for us to predict or retrodict the complete state of the universe at any later or earlier moment. We are supposing that omniscience about the present, for example, is possible, and that it could give us certainty in every respect about the past or the future. If, then, the total state of the universe at one moment cannot be a sufficient condition of any state of affairs in the universe at any other moment, then it is safe to suppose that no state of affairs less than the total state of affairs is ever a sufficient condition of this kind. But as a matter of logical necessity this is so. Even the totality of facts at one moment cannot without further qualification be regarded as the sufficient condition of what subsequently occurs. It might well be objected that the impossibility of acquiring all the necessary data and of making all the necessary calculations is not merely physical or psychological - that it is an analytic impossibility as well. If so, my argument remains valid. I do not maintain that there ever can be a complete set of facts which determine all other facts about different periods of time. Far less am I maintaining that knowledge of such

a set of facts is physically, psychologically or even logically attainable. I merely maintain that if there is such a set of facts, the negative fact that there are no other facts is part of the total condition that determines the facts about other moments of time. This becomes obvious if we attend to the formal structure of the scientific or causal laws by means of which predictions or retrodictions are made from the data given, and in which the necessary connections between events are formulated.

The causal laws which, for instance, the physicist uses when he predicts do not entitle him to predict what, given certain relevant facts, will occur under all conditions. They only entitle him to predict what will happen if no conditions happen to obtain apart from those which he takes as data. For brevity I no longer refer to retrodiction, to which mutatis mutandis the same conclusions apply. One need not deny, of course, that on many an occasion where a prediction is to be made there are factors present which can safely be ignored. This may be true even when one can be reasonably certain that they affect in some way the future one is endeavouring to predict. In predicting an eclipse of the sun, for instance, one safely ignores the presence or absence of the majority of mundane occurrences. One does not wish to predict the future with the degree of accuracy which would make these factors relevant, and in any case at the present stage of scientific technology the influence which presumably they exercise would be unobservable. One may admit, then, that the future always is conditioned by factors additional to those which one has taken into account when making a correct prediction. It must, however, be unconditioned relative to the degree of accuracy at which the prediction aims: otherwise the prediction has not been correctly
made. One can, of course, at no level of accuracy, be sure that the prediction has been correctly made and that all the relevant facts have been taken into consideration. There is only one system, viz., the entire universe, which can safely be regarded as isolated or independent of external factors; and of that system our knowledge is incomplete.

As a simple but entirely accurate example of a causal law and its use in prediction we may take the law of refraction from plane polished surfaces, viz., that the angle of refraction is equal to the angle of incidence. By means of this law we could predict with accuracy the point at which a beam of light will impinge upon a certain screen after refraction, but only in the absence of certain conditions which are possible. If some other refracting agent intervenes between the screen and the polished surface, or if the density of the medium through which the light is refracted becomes uneven, or if the screen disintegrates or moves within the period of time taken by the light to travel from source of emission to the position predicted, then the prediction will certainly not be borne out. The future will not be predictable purely in terms of the initial conditions specified, i.e., the angle of incidence and the position of the screen. It is even possible that the future will not be predictable solely in terms of the law of refraction but that other causal laws have to be called upon.

Altogether in making a prediction at any given moment about what will subsequently occur we must satisfy ourselves that two conditions are fulfilled:

(a) that the causal law or set of causal laws which we apply to the given situation is the sole law or set of
causal laws to be applicable for the purpose of predicting, (b) that if the law or set is the sole law or set applicable for this purpose to the situation, then it is applicable neither in a more nor in a less complex fashion than we allow. In our example the screen might have shifted after the ray had been emitted and before it could strike the point predicted. Condition (a) will then be violated unless the predictor has realised that other laws besides that of refraction are involved. On the other hand, the predictor may have allowed for the presence of only one plane polished surface between source of light and destination. The ray, however, may in actual fact be refracted by several surfaces before striking the screen. In such circumstances then, condition (b) will have been violated. The law of refraction is alone applicable to the situation, but in a more complex way than has been allowed.

Both conditions (a) and (b) must be held in mind, but in a perfectly unified science the fulfillment of (b) alone would suffice. A perfectly unified science is by definition a science in which only one law is applicable. In using such a law, however, it would be less easy to satisfy ourselves that (b) had in any given situation been fulfilled since it probably would be applicable in a more complex fashion than our incomplete knowledge of the situation would allow us to recognise. If, for instance, the phenomena of light were determinable in terms of laws governing the motions of particles, the laws of motion would suffice for predicting the point at which light would impinge on a moving screen, but only if we knew in detail the relative positions of all the particles out of which the ray, the refracting agents and the screen were composed.
The general principle from which both these conditions derive rather than their relative importance is, however, our more immediate concern. They provide for, by guarding against, the possibility that factors, additional to those which the prediction has taken into account, could by their presence prevent what otherwise would occur. They lay down, as an indispensable condition of the subsequent occurrence, that such factors should not in fact obtain.

There is one source of possible confusion that might conceivably obscure the truth of these conclusions. Quite apart from certain quantitative laws which can be regarded merely as definitions of physical concepts, many quantitative laws are at least partially analytic in structure. The quantitative ratios which they specify are logically contingent and verifiable or falsifiable by experience. On the other hand, the factors between which these quantitative ratios hold are analytically or logically correlative. It is logically conceivable for instance that the angle of refraction is not equal to the angle of incidence, but logically inconceivable that where refraction has taken place incidence has not taken place. The fact that in certain laws the analytically connected factors are successive as in the instance of incidence and refraction might possibly lead one to mistake the logically necessary connection for a causally necessary one. This would lead to the further mistake of supposing that the occurrence of a certain event could be in itself the sufficient condition of some other - that the occurrence of refraction for instance is not merely the logically sufficient condition of an antecedent incidence but the causally sufficient condition as well. There are other laws, of course, where the analytically connected factors are not temporally
successive. In Boyle's law for instance the analytically connected factors are the volume and the pressure of a gas. Once again it is the quantitative ratio between them at a constant temperature which is logically contingent. But there is not the same occasion for confusing the analytic connection with a causal connection, or of supposing that one event must under all conceivable circumstances be preceded or succeeded by another of a specific kind.

There is another argument in philosophical currency which purports to show that no event or group of events is a sufficient condition of another. Unfortunately it is, to my mind, invalid. In concluding this section I cannot ignore it, because it bears a sufficient likeness to the argument which I have employed to make it a possible source of misunderstanding. It has been argued that if there is a discontinuity between cause and effect, then in the interval between the two there is always room for the intervention of other conditions. Consequently the cause could never be the sufficient condition of the effect. If, on the other hand, cause and effect are conceived as continuous, the possibility of additional conditions that intervene is indeed removed, but, so it is argued, only at the cost of cause and effect becoming in part identical.

Here the crucial issue is whether continuity does in fact entail partial identity. To my mind it is only through an erroneous interpretation of a mathematical theory that one can suppose that it does. According to this theory, a line consists of a compact series of points, and a duration of a compact series

of instants. 'Compact' is here understood in the technical sense to indicate that between any two points in the line, or any two instants in the duration, there exist respectively other points and instants. On this view of the constitution of a duration the instant that divides one segment of the duration from another must be part of both. If it belonged to another, the two segments could not be continuous with each other. If, on the other hand, it belonged to one and not the other, then where does the other segment begin? At the next instant? But if the series of instants is compact, there can be no next instant? Other instants must intervene between the dividing instant and any other instant with which the segment that excludes the dividing instant is taken to begin. And consequently, once again, the two segments would not be continuous. Since this is contrary to our hypothesis, there can be no alternative to regarding the dividing instant as part of both segments. Let us now suppose that two segments of time divided by a given instant are exhaustively occupied by cause and effect respectively. If then the constituents of duration are instants in the mathematical sense, then the dividing instant must be part both of the cause and the effect, and cause must in part be identical with effect. And if, so the argument concludes, cause and effect are in part identical, then the cause is indeed a sufficient condition at least of that part of the effect with which it is identical: but it is a sufficient condition in the analytic sense of condition and not in the synthetic sense required by the relation between cause and effect.

The rejoinder to this argument is, however, obvious. A segment of time is not composed in any concrete or material sense of compact series of instants. The instants which compose segments
of time are mathematical abstractions. In any concrete or material sense of the word 'compose' a segment of time is composed not of instants but of an infinite number of finite segments which are distinguishable from each other in terms of instants. An instant is but the end of one segment of time and the beginning of another but not in any material sense a part of time, nor of either of the segments which it divides. It does not follow then that the segments are contiguous only if the instant is part of at least one of the two segments which it divides. Far less must we suppose, if we wish to maintain that the segments are contiguous, that the instant belongs to both the segments which it divides.

The point of this argument which I have criticised seems to be that we never can enumerate all the positive causal conditions upon which a given event depends. Unless we make the actual beginning of the effect part of its causal conditions, an intermediate causal condition must always exist, or have time to exist, between any causal condition and the beginning of its effect. The point of the argument I have used, on the other hand, is that having enumerated all the positive conditions one has yet to stipulate as a negative condition that there are no other positive conditions. Otherwise one has failed to specify the sufficient condition of the event's occurrence. The fact that there are no other positive conditions has nothing to do with the fact that there are no gaps in time between the positive causal conditions that have been enumerated and the effect. Even if there were no intervening gaps, there are other factors which could prevent the occurrence of the effect. They might be partly or wholly simultaneous with the positive causal conditions enumerated.
Since no event or set of events can be a sufficient condition of others and in that sense completely responsible, the relation of necessary connection strictly speaking does not hold between events but between facts about events. The sufficient condition is composed of positive and negative facts. Consequently I have called the sort of responsibility which consists of necessary connection 'explanatory'; for explaining is the only thing one set of facts can do or fail to do to another.

II

Where two events are related to each other as cause to effect or condition to conditioned it is, then, misleading to say that one event is wholly responsible for the other, since this suggests that the occurrence of one event might conceivably be the sufficient condition of the occurrence of another. There is, however, another sort of relationship which makes it possible to say of one thing that it is wholly responsible for another. It is logically possible to say of an agent that he is wholly responsible for some particular action. This I take to be elementary, but there remains a question of interpretation which is not quite so elementary.

Mr. H.L.A. Hart has suggested\(^1\) that the philosophical analysis of the concept of a human action has been inadequate and confusing, at least in part because sentences of the form 'He did it' have been traditionally regarded as primarily descriptive whereas their principal function is what I venture to call ascriptive, being quite literally to ascribe responsibility for actions much as the principal function of sentences of the form 'This is his' is to ascribe rights in property.

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I agree that there is what might be called an ascriptive use of the word 'responsible'. But underlying this use there is what I shall call a narrative use of the same word. I use the word 'narrative' to contrast this use with the explanatory use examined in the previous section as well as with the ascriptive use mentioned by Hart.

The following would I think be a fair summary of Hart's article. 'Responsible' in the ascriptive sense means something like 'meriting good, bad, or indifferent treatment'. An agent in the ascriptive sense is responsible if he has some sort of merit positive or negative. But, and this is the novel point, this merit does not depend upon any definite characteristic of his action rather than another. To judge that an agent is responsible for something or that 'He did it' is, at the very least, to do more than make certain judgements about matters of fact. It is similar to the decision which a judge makes in the light of certain precedents. He is more often making law by creating a new precedent than merely acting in accordance with the existing law. By his decision he makes certain facts determine the issue. He doesn't merely judge that in the light of the existing law certain facts do without ambivalence determine the issue. He creates rather than interprets law. Likewise by ascribing responsibility to a particular agent one makes him responsible or creates his responsibility. One does this, of course, in the light of certain facts about his action, but in ascribing one chooses the sort of fact that will determine the issue.

I wish to show on the other hand that there is a non-ascriptive sense of 'responsible' or 'He did it'. There are ascriptive uses
of these words as well, but the non-ascriptive use is presupposed by ascriptive uses. Certain facts about an action are relevant to its merit, and the relevance of some at least of these facts does not depend upon the choice of the person who ascribes merit. A non-ascriptive or 'narrative' type of responsibility depends upon this residual class of fact. We may notice this more clearly if we observe a very necessary distinction between two kinds of ascriptive responsibility: for each of the ascriptive kinds presupposes the narrative kind in a different way.

An agent may be wholly responsible in the ascriptive sense where he is the sole agent to whom any praise or blame for an action can pertain, even though he is not wholly responsible in the narrative sense for all its creditable or discreditable aspects. Thus in a railway disaster one may say of the signalman that he was wholly responsible for the accident in the ascriptive sense, where one merely wishes to exculpate some other person who has been involved, such as the engine driver. One does not intend to deny thereby that the disaster was indeed an accident. One merely wishes to indicate, first, that the action of the signalman was one of the many voluntary actions that contributed to the accident, and second, that in its voluntary aspects it was the sole action of all the contributing actions that should not have been performed. Where the signalman's action may be presumed unintentional in its disastrous aspects, one does not, however, hold him guilty of murder but only of culpable homicide, if there are fatalities. Accordingly, a person can be wholly or partially responsible for an occurrence in the ascriptive sense without the stigma or credit being moral, if the occurrence taken as a whole was a fortuitous concatenation of actions, which taken in isolation
from each other may each have been voluntary. The stigma or credit, or the absence of either, for the voluntary part of his action that led to the fortuitous whole will be, of course, of a moral kind: but it will at the same time be less than if the whole occurrence had been intentional.

In the instance of an accident responsibility whole or partial, for the accidental occurrence is of the ascriptive kind alone. On the other hand an agent may be wholly responsible for an occurrence in both the ascriptive and narrative sense. When this happens the stigma, or credit, or absence of either, that pertains to the occurrence must be fully moral in character: that to which it pertains is in its possibly creditable or discreditable aspects a voluntary action of the agent through and through. Accordingly, what distinguishes the first kind of ascriptive responsibility from the second is this. Complete responsibility of the first ascriptive kind for an action in certain aspects implies only partial responsibility of the narrative kind for the action in the same aspects. Complete responsibility of the second ascriptive kind, on the other hand, implies complete responsibility of the narrative kind in precisely the same aspects. Both kinds of ascriptive responsibility, however, presupposes some degree of narrative responsibility.

In the instance of the railway accident, the signalman could not have ascriptive responsibility for it of the first non-moral kind, unless the occurrence had been in certain of its aspects an entirely voluntary action of his. At the same time, since it is an accident, it cannot in all its aspects be an entirely voluntary action of his. It may have comprised his absence from the signal-controls, and only if this was voluntary can he be held
ascriptively responsible in the first way for the accident. But although he can be held wholly responsible for the accident in the first ascriptive sense (provided there has been no lapse on the part of other officials involved), he can only be held partially responsible in the narrative sense. And if his absence from the controls was entirely involuntary, due for instance to an unpredictable stroke, it is unlikely that he could reasonably be held responsible for the accident in any ascriptive sense whatever. He certainly could not be held responsible, whether wholly or partially, for the accident in the narrative sense, and consequently not in the second or moral ascriptive sense. The only sense in which he could be held responsible for the accident at all is the explanatory sense dealt with in the previous section, because his absence from the controls is a causal condition of the accident.

It is now clearer what this narrative kind of responsibility presupposed in some degree by either type of ascriptive responsibility must be. The narrative kind is exactly coextensive with the voluntary whereas the general ascriptive kind is wider. Both the words 'responsible' and 'voluntary' derive their principle utility from the fact that the verb 'act' and 'do' have sometimes a narrow but more often a wider sense. In the more frequent and wider use they signify involuntary as well as voluntary behaviour. Even inanimate objects are said to do things or to act. In this sense these words and the words for particular actions (e.g., approach') have a purely descriptive sense. The relevant behaviour can be specified in purely ostensive terms. But some actions are voluntary, and when we refer to them as such our discourse is narrative as well as purely descriptive. 'I sprang to the saddle and Jorrick and he' is, for instance, the first line of a narrative
and not merely a descriptive poem. We frequently use the word 'responsible' as well as 'voluntary' to make clear the distinction between the two kinds of discourse.

If an action is voluntary in all its ostensive aspects then an agent is wholly responsible for the action in the narrative sense. If, on the other hand, it is only voluntary in some of its ostensive aspects, then the agent whose action it is can be only partially responsible for it in the narrative sense. The ostensive specifications give no indication of what might well be considered the most important fact about the action, viz., whether it is voluntary, and what persons are responsible, and the degree to which they are responsible. The railway disaster can be specified in ostensive terms but this leaves unsaid that it is an **accident** or **fortuitous** concatenation of the behaviour of a number of agents, i.e., that it is involuntary. It further leaves unsaid, that one of the contributing factors in the fortuitous concatenation, viz., the signalman's behaviour, was at the same time completely voluntary, an action for which he was wholly responsible.

Obviously then to complete our discussion and support these distinctions between kinds of responsibility, we must ask what makes an action voluntary. Two conditions are sufficient:

(a) the action must not be contrary to the agent's intentions;
(b) the fact that it is not contrary to the agent's intention must be at least an indispensable condition of its successful performance.

On these conditions I think both Libertarians and their adversaries could agree. They are sufficiently liberal to recognise as
voluntary such normally unreflective actions as breathing and blinking, or spontaneous, or impulsive actions, which some would feel disinclined to call intentional since they are unreflective. At the same time they recognise the voluntariness of deliberate or reflective actions as well. Superficially, however, they may seem insufficient for two reasons that I can think of.

First: can they decide the voluntary status of actions prompted by post-hypnotic suggestion? While in a hypnotic trance one may be told to perform a particular action so many minutes after regaining normal consciousness. One may, for instance, have been ordered to open a window and in many cases when the allotted time comes round one does in fact open the window, probably thinking one is just satisfying a passing whim or even perhaps that one wants fresh air. Now is this action voluntary? Certainly the two conditions seem fulfilled. The action was not contrary to one's intention - one even was aware of an intention to do it. Likewise, the fact of the action not being contrary to the agent's intention is an indispensable condition of its performance. If one hadn't wanted to pull the window down one wouldn't have pulled it down.

To my mind the action really is voluntary. It is only as the obedience to a suggestion that it can be considered involuntary, for it might be contrary to the agent's intention (damaging to his pride, for instance) to obey a post-hypnotic intention. But in fact one can say this sort of thing about many of our more normal actions which we wouldn't hesitate to call voluntary actions. Many of our actions are suggested to us and for reasons of vanity we might never have performed them if we had been aware of the fact. Indeed, only on the rarest of occasions are we spontaneously
aware of all the opportunities for action afforded by our circumstances. And, in any given instance, it is almost as rare for us to realise that the action was suggested. The novelty of post-hypnotic suggestion is not its covert character so much as the method employed. Now we have already seen that any action may be (most are) voluntary in some respects and involuntary in others. In the instance of an agent unwittingly following out a suggestion, the action suggested can be involuntary only when considered as obedience to the suggestion.

To point to the important role of unrecognised suggestion in action may, however, seem damaging to Libertarianism. Does it not upset the metaphysical neutrality I have so far tried to observe? But why should the Libertarian deny the truism that an agent is more likely voluntarily to realise a project which he entertains than one which he does not entertain? Any why should he not admit that there are limits to the agent's ability to conceive action spontaneously? The agent's intelligence, education, general knowledge, and social contacts can without hesitation be recognised as controlling what enters into the agent's mind. Having admitted all this the Libertarian can still maintain with perfect consistency that it remains causally unsettled whether the agent will aim at the end which he entertains. Of course, in the instance of post-hypnotic suggestion it seems that the agent having entertained the suggested project is more likely to realise it than not. But it is quite easy to explain this tendency as a voluntary one. When one finds one gives more attention to a trivial project than it seems to merit the rational thing to do is to be rid of it by realising it in action, in the same way as one gives in to a nagging wife for the sake of peace.
A second reason for making reservations about the sufficiency of our two criteria of voluntariness may be found in what are called 'compulsions'. Is the child who sucks his thumb, the kleptomaniac, the sex-criminal or the miser behaving voluntarily? Again by our two criteria he may seem to be. Can we not say that these people know what they are doing, very often intend to do it, or in any case do not at the operative moment intend not to do it, and also that if they had intended not to do it they would not have done it? Yet we may feel doubts about calling such actions voluntary.

The reasons for hesitation are obvious. Compulsive actions are so incongruous or inappropriate. We feel inclined to say that the agent really does not know what he is about even when, as above, we felt compelled to admit that he is aware of the bare facts about his action. Compulsive action violates the first criterion in rather a curious way. It is not contrary to the agent's intention as a result of any sort of external force. Neither is he in one sense ignorant of the nature and circumstances of his action. In one sense he knows very well what he is about to do and, afterwards, what he has done. What he is unaware of is his real intention. And there is no need to jeer at the word 'real' here. What it indicates is quite clear. The action is inappropriate not because the agent is ignorant of what it and the objects round about him are. It is not like aiming a rifle which one mistakenly takes to be unloaded, or like sitting on a chair that isn't there. The action is inappropriate because the agent is unaware of what these objects are not. They conceal because they are confused in his mind with other objects.

This concealment seems to be what in psycho-analytical theory
is referred to as symbolisation. The thumb is a phallic-symbol because it 'conceals' or diverts attention from the phallus. But since we are dealing in hackneyed examples let us take one which has exercised the novelist as much as the psychoanalyst, viz., that of the miser. More imagination has been expended upon this type of example. It carries a greater wealth of association, and accordingly is more suggestive. The miser's behaviour displays the incongruity characteristic of compulsions. What then does his money conceal from him?

Well, it may conceal or symbolise his faeces, but let us try out an alternative theory, viz., that it conceals his personal inviolability. Inviolability is indeed a vaguer type of entity than faeces, but it may be more relevant. In fact it may account for the infantile concern for faeces which when unwisely interfered with leads to traumatic conditions. Under the pressure of our environment, particularly of our social requirements, a more sensitive differentiation of our aims or ends may become necessary. In the process of this differentiation the individual may become confused. His life may lose its integrity - his ends their essential unity. Instead of his new life being a development through differentiation of the old he may feel that it has little continuity with the latter and no longer any self-consistency. The miser retains an integrity or inviolability of a rather stunted form.

Now personal inviolability is the sort of end which we may have of necessity. This necessity, however, is not a deterministic psychological sort of necessity. Personal inviolability is the

1. cf. Francois Mauriac's 'Le noeud de vipères'.
sort of end that may underly, or precondition, most, or all, of our more specific ends. The necessity is of a logical kind. There is an inconsistency about not willing one's personal inviolability analogous to the inconsistency, mentioned by Kant, of not willing the development of one's talents. Since one's talents qualify one for the successful execution of one's aims one cannot consistently will their atrophy. Likewise, short of willing suicide of character, the preservation of the personality which we express in our particular actions, is necessarily willed in the willing of these actions. On this analysis we can see why the miser's behaviour becomes compulsive. An end, which he need not choose from logical or any other kind of necessity, comes to symbolise or conceal an end which by logical necessity he must choose. In this way the former acquires a spurious sort of logical necessity so long as the agent fails clearly to see what it is not. It is this spurious logical necessity that exercises the compulsion. The miser knows what his money is, but he does not know that it is only money. If he knew that his money was not his personal inviolability he would be in a position to stop or to continue hoarding, and simultaneously to pursue or change his main or general purpose. If he does not stop hoarding, then probably his hoarding was voluntary, i.e., consistent with his intentions, all along. If, on the other hand, he does stop hoarding, then probably, other things being equal, his hoarding was involuntary, i.e., inconsistent with his intentions, all along. Other things, of course, might not be equal. He might continue hoarding for an entirely new set of reasons, such as an unprecedented instability in stocks and shares. Accordingly, his new rational behaviour might obscure the fact that his previous behaviour had taken an irrational form.
which, other things being equal, would have ceased as soon as he discovered what his money is not. I conclude, then, that compulsive behaviour does not conform to our first criterion of voluntariness, viz., that voluntary action cannot be contrary to the agent's intention. We only feel doubt on this matter if we fail to distinguish between ignorance of what one's action is and ignorance of what it is not.

For these reasons, then, the two conditions of voluntariness can stand as sufficient despite the apparent difficulties. Now whether an occurrence is not contrary to the agent's intention, and whether its not being contrary is an indispensable condition of its occurring, are both matters of fact rather than matters of ascription. This is true whichever of the two prevailing interpretations of statements about intention one cares to adopt. They may be categorical statements about mental occurrences, or alternatively, they may be reducible to hypothetical statements or 'mongrel-categorical' statements about such publicly observable events as what the agent would have done in certain circumstances.¹

I don't wish to suggest that one must adopt one or other of these views, but merely to point out that on either, the presence of an intention is not a matter of ascription. In the next chapter but one, I shall try to give a more adequate analysis of intention than either of these, but this will leave unaffected our present conclusion that matters of intention are non-ascriptive.

We have seen, then, in the first part of this chapter that the relation of necessary connection is strictly speaking a

relation between facts about events rather than one between events. No event or set of events can be wholly responsible for the fact that another event or set has occurred, since the sufficient condition consists of negative as well as positive facts about events. It consists of the composite fact that certain events have occurred and that no other events of relevance have occurred. In the second part of this chapter we have seen, on the other hand, that the agent can have complete responsibility for his actions. Since, then, the agent is a person and not a set of positive or negative facts, there must be a distinction between the two sorts of responsibility I have labelled 'explanatory' and 'narrative'. We have also seen why we must distinguish between the narrative kind and the ascriptive kinds which, for similar reasons, must also be distinguished from the explanatory kind. There remains, however, the apparent possibility that the narrative kind of responsibility, while distinct, might yet be reducible to the explanatory type. In later chapters I shall argue that narrative responsibility or voluntary action is indeed reducible to necessary connections between events, but not to the one-one necessary connections postulated by Determinists.
CHAPTER III

Is Responsibility an asymmetrical and timeless relation?

In the properties of symmetry and timelessness we can find a second reason for distinguishing between two kinds of responsibility.

I

The one-one necessary connection between events which Determinists postulate is, in the first place, symmetrical. On the other hand the relation between an agent and his voluntary action is asymmetrical: the agent does the action, but the action does not in the same sense do the agent - the action is not responsible for the agent in the same sense as he is responsible for his action.

This contrast is often obscured by our use of such terms as 'cause', 'effect', 'necessitating' or 'determining' to express relations of necessary connection. They suggest that the relation between effect and cause, necessitated and necessitator, or, what is determined and what determines may not be the same as the converse relation. On the other hand, the laws of the most exact sciences such as physics consist of equations, and consequently the necessary connections which they express must be symmetrical, since equality is a symmetrical relation. Determinists think laws of this type govern all occurrences. Possibly the term 'law', however, has further misleading implications. It might suggest the presence of a legislator who by some sort of exertion compels phenomena to

behave consistently with the laws; or at least it might suggest the presence of an excited force. If the idea of a legislator is rejected as too metaphysical, the laws are held to state the principles in accordance with which such forces or gravity, magnetism, the powers of life, and the like, act. But the literal interpretation of such terminology has very little support among modern scientists. Even seventeenth-century scientists like Galileo and Newton, who were tempted to interpret forces literally as a physical concept, don't give this interpretation whole-hearted support. They distinguish very many connections in nature which they express in scientific generalizations or principles on the one hand and the occult agencies which they postulated to explain these connections on the other. Under the circumstances, the distinction between force and phenomena of force becomes of the utmost importance, difference between the direct relation of force to voluntary action on the one hand and that of event to event on the other, for a discussion of these and other passages.
behave consistently with these equations; or at least it might suggest the presence of an exerted force, if the idea of a legislator is rejected as too metaphysical. The laws are held to state the principles in accordance with which such forces as gravity, magnetism, etc., are exerted, in somewhat the same way as civil laws state the principles in accordance with which political force is exerted.¹ But the literal interpretation of such terminology has very little support among modern scientists. Even seventeenth-century scientists like Galileo and Newton, who were tempted to interpret force literally as a physical concept, don't give this interpretation whole-hearted support. They distinguish very clearly between the necessary connections of phenomena, which they expressed in scientific generalisations or principles, on the one hand, and the occult agencies which they postulated to explain these connections on the other. Quite explicitly they abstain from speculation about these agencies on the grounds that they are beyond the province of experimental science.² Consequently, experimental science is not even concerned with an asymmetrical relation between force and phenomena.

To accept the literal implications of such terms as 'law', 'force', etc., when applied to physical phenomena is evidently to assimilate physical phenomena to human actions and to ignore the important differences between the direct relation of agent to voluntary action, on the one hand, and that of event to event on the other.

2. cf. Galileo, Two New Sciences (New York, Macmillan, 1914), pp.166-7 and 293; Newton, Principia (tr. Cajori), pp.546-7; and Mortimer Taube, Causation, Freedom & Determinism, p.113ff for a discussion of these and other passages.
The asymmetry required by such terms as 'causing', 'necessitating', 'determining', etc. is, of course, to be found in the asymmetry of temporal relation between one event and the successor in time with which it is necessarily connected. Thus the fact that incidence of light at a particular angle precedes refraction at the same angle, makes one identify the incidence with the cause which necessitates, or determines, refraction at the same angle as its effect. But the fact that there are other relations between the values of this particular equation, and that these relations happen to be asymmetrical does not make the necessary connection between them likewise asymmetrical.

One might, of course, define responsibility not solely in terms of necessary connection but in terms of temporal antecedence as well. In that case the responsibility of one event for another would be as asymmetrical as the responsibility of an agent for his voluntary actions. Nevertheless the asymmetry must have a different source in either case. This we can see if we turn to the contrary concept of chance. When discussing the necessary connections between events it is as significant to say that $A^1$ rather than $A^2$ preceded $B^1$ 'by chance' as to say that $B^1$ rather than $B^2$ followed $A^1$ 'by chance'. On the other hand it is not significant to say that a certain action had a particular agent 'by chance' in the same sense of 'chance' as it is significant to say that he did a particular action 'by chance'. Accordingly, this latter asymmetry in chance must be peculiar to the logically related 'narrative' responsibility alone, and not to the 'explanatory' type as well. I shall state more positively what it is later in this chapter.

There is, indeed, another kind of asymmetry or, more accurately, nonsymmetry between events in one-one necessary connection, or
the values of different variables in a causal law. Furthermore, this nonsymmetry, unlike temporal antecedence, does depend upon the necessary connection. It has, however, a purely epistemological origin, and is not essential to necessary connection. One event can be said to determine and the other to be determined, when the first gives us the value of a variable in the scientific formula by means of which we can determine, i.e., compute, specifically what the other event must be without actually needing to observe the latter. By calculation we determine what this latter event is: we do not determine that it is what it is - we do not cause it. Similarly, it is our conclusion that the latter is what it is, which is necessitated by the premiss that the former is what it is.

Now whether we use the earlier of two successive events rather than the later in order to determine the other, depends upon which is given and which is not. If the earlier event provides the data we predict the later event; and if the later event provides the data we retrodict the earlier event. A scientific formula can be used for either purpose: the nonsymmetry of this kind of determining depends purely on the accident of what we know. As A. E. Taylor puts it:¹

For 'descriptive' science, what we suggested at first as a paradoxical possibility, is the actual fact. The past is determined by the future in precisely the same sense in which the future is determined by the past, namely that as both are stages of the same continuous process, if once you knew the principle of the process you can start equally well with either and reason to the other.

Or, again, Russell:²

The law makes no difference between past and future: the future 'determines' the past in exactly the same sense in

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¹. Elements of Metaphysics, p.175.
². op.cit. (Ar. Soc. Proc.), p.15.
which the past 'determines' the future. The word 'determines' here has a purely logical significance: a certain number of variables 'determine' another variable if that other variable is a 'function' of them.

Obviously this nonsymmetry is quite distinct from the temporal asymmetry of antecedence. It is, furthermore, still less capable of accounting for the asymmetry of the agent's responsibility for voluntary action. Voluntary action cannot be responsible for agents in the same sense as agents are responsible for voluntary actions.

We must, of course, admit that certain forms of necessary connection are asymmetrical. Necessary connection may be many-one or one-many as well as one-one. I have only shown that the necessary connection between events, which we designate by 'cause', etc. and 'effect', etc., respectively, may be symmetrical. Consequently any asymmetry that justifies the use of these terms must belong to additional relations between events. I have indicated what these additional relations are, and intend to show more fully that the asymmetry of narrative responsibility, or the relation between agent and act, has a different source.

The historical reasons why we use asymmetrical terminology for expressing symmetrical relations of necessary connection must be omitted from this discussion. R. G. Collingwood has contributed valuably1 to this subject, but there is much in his interpretation of the facts with which I disagree.

II

The contrast in asymmetry is perhaps less striking than the contrast to which I now turn. The relation of necessary connection

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is a formal timeless relation between occurrents. It is not a material temporal occurrent relation: it is not the kind of relation which constitutes events: it only holds between events. On the other hand the relation of narrative responsibility does constitute events if we regard actions as a class of events. It is the relation between the doer and what he does.

Laws of nature can be treated as analogous to the rules of logical inference. When we assert that \( p \) implies \( q \) where \( p \) and \( q \) are propositions, we assert something the truth of which is independent of time. The tense of 'implies' is the timeless or logical present. Now when applied to occurrents, the word 'cause' can be used in this respect in exactly the same way to connote a propositional operation. The rules of this kind of operation must, of course, vary in certain respects from those of implication. Like 'implies' we can use the word 'cause' to connect two propositions \( p \) and \( q \) when they refer positively or negatively to certain events as having occurred, occurring or about to occur. When used in this way it expresses with perfect adequacy the relation between occurrents which the causal terminology of more ordinary speech is meant to indicate - provided we observe the conditions layed down in Chapter II. The sufficiency of \( p \) as a causal ground for inferring \( q \) must always be taken as relative to some causal law or set of laws. Consequently \( p \) is the sufficient ground for the inference under the two conditions that 

(a) the causal law or set of laws which we take as applicable to the given situation is the sole causal law or set of laws applicable for the purpose of inference;

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1. cf. Carnap, Philosophy and Logical Syntax, Chap. II, para. 5.
(b) if the law or set be the sole law or set applicable, it is applicable neither in a more, nor in a less complex fashion than we allow.

When 'causes' is used in this way, however, we must remember to observe the same distinction between validity and truth which we observe in logic. If we say that \( p \) implies \( q \), we imply in this usage neither that \( p \) nor that \( q \) is true. On the other hand, causal terminology frequently carries the suggestion that the things which are causally related are facts, or actual events, or things that do exist. To say 'Something causes interference in my television set' is to suggest both that the something is factual, and that the interference has taken place, or will take place by causal necessity. The tense of 'causes' is here the habitual and not the timeless present. The correct interpretation of tense, of course, depends very much on the context of the statement. In 'A car-engine causes interference in a television set' it is more likely that the tense of 'causes' is the timeless and not the habitual present. Whether it is the habitual rather than the timeless present depends upon how far one can accurately substitute 'is causing' for 'causes' in the proposition.

In contrast with the verb 'to cause' the use of the word 'to imply' can never imply that, where the ground refers in the affirmative to an occurrence, the occurrence must be actual. The truth of \( p \) implies \( q \) implies the truth neither of \( p \) nor of \( q \). The fact that 'to imply' can be used in other tenses than the present might indeed obscure this. These other tenses, however, have the function of limiting the applicability of the rule of inference to some particular period of time. I might say 'In my day bad health implied financial ruin' without strictly implying that during the
stated period anybody's health was bad. Although it is unlikely that everybody enjoyed good health at that time, my statement could be based not upon instances but upon the fact that there were no health insurance schemes in being then. Consequently, the whole statement is convertible to the timeless present with no loss of meaning, as distinct from elegance, simply by putting ground and consequent in propositional form somewhat as follows: 'That X's health was bad before such-and-such a date implies that X was financially ruined.'

Those facts of usage can then be summed up in three conclusions:–

(1) There are instances, where the use of the verb 'to cause' is very similar to that of 'to imply'. In whatever tense we use the verb, we can translate the sense without any substantial loss of meaning by asserting that one proposition is the sufficient causal ground for inferring another proposition, where 'is' is in the timeless present.

(2) Where this conversion is possible the existence of nothing whether substantive or occurrent is being implied.

(3) There are, however, instances where the use of the verb 'to cause' is less closely parallel to the use of the verb 'to imply', for the existence of some substantive or occurrent is implied.

Because of this third conclusion I may seem to have shown no more than that the necessary connection expressed by 'cause' is sometimes of a purely formal and timeless kind. What I engaged to show was, on the other hand, that it is always of a formal and timeless kind. But we must accept this stronger conclusion. Otherwise, we would have to deny that one event causes another only
because they satisfy a valid causal law. Accordingly, when the verb 'to cause' is used with existential implications it must express something more than the necessity of connection between occurrents. The additional implication, however, is not that the necessity between the connected events is something material as distinct from formal. When we say that one event has caused another we are not describing the occurrence of some occult output of energy in addition to the two events, even though we imply that these two have taken place.

To treat the causal relation as material would lead to paradox. In addition to a first-order series of events that cause, and are caused, e.g., the running of a car-engine, we would require a second-order series of events, viz., the causings exercised and suffered by the first-order series. The event which is the running of the car-engine would have to stand to the process of causing interference in the same sort of substantive relation as the car-engine stands to the process of running. Consequently, we would require a second-order time-dimension within which the first-order event could persist as a substantive or continuant, in the same way as the first-order substantive, e.g., the car-engine persists in the first-order time-dimension throughout various activities such as running. Furthermore, is there any reason why second-order events should not persist and cause in a third-order time-dimension in the same way in which first-order events were required to persist and cause in a second-order time-dimension? Likewise is there any reason why the regress should stop at the third-order time-dimension, and not continue to infinity?

Now, this regress or possible regress may seem worthwhile to some as a speculative hypothesis. It is not, however, an intended
implication of the ordinary use of the terms 'cause', 'effect', etc. If we say that the forced march of Blücher caused the tide of battle to turn against Napoleon at Waterloo, it is not our intention to attribute an independent history to this forced march in addition to the history of Europe of which it forms a part. When we say 'Europe was unsettled then' we may either be comparing or contrasting the state of Europe then with what it is now or will be at some time in the future. But in saying that Blücher's forced march 'caused' we are not comparing or contrasting its relation to Napoleon's defeat in the past with its relation to the same event in the present or future. The past tense of the verb 'to cause' is meant to indicate merely the time of the march and the defeat relative to the present. The causal relation between the events is treated as unchanging.

We may conclude then that when causal terminology is used to indicate necessary connections between events the relation it describes is formal and timeless. Also we may note that the analogy with the use of the word 'imply' justifies further my description of this usage as explanatory.

III

Before contrasting the responsibility of the agent for his voluntary action with the explanatory type in respect of symmetry and timelessness I must explain one further matter. To say that a relation is not formal and timeless is to say that it is material and temporal. The distinction is one between a relation which one event may bear to another and a relation of the type which constitutes these events as events.
There are in fact two ways in which we can regard anything which takes time. We can treat it either as a unit or as a unity. These two ways, of course, are not mutually exclusive. When we treat the event as a unit we treat it as externally related to other events antecedent, concurrent, or subsequent. When, on the other hand, we treat it as a unity we are attending to its internal structure. Obviously we can attend to its internal and external relations at the same time. Now when we treat it as a unity there are two further ways in which we may regard it. We may regard it as made up of smaller externally related units, or we may regard it as what I shall call 'a process'. When we treat it as a process we treat it as composed of stages of development - and stages in the same process are not externally related to each other. They include and overlap each other. Bound up with the notion of stages and development there are, of course, the further notions of potentiality and actuality. The earlier stages are potentially the later stages and the later stages are the actuality of the earlier stages.

This distinction can perhaps be elucidated by the following somewhat crude diagram.

When we conceive what occurs between $T_1^1$ and $T_4^1$ (e.g., between Monday and Thursday morning) as consisting of event-units, we represent it as the sum of $AB$, $BC$ and $CD$ in temporal order or otherwise. When, on the other hand, we represent it as a process,
we represent it as consisting of AB, AC, and AD in that order. Each of the latter three events is represented as a separate stage in the final stage, i.e., the complete process AD: alternatively, each is regarded as a form, complete or incomplete, actual or potential, of AD. I shall show that when we treat a temporal unity as a process, we regard the earlier event-units as in one-many necessary connection with the later ones. Thus, given CD, the preceding events BC and AB must be given by necessity since in accordance with the one-many pattern they are indispensable conditions of CD. In the same way BC must presuppose AB. Each later event, accordingly, sums up the earlier event. One way of giving AD this sort of structure is simply to regard AB as the first of its components, BC as the second, and CD as the third. By definition a third presupposes, but is not presupposed by, a second; and a second presupposes, but is not presupposed by, a first, since the first component could be the only one. But AD might have the process-structure for other reasons as the following example shows.

Let us take the temporal whole consisting of a stone breaking a window. This is represented as a process if it is considered first as the stone coming into contact with the window, and then as the stone breaking the window, since the parts are articulated as stages and not as mutually exclusive. If, on the other hand, it is represented as consisting first of the stone coming into contact with the window and then of the window breaking, then it is represented as whole consisting of events, because the parts are mutually exclusive. Observe here how the second event-unit, i.e., the window breaking, presupposes, but is not presupposed by, the earlier as soon as it is described as the stone breaking the
window. The earlier event-unit, i.e., the stone coming into contact with the window, does not presuppose the occurrence of the second, since other causal conditions might conceivably intervene to prevent the latter (cf. Chapter II). Here, then, a one-many structure has been imposed upon the temporal unity by the definitions of the terms used to describe it. We could, of course, change it to a one-one structure by describing the stone's coming into contact with the window as the stone's being about to break the window. In this way the window would be broken by definition. However, it may not be broken in fact. We have to wait until it is broken before we can describe the preceding event in that way. In contrast we can describe the second event as soon as it occurs, in such a way as to presuppose the first since, of course, the first has already occurred.

This explains in a preliminary way how we can distinguish relations holding between events from relations which constitute events. Unfortunately, it must give the impression that relations between events are fundamental to relations which constitute events, since I have defined the second in terms of the first. This would lead to an infinite regress since by definition a constitutive relation must be more fundamental than a relation holding between events thus constituted. I cannot remove these regressive implications until Chapter VI. In the meantime we must become more familiar with the various distinguishable types of process, and to this end I append the following diagram of subdivision.
I shall begin with the distinction between voluntary and non-voluntary non-self-determining activities with the ultimate intention of explaining the distinction between retrospective and prospective process. This last is the most fundamental and significant distinction for my purposes. We must not, however, be led by the diagram to expect that retrospective and prospective process will prove to be coordinate species. One may be more fundamental than the other: but that is a question which I would like to leave undecided at the outset.

An example of a non-voluntary non-self-determining retrospective process which is an activity has already been used. One can take it as a generally accepted fact that the action of the stone in breaking the window is not a voluntary action - at least on the part of the stone. Consequently, it can be contrasted with an instance of the following sort. Suppose I plan to use book-tokens, which I count upon receiving every year as a birthday present, to buy one volume, no more than one volume, and a different volume each year, of Proust's 'Remembrance of Things Past': I begin in the most natural order with 'Swann's Way' and terminate with 'Time Regained'. The process in which my act becomes completely realised is a limited but fairly lengthy action of the voluntary kind. It will reach completion in twelve years time, and each of the preceding eleven will be marked by a stage in this completion. The twelve years which have been occupied in this way have been endowed with the character of a specific temporal unity by my acquisitive intention. If, on the other hand, I received each successive volume annually as an unsolicited gift, then the period of twelve years would have been endowed with temporal unity by no intention of mine. It would still have a unity, however, as
the space of time in which I happened to acquire the complete work. This latter activity would be non-voluntary in type like the stone breaking the window.

Let us now subdivide further. The example of a voluntary process of the retrospective kind exemplifies a temporally definite process as well. It is temporally definite because it is specified that it takes twelve years to complete. Every process must, of course, take a definite period of time, but the period of time may not be specified in its description: and if it is a voluntary process, it will not be voluntary in respect of its precise duration, unless the agent intended that it should last for just that length of time.

This subdivision must not be confused with the further one between finite and infinite processes. The acquisition of the whole of Proust's main novel described thus, with the phrase 'in twelve years' omitted, is a temporally indefinite process, but it is finite and not infinite. Likewise an infinite process is not necessarily temporally indefinite. Suppose Proust had been inspired by Tristram Shandy to write an absolutely comprehensive autobiography, genuine or fictitious: and suppose further that he is immortal, and supplied eternally with all the materials necessary for writing. Under these conditions he would not be compelled like Tristram Shandy to abandon his plan by the fact that it takes longer to describe a happening exhaustively than it takes for the happening to occur, and that one has to wait until it occurs before one can note that it has. The resulting novel would be infinite in bulk and in the time taken to write it. Now, if Proust were aware of the implications of his task, it would, as a voluntary process, be temporally definite though temporally
infinite. He has specified and intended its temporal infinity. If, on the other hand, he is not aware of the regressive implications, it will, as a voluntary action, be temporally indefinite as well as infinite. To describe the process just as the writing of an absolutely comprehensive autobiography is, however, to describe it as temporally indefinite, although to describe it as the writing of a (quite literally) never-ending autobiography is to describe it as temporally definite.

Let us now ascend to the more generic distinction between self-determining and non-self-determining activities. Instances so far adduced have all been of the non-self-determining kind. Like all processes, of course, their specific nature depends upon that of the temporal unity which is their final stage. But the particular section of time that forms a temporal unity, and the particular respect which gives it, rather than some other section, this unity, has so far depended upon our interest and attention. I am not denying that the stone does break the window, or that over the course of twelve years I may complete my collection of Proust's main novel: and I am not denying that these are matters of objective fact. I am merely pointing out that in describing what occurs in this way, we group and separate what has occurred in one of an indefinite number of ways in which it can with perfect objectivity be grouped or separated. It is the selection of one of these from the others that is subjectively conditioned. Thus I can, according to my interest, view what has occurred as the stone breaking the window, or the stone coming into contact with the window and the window breaking. Those are alternative methods of grouping the content of what falls within one particular strand of time or spatio-temporally continuous region. They are not
equivalent, for only if I regard what has occurred within these limits as one process, viz., as the stone breaking the window, would I regard the stone coming into contact with the window as a preliminary stage, viz., as the stone being about to break the window. According to the one way, I make a distinction between preliminary and final stages, and according to the other, I distinguish between complete self-contained processes.

In contrast where a process is self-determining there are objective reasons in addition to subjective ones for attending to just one particular section of one particular strand of time, and for taking it as a temporal unity. We are objectively justified in regarding a specific grouping of event-units as a temporal unity where the relatively later event-units determine the relatively earlier event-units, but not vice-versa. Any other type of necessary connection, whether the converse, or that of mutual implication, must be absent, or, in any case, discounted. Although they would give equal objective justification for regarding the particular temporal unity in question as a unity, they would nullify the objective justification for regarding the various stages leading up to this unity as stages belonging to it, rather than some other unity. Let AD be the temporal unity of which the event-units are in necessary connection. Then, it is only if CD is the sufficient condition of BC and AB, and BC the sufficient condition of AB, and furthermore, if neither AB is the sufficient condition of BC or CD, nor BC a sufficient condition of CD, that there are objective reasons for regarding AB as a stage in AC and AC as a stage in AD. If, on the other hand, each of the three event-units were a sufficient condition of all, it would be perfectly legitimate to regard AB as a stage in AC and AC as a stage in AD. Each
these stages is certainly an incomplete form of AD, but they are not stages in the development of AD as a necessarily connected whole. They are not stages in the objective determination of AD as an objectively determined whole. The objective determination of the whole would be as complete in AB as in AD. Likewise, if the earlier stages are sufficient conditions of the later, they cannot be stages in the objective determination of the whole, because the whole would be completely determined at the beginning instead of at the end alone.

In supposing that necessary connections may be asymmetrical I am not, incidentally, going back on the first part of this chapter. We saw that asymmetry does characterise one-many or many-one necessary connection. Likewise when I say that one event may be a sufficient condition of another, I am not going back on Chapter I. Its sufficiency must be understood as relative to the two conditions that were outlined.

In finding examples of self-determining processes I am under no obligation to vouch for these examples being genuine, since their function is purely illustrative. Consequently I shall be treading on no deterministic toes by giving instances where later events determine earlier but not vice-versa. However, even supposing that genuine examples can be given, they are possibly reconcilable with deterministic premisses. Successive events which are in strictly one-one necessary relationships in their more determinate characteristics may in their more general characteristics display one-many necessary relationships, if indeed they display any at all.

One type of change which apparently exemplifies self-determination is that of organic growth (or decay). In the classic
example of the growth of an oak tree from an acorn one can reasonably assert that unless there is an acorn, there will be no oak, and, accordingly, that if there is an oak, there must have been an acorn. On the other hand, there is plenty of evidence to show that acorns may not develop into oak trees. Conditions of soil, weather, etc., are all equally indispensable to the growth of an oak. We may note in passing, however, that this asymmetry of necessary connection between acorns and oak is perfectly compatible with the symmetry of Determinism. The presence of an acorn is an element which a number of incompatible total situations might have in common. Accordingly, the apparent indeterminacy in the consequences of this common element could be explained deterministically in terms of the variety of additional factors that differentiate from each other the various incompatible situations in all of which the acorn is present.

It is not entirely irrelevant to notice a further feature of organic growth, since within the species of self-determining activities it enables us to differentiate between the temporally definite and indefinite. I refer to the plasticity displayed in the growth of organisms by which the final characteristic may be achieved in any one of a number of ways. To take an extremely simple instance, the acorn will in suitable conditions grow into an oak tree whichever way it is planted in the ground. If planted with the germinating part downward, the shoots will very soon turn round and strike upwards. Because of this we ascribe to organic behaviour a teleological or quasi-teleological character: the

1. cf. R. B. Braithwaite, Scientific Explanation, p.329ff., who, however, makes no adequate distinction between this and the self-determining characteristic of organisms.
organism behaves as if it were adopting a means to a specific end. Now, in consequence of this adaptability the organic process is within limits a temporally indefinite one, since the length of time for its completion will depend upon the presence or absence of snags which it has to surmount.

In illustration of temporally definite self-determining characteristics we can turn to the field of history. It is plausible to suppose that a certain historical event, either in its specific or general characteristics would never have occurred if it had not been preceded by another particular event, and that particular event alone. At the same time it would be less plausible to claim that given the antecedent event the subsequent event followed inevitably. We would regard the latter claim as far more ambitious than the former. Now one of the things we might expect the historian to explain is why the historical process in question took the length of time it actually did take to reach completion. We might ask him why it took Germany so long to achieve nationhood as compared with neighbouring states. In actual practice, of course, we would not expect him to explain the duration of the process within very exact limits. It might not even be possible to assign exact temporal limits to the process in question. But nevertheless, allowing for a certain margin of inexactitude, we do expect explanations of the duration occupied by a process from the historian, as well as explanations of why the process happened at all. Accordingly, we may regard historical processes as illustrating the temporally definite type of self-determining retrospective process.

The distinction between self-determining and non-self-determining processes has now been adequately illustrated, but
there remains one qualification which we must make. In respect of certain of their characteristics many of the processes distinguished under these headings may be distinguishable under an entirely different set of headings in the above system of classification. Under which heading we place a particular process may depend to a large extent upon which of its characteristics we specify when referring to it. After Chapter VI we shall have to revise the present dispensation. There we shall argue that under one condition the self-determining structure or one-many necessary connection between events is a necessary property of prospective process. The one condition is that events owe their self-determining structure to their specific rather than more general characteristics. In the examples just used, on the other hand, it was the more general characteristics which gave the events possessing them this particular structure.

Let us now turn to the distinction between activities and phenomena. So far the processes that have come under our review have all without exception been activities. All of them have been treated as phases in the history of some substance, if we interpret that category sufficiently widely to include such things as countries, persons, organisms, and inanimate objects. The substantive expression which is the subject of the sentences describing these processes, has stood for something to which we refer as a substance. But there are other process-describing sentences in which the substantive expression does not refer to a substance. It refers to a complete process, e.g., the 'Reformation', 'the second world-war', 'the Edinburgh Festival', 'the sunset', 'the blast of a foghorn', 'the whine of a siren', etc. The events to which the first three of these expressions refer could no doubt be described
by sentences which refer to the behaviour of individual substances. The Edinburgh Festival, for instance, consists of the behaviour of individual artists and the members of their audience. On the other hand, the latter three expressions seem to refer to sensations, or, to use a more specialised term, sensa, as distinct from percepts. No doubt they contain references to substances, but the inadequacy of our vocabulary for referring to sensa except by reference to the material objects with which they are associated is a familiar one. When we refer to a sunset, or to the blast of a foghorn, or to the whine of a siren, we are not necessarily alluding respectively to the sun setting, or a foghorn blowing, or a siren whining, nor in general to the activities of a substance. I shall give all these processes, whether they are physical processes, or sensa, or anything else, the generic title of 'phenomena' where we do not refer to them as pertaining to the history of a substance.

An interesting peculiarity of the sensum-class of phenomenon is that its members tend to form temporal gestalten. Like activities, with the exception of the self-determining kind, the principle of the temporal unity in which they reach completion is psychological. It depends upon the direction of one's attention rather than upon any objective feature about the unity itself. But in the case of sensa, the direction of the attention is not always determined by reflection. We tend quite unreflectively to group certain sensa together as a unity, and to regard any one of these constituent phenomena by itself as incomplete, in the same way as quite unreflectively we subordinate certain spatial patterns to more inclusive ones, and fail in turn to subordinate these to yet other spatial patterns. Certain of these temporal gestalten
are, no doubt, formed only after the complete phenomenon has been experienced. Probably it is after habituation to the blast of a particular foghorn that we regard the initial stages, before, let us say, the sound reaches its full volume, as incomplete; although the expectancy which colours our experience in these initial stages is absolutely immediate or felt, rather than reflective or conceptual. In other cases, however, this felt anticipation of what occurs later may not invariably be the product of previous experience. Possibly, for instance, on the very first occasion we felt inclined to sneeze our instantaneous experience was pregnant with something which, if it occurred at all, only occurred later, viz., the completed sneeze. There may be a sort of innate expectancy which we cannot help feeling, though reflectively we may not expect the felt sequel.

There is, however, a more important difference between the sensum-class of phenomena and the rest of this genus. To say 'The Edinburgh Festival is over' is equivalent to saying 'Edinburgh has just held her annual festival'. But to say 'The sunset is over' is not equivalent to saying 'The sun has set', if the former refers to a sensum or set of sensa. Other types of phenomena are reducible to the activities of individual substances, but sensa are not. Descriptions of either sort of phenomena have, however, one linguistic feature in common. The substantive subject refers to the complete process ('the Festival', 'the sunset', etc.) and the verb indicates the stage at which the process has arrived ('is over', 'has begun, etc.). There are indeed exceptions to this rule. In 'The sunset is sending me into ecstasies of delight' or 'The pain is driving me crazy' the verbs, as distinct from their tenses,
do not express the stage of development. This happens when the process is referred to as part of a more composite process which is not referred to substantively. But in all other cases the rule holds.

I have subdivided the general retrospective type of process in some detail partly to indicate that some of these subdivisions may be reducible to others. All activities for instance are reducible to phenomena. This may be simply the result of expressing the same state of affairs by two equivalent forms of sentences (e.g., 'The breaking of the window by the stone is over' and 'The stone has broken the window'). If, however, one is phenomenalistically inclined, one would wish to reduce all statements about activities to statements about the sensum-class of phenomena and maintain that the latter are more basic and elementary. This is an issue which I wish to leave open. My main reason for entering into fairly detailed subdivision is, however, different. By covering fairly exhaustively the area of retrospective process its essential difference from prospective process may become clearer.

All the processes examined under the heading 'retrospective' owe their process-structure partly to subjective factors. We have already seen how by electing to describe a temporal unity in a certain way we can give the component event-units the one-many structure characteristic of process. The non-self-determining processes in particular owe their structure to the definitions of the descriptive terms. If I receive 'Time Regained' and describe this as the twelfth volume in my collection of the complete novel, then I elect that this should be the final stage in a process. The description presupposes that I have already received the other
eleven volumes, whereas my receipt of these presupposes neither through description nor through causal connection my receipt of 'Time Regained'. The process of collection may prove abortive in its final stage.

To a lesser extent, however, even the self-determining processes are, with certain qualifications, subjectively conditioned, despite my having described them earlier as objectively determined wholes. We saw that the examples I gave of self-determining wholes are perfectly consistent with deterministic premisses. The growth of the acorn could have the one-many relationship to the growth of the oak tree only with respect to these rather general characteristics in terms of which I am now describing these two events. If, however, I were able to describe the more specific characteristics of a particular instance of these two events, and chose to do so, the connection might, for all that has been shown to the contrary, turn out to be one-one. Accordingly, the one-many relationship is subjectively conditioned by the fact that I have chosen to describe the more general rather than the specific characteristics of the two events. It will follow, of course, that where the specific as well as the general characteristics of a series of events displays a one-many pattern of connection, then this structure is not subjectively conditioned. I reserve this type of case for special treatment in Chapter VI where I show that this type of process comes under the heading 'prospective' as distinct from 'retrospective' process.

Now in retrospective processes the earlier stages are not invariably followed by the later stages even though by definition of terms it is appropriate that these later stages alone should
follow. When I have in my possession 'The Sweet Cheat Gone', which is volume eleven of Proust's novel, I cannot say that the twelfth and final stage is quite literally about to occur. Of all the things that might possible occur this is, of course, by definition of terms the most appropriate. Aristotle would have distinguished it from the other possibilities as the actuality of the preliminary stages - as what the preliminary stages potentially are - even though it may never become actuality. For him the potentiality of a process does not consist of all the possibilities, but only of the one which by definition of the descriptive terms is appropriate. In fact it is only in retrospect after I have volume twelve 'Time Regained' in my possession that one can say in the quite literal sense that this final stage is the actuality of what has gone on before. Or again it is only retrospectively after the process has become completed that one can say in the literal sense that the final stage was about to occur. Before the final stage one could not say with certainty 'The final stage will occur' since one cannot control the future by defining one's terms.

In prospective process on the other hand the 'aboutness' possessed by the preliminary stages is possessed quite literally. Where a later event is the actuality of an earlier event it must occur. This kind of 'aboutness' is the kind possessed by anything in respect of its future. But we must notice here an important distinction between what was, what is and what will be about, or going to, happen. Something that is about to happen must happen. On the other hand, something that was about to happen or will be about to happen may not have happened, or may not happen,
respectively. Thus one can say 'The train was about to depart when at the last moment the guard caused a delay'. Or again 'He will be about to depart, and then you must prevent him'. But one cannot correctly say 'This is about to happen, but something will prevent it', although one can say 'This is about to happen, if nothing happens to prevent it'. If something really is going to happen then by definition nothing can prevent it.

These differences between retrospective and prospective process are not differences of content. One and the same process can be considered as retrospective or prospective. The stages of any process that has taken place must have had in the moments of their occurrence prospective potentiality. The distinction between the stages of prospective process is simply the distinction which we make when using the terms 'past', 'present' or 'future', and the equivalent tenses or temporal adverbs. The present consists of the pastness of one set of events and the futurity of another. The past is the incomplete actuality and the future is its potentiality. Unlike the past and the future, then, the present is not a period of time but a date at which two adjacent periods of time are respectively in the past and future. As such it is not to be contrasted with the past and the future considered as periods of time, but, on the contrary, with dates in the past and future when the distinction between past and future was or will be different.

On this interpretation, then, the present corresponds say to the point C at $T^3$ in the diagram. The past would then correspond to AC between $T^1$ and $T^3$, and the future to CD between $T^3$ and $T^4$. The contrast between C on the one hand, and B on the other, would then be between the date when AC and CD are the past and future
respectively, and the date when AB and BD were respectively in the past and future. Again, the contrast between C on the one hand, and D on the other, would be between the date when AC and CD are in the past and future respectively, and the date when AD, and whatever follows outside this end of the diagram, will be respectively in the past and future. To treat C rather than B or D as the present is simply to treat it as the date which dates B or D as past or future dates. These dates of course date C in turn but only in the indirect way in which a past or future date can date the present.

This interpretation of the present as a date is, of course, essential to the elucidation of the idea of prospective process, and I propose to show that it is unequivocally supported by the facts of linguistic usage. We do, it must be admitted, speak in certain circumstances of 'in the present' just as we speak of 'in the past' or 'in the future'. This might mislead one to suppose that the present is a period of time correlative to the past and future rather than the date of the past and future. But, on the other hand, while common usage allows us to say 'at present' it does not allow us to say 'at past' or 'at future'; and this is sufficient to establish the dating function of the present relative to the past or future. The phrase 'in the present' has a more complex purpose than may first appear, and I shall discuss it later.

Let us first see what would happen if we did not interpret the use of the terms 'past', 'present', or 'future' in the way I have indicated. There will be two other possibilities.

According to the first, an event might be past, present, or future, in the way in which one geometrical figure may be smaller,
equal to, or greater in area than another. Of these three relations both smaller than and greater than allow many different sizes of figure as their referents, whereas equal to allows only one size of figure. This analogy might explain why 'the present' seems to refer to something much narrower than either 'the past' or 'the future'. The analogy holds in other important respects as well. No two of these three geometrical properties can consistently be attributed to the same figure at the same time. Likewise no event can at the same time be past, present, and future or any two of these.

There, however, the analogy stops. The same two geometrical figures must at all times be related by the same relation of size. It is not only inconsistent to say at $T^1$ 'A is both smaller and greater in area than B'. It is likewise inconsistent to say at $T^1$ 'A is smaller in area than B' and then at $T^2$ 'A is greater in area than B' (provided that by definition of terms no change in the area of either figure is permitted). On the other hand, as M'Taggart pointed out, it may be necessary to say at $T^1$ 'A is in the future' and at $T^2$ 'A is in the past', although, of course, it would remain inconsistent to say either at $T^1$ or at $T^2$ 'A is both in the past and the future'.

The difference between the two types of sentence, one about area and the other about time, lies in the function of the copula 'is'. In the sentences about area there is no point in distinguishing the function of 'is' from the function of 'was' or of 'will be': this followed from the definition of 'the same figure'. In the group of sentences about events, the distinction between 'is', 'was' and 'will be' does have a useful and necessary function.

In the sentences about area the copula is timeless: in those about events it is temporal. Now the temporal copulae indicate that the sentences in which they occur may only be true at the moment of utterance, which is from the utterer's point of view the present. Consequently, since adjectives like 'past' and 'future' can only occur in such sentences their applicability must be relative to the present. This is the true explanation of the narrowness of the present relative to the past and the future. The analogy in narrowness between the present and the geometrical relation equal to was quite misleading.

These arguments dispose of the first method of regarding the present as correlative with the past and the future instead of as a date for the distinction between past and future; for they show that the truth of a statement about what is in past or future depends upon the statement's tense. But one might argue alternatively that though the present has this dating function along with past dates and future dates, it may be correlative to the past and future as well. One might take as evidence the fact that we sometimes use the phrase 'in the present' and not merely the phrase 'at present'. Since we also use the phrases 'in the past' and 'in the future', this might suggest that like 'past' and 'future' the word 'present' may indicate a period of time as well as a date. By referring to a period of time as 'the present', however, we don't necessarily treat it as correlative with the periods of time that are past and future. A thick black line on a sheet of paper is extended like the areas which it divides. Nevertheless, even when aware of the fact, we usually treat it as a limit, common to the two areas rather than as an intermediate area. Again, while
aware of the size of the Pyrenees we usually treat them as the boundary between France and Spain and not as a third country. Likewise, when we speak of a number of events, as in the present, we draw attention principally to the fact that they are temporal boundaries between the past and the future, even while recognizing that they have relative to each other a temporal order as well. If we want to ignore the reference to the past and future which these events limit, we have to invent a philosophical or psychological locution such as 'the specious present'.

However, let us suppose that the present is a correlative of the past and the future as well as a date, and see where this leads us. It will imply that the present not only dates the pastness or futurity of events, but also the presentness of other events as well. Not only will one contrast the distinction between past and future at present with past or future distinctions, but one will have to contrast the present at present with the present in the past and future. Now I feel a greater uneasiness about saying 'In 1815 the battle of Waterloo was in the present' than I would feel about saying 'In 1816 the battle of Waterloo was in the past' or 'In 1814 the battle of Waterloo was in the future'. I would feel inclined to put 'the present' in quotation marks while leaving 'the past' and 'the future' unadorned. Otherwise, to make the former statement would be similar to saying 'In 1815 the battle of Waterloo was happening now': and this seems to suppose some odd kink in time whereby events of 1815 are identical with something occurring now. On the other hand, the corresponding versions of the latter two statements would be 'In 1816 the battle of Waterloo was no longer happening' and 'In 1814 the battle of Waterloo had
not yet happened' respectively: and in contrast these two statements in no way outrage our sense of normality. Accordingly, normal usage suggests that the present is not correlative to the past or future, since the phrase 'in the present' does not occur in the same way as the phrases 'in the past' or 'in the future', nor the adverb 'now' in the same way as the adverbs 'no longer' or 'not yet'.

I do not suggest, however, that any logical absurdity is entailed by taking the present as a correlative of the past and future. I only maintain that as a matter of linguistic fact we don't, and furthermore, that it is unnecessary and uneconomical to do so. The present, as we saw earlier, must have at the very least a dating function to prevent logical absurdities. Accordingly, if we make it a correlate of the past and future which it dates, we are involved in an infinite regress. We imply that the presentness of an event must be past, present or future, in the same way in which the pastness or futurity of an event may be past, present, or future. But if this is so, then the second order past, present, or future must likewise be past, present, or future and so on ad infinitum. When discussing infinite regresses one must, of course, resist the temptation to call them 'vicious' by way of rhetorical flourish. I can see nothing vicious in this particular regress.  

Vicious regresses are limited to regresses which arise from analysing concepts either directly or indirectly in terms of themselves; but no attempt has here been made to define anything. The regress is objectionable here simply because it is unnecessary. In its place one can substitute an indefinite regress by confining the function of the present to that of dating instead

1. M'Taggart assumes without any argument that there is. (Loc. cit).
of something that is dated. In functioning as a date the present is in contrast with yet other dates - a contrast between what is at the present in the past or future and what was in the past, or will be in the future, in the past or in the future. These other dates, however, since they are all in what at present is the past and future, must all be dated by the present as well. But one can in addition, if one wishes, date them by other dates than the present. When one uses the pluperfect tense, one places an event in what is past relative to a date which is in the past relative to one's present: likewise, when one uses the future perfect tense, one places an event in the past of a date which is in the future relative to one's present; and there are infinitely more of these indirect ways of locating an event in time than the grammarians have taken the trouble to recognise. So long, however, as one does not treat the present as correlative to, as well as dating, the past and future, there is no logical necessity that one should date dates as well as events.

It might be argued, however, that unless we suppose that the present functions as more than a date, we cannot account for the facts of experience. Without a third container, comparable to the past and future, would we have to omit certain events from our inventory of reality? Linguistic usage may seem to suggest this. We frequently use the adverbial 'now', or the adjectival 'present', to refer to periods of considerable length.¹ We even speak about 'the present epoch'. Where we use temporal inflections we not only say 'He did X' or 'He will do X' but also 'He does X' or 'He is doing X'. If the present is a date alone, must we cut out the events to which we allude in the present tense from the totality

¹ cf. Findlay, Time: A Treatment of Some Puzzles. (Logic and Language: First Series, p.40ff.)
of existence? By no means. This use of the present tense is
ddictated purely by our method of describing occurrences. We might
want to refer to an occurrence only as a member of a temporal unity,
and if this temporal unity is sufficiently long in duration and
insufficiently remote in the past or future it must straddle the
point of division between the past and the future. But it is
always possible to group occurrences in such a way that the grouping
does not straddle the present, although it may be the straddling
grouping alone that happens to interest us. Thus, while writing
the previous sentences I might have answered the question 'What
are you doing just now?' by saying 'Writing this sentence'; but,
carefully synchronising my speech with my pen, I might have said
'I have just written the word "although"'. It would of course be
eccentric to answer the question in this way, because to ask the
question at all implies that one is prepared to tolerate a margin
of inaccuracy which is sufficient to accommodate the length of
time during which one could reasonably expect a reply. To treat
an event as a limit is, as I have already said, no more odd than
to treat a mountain range or a river as a boundary between two
countries.

The present, then, is a stage in prospective process or the
process of time. It is distinguishable from past stages for it
includes in the past what was previously in the future and excludes
from the future some events that were previously in the future.
It is likewise distinguishable from future stages because it
excludes from the past some events that will be in the past and
includes in the future some events which will not be in the future.

This completes my explanation of the distinction between
retrospective and prospective process. It completes likewise
the explanation of the distinction between relations that relate events but which are themselves timeless and relations which are temporal because they constitute events. Necessary connection is a timeless relation whereas the relation between potentiality and actuality is a temporal relation constituting process. It is natural at this point to raise the question whether the timeless type of relation is logically related in any way to the temporal type. Does one presuppose the other in any form? In Chapter IV I propose to show that the temporal relation does not presuppose one-one necessary connection of the deterministic type and in Chapter V that one-many necessary connection of the Libertarian type entails the temporal type of relation. It will become obvious in these chapters that these issues depend very much upon whether retrospective process is the more ultimate type. Can prospective process be analysed in terms of the relation of inclusion and exclusion holding between temporally ordered aggregates of events, as our interim diagram tends to suggest, or is the idea of process basic to the idea of an event? I wish to leave these questions undecided for the moment. In the concluding section of this chapter I propose to show that the agent's responsibility for his voluntary actions is an asymmetrical relation of a kind which does not hold between events and that furthermore it is a temporal as distinct from a timeless relation.

IV

The relation of an agent to what he does voluntarily is that of a substance to an event, and therefore manifestly asymmetrical. It would be distinctly odd to say that what he has done is responsible for the agent for this reason alone - at least if one were
to use 'responsible' in the same sense as when one says the agent is responsible for what he does voluntarily. Perhaps, however, I should try and remove any possibility of the point I am making at the moment being misunderstood for one which I am about to make much later. For the moment I am merely distinguishing between two kinds of relationship, i.e., the explanatory and the narrative type of responsibility, while neither affirming nor denying that the one type may be reducible to another. Determinists could agree that the narrative type is substance-occurrent in form and at the same time maintain that the explanatory one-one occurrent-occurrent relation is its logical condition. For instance, they might say that when an agent is responsible for his action in the narrative sense his volition of the action is responsible for his action in the explanatory sense, and then add that preceding events are likewise responsible for his volition in the explanatory sense. Narrative responsibility on this account would be reducible to a subclass of explanatory responsibility. At the moment, however, I wish merely to guard against the confusion of one of the two types with the other.

C. D. Broad has provided an instructive instance of this confusion. He believes that a Libertarian interpretation alone can recognise the presuppositions of our ethical judgements, i.e., our belief in what he calls 'categorical obligability'. On the other hand, he believes that indeterminacy is not a sufficient condition of categorical obligability. We wish to hold the agent responsible for doing, among the actions which indeterminacy makes possible, that particular action which he did in fact do rather than any of the others. Broad believes that this responsibility is a condition additional to indeterminacy, and gives the following
account of the way in which he thinks Libertarians might try to recognize what he believes: ¹

I suspect that they would quarrel with my statement that on their view, the fact that one puts forth such and such an effort in support of a certain desire is, in the strictest sense, an accident. They would like to say that the putting forth of a certain amount of effort in a certain direction at a certain time is completely determined by the agent or self considered as a substance or continuant, and not by a total cause which contains as factors events in and dispositions of the agent. If this could be maintained, our puttings-forth of effort would be completely determined, but their causes would neither be events nor contain events as cause factors. Certain series of events would then originate from causal progenitors which are continuants and not events. Since the first event in such a series would be completely determined, it would not be an accident. And, since the total cause of such an event would not be an event and would not contain an event as a cause factor, the two alternatives "completely determined" and "partially determined" would both be inapplicable to it. For these alternatives apply only to events.

Of this supposed defence he observes: ²

Now it is surely quite evident that if the beginning of a certain process at a certain time is determined at all, its total cause must contain as an essential factor another event or process which enters into the moment from which the determined event issues. I see no prima facie objection to there being events that are not completely determined. But in so far as an event is determined, an essential factor in the total cause must be other events. How could an event possibly be determined to happen at a certain date if its total cause contained no factor to which the notion of date has any application? And how can the notion of date have any application to anything that is not an event?

Both Broad and his Libertarians have failed to realise that the substance-occurent type of responsibility belongs to a totally different category from the occurrent-occurent type - for the former type is not causal at all. The difference is not merely in the category of one of the terms, viz., the referent of the

² op.cit., pp.44-5.
relation. The two types of relation themselves belong to a different category. This has been obscured by taking the statement that the agent is responsible for his action as synonymous with the statement that the agent determines his action. When the word 'determine' is used in this way with an accusative rather than with an infinitive, as in 'determine to do', it normally expresses a relation of the explanatory kind which holds between events and not between a substance and an event. Broad, of course, has used the term 'accident' in these passages and not the correlative term 'responsible'. But if there are two kinds of responsibility there are likewise two kinds of accident which one must be careful to distinguish. The solution, then, to the alleged Libertarian dilemma is not that the agent's action is no accident, since it is determined by a continuant or substance, i.e., the agent. The relation of determination can only hold between events. On the contrary, the agent's action is no accident, in the one relevant sense of 'accident', because his action is a voluntary one for which he is responsible in the relevant sense of 'responsible'. Perhaps the failure to distinguish the event-event type from the substance-event type of relation explains also why Broad and his Libertarians interpolate these 'puttings-forth' of effort between the agent and his action. Their motive may be to postpone to the very last moment the anomalous necessary connection of a substance to an event, and if one postulates an occult type of event, the queerness of its necessary connection to a substance may be less apparent.

Broad can still object that even if an explanatory type of responsibility is distinguishable from a narrative type, nevertheless the antecedents of an action should provide a complete explanation
of why the action occurs at one date rather than at another. But this is exactly what the Libertarian indeterminacy defined in Chapter I does. It denies that every specific event has a sufficient antecedent causal condition, but not that it has an indispensable antecedent causal condition. Now as long as an event has the latter even though it has not the former, there is an absolutely sufficient explanation of its temporal position. One must not confuse the explanation of its temporal position with the explanation of why it rather than a limited number of other events should occupy that particular temporal position. Libertarianism withholds this latter explanation alone.

To appreciate fully that the relation between a substance and an event belongs to a different category from the relation between an event and an event, we have, however, to attend to something more than its asymmetry. Asymmetry alone has merely marked the difference in category between the referents of the two types of relation. The more important distinction is between the respective timeless and temporal characteristics of the two types of relation, although this derives from the difference in the category of the referents.

The relation between a substance and an event or occurrent constitutes a process. This process belongs to the particular type we labelled 'activities', though not necessarily to the retrospective type of activities of which we gave examples. The relation of a substance to an event is the relation of doing or acting or being active. In fact we can take it as a general definition of substance that it has the capacity to do various things some of which, of course, it never does. Events, on the other hand, have not the capacity to do or not to do things (except in the explanatory
sense of efficacy): they only have the capacity to become or not to become some more comprehensive events. When a stone breaks a window the breaking of the window is, in a rather wide sense, an action and the stone is, in a correspondingly wide sense, the agent. The stone possesses efficacy or responsibility with respect to the action. However, the stone is inanimate and obviously incapable of voluntary action. Accordingly the type of responsibility or efficacy which it possesses cannot differentiate the relation between the agent and his voluntary action alone from the explanatory type of responsibility.

Nevertheless, the type of responsibility or efficacy which the stone possesses, or is said to possess, as a substance is quite distinct from the explanatory type. This may be obscured by the fact that we often describe substances like stones as the causes of what they do, e.g., breaking windows, and causation is an explanatory concept. But as Broad has pointed out,¹ strictly speaking, causation is a relation between events and to say that the stone causes the breaking of the window, is an elliptic way of saying that the stone's coming into contact with the window causes the window-breaking. Accordingly, to say that an object is a cause is to make concealed reference to a causal relation between events. On the other hand we sometimes say that an object does something when no such concealed reference is possible. Take for instance the stone flying towards the window. This is something which it does. But on no account would we say by ellipsis or otherwise that the stone is the cause of its flying towards the window or even of its completing its flight. Consequently,

¹. loc. cit., p.45.
the type of responsibility or efficacy possessed by a stone as a substance is quite different from the responsibility it can sometimes by ellipsis be said to have as a cause of an effect. Where its efficacy is of the kind peculiar to substances, there is no mutually exclusive relation between the doing of something and the something done, because these are both stages in a process. On the other hand, where the efficacy is of the explanatory type the relation between doing and thing done is a mutually exclusive one between cause and effect.

Granted then that an object's responsibility for its behaviour is different from the explanatory kind, what is the difference between its responsibility and that of the agent of voluntary action? An obvious but unambitious answer is that the presence of intention or purpose, or, at the very least, the absence of any contrary intention or purpose, is indispensable where the action is voluntary. This answer, however, leaves the precise nature of intention or purpose undetermined. It does not explain specifically the precise part played by intention in the process-like structure of action.

At the moment two accounts of intention seem to hold the field among contemporary philosophers. Both of them lend themselves more directly to a deterministic interpretation of action than to Libertarianism. The more traditional account of the two interprets intending or purposing as mental events which are antecedent causal conditions of voluntary action. The less traditional account gives a dispositional analysis in the Rylean manner1 of acting.

intentionally or purposefully. Thus to say that an action is voluntary is interpreted as shorthand for a number of statements, all but one of which are essentially hypothetical in form. Ryle calls this analysis 'mongrel-categorical'. For instance 'X caught the 9.30 a.m. intentionally' would be the equivalent of 'X caught the 9.30 a.m. and if he had been given the wrong platform number and hadn't discovered the error in time he would have missed his train, and if he had slept in he would have hurried to catch it....'. On either of these accounts, then, the relationship of responsibility is reducible to a one-one, or, at least, to a many-one necessary connection between events. Libertarians, on the other hand, postulate one-many necessary connections. Accordingly, they couldn't regard responsibility for voluntary action as consisting solely of the intentionality of the action as analysed in either of these two ways. If an intention is an event with only one action as its possible overt effect, then they would have to postulate an indeterminacy among the agent's intentions. If, on the other hand, Ryle's mongrel-categorical analysis of intention is correct, they would have to suppose that the causal condition of the truth of the categorical statement (e.g., 'X caught the train') has itself no sufficient causal condition but falls within a range of indeterminacy.

In the next chapter I propose to show that neither of these two accounts of intention are adequate. Many of the issues, accordingly, between Libertarians and Determinists have been misconceived. No account of intention is adequate which cannot give adequate recognition to the agent's standpoint towards his voluntary action at the moment of performance. From this standpoint voluntary
action falls under the heading of prospective process in a way which is compatible neither with the dualistic interpretation of an intention as a mental event nor with the mongrel-categorical analysis.
CHAPTER IV

Intending and Predicting

Intentions or purposes as we have seen in Chapter II, Section II, are involved, positively or negatively, in voluntary action as such. Now intentions belong to the type of thing which language can express. They are expressed in categorical predictions of the form 'I am going to.....', or 'I am about to.....' or 'I shall.....'. In what follows I shall show how through understanding of the logic of expressions of intention we can discover the essential difference between the voluntary actions of persons, on the one hand, and their non-voluntary actions, or the actions of things other than persons on the other.

Because of their categorical form these types of prediction have the characteristic tendentiousness or comparative lack of warrant which distinguishes any statement about the future from equally categorical statements about the more or less immediate past. Categorical predictions, of course, are frequently warranted by inductive generalisations derived from past experience. But their warrant is only that of a conclusion based upon data and never as strong as the warrant of the data. The warrant of any conclusion inductive or deductive is, indeed, weaker than the warrant of the premisses. Predictions, however, owe their tendentiousness not to the fact (when it is a fact) that they are conclusions. It is truer to say they are conclusions (when they are conclusions) instead of data, because of their ineluctible tendentiousness. Where we deal with predictions that express
purpose their tendentiousness quite clearly is of a more radical kind.

Where a categorical prediction expresses an intention the action predicted conforms with the first condition of voluntariness, viz., that the action is not contrary to the agent's intention. This fact also is, at least from the agent's point of view, an indispensable condition of the action's realisation, i.e. the truth of the prediction. Accordingly, it looks as if the data for making the prediction in accordance with inductive generalisations must from this standpoint always be incomplete since they include the presence of the attitude which the prediction expresses. They cannot become complete until the attitude expressed by the prediction comes into being: but, on the other hand, the attitude cannot come into being until the agent believes the prediction to be true. For the person who expresses intention the tendentiousness of the prediction in which his intention is expressed lies just here.

The comparative lack of warrant is not simply the one which distinguishes a conclusion from the data upon which it is based, but rather the one which distinguishes a sufficiently from an insufficiently established conclusion.

In what follows I propose to do two things. First, I shall show that the appropriate form for expressing purpose really is one of categorical prediction, e.g., 'I am going to....'. Second, I shall establish with greater circumspection the essentially unwarranted or ungrounded character of expressions of purpose. This will lead us towards two conclusions:

(a) that neither the mental-event analysis nor the Rylean analysis of intention is, when taken severally or in conjunction, logically adequate: for neither do justice to the standpoint of
the agent;

(b) that in fact Libertarianism alone can meet the requirements of the logic of expressions of purpose.

I shall deal with further implications of these conclusions and in particular with their relevance to the previous chapter at the close of the present one.

I

To show that the form 'I am going to...' does express purpose, and to make further the necessary modifications to this claim, let us consider several sets of contrasted expressions each of which will include one at least that possesses this form. The first of these sets consists of the following three sentences.

(1) 'I am going to sneeze'
(2) 'I am going to sleep'
(3) 'I am going to catch the 9.30 a.m.'

The three sentences are distinguishable in content alone and illustrate that purposive and non-purposive statements may have a common linguistic form. 'I am going to sneeze' may readily be interpreted as a straightforward prediction of future fact expressing no purpose whatever. Sneezing is most frequently an involuntary action although sometimes it can be induced or repressed on purpose. It is, nevertheless, possible that in using this sentence the speaker may just allude to a present tendency or physical inclination to sneeze rather than to a future event. Accordingly to deny (1) as a prediction would not in this instance be to deny what he is affirming, or at least, what he is primarily concerned to affirm. The predictive use of (1) is, however, predominant.
'I am going to sleep' I take to be rather more ambivalent. It may be a simple prediction of what will happen in the near future, or, just as likely, a description of a present tendency towards a future event the occurrence of which is not being predicted. Its equivalent may quite simply be 'I am sleepy', and this kind of ambivalence is, I fancy, more predominant in the use of (2) than the comparable ambivalence in the use of (1) 'I am going to sneeze'. But we must further note that this ambivalence in the use of (2) is subordinate to another. Whether we use (2) predictively, or for describing a present tendency, we may in the former case, and must in the latter, be using it to describe what is involuntary. It may be the case that I am predicting falling asleep as an event which I cannot avoid, if I am using (2) predictively: and if I am using it to describe a present tendency, then the fact that I am sleepy certainly is nothing that I can help now, even though it might be possible to avert it by action in the past. On the other hand, especially in circumstances where one is feeling tired, sentence (2) may be used to express one's resolution to go to sleep. In this use, however, it remains predictive as well as expressive of resolution.

This purposive aspect of (2) is to my mind far more predominant in the use of sentence (3) 'I am going to catch the 9.30 a.m.'.

I do not deny that there are contexts in which (3) could be interpreted as a simple prediction expressive of no resolution whatever. But its content conjures to my mind the sort of context in which it would be expressive of purpose or resolution as well as predictive. It does this more readily than the content of (2) 'I am going to sleep', and a fortiori more readily than the content of (1) 'I am going to sneeze'. The circumstances where the catching of a train
by the speaker is not a voluntary activity are exceptional, but the circumstances in which falling asleep or sneezing is involuntary are not so exceptional.

I hope I have now made it sufficiently clear that I make no attempt to derive the precise significance of any member of this first group of sentences from its form alone. In form they are identical, but (3) in its content suggests less ambivalently than do the contents of (1) and (2) the context in which its use is both predictive and expressive of resolution or purpose. Perhaps I should add that it is here irrelevant whether any of these expressions suggests a context to others with greater or less ambivalence than it suggests that context to me. My concern is principally with the kind of use to which expression (3) to my mind best lends itself and not whether expression (3) does in fact lend itself best to that use. Where other people differ from me they can substitute suitable examples of their own.

Now that we have noticed the use of an expression of the form 'I am going to....' which is both predictive and expressive of resolution, we can turn to formal contrasts between this form of expression and slightly different forms. What these forms will have in common is that all are both predictive and expressions of resolution.

(3) 'I am going to catch the 9.30 a.m.'
(4) 'I'll do my damnedest to catch the 9.30 a.m.'

Sentences (3) and (4), it will be observed, are both concerned with the same action but each in a different way. This difference of way, however, doesn't prevent either from expressing a resolution to do a certain action: but the action to which (4) refers is less determinate than the action to which (3) refers. Alternatively,
(4) refers to an action less specifically than (3). The action to which (4) refers isn't simply the catching of the 9.30 a.m. but a less determinate action which may or may not coincide with the catching of the 9.30 a.m.

But that is not the sole important difference between the two sentences. One has also to distinguish between the attitude they express and the attitude they evince. Every expression evinces but every evincing does not necessarily express what it evinces. For instance (4) 'I'll do my damnedest etc.' expresses a resolution as well as (3) 'I am going to etc.', but in certain contexts, while expressing resolution as effectively, though not as specifically as (3), it may evince irresolution. Swearing often manifests uncertainty about oneself and one's aims. Expressing is, in the sense in which I propose to use the word 'expressing', not merely a manifestation of an attitude like tears of sorrow or a blush of embarrassment. In addition it is the voluntary manifestation for the purpose of communicating the fact that one has it. This last statement doesn't amount to a complete definition of 'expressing', as we shall see later: but it will check the sort of confusion between expressing and evincing shown, for instance, by the earlier exponents of the attitude theory in ethics. ¹

We now turn to a further group of contrasted expressions:

(3) 'I am going to catch the 9.30 a.m.'
(5) 'I am going to catch the 9.30 a.m., if I can'
(6) 'I'll try to catch the 9.30 a.m.'
(7) 'I'll do all within the bounds of reason to catch the 9.30 a.m.'

Like sentences (3) and (4), all members of this group refer in varying ways to the same action. This should make clear that we must attend to the use of the different forms of expression in the same context. Of the group, it will be noticed, (3) 'I am going to etc.' is the sole sentence in which we have to specify a particular sort of content (catching the 9.30 a.m.) to make it quite clear that the sentence is expressive of resolution as well as predictive: unlike sneezing or sleeping, catching a train is unlikely to be anything but a voluntary action. The form of sentences (5) - (7), on the other hand, is such that the action to which they refer specifically cannot be anything but voluntary if it comes off, whether it be sneezing, sleeping, or the catching of a train.

To prevent misunderstanding perhaps I should add one proviso. I have attributed a different significance to certain of these forms, when used in the same or in a similar context with reference to the same action or to similar actions, from the significance I attribute to others and especially to (3). But there may be circumstances in which expressions of one of these forms might do duty for others. It will be more convenient, however, if we confine our attention to circumstances in which together these expressions form an articulate system of meaning - where in other words one expression, and (3) in particular, would be used in preference to the others.

Where, for instance, nobody doubts my ability to catch the train, it is a matter of comparative indifference whether I express purpose by 'I am going to....', 'I am going to....if I can', or 'I'll try to....'; but where my ability is in doubt, it becomes necessary to discriminate.

Of all four expressions (3) alone expresses specifically a resolution to act in a specific way. It expresses the speaker's
resolution to catch the 9.30 a.m. The remaining expressions express some resolution, but because of their form they express no specific resolution specifically. They are unspecific expressions which (with the possible exception of (7) 'I'll do all within the bounds of reason etc.') may express, albeit unspecifically, the specific resolution to perform a specific action, viz., the catching of the 9.30 a.m. On the other hand, they may equally well express as unspecifically a more moderate specific resolution to do a specific, but therein unspecified, action: the speaker may be uncertain whether the specific but unspecified action will eventuate in the specified action, viz., the catching of the 9.30 a.m. For instance, it may express unspecifically the resolution to rise in good time in the morning, or to buy one's ticket beforehand, or to make a reservation on the train, or all or more than one of these. At the same time it may anticipate some intervention which makes such precautions unavailing. Whatever the actual attitude these unspecific expressions do express, expression (3) remains in its form 'I am going to....' the specific expression of resolution: and this is true even supposing the action it actually specifies is not in fact the action the speaker has resolved to do.

As with sentence (4) 'I'll do my damnedest etc.' it may, further, be possible to distinguish between what sentences (5) 'I am going to etc., if I can' and (6) 'I'll try to etc.' express and the attitude they evince. Emotionally they appear more neutral than a sentence of the form 'I'll do my damnedest....' like (4): they don't betray the excitability of the former. They have, however, because of their unspecific nature, a non-committal character which, according to the context, may or may not evince or betray attitudes incompatible with the resolution they express. The speaker may have chosen a
comparatively non-committal form of expression because of a certain instability of resolution: or he may merely be uncertain about the causal connection between the specific but unspecified action he has resolved to do and the action which he specifies (e.g., between rising in good time, and catching the 9.30 a.m.): or again he may simply be unwilling to insist upon his actual certainty about the existence of this causal connection where he is willing that his listeners should remain in doubt. To take up the last point: unless an action is recognisably easy to perform, it may only become necessary or desirable to express specifically one's specific resolution, as in expression (3), where one must inspire confidence for the sake of success. It may be unsuitable, for instance, for a general delivering an eve-of-battle oration before his troops to say 'We shall try to sweep the enemy back' rather than 'We shall sweep the enemy back' or 'We are going to sweep the enemy back'.

The remaining expression (7) 'I'll do all within the bounds of reason etc.' may neither express nor evince anything materially different from (5) 'I am going to etc., if I can' or (6) 'I'll try to etc.'. Like them it does not refer to any specific action specifically: but it fails to do so in a rather different way. According to context the difference may or may not be significant. The phrase 'the bounds of reason' is highly unspecific in reference. This lack of specification may in certain contexts evince irresolution, but in others it may evince a negative resolution not to do certain kinds of action. However, in spite of these differences I propose in what follows to make (6) 'I'll try to etc.' represent the three expressions in this group which are contrasted with (3) 'I am going to etc.'.
I have contrasted (3) as a specific expression of a specific resolution with other expressions which express specific resolutions unspecifically, in spite of their reference to the same specific action (viz., catching the 9.30 a.m.). But I have no wish to deny that the less specific expressions may, in the particular circumstances of their utterance, be more warranted than (3). Indeed the statement 'I'll try to catch the 9.30 a.m.' may in certain circumstances appear so much more warranted than 'I am going to catch the 9.30 a.m.' as to throw grave doubt upon the authenticity of the latter as an expression of the specific resolution actually made by the speaker. In such circumstances (3) may be the evincing of braggadocio rather than the authentic expression of resolution. When the speaker sees that his chances of catching a train are remote if not altogether absent, 'I am going to catch the 9.30 a.m.' cannot be regarded as the authentic expression of whatever resolution he may have made in the light of this knowledge. It is the tendentious nature of the 'I am going to....' form which may seem to make some more warranted substitute desirable.

But I have already emphatically declared that in this particular group of contrasted expressions where in common all express resolution, it is in the form of the expression that I am interested rather than their content or the action to which they specifically refer. An expression like 'I'll try to catch the 9.30 a.m.' may well be a more authentic expression of a particular resolution than 'I am going to catch the 9.30 a.m.': and just, or only, because it is more authentic it will be a more specific expression of that particular resolution. All I wish to insist is that whatever the agent's specific resolution, a sentence of the form 'I am going to....' gives more specific expression to this
resolution than a sentence of some such form as 'I'll try to....'.

It may well be that where most specific actions are concerned a clear-headed agent may see that they are not the certain results of his efforts. Nevertheless to refer to an action as, say, trying to catch the 9.30 a.m., is not to refer to that action in a specific manner, although it is to refer to the action the agent is trying to do specifically. If there is any such thing as a specific resolution at all, there must be some residual action which the agent in acting must feel confident that he can perform, and the resolution to perform such an action is specifically expressed by the form 'I am going to....'. The consequences of regarding trying to do a specific action as a specific action are paradoxical. Trying to do something is consistent with failing to do it. Consequently, if trying to do something is a specific action one can resolve to perform, the failure to do it would be voluntary, if we had resolved to try to do it: but the failure to do what we try to do is involuntary.

At some stage, then, tendentiousness is inevitable. Although the specific expression of a given resolution may not be authentic either in part or in entirety, there always is present in the agent some resolution capable of authentic expression in the form 'I am going to....' - at least, in so far as he is capable of voluntary actions at all. Of course, at no moment is it ever impossible for him, provided he has time, to reflect that what he resolves to do he may not do successfully. This doubt, however, need be no more than a purely theoretical doubt which doesn't modify the resolution in any way. When the resolution is of the residual kind (i.e. where the action resolved upon cannot be subdivided into a subsequent part about the occurrence of which the
agent is relatively uncertain and an antecedent part about the occurrence of which he is relatively certain), then the doubt or reflection must be purely theoretical.

A doubt of this purely theoretical kind must be carefully distinguished from other kinds of doubt which would lead one to express resolution by 'I'll try to catch the 9.30 a.m.' rather than by 'I am going to catch the 9.30 a.m.' If the doubt were of the purely theoretical kind in this instance, there could be no other resolution than the resolution to catch the 9.30 a.m., for, whichever of the two expressions we employ to express resolution, it is the resolution to catch the 9.30 a.m. which is thereby expressed. The agent's reasons for refusing definitely to assert that his specific project is practicable would not be peculiar just to that particular situation in which he has to act. He is not in doubt, for instance, because he realises that his other commitments might prevent him from setting out in time to catch the 9.30 a.m. That would not be a doubt about any specific project, but simply doubt about the practicability of one particular project or a definite number of particular projects as against certain other more moderate projects. Just because the agent doubts his ability to catch the 9.30 a.m. he might not doubt his ability to get up in the morning in good time for catching the 9.30 a.m.

The precise analogue of the distinction between the two kinds of doubt may be found in the instance of perception. I may say 'I think that is a round tower' where the qualification 'I think' may be made from either of two different motives. It may indicate that I see an object with certain characteristics, which I do not specify, but interpret, as belonging to a round tower: or again, it may indicate that if I am seeing anything at all, rather than
experiencing an hallucination, it is a round tower that I am seeing, but nevertheless, that I may in fact be undergoing an hallucination. In the first case it is understood that I am seeing something not directly specified or not directly specified with any confidence. In the second case it is understood that I may not be seeing anything at all, as distinct from experiencing a visual sensation. Now just as 'That is a....' is an appropriate form in which to express a specific perceptual belief specifically, so 'I am going to....' is the appropriate form in which to express a specific resolution specifically. Where one does hold a perceptual belief, to prefix an 'I think' before the 'That is a....' is to express an uncertainty which in no way shakes one's perceptual belief. One cannot help having perceptual beliefs even where one concedes the possibility that they are hallucinations. The victim of delirium tremens may know that where in a particular region of what would normally be regarded as his visual field he 'sees' a pink rat there is in fact no pink rat: but this doesn't prevent it from being a fact that if he is seeing anything there at all, then what he sees is a pink rat. For analogous reasons one may doubt one's ability to carry out a specific project without being in the least deterred from having that specific project or another which would be subject to the same doubts. If, then, in such circumstances one expresses these doubts in the form 'I'll try to....', this form must be taken as equivalent to 'I think I am going to....', which again is a form analogous to 'I think that is a....', where the uncertainty expressed is uncertainty about one's freedom from hallucination. The use of the form 'I'll try to....' which is equivalent to 'I think I am going to....' when used to express a general undiscriminating incertitude about the practicability of
one's projects, must, accordingly, not be confused with the form 'I'll try to....' which means that the speaker is going to do, or is resolved to do, something unspecified, which perhaps will coincide with whatever has been specified.

Before allowing ourselves to accept finally the conclusion that the tendentious 'I am going to....' is the sole form for giving expression specifically to specific resolutions we should, however, take notice of one other group of contrasted expressions, viz.:

(3) 'I am going to catch the 9.30 a.m.'
(8.1) 'I intend to catch the 9.30 a.m.'
(8.2) 'I am resolved to catch the 9.30 a.m.'
(8.3) 'I purpose to catch the 9.30 a.m.'
(8.4) 'I have decided to catch the 9.30 a.m.'

Here I have labelled the new sentences by decimal numbers to play down whatever difference in shade of meaning each may owe to its linguistic difference from the rest. Sentence (8.1) can be taken as typifying the rest, and accordingly I shall for convenience refer to it as '(8)'. For my present purpose the contrast between these sentences and (3) 'I am going to etc.' is of sole importance.

The contrast presented here differs, it will be observed, from the preceding. It cannot be said that sentence (8) 'I intend to etc.' expresses as does 'I'll try to etc.' a specific resolution unspecifically. One of the possible functions of a sentence of the form 'I intend to....' does, however, coincide with one of the functions of the form 'I'll try to....' which we have just discussed, and should be noticed before passing on to the others. The form 'I intend to....' can be used to express exactly the same indiscriminate sort of incertitude as the form 'I'll try to....' can
express. Accordingly on this count we must give preference to an expression of the form 'I am going to....' as the specific expression of specific resolution for reasons similar to those already given in the case of the form 'I'll try to....'.

It may seem possible to argue, however, that an expression of the form 'I intend to....' is itself the specific expression of specific resolution, that it doesn't necessarily express any doubt about the practicability of a project so much as the bare minimum that constitutes resolution. To express specific resolution specifically, it may be argued, one need not commit oneself to the practicability of what one is resolved to do: one need make no predictions whatever about the future whether by use of form (3) 'I am going to....' or form (6) 'I'll try to....', but can simply confine oneself to a statement about the event which is present when the resolution is made. The general presumption against which this argument runs counter is, in short, that one cannot resolve to do an action unless one thinks that it lies within one's power, i.e., will occur if one resolves to do it.

I am unable to give any positive proof of this presupposition which is the equivalent of my thesis that specific expressions of specific resolution are of form (3) 'I am going to....'. I can only proceed negatively by criticising alternative suggestions, as I have done with the suggestion that specific expressions of specific resolutions are of form (6) 'I'll try to....', and will proceed to do with the suggestion that they are of form (8) 'I intend to....'. And I suggest that any inclination to deny the truth of the basic principle I am defending proceeds simply from a misunderstanding of the appropriate uses of expressions of all these forms. Furthermore, I think, any tendency to regard the 'I'll try to....' form
as strictly a more appropriate form for specifically expressing resolution than the 'I am going to....' form, may be based on the belief that the 'I intend to....' form is a sufficient expression of specific resolution. It does, however, contain a predictive element which the 'I intend to....' form does not, although this predictive element is much less specific than in the 'I am going to....' form.

It is quite apparent that an expression of the form 'I intend to....' cannot be preferred to one of the form 'I am going to....' as expressing specifically specific purpose. It only becomes apparent, indeed, by appealing to what is basically the principle I am seeking to establish. But this circularity is not a vicious one, since I only claim to establish the principle to the extent to which I can show that each of the different forms of expressions has a distinct function which is consistent with the principle. Intentions, decisions, etc. are usually regarded as revocable. One can make up one's mind to do something and then change one's mind and decide to do something else. To intend to do an action is even consistent with not trying or beginning to do it rather than some alternative, provided the intention is formed and revoked before it can become operative in that respect. But although an agent may revoke his intentions, these intentions are neither consistent with the intention to revoke them, nor even with the absence of the intention not to revoke them. Every intention towards a specific action includes the intention not to revoke the intention towards that specific action, (i.e., is inconsistent with the absence of this intention).

This inconsistency, however, is not made explicit in any of the expressions of form (8) 'I intend to....'. If, on the other
hand, we take the form (3) 'I am going to....' as the form of whatever expresses specifically specific resolution, the inconsistency is made explicit. Subject to identity of context 'I am going to catch the 9.30 a.m.' is inconsistent with 'I am not going to catch the 9.30 a.m.'. To see the inconsistency of 'I intend to catch the 9.30 a.m.' with 'I shall later intend not to catch the 9.30 a.m.' one has, in contrast, to rely upon one's knowledge of the meaning of 'intend'. I have no desire, of course, to deny that expressions of the form represented by (8) 'I intend to....' may not express purpose very well. Often, indeed, it is desirable when expressing purpose to say 'I intend to....' rather than 'I am going to....', but under two conditions alone. Firstly there must be no doubt felt by me that I am going to etc., and secondly, I must wish to stress the voluntariness of what I am about to do. Hence in such circumstances by uttering (8) 'I intend to etc.' the speaker would be understood to commit himself to (3) 'I am going to etc.'. If, on the other hand, expression (8) is used in preference to (3) for the purpose of indicating revocability of decision, it cannot express resolution authentically.

But what if expression (8) 'I intend to etc.' is used not in contrast or preference to (3) 'I am going to etc.' in order to indicate the revocability of decision: what if it is used for the entirely different purpose of recognising the fallibility of decision? One may not succeed in doing what one decides to do; and it may be argued that to concede this fact alone in no way detracts from the expression of resolution. It is, however, clear that propositions of the form 'I'll try to....', or kindred forms, can alone give appropriate recognition to the fallibility of decision for the decisions the fallibility of which they recognise are not
the decisions they express. A proposition of the form 'I intend to....' or kindred forms is, within the same context, incompatible with any statement made by the same speaker of the form 'I won't be able to....' or even 'I may not be able to....' where both propositions refer to the same action. One cannot intend to do anything which one believes lies outside one's power to bring about. This incompatibility between the former and the latter pair, when used in the same context to refer to the same action, isn't indeed formally explicit, for it is implicit in the meaning of the word 'intend'. The form (3), however, makes it formally explicit, because the affirmative of 'I am going to....' is incompatible with 'I am not going to....', and the latter is a consequence of 'I won't be able to....'. The non-formal contradiction has as its source the formal contradiction between the proposition which specifically expresses the specific intention and its negative.

In general, statements of the form represented by (8) 'I intend to etc.' fall short of specifically expressing purpose or resolution when, unlike statements of the forms represented by (3) - (7), they are in no way predictive: but we may recognise that in some contexts they are used predictively. They fall short of expressing resolution precisely when they express the speaker's refusal to commit himself to an opinion about what lies within his power, i.e., about what will happen if he decides that it shall happen. It is only when the truth of statements like (3) 'I am going to etc.' is presupposed by the use of statements like (8) 'I intend to etc.' that the use of form (8) becomes justified. What it then conveys is something more than form (3) - never something incompatible.

To ignore or misconstrue the contrast between (8) 'I intend to etc.' and (3) 'I am going to etc.' would be to ignore, or misconstrue,
the contrast between a statement about purpose and a statement or expression of purpose. We have already attended to a distinction between expressing and evincing an attitude, which, we saw, consisted in the fact that in the expression of an attitude the manifestation, or evincing, of that attitude is meant. For a complete characterisation of expressing we must in turn distinguish more clearly between expressing an attitude and making a statement about it. 'That is a round tower' is a statement about a round tower and a statement or expression of perceptual belief. 'I believe that is a round tower' is on the other hand a statement about and not a statement or expression of perceptual belief. It is, however, a statement or expression of belief about my perceptual belief.

In these examples we have been dealing with expressions of attitude that can likewise be called 'statements of attitude'. This only happens where the expressions of attitude also happen to be statements about something, i.e., where they are also true or false. The attitude they express is then one of belief. Not all expressions of attitude are, however, likewise statements of attitude, because some of them are not about anything, since they are neither true or false. 'Oh, to be in England!' or 'Would that I were in England!' are not statements about anything, although they are in sentence form. They are expressions of a wish, but not of belief. Furthermore, there are expressions which are not even in sentence form: e.g., exclamations such as 'Alas', 'Dear me', 'Goodness gracious', and swear vocabulary: all these express attitudes of sorrow, disapproval, chagrin, or surprise. In general where words are used for expressing they are used authentically or inauthentically rather than truly or falsely. It is as a statement about something that a sentence is either true or false. As an
expression it can only be authentic or inauthentic according to whether the speaker actually has the attitude he expresses or means to manifest or evince. The expressive function of language is its most generic function, the assertorial function being in contrast specific.

Now a sentence of the form 'I am going to....' happens to be a statement about what will happen in the future as well as a statement or expression of purpose or resolution or intention. In expressing purpose it expresses belief and vice versa. A sentence of the form 'I intend to....', on the other hand, is a statement about the intention expressed in form (3) 'I am going to....'. It is indeed a statement or expression of belief, but what it directly expresses is merely belief and not purpose, resolution, or intention. A sentence of the form 'I am going to....' is analogous to a sentence of the form 'Would that....', where a sentence of the form 'I intend to....' would be analogous to a sentence of the form 'I wish that....', although we must note that the wish-expression is not a statement, whereas the resolution-expression is a statement of the predictive sort. Both the 'I intend to....' and the 'I wish that....' forms are, however, true only on condition that the 'I am going to....' and the 'Would that....' forms respectively are authentic. Consequently they give indirect expression to intention and wishes respectively - but not direct expression.

II

My argument that form (3) 'I am going to....' in contrast to others is alone the appropriate form for the specific expression of specific resolution becomes at this point complete. I have shown that to express my intention is, for me, essentially to make a
categorical prediction of the form 'I am going to... ' or some equivalent, and not merely to make some hypothetical statement about the future. This conclusion, of course, applies directly to expressions of purpose, and not to my own or other persons' statements about my purpose. For its application to these we must take a fourth set of contrasts into consideration. By means of this fourth set I hope to indicate the deficiencies of more than the Rylean analysis. Difficulties in the uncircumscribed treatment of intentions as mental events of the kind called 'conations' by introspective psychologists will become evident as well. The contrast, I wish to establish, is between sentences of all the main types so far connected on the one hand, and their grammatical equivalents in the third person singular within the same tense, on the other. "I am (1) going to sneeze (i) He is '
'I am (3) going to catch the 9.30 a.m. (iii) He is'
'I (6) 'll try to catch the 9.30 a.m. (vi) He'
'I intend (8) to catch the 9.30 a.m. (viii) He intends' One could establish a further contrast with very similar properties between the first person present and future indicative sentences about purpose and their grammatical equivalents of the first person past indicative form. The points of difference between this further contrast and that above are not, however, sufficiently significant for separate treatment to be necessary: the conclusions evoked by the one are in the main applicable to the other. In each a unique relation between the expressive and the assertorial function of (3) 'I am going to etc.' is evident, which either does not hold at all, or else does not hold in the same degree, in the other sentences. To put it otherwise, there is a relation of dependence between the authenticity of (3) considered as an expression of
resolution and its truth considered as a prediction.

Expressions (3) 'I am going to etc.' and (6) 'I'll try to etc.', it will be noticed, express resolution as well as predictive belief, whereas in the same context and with reference to the same action, the comparable expressions (iii) 'He is going to catch the 9.30 a.m.' and (vi) 'He'll try to catch the 9.30 a.m.' are no more than expressions of predictive belief. The latter pair might, indeed, conceivably be expressive of resolution to force somebody, if necessary, to do or try to do a required action - especially if they were uttered in a minatory tone of voice, or in a context which would make their minatory character apparent. In that case, however, they would have to be considered as elliptic expressions (standing for 'I am going to force him to catch etc.'), whereas here I wish to treat them as being as explicit as (3) and (6). There is no similar disparity, on the other hand, between (1) 'I am going to sneeze' and (i) 'He is going to sneeze', as both can be interpreted either as expressions of what is merely belief or as expressions of a belief about a present physical tendency. Since an expression of form (8) 'I intend to....' implies in its correct use the authenticity of an expression of form (3), the disparity between (3) 'I am going to catch the 9.30 a.m.' and (iii) 'He is going to etc.' will likewise affect (8) 'I intend to etc.' and (viii) 'He intends to etc.'. Of course, it is an important difference that (iii) is predictive, whereas (viii) isn't in the least predictive.

The relation of (3) 'I am going to etc.' to (iii) 'He is going to etc.' and (6) 'I'll try to etc.' to (vi) 'He'll try to etc.' is, accordingly, unique in this group of expressions, and deserves fuller analysis to discover why there should be a disparity between what the first person and the third person singular future indicative
forms express. The cause is, I think, to be found by comparing (3) and (iii) with (1). 'I am going to sneeze' does not express purpose (at least as I have interpreted it), and the reason for this lies in the difference in the sort of thing to which it refers. Normally sneezing is not the sort of behaviour which is voluntary whereas the catching of trains is. Sentences (3) and (6), i.e., 'I am going to catch the 9.30 a.m.' and 'I'll try to catch the 9.30 a.m.', then, express purpose and not mere belief, because they refer to future voluntary behaviour. Furthermore, it must be because they refer to future voluntary behaviour and not merely to present volition that they express purpose, since (8) 'I intend to etc.' which refers to present volition, is expressive of purpose only if it implies the authenticity of (3). This explanation of why (3) and (6) express purpose only goes, however, part of the way, because, if (3) and (6) refer to future voluntary behaviour, it is reasonable to suppose that so do (iii) 'He is going to etc.' and (vi) 'He'll try to etc.', their third person singular forms; but (iii) and (vi) do not express purpose. The full explanation must consist in some way of the grammatical fact that (3) 'I am going to etc.' and (6) 'I'll try to etc.' are in the first person singular. But why should this fact of grammar be significant? The answer is that it can only be significant because (3) and (6) refer to the attitude they express, which is, of course, that of the speaker, whereas (iii) and (vi) refer to the attitude of an agent who is not the speaker.

In what follows I shall refer to (6) less frequently than to (3), thus ignoring certain complications that don't affect the main argument. The situation, then, is that (3) 'I am going to etc.' expresses purpose because (a) it refers to a voluntary action, and
(b) it refers to the attitude it expresses. It is also apparent, however, that (b) is the condition of (a), i.e., that (3) refers to a voluntary action only because it refers to the attitude it expresses. This can be seen by examining (iii) 'He is going to etc.' in contrast to (3) 'I am going to etc.' Does (iii) refer to a voluntary action? It is of course reasonable to suppose that it does if (3) does, and it is reasonable to suppose that (3) does, because catching trains must seldom be anything other than voluntary: but we can go further and state under what conditions (iii) does refer to a voluntary action. It refers to a voluntary action only if, as well as predicting an event, it further means that the event predicted is conditioned in some way by the intention to bring it about (or the absence of contrary intentions). In other words when (iii) 'He is going to etc.' is about a voluntary action, sentence (viii) 'He intends to etc.' must be part of its meaning. Now sentence (viii) is precisely about what (3) expresses, since we are taking both the first and the third person singular forms to refer to the same agent. Provided, then, that it is reasonable to suppose that (3) refers to a voluntary action for the same reason that (iii) does, if and when it does, (3) must refer to the attitude it expresses. The situation then is that (3) expresses purpose because it refers to a voluntary action and it refers to a voluntary action because it refers to the attitude it expresses.

Some attention has recently been given to the 'performativé'
character of certain classes of statement in the first person singular present indicative such as 'I bet', 'I promise', 'I give', 'I suggest', 'I protest' etc. It is accordingly, advisable perhaps to notice here that expressions of form (3) are not wholly analogous to these kinds of statements. I bet by saying 'I bet', promise
by saying 'I promise', give by saying 'I give', suggest by saying 'I suggest' and protest by saying 'I protest'. On the other hand, in normal circumstances no betting takes place by saying 'He bets' nor promising by saying 'He promises' etc., etc. This is as far as one can safely take the analogy between Professor Austin's performatives and expressions of purpose. Expressions of purpose are no longer expressions of purpose if for them we substitute the corresponding expressions in the third person singular. But beyond this the analogy is in part controversial and in part non-existent. Professor Austin says that his performatives don't have any truth-value because they are not used for referring purposes. I would like to say that they do refer, and differ from the corresponding 'He....' forms by referring to their own utterances or tokens. Consequently by uttering them we make them true. They are token-reflexive.

Even so, however, expressions of purpose differ from Professor Austin's performatives. They certainly do refer. 'I am going to etc.' is the contradictory of 'He is not going to etc.' when uttered by a different person. Since the latter refers and has truth-value, the former must refer as well. One might deny that the contradiction here is strictly logical: but then by supposing there are no strictly logical relations between such pairs of sentences one either begs the question or else uses the term 'logical' in a highly recondite specialised sense with little relevance to our ordinary use of terms like 'true', 'false' and 'refer'.

1. I have no written references for Professor Austin's view apart from a summary of a talk given by him to the 1955 British Council Colloquium on Contemporary British Philosophy. In conversation on the same occasion he has disagreed explicitly with the token-reflexive interpretation which I have suggested.

Now if expressions of purpose do refer, then (within the present conceptual frame of reference) they are reflexive without further qualification. Within this conceptual frame, expression (3) must be interpreted as referring to the attitude it expresses. Now the latter is distinguishable from other purposive attitudes by its propositional content alone. Accordingly, expression (3) refers to itself, i.e., it is reflexive without qualification. Possibly, then, our conceptual frame need revision.

The analysis of (3) 'I am going to etc.' has, however, to be carried yet a stage further. Up to the present point it has amounted to saying that there is a relation of dependence between the authenticity of (3) as an expression and its truth as a prediction. Since (3) refers to what it expresses, it cannot be true unless it is an authentic expression and the agent really has the purpose expressed. The extent of this dependence must now be made much more explicit. The authenticity of (3) is at least an indispensable condition of the truth: but is it more than an indispensable condition? Might it not be a sufficient as well as an indispensable condition of (3)'s truth? This question cannot be answered with an unqualified 'yes' or 'no'. To answer it satisfactorily we must distinguish between two standpoints, one of which is expressed by the expressions in the first person singular future indicative, and the other by the expressions in the third person future indicative. I shall distinguish between these two standpoints as between the standpoint of the agent towards his projected action at the moment of action, on the one hand, and the standpoint of any other agent towards the first agent and his actions and of the same agent towards his past or non-projected actions, on the other hand.  

1. This distinction is modelled upon one which Professor Macmurray makes between the self as agent and the self as subject.
The distinction is such that any standpoint, whatever it may be, must belong to one or other kind; there is no fence between them upon which one can sit, although it is possible, while having one standpoint, to be in sympathetic communion with the other. Furthermore, everybody must hold both standpoints, although not towards the same person or action. For convenience I shall henceforth refer to this distinction more briefly as that between the standpoint of the agent, on the one hand, and the standpoint of the other agent, or, preferably, the alien standpoint, on the other hand.

Now sentence (3) 'I am going to etc.' is authentic as an expression only if the agent believes that sentence (3) is true. Hence from the agent's standpoint not only is authenticity an indispensable condition of truth as we have already noted, but also the truth of the expression is an indispensable condition of its authenticity. It is possible from an alien standpoint that I should believe a proposition to be true and that nevertheless the proposition should be false; but if I were to say 'I believe p, but p is false' I would not be self-consistent. Accordingly from my standpoint the truth of 'p' as a statement is an indispensable condition of its authenticity as an expression. Hence from the agent's standpoint both the authenticity of (3) is an indispensable condition of its truth and the truth of (3) is an indispensable condition of its authenticity. But this is equivalent to saying that from the agent's standpoint authenticity is a sufficient as well as an indispensable condition of the truth of (3).

From an alien standpoint on the other hand authenticity is no more than an indispensable condition of the truth of (3) 'I am going to etc.' . It is perfectly possible for another agent to

believe that an agent is genuine or sincere in uttering (3) but that nevertheless (3) is false, since certain conditions necessary to the latter's catching the 9.30 a.m. which he thinks are present or realisable, are in fact, unknown to him, absent or unrealisable. From the agent's standpoint, nevertheless, intention, purpose, or resolution cannot be regarded as one among a number of conditions of the realisation of these conditions. From the alien standpoint, on the other hand, the agent's intention is only formed in consideration of what the agent thinks rightly or wrongly are the conditions, and can consequently be treated as just one among a number of conditions of the action's realisation.

By distinguishing clearly between the standpoint of the agent and the alien standpoint we can now come to a final conclusion about the respective merits of the two alternative theories we set out to criticise. We can now see the danger of prejudging any metaphysical issue through exclusive adherence to categories of thought that are appropriate to one of these standpoints alone. If we treat purposive attitudes exclusively as mental states or events on the one hand, or as Rylean dispositions on the other, or as sometimes the one and sometimes the other, we cannot do justice to the agent's point of view. In consequence we indirectly fail to do justice to the alien point of view as well, since it has to take into account the fact that the agent's point of view, whether correct or incorrect, does nevertheless exist. Even to use, as I have been doing, such terms as 'attitude', 'purpose', 'intention', or 'resolution' etc., in interpreting the agent's point of view, tends to commit one to the alien standpoint and to its illegitimate extension into a metaphysical outlook. It may mislead me into making an unqualified distinction between what I am now going to do and my intention to
do it, or purposive attitude. (Here I am referring uniquely to myself Kenneth Rankin at the present moment and not to anybody who uses the words 'I' and 'my' etc. at any moment.) In consequence of this distinction a sentence like (3) 'I am going to etc.' must seem anomalous. If we retain this distinction, the following paradox can be derived from a sentence like (3) 'I am going to etc.'.

If I say that by uttering (3) I refer to the attitude I am expressing, I postulate a distinction between this attitude and the future event which I predict. This suggests that facts about physical occurrences in the future may be subjectively conditioned, or subjective matters of fact. They would be comparable to the facts which statements like 'I am giddy' or 'I am in pain' affirm; for if these statements are authentic they must be true. But these are statements about the subjective state of the subject or speaker and, furthermore, about his present subjective state. There is nothing inexplicable about their being subjectively conditioned. Sentence (3), on the other hand, is about the future and, furthermore, directly about physical events whatever else it is about. Accordingly, it is truly surprising that it should be subjectively conditioned. That a subjective factor like belief should be a causal condition of a future or a physical occurrence is, indeed, perfectly conceivable. If there is a distinction between psychological and physical events at all, why should there be no causal interaction between the two sets? But from the agent's standpoint his belief or attitude (if he permits such things in his ontology) is more than a causal condition of the fact believed in. It is primarily a logical condition. The belief or purposive attitude conditions the truth of the proposition believed in primarily because the proposition believed in refers to the belief or purposive attitude it
expresses. This paradox remains, it should be noted, whether we regard beliefs and purposive attitudes as mental events which may be causally related to physical events or whether we regard them as Rylean dispositions. As long as the agent distinguishes subjective from objective facts about himself, the paradox is unaffected by whichever analysis of the distinction one gives.

If we wish to analyse voluntary action mechanistically, i.e., in terms of one-one or many-one necessary connections between events, it may, of course, seem necessary, even at the price of paradox, to distinguish between the subjective realm of attitude on the one hand and the objective realm of future or physical events on the other. A voluntary action, accordingly, is taken to have a sufficient causal condition like other events. It is, however, an indispensable part of this sufficient condition that the agent should have purposive attitudes and that the action should be consistent with these. But now suppose that the distinction between attitudes and the objects of attitudes is to some extent untenable. Just to this extent the proposed mechanistic analysis of voluntary action would be likewise inadequate.

However, even if we retain the distinction between attitudes and their objects, any mechanistic analysis which relies upon it is doomed. From the agent's point of view we saw that the authenticity of an expression of purpose of form (3) 'I am going to....' and the truth of this expression mutually condition each other. Now the expression is authentic only if the agent has the purposive attitude expressed. But he can have the attitude expressed only if he makes the prediction which expresses it. Accordingly he cannot regard the grounds for making the prediction as complete until he has actually made the prediction. Before he has actually resolved
to do an action he cannot suppose that the action has a sufficient causal condition. The distinction between purposive attitudes and their objects is, accordingly, only superficially conducive to mechanism. There is no incentive, even for the mechanist, to stomach the paradox latent in the distinction.

It is from the alien standpoint that the distinction between purposive attitudes and the actions purposed becomes absolutely essential. There is no logical necessity for any purposive attitude to terminate in the action purposed since from this standpoint one can fail in what one has intended to do. Consequently the distinction between intending and actually acting is unavoidable. The choice between representing this distinction as one between two distinct realms of being, mental and physical, or as between a logically more and a logically less complex way of referring to physical occurrences or states is a possible choice from this standpoint alone.

We must bear in mind, however, that every person has both standpoints, although no two persons have the same standpoint towards exactly the same object. Accordingly even in adopting the alien standpoint towards someone else I must allow for the fact that he adopts the same attitude towards me, and that of the agent towards himself. The mental-event analysis of attitude recognises that there are distinct and irreducible standpoints by means of the distinction between inner and outer experience. The objects of one person's inner experience must exclude the objects of another person's. In contrast the Rylean analysis with its attack on the private world of introspection denies that there are ultimately irreducible standpoints. Both accounts exaggerate. The mental-event analysis does justice in part to the alien standpoint, but forgets
that this standpoint can only be adopted towards the actions of others. Because of its monistic approach, although for no other reason, the Rylean analysis, on the other hand, is in part appropriate to the standpoint of the agent, but in its turn neglects the fact that this standpoint can only be adopted towards one's own actions. The two distinct standpoints, however, involve each other as shall be shown in greater detail in the next chapter. In adopting the standpoint of the agent towards one's own action one at the same time adopts that of the alien towards others: and in adopting that of the alien towards others one must at the same time take into account that they adopt the standpoint of the agent towards themselves. Accordingly neither the dualistic nor the monistic approach is entirely adequate even when confined to the most appropriate standpoint.

The relevance of this rather complex discussion of statements about and statements of purpose to the preceding chapters is itself rather complex. At the end of the last chapter we saw that processes can be divided into phenomena and activities. In the majority of cases it is possible to describe one and the same process either as an event becoming complete, (e.g., the sunset), or as something doing something (e.g., the sun setting). We further saw that responsibility or efficacy of the narrative kind is possessed by things that do things, i.e., by substances rather than by events. However, the class of activities is more extensive than the class of voluntary actions (i.e., the class of activities for which an agent is responsible in the narrative sense). What makes the difference? This is the question to which the present chapter has
given both a negative and positive answer.

It has drawn attention to the deficiencies both in the mental-event type and the Rylean-disposition type of analysis of voluntariness. One cannot satisfactorily analyse a voluntary action into a sequence of one-one causally connected events, one of which must be the mental event which we call volition. Neither can one analyse it into a one-one causally connected series of non-mental events the subsequent parts of which would have turned out differently in certain specific ways if the antecedent parts had likewise been different in certain specific ways. But a negative conclusion of more general significance has followed as well. Not only have two particular types of causal one-one connection between the constituent parts of the process been ruled out. All types of one-one necessary connection have been excluded.

We have seen that the phrase '...going to...' occurs in two very different kinds of prediction. It may occur in an expression of purpose or in the ordinary type of prediction which may be based on data about sufficient causal conditions. The former type can never be part of the latter. Both types are indeed predictions, and an expression of one type can be used to contradict an expression of the other. But there the logical similarity stops. The truth of the former is conditioned by its authenticity, i.e., by the attitude which it authentically expresses - and from the standpoint of the agent it is wholly conditioned in this way. The truth of the latter, on the other hand, is entirely independent of the attitude it expresses. Consequently the former can never be of the latter type, i.e., drawn as a conclusion from knowledge of sufficient conditions. Otherwise it needn't fulfil its function of expressing intention. But, it might be objected, even if it needn't, is there
any reason why it shouldn't? Of course there is, for we come to the decision which the former prediction expresses only where we think the prediction would have been false had we not decided. In that case, the objection might continue, may we not treat the decision as in some way part of the sufficient condition, or as logically connected with there being a sufficient condition? But we have already disposed of the two analyses which treat decisions in this way. Both fail to account for the fact that from the agent's standpoint the authenticity of the prediction (and hence the decision) is dependent upon its truth. If the agent treated his expression of purpose as based upon a knowledge of sufficient conditions, and if at the same time he made this sufficient conditioning dependent upon the presence of purpose, an odd consequence would follow. He could never make a prediction of this sort which would be fully substantiated on causal grounds at the time when he made it. It would only become fully substantiated in this way when he had made it. The truth of his prediction would have an antecedent causal condition which worked retrospectively, and this is logically absurd. Consequently, Libertarian indeterminacy must be postulated by the standpoint of the agent. No theory could desire stronger support, since nobody, not even a Determinist, can avoid being an agent. A person is always trying to carry out intentions of a positive or negative kind.

So much for the negative conclusions of this chapter. What are the positive conclusions? To begin with, simply that from the agent's standpoint the '...going to...', or futurity, or aboutness to which he refers is the distinguishing mark of what in Chapter III I label 'prospective process'. The phrase '...going to...' expresses a kind of potency quite different from the potencies peculiar to
the processes which I labelled 'retrospective'. Likewise, the alternatives between which the agent has to decide are potentialities which are quite different from the potentialities which may or may not be actualised in retrospective process. In fact, to mark this difference I have had to introduce just at this moment the distinction between a potency and a potentiality. The potency consists of what the agent is going to do whereas the potentialities consist of all the things he could do. In a retrospective process no such distinction is required for the terms of its description dictate that one development and one development alone is appropriate to the previous stages, even though this development will not as a matter of fact take place. If I describe a particular event just now as the process of a stone breaking a window while the stone is yet in mid flight only one sequel is appropriate to my mode of description. If this sequel does not take place we simply say that the process was abortive. In prospective process on the other hand a number of sequels are recognised as consistent with and appropriate to what has already elapsed.

This description of voluntary action from the agent's point of view is, however, not yet exhaustive. A further contrast with retrospective process is possible. Where we describe a retrospective process which has not yet been completed, we could describe it equally well in a way which makes no suggestion that the process is incomplete. Instead of saying that the stone is in mid flight or that it is on the point of breaking the window we could simply describe its spatio-temporal coordinates in relation to those of the window up to the present moment but not beyond. This mode of description would refer in no way to anything that might happen after the present moment. On the other hand, the agent, as he looks
at the matter, can substitute no description of what happens in or about him up to the present moment in place of his prediction of what he is going to do. Prediction alone will do.

However, we haven't yet put our finger on the principal difference between voluntary action from the agent's viewpoint and other activities. After all, things like stones don't merely take part in retrospective processes. As well as saying that the stone is on the point of breaking the window (even if it won't) we also predict sometimes that the stone is going to, or actually will, break the window. Here one might argue no description of what happens in and about the stone and the window up to the present can stand in for the prediction about what the stone will do. This, however, is not altogether correct. Instead of making the prediction we can simply say that what happens in and about the stone up to the present is the sufficient cause of the stone breaking the window in the future. The important point is this. In predictions about things like stones and non-voluntary agents, we always treat these things as having a present state which is distinct from the future which we predict. This present is as it were something intermediate between the past and the future. It is used as data for predicting the future. But where we turn to expressions of purpose we treat the past and the future as they ought to be treated. My present is my past and my future: i.e., it is the date when a particular set of events is in the past and another particular set of events, or set of possibilities of events, is in the future. I am what I have done and what I am about to do. Apart from that I am nothing.

Responsibility, or efficacy, of the narrative kind is, then, connected with this peculiar prospective type of potency. It is possessed by persons who can justifiably take up the standpoint of
the agent towards the actions for which we hold them responsible. This also marks the distinction between narrative responsibility of the genuine kind and the quasi-narrative responsibility of sticks and stones.

One further point. These conclusions may seem to have been based solely upon an analysis of our more reflective voluntary actions, viz., those which involve purpose, decision, and intention. Some of our voluntary actions, however, are not reflective, and yet we are responsible for them. Have I not, then, left an important type of responsibility out of consideration? The answer is 'No' for two reasons. First, I showed in Chapter II, Section II how unreflective voluntary action could be defined negatively in terms of intentions. Second, in this chapter I have been dealing not so much with intentions, purposes, etc., as with what those attitudes make explicit. They differ from other voluntary states simply in degree of self-awareness. But the object of awareness is common both to the explicit and the inexplicit states.
CHAPTER V

Actions and their Circumstances

So far we have been mainly making distinctions. Any distinction, however, requires for its complete clarification some account of the relation between the distinguished terms. Let us take, then, our principal distinction. What is the relation between the explanatory and the narrative type of responsibility? A whole cluster of more or less equivalent questions has been raised by this distinction. What is the distinction and relation between a voluntary action and the other events which it accompanies? What is the distinction and relation between a means and an end or between what we do for its own sake and what we do for the sake of something else? What is the distinction and relation between a mere thing and a person? This last formulation of the problem is perhaps the one which Chapter III suggests most directly. There we succeeded in distinguishing processes in which things as such are engaged from processes which are the voluntary actions of agents, but left unanswered the question of how they work together. Accordingly, we may conveniently take its solution as the key to the other questions. And once more we shall have to observe the distinction between the agent's and the alien standpoint, for each requires a different answer.

In acting the agent has to solve questions which are specific forms of the questions I have raised above. He cannot entertain a reasonable hope of realising his intentions unless they have been formed in consideration of the circumstances, i.e., the objects surrounding him, and their previous behaviour. It is advisable,
however, before going further to recognise a variety of types of voluntary action according to the role which consciousness plays in them.

One type consists of deliberate actions where considerable reflection may take place about the nature of the circumstances in which the agent is called to act prior to his forming a definite intention. This sort of action is more likely to take place where the circumstances are novel, e.g., when we plan an expedition. A second type consists of one type of habitual action. I make a decision, e.g., to walk home, and then carry it out, taking all the necessary turnings while all the time giving my attention to something entirely different. As a third type we have a controlled type of activity where execution follows recognition of the circumstances too closely for any process of deliberation to intervene, and where the circumstances are too novel for the response to be in any way habitual. A dog runs in front of my car and I brake practically instantaneously. I conduct a conversation with somebody and respond intelligently without any reflection. This type of action has been thought to require a behaviouristic analysis of voluntariness which dispenses with all reference to consciousness. The vividness of one's experience during this kind of activity seems to me too outstanding for such an account to be plausible. The experience is odd, perhaps, for those who rely on neat distinctions between cognitions and conations, but nonetheless quite unmistakeable. Certainly I don't reflect that there is a dog and that at my present speed it is likely to be hurt. I apprehend the dog immediately as not to be hurt and act accordingly. (The brake-applying mechanism is of course a conditioned reflex which rather complicates this example.) My mode of consciousness is gerundive in nature. One doesn't always 1. F. H. Bradley, Collected Essays, Vol. II, pp. 29, 504, 505.
apprehend the circumstances in purely descriptive categories and then imagine a course of action adapted to its descriptive qualities. One frequently apprehends the object immediately as requiring such-and-such an action.\footnote{F. H. Bradley, \textit{Collected Essays}, Vol.II, pp. 39, 504, 505.} Again in the conduct of a conversation I immediately apprehend the remark of the other person as requiring a particular answer in the same moment as I apprehend its meaning; or in making a speech I apprehend what I have just said as requiring such-and-such a conclusion without any process of reflection intervening. As a fourth type we have another kind of voluntary action where reflection, positive intention, or gerundive apprehension may all be absent. The process of breathing or of blinking is up to a point voluntary for we can stop it at least for short periods. Now normally when I breathe I don't deliberate about the necessity of breathing in order to live, nor do I do it merely out of habit, nor do I apprehend the situation immediately as requiring breathing, nor have I any positive intention to breath. My action, however, is voluntary because it doesn't conflict with any of my other positive intentions, and the fact that it doesn't conflict with these intentions is an indispensable condition of its taking place. If, for instance, I found that my breathing interfered with my hearing a very slight noise, I could and would stop breathing in order to listen better. This type of action also has been subjected to behaviouristic misinterpretation. The undoubted fact that no positive intention or conscious idea is involved in the action does not mean that no intention is involved in the action. Finally we have another type of habitual action. This is similar to such actions as breathing or blinking in the absence of positive intention, but it is dissimilar in having been formed by habit. I may have
acquired the habit of switching off the electric light whenever I leave the room and may continue to do so even when it promotes no particular end of mine, such as the saving of expense. The action is voluntary because as soon as it became inconsistent with any of my ends I could desist. It is possible, however, that there may be a further dissimilarity between this type of action and the fourth type exemplified by breathing. When I pass the electric switch possibly there may always be the gerundive feeling that it is to be pushed up.

I think this classification does sufficient justice to the various types of voluntary action. Diverse as they are, none of them invites a behaviouristic analysis. All of them involve consciousness more or less directly and this consciousness is at its most explicit in fully deliberate actions. Accordingly, we can confine our attention to deliberate actions in order to determine the relation between things and persons both from the alien and from the agent's standpoint.

Deliberation is sometimes conceived as taking one or both of two forms. Its alleged object is either to answer the question 'What is my end?' or the question 'How should I attain my end?' The answer to the second question is supposed to presuppose the answer to the first, and the answer to the first to be independent of the answer to the second. According to this conception, then, the issue between the Libertarian and the Determinist can be stated as follows. For the Libertarian the agent, in and through the process of asking and answering the question 'What is my end?', makes one of the possibilities his end. The answer is performatory. According to the Determinist the answer to the question is a discovery rather than a making or performance. The end for the Determinist is pre-
determined by my psychological make-up and environment past and present. It is fixed. But according to either account, whether the end is predetermined or not, the agent must have it before he can raise the question 'How can my end be attained?'.

Now it is perfectly true that if we could visualise a state of affairs as an end without having any idea how it could be brought about, then of logical necessity the answer to the question 'What is my end?' would precede the answer to the question 'How is it to be brought about?'. But this initial assumption is totally unjustified. In deliberation we do initially visualise a state of affairs which appears in itself desirable, and then consider the question how it is to be brought about. It is not, however, until we find a solution or a number of solutions to this second question that we can confer upon the intrinsically desirable state of affairs the status of end. In the first place, as will be readily agreed, it is not until we are assured that the question 'How?' has some answer that the intrinsically desirable state of affairs can be made an end. If we discovered that it was beyond our power to bring it about in any form, we obviously could not entertain it simultaneously as an end. In the second place, even if we are satisfied that the intrinsically desirable state of affairs can be attained we still have to decide whether the method of attainment would make it worthwhile. What is for intrinsic reasons desirable may be for extrinsic reasons undesirable. By using any method of attainment we have to tolerate certain intrinsically undesirable states of affairs and relinquish yet other intrinsically desirable states of affairs. We can perfect our command of a musical instrument, for instance, only by long hours of laborious practice which could have been spent in the enjoyment of something else. In the third place, some of the
methods of attainment may be themselves more or less intrinsically desirable. One may, for instance, consider whether to go home on leave by plane or boat, and opt for the sea journey because it is more pleasant even though less quick than by air. Here it may well be that one wouldn't make any journey at all unless one wished to go home on leave, but yet the journey is found intrinsically desirable.

Whether one is a Libertarian or a Determinist one must, then, recognise that deliberation is monolithic. Ends only become determinate for the agent in the course of considering the causal properties of the circumstances in which he is called upon to act. The circumstances consist basically of physical objects with various causal potentialities and we form our ends, or our ends become formed, only in the course of discovering the various ways in which the causal potentialities of these objects can be realised. Even the differentiation of our sensuality into the basic appetites must depend upon insight into the physical peculiarities of our bodies which are the most basic part of our circumstances. It is unlikely, for instance, that the female praying-mantis, given consciousness, would recognise precisely the same distinction between hunger and the sex urge as we do, since she has a physiological compulsion to satisfy the first whenever she satisfies the second. Likewise, to turn to less corporeal ends, the ambitious politician may not at first be aware of the relative value he attaches to popularity as distinct from personal integrity or the welfare of his country. He becomes aware of the two as distinct, and his own personal equation between them, solely from the experience that one must be subordinated to the other in circumstances which do not permit him to aim at both.
It is worthwhile to establish the monolithic nature of deliberation and to clarify the relation between circumstances and the formation of purpose through an analysis of more specific examples. Let us make a preliminary distinction between single-step and multiple-step actions. Certain objects or aims can be attained by a direct or comparatively direct action, but others only in consequence of a chain of successive actions each with a more immediate object attained for the sake of the later objects. In the single-step action the causal dispositions of the immediate circumstances at the moment of action are sufficient to define the range of mutually exclusive possibilities for the future, one of which is the agent's object. In the multiple-step action the immediate causal dispositions are merely sufficient to define a range of mutually exclusive possibilities for the future, at least one of which possesses a disposition which defines at more or less remote removes a range of mutually exclusive possibilities in one of which the agent's object can be attained.

The following is an example of what is roughly speaking a single-step action, and is designed to show that a relatively simple action may involve a complex process of deliberation. A team of engineers at work in Florida found the humid heat unbearably oppressive. The grass around was thick and parched. They set it on fire. Convection currents funneled the vapour into the cooler atmosphere above. Condensation in the form of a thunder-storm ensued, and the descending rain cooled the lower atmosphere. The atmospheric humidity was also reduced and they could once more perspire freely.

Now probably they had to souse the grass liberally with kerosene before setting it on fire: and probably they had to kindle fires over an extensive area at adequately spaced intervals to
ensure convection in sufficient volume. Probably, therefore, the action involved more than one stage. But if we ignore these preliminaries our example still illustrates a natural uncontrived complexity which is confined to one step. The components of this complex are the causal or instrumental dispositions inhering in the circumstances which the engineers exploited. These dispositions can be expressed in hypothetical propositions roughly as follows:—

- if it will rain it will become cooler;  
- if this vapour condenses it will rain;  
- if convection in sufficient volume occurs the vapour will condense;  
- if fire covers a certain area convection in sufficient volume will occur;  
- if this grass is kindled the requisite conflagration will develop. As a supplement we can add:— if when working we perspire freely we can keep moderately cool; if the humidity of the atmosphere is lowered, we can perspire freely; if convection occurs the humidity of the atmosphere is lowered.

This analysis makes it clear that the total circumstances for the engineers form a close-knit nexus of instrumental dispositions which can as an ordered unit be comprehensively described as the disposition to cool. This comprehensive disposition can be expressed by a chain of statements about the necessary one-one or many-one connections between events. The nexus is close-knit because, provided the circumstances specified are taken as forming a closed system, the exploitation of the combustibility of the grass leads inevitably to the exploitation of the remaining elementary dispositions comprising the complex disposition. Of course if we do not regard the circumstances as a closed system, we can conceive of additional circumstances in which the original chain-reaction could be interrupted. The detonation of an atomic charge, for instance, in the locality of the fire half-way through the chain-reaction
could no doubt puff the impending thunder-storm into non-existence. Now the close-knit nexus we have examined is disclosed to the agent through his deliberation, and illustrates how he can only form his ends in the course of such deliberation. No doubt the discomfort of humid heat was felt by the engineers before their insight. That, however, does not confer the status of an end or aim upon the removal of the discomfort. They might, after all, have gained some relief by knocking-off for the day. If so, the fact that they didn't shows that their object was more complex. Physical relief could not compensate for the loss of time or money it would have entailed by this method. Likewise their decision to exploit the close-knit nexus of dispositions would entail decisions about what to tolerate and what to relinquish and what to regard as compensating this tolerance or sacrifice. The possibility of such decision, or understanding of one's will, would depend upon a clear understanding of the component dispositions. Many of the consequences of lighting the grass might have been listed as intrinsically or extrinsically undesirable: e.g., the devastation of a large area of vegetation possible serving other useful purposes, the wholesale and painful destruction of innocuous local fauna, the sudden flooding caused by the deluge, mud, and other attendant evils, which we cannot fully enumerate without a more detailed knowledge of the situation. On the credit side we must not forget to place the successful execution of a bright idea or exercise of engineering ingenuity, which would give the process as a whole an intrinsic value. The mere fact that the action involved a fairly detailed insight into the dispositional properties of the circumstances would of itself provide an incentive for exploiting them. It is even possible that no special attention or weight was given to the physical discomfort before the insight supervened.
The temptation to suppose that objects of action become determinate before insight into the circumstances in which they are to be realised possibly arises from a failure to distinguish clearly between purpose and wish. It is perfectly true that our wishes, as distinct from our purposes, can be highly determinate even where we have little regard for our actual circumstances. This is simply because they are the substance of our day-dreams. Our wishes have a tendency to be idle. When they are determinate what makes them wishes and what makes them idle is that the circumstances, if any, which they visualise are not the real circumstances and have little likelihood of becoming the real circumstances. Thus the party of engineers may have conjured up severally in the moment of their discomfort visions of long cool drinks in their favourite bars or drug-stores back home. The object of their wish is indeed determinate, but it is entirely imaginary and unrealisable. Wishes, however, need not be entirely idle. They have a practical role in the genesis of multiple-step actions in which circumstances which are not real can be made real as the result of action. Nevertheless, where this is possible, it is because the wish is wholly determinate neither in itself nor in the circumstances to which it extends; for only thus can it be adapted to the real circumstances.

Let us now turn to the sort of complexity found in multiple-step actions. Here the agent exploits the instrumental dispositions of the circumstances in order to develop modified circumstances with more highly specialised instrumental dispositions in which he can act on later occasions. The construction of the sort of article for which it is conventional to reserve the terms 'instrument', 'tool', 'utensil', etc., affords one type of instance, though not the only one, of such action.
The following is admittedly a fictitious reconstruction of prehistory. Let us suppose that the same palaeolithic agent made his flint tools with which he made his flint weapons with which he hunted. The action taken by this huntsman-cum-craftsman-armourer in shooting a deer, for instance, is a multiple-step action. In contrast to our previous example, such an action owes its complexity to a loosely-knit nexus of instrumental dispositions related serially in degree of specialisation. It is loosely-knit because the exploitation of the antecedent instrumental dispositions does not involve inevitable exploitation of the subsequent dispositions in the nexus. The intervention of the agent is required at each stage. Although each component disposition has to be exploited in a fairly determinate way in order to become a member of just that nexus and no other, at each stage there is no compulsion that it should be exploited in precisely that fairly determinate way, apart from the agent's determination that it should become a member of just that nexus.

It is equally clear in the instance of multiple-step actions that decisions to tolerate, sacrifice, and take in compensation, depend upon insight into the complex of instrumental dispositions inherent in the circumstances. The very project of slaying a deer cannot be formed by our primitive agent until it is apprehended as vulnerable-to-skilled-use-of-manufactured-missile. Prior to the manufacture of such missiles and the acquisition of skill in their use the slaying of deer could only be regarded as the outcome of a lucky fluke and not as a practical project. Then, even after it can be entertained as an end, the agent has yet to consider whether it is worth all the labour of first making tools to make weapons and then of acquiring skill in the use of these weapons. Might it
not be better to bask in the sun and, when the pangs of hunger became pressing, to collect roots, worms, and grubs?

On the other hand we must not ignore the possibility that the instrumental processes have, or come to have, an intrinsic value for the agent. First they may have the positive value peculiar to any exercise of a highly articulate and complex choice. Such choices give the agent a feeling of mastery over his environment. The more instruments at his disposal the greater the number of possibilities from which he can pick his end. Then again, we might reasonably expect our palaeolithic agent to derive from his composite activity as a whole the peculiar satisfaction which in modern times the butcher, the toxophilist, and the craftsman-armourer can, if they have a sense of vocation, only experience in part.

Living as we do in a technological age where superficially the prevailing motives are profit and, perhaps, leisure, we tend to ignore the intrinsic value of instrumental choices. Instrumental processes consume time and labour. This is inimical both to profit and leisure. Cost of production is one of the limits to profit. Hence the profit motive must lead to the pruning of the instrumental process down to the minimum. By the profit and leisure criteria the instrumental process is worse than intrinsically worthless, and consequently is in need of extrinsic justification. Paradoxically, profit and leisure as objects of action can be attained in ideal form only when nothing has been done for their sake. Hence the incentive to technological advance and the cutting down of instrumental process to the minimum. We must regard the increasing variety of sports and hobbies as the compensating social phenomenon. To a large extent they are the debris left in the wake of technological advance. In them there persist in fossilised form the old
techniques which are no longer of instrumental value. Yachting, hiking, fencing, etc., were all at one time under less genteel names highly practical and necessary occupations, but now have been cut adrift from their former ends by the development of new techniques with the same purpose. The fact that they are still practised shows that they had an intrinsic value which perhaps has become clearly distinguishable from that of their ends only after they have become obsolete as techniques.

I am not, of course, trying to obliterate the distinction between means and end altogether, but merely pointing out that it is justified in any one of four main situations. First, one part of an action may be of intrinsic positive value for the agent, and another part may be intrinsically indifferent in value or, if we leave its causal connection with the first part out of consideration, extrinsically indifferent. Second, one part of an action may be of intrinsic positive value for the agent and another part intrinsically bad or, if we leave its causal connection with the first part out of consideration, extrinsically bad. Third, one part of an action may be of intrinsic positive value for the agent in such a way that in the circumstances the agent would accept no substitute for it and another part may be likewise of intrinsic positive value but in such a way that the agent would dispense with it if it precluded the first part. In all three cases we distinguish the first part from the other part as an end from a means. Fourth, a general characteristic of an action may have intrinsic positive value for the agent and he may have no preference for one of its specific forms rather than another. In this case the distinction between ends and means coincides with the distinction between the general and the specific. Finally, we must not forget the situation
in which the ends-means distinction is entirely inapplicable. Every part of the action may be of equal value for the agent. Sporting activities perhaps approximate most closely to this type of action. We must also notice that there are situations intermediate to these four main types.

I do not deny, then, that there is a distinction between means and end. The point I have been making is simply that the one becomes differentiated from the other only in the course of deliberation about one-one or many-one causal connections, or assessing the instrumental potentialities of the circumstances. The agent, in other words, forms his purpose only in consideration of the circumstances, or rather of what he thinks are the circumstances, and, accordingly, what he thinks are the circumstances are constitutive of his purpose in purposing. This is, of course, to put the matter from the alien standpoint. From the agent's standpoint the circumstances, and what he thinks are the circumstances, coincide, and his purpose and what he is going to do coincide. Accordingly, from my standpoint towards myself, just now, the circumstances are constitutive of my going or being about to do whatever it is that I am about to do. From the alien standpoint the relation between the circumstances proper and the agent's purpose is strictly speaking a purely external one. The internal or constitutive one for the alien is between what the agent thinks are the circumstances and his purpose, or what he thinks is his aboutness to do something. What he thinks are the circumstances and the actual circumstances need not coincide. Likewise, and in consequence, what he thinks he is about to do need not be what he will in fact do. Accordingly, circumstances and his aboutness to do something are not internally or constitutively related.
This internal or constitutive relation of circumstances to action or things to persons may not at first sight appear particularly unique. One may argue that the potentialities for the future of inanimate objects as well is constituted by other objects animate or inanimate that surround them. Hence their aboutness to do something is likewise constituted by these objects. The potentialities of a hammer for instance are constituted by the potentialities of the nail, or to revert to a former example the potentialities of a stone are determined by the potentialities of a window-pane. To describe these relations it is convenient to distinguish between active and passive potentialities. Each respective kind requires the existence of the other. The potentiality of the hammer to hammer in requires the existence of such things as nails with the potentiality of being hammered. The potentialities of the human body are determined in this way as well. Those of the hand, for instance, are greatly increased by the creation of such instruments as hammers and nails. It is because of these constitutive relations between the potentialities of objects that several substances can become involved in the activity of one substance, or the process relative to which that substance is the agent. For instance it is in this way that the window is involved in the activity of the stone breaking it.

This analogy between the potentialities of objects or things as such and the potentialities of agents is of course illuminating. But it is one which must remain misleading so long as we fail to clear up an important difference. The difference to which I now wish to draw attention can perhaps be more closely related to contemporary discussions if I describe it as the distinction between dispositions or tendencies on the one hand and causal possibilities
on the other. Failure to make this distinction with sufficient sharpness has had a detrimental effect on discussions of the language of choice as when we say prospectively 'I can catch this bus or go by tube', or retrospectively 'I could have done otherwise'. The type of potentiality expressed in this way has not been distinguished with nearly enough sharpness from the potentialities possessed by things. The potentialities peculiar to agents consist of bare causal possibilities as well as of certain types of disposition peculiar to agents alone, whereas the potentialities of things other than agents consist solely of dispositions.

Causal possibility is closely analogous to logical possibility. To say "'p' is possible" is equivalent to saying "'p' is not necessarily false", and this equivalence holds whether the two modalities of possibility and necessity are logical or causal. Thus 'That there is life on Mars is causally possible' is equivalent to 'That there is life on Mars is not by causal necessity false'. Where we use words which express causal possibility we withhold our assent from an inference that something is false.

When dealing with dispositions or tendencies, on the other hand, we don't merely deny that some statement is necessarily false. We go on to affirm that in certain circumstances certain statements are necessarily true. Thus according to Ryle¹ 'To say that this lump of sugar is soluble is to say that it would dissolve, if submerged anywhere, at any time and in any parcel of water'. This statement is, of course, as Ryle would be prepared to admit, only an approximate analysis. Sugar would not, for instance, dissolve in a saturated solution. Accordingly, the distinction between causal possibilities and dispositions must be made with rather more

¹. The Concept of Mind, p.123.
precision. Having refused to infer that certain statements about sugar are false there are an infinite number of statements about sugar which we could truthfully affirm to be necessarily true under various circumstances. Even under the accepted laws of nature under certain conditions anything can happen to anything, so that in a far too loose sense everything would have every conceivable disposition or tendency. In certain circumstances diamonds will dissolve and in others sugar will not dissolve. Yet normally we don't say that diamonds are soluble and sugar insoluble. This shows that when we attribute a tendency or disposition we have certain standard standing conditions in mind such that a particular kind of antecedent will lead to a particular kind of result. In the standard standing conditions sugar will not be insoluble nor diamonds soluble. Of course for different purposes different kinds of standing conditions may be taken as standard. The tea-jenny accepts a different set of conditions as standard from the conditions accepted by the chemist. Accordingly a substance which is insoluble from her point of view may be soluble from the chemist's. The standing conditions which we accept as standard are in general the conditions which we can make to stand with relative ease.

The distinction between a causal possibility and a disposition or tendency now appears more definite. When we indicate a causal possibility we refuse to infer that something is false. When we indicate a disposition or tendency we affirm that in the standard circumstances certain things are under certain conditions necessarily true. Any greater definiteness that can be brought to the making of this distinction lies not so much in the definition as in the kinds of reason we may give for saying that something is causally possible. There are a variety of reasons why we may refuse to infer
that something is false; and it is when we come to classify this variety that the distinction between determinism and the various brands of indeterminism become relevant.

On deterministic assumptions bare causal possibility without causal necessity cannot belong to any specifically specified event. Any specific event with a definite spatio-temporal location must on this view either be causally necessary or causally impossible. Accordingly the determinist can only accord causal possibility to statements in which events have not been specified with the degree of precision necessary for inferring in accordance with some valid causal law that such statements are false. Thus a determinist could say with a clear conscience that possibly there is life on Mars if he merely means that no causal law would justify the conclusion 'X is not living' where this is drawn from such a vague premiss as 'X is on Mars'. We can take as another example the following remark which Ryle has discussed:  

\[\text{1. op. cit., p.127.}\]

'No, I might walk under the ladder and not have trouble'. Obviously this remark means that if one takes any instance of walking under a ladder solely in that aspect, then the occurrence of trouble follows from no valid causal law. The occurrence is not necessary on the conditions as stated. Perhaps there is an additional implication that the non-occurrence is not necessary as well, since otherwise one would make the stronger statement 'If I walk under the ladder, I won't have trouble'. But on the deterministic hypothesis either the occurrence or non-occurrence of trouble is necessary on the conditions as they actually are.

It is precisely on this point that determinism differs from the various forms of indeterminism. If, for the sake of convenience,
we assume that all the valid causal laws are known, then the
distinction between the two is as follows. Determinists refuse to
infer that a statement is false only when they think the facts have
been insufficiently specified. With the exception of the extremists,
indeterminists can refuse for the same reason, but they have other
reasons as well. In certain cases even when, and particularly when,
the facts have been accurately specified, they believe that no
inference is justified. But whatever the reasons may happen to be
for refusing to infer, the definition of causal possibility remains
the same.

We can now consider how carefully the distinction between
causal possibility and dispositions or tendencies has been observed
in contemporary discussions. I would not like to say that Ryle has
actually confused the two concepts. He writes:

To say that something can be the case does not entail that
it is the case, or that it is not the case, or, of course,
that it is in suspense between being and not being the case,
but only that there is no license to infer from something
else, specified or unspecified, to its not being the case.

In this account the word 'can' is obviously taken to express the
bare concept of causal possibility rather than one of disposition
or tendency. But if Ryle does not actually confuse possibility and
disposition, the application of the former is reduced in a most
significant manner.

For instance in discussing the distinction between the voluntary
and the involuntary \(^2\) he deals with 'can', or rather 'could have',
as it occurs in sentences of the form 'He could have helped doing it'.
The truth of sentences of this type is commonly accepted as a
criterion of the voluntariness of an action, and Ryle believes that
consequently only the blameworthy types of action can be voluntary

1. op.cit., p.127.
2. op.cit., p.69ff.
or involuntary. He appears to think that 'can' or 'could have' in this context indicate dispositions exclusively, and that particular type of disposition which he calls 'a know-how'. On this interpretation of 'could have' his argument would be sound, viz., that 'He could have helped doing this' is apposite only where 'this' refers to a mistake. 'He knew how to help making this mistake' is sense, but 'He knew how to help doing this correctly' is odd.

However, if we take as a concrete instance one of his own examples, it does not follow that 'Could you have helped tying a proper reef-knot?' is necessarily odd - and this for more reasons than one. First, supposing 'Could you have helped' really does mean 'Did you know how to help' there is no necessary oddity, because the negative of 'tying a proper reef-knot' is not 'tying an improper reef-knot' but 'not tying a proper reef-knot'. One might tie a proper bow-line instead, or just do nothing. Second, 'Could you have' need not indicate a know-how at all. We might ask this question of someone who was under hypnosis, in order to determine whether he was really under hypnosis, or in order to find out whether action under hypnosis is altogether involuntary. In the latter case the agent may reply 'Yes, I could, and I would have refused to tie a proper reef-knot if it had been against my moral principles to do so': for there is evidence that there are limits even under hypnosis to what one will do.

But I don't deny that Ryle's examples show a bias in favour of his point. First, by incorporating the word 'helped' they suggest that at the same time as asking whether the agent could have done otherwise one also evaluates the action as something to be avoided. In most cases, though not necessarily in all, the use of 'helped' in 'Could you have helped doing X?' implies that doing X is in some
way undesirable. But one need not evaluate the action at the same time as one asks whether the agent could have done otherwise, even though it may be convenient to do so. One could use some neutrally toned expression as I have just done. By ignoring this point Ryle makes it more likely that 'Could you have' refers to a know-how, since where it does refer to a know-how, one must also regard the indicated action as an accomplishment of some sort. Second, his range of examples includes such ill-assorted activities as tying reef-knots, seeing the point of jokes, solving riddles, doing long-division sums, and finally being kind. It is noticeable that examples of this very last type, which alone is properly ethical, are in a minority. In fact their function is to bridge the gap between the other examples and Ryle's conclusion about the correct use of 'could have' in contexts of ethical relevance. It would be better not to put the Socratic doctrine that virtue is knowledge into modern dress if it leads us to ignore all the efforts that have from time to time been made to distinguish clearly between acting skilfully and doing one's duty. Whether there really is a fundamental distinction may perhaps still be controversial, but the issue depends at least partly upon whether 'can' or 'could have' is used, when we discuss actions, solely to refer to certain kinds of disposition or tendency. 'Could' in 'Could you have helped doing X?' undoubtedly may (but need not) refer to a know-how, where doing X is an error of skill. But whether it can ever refer to a know-how when doing X is a contravention of moral duty, is controversial. Accordingly Ryle's technique of deploying examples in a kind of spectrum is at this point question-begging in its execution. The dum-dum effects of this sort of argument are initially paralysing but essentially indiscriminate. They stun by simultaneously failing to convince in
such an embarrassing number of complexly related ways.

Ryle may have restricted the interpretation of 'can' or 'could have' in this context simply because he takes the usage of magistrates, parents, teachers and other censorious types as standard. While these people may be what he calls 'ordinary folk' we must not suppose that they have a proprietary interest in the alternative courses of action which an agent can adopt. This I shall confirm in a moment. But even as censors their moral censure is coloured by their didactic interest in inculcating morality. As any normally perceptive parent must be aware, there is something rather gross about his use of ethical terms for instructing his child. Their use becomes truly appropriate in a relationship of personal equality alone. For the same reason the pontifications of magistrates cause one to raise an eyebrow even while one believes that they are socially necessary. The language of ethics is the language of mutual adjustment or of personal commerce rather than the instrument for instructing the initiate or the heretic in the articles of the general will. It is used dialectically for the purpose of deciding how far to go into business with and how far to go into business against each other. It is used to construct an issue for choice rather than to compel the desired response. The reason why many prefer a democratically organised community to a totalitarian one is possibly because they believe more or less explicitly that this dialectical function of ethical language can be properly realised in the former alone.

I suspect, however, that there is a concealed and more fundamental cause for the way in which Ryle restricts the scope of causal possibility. A certain amount of metaphysics has possibly gone underground in 'The Concept of Mind'. The selection and deployment of examples appears surreptitiously governed by a number of 'isms'
among which Determinism holds an honourable rank. On deterministic assumptions bare causal possibility can belong to no specifically specified event. Every event, as we saw, must be regarded either as causally necessary or causally impossible, and it can only be regarded as causally possible if it is causally necessary as well. Accordingly, when somebody with deterministic leanings comes to discuss the use of 'can' and 'could have' for referring to specifically specified events, he will be predisposed to believe that this use indicates a disposition rather than a bare causal possibility. Since disposition-statements imply that under certain specific conditions in certain circumstances certain specific things will necessarily happen, they can be recognised by a theory which believes in the universal applicability of inference-licences to actual events in every detail.

I shall now return to the facts of language. I hope it will be admitted that acting with deliberation is a perfectly ordinary thing for 'ordinary folk' to do, even if a high proportion of our actions are not deliberate. When we deliberate it is quite normal to ask ourselves 'What shall I do?' and this question may be amplified and made specific by a reflection of the form 'I can do X, and I can do Y, and I can do Z, but I must do one and no more than one of these'. Here the 'can' and the 'must' express the causal modalities of possibility and necessity. The word 'can' does not indicate a tendency or disposition. We can translate 'I can do X' as "I shall do X" is not necessarily false. It signifies a refusal to make an inference and nothing else. Any tendency to do X is indicated by the second half of the reflection, viz., 'I must do one and no more than one of these'. But this does not indicate a necessity to do X rather than Y or Z. It simply indicates a
necessity to do X or Y or Z rather than anything else: and one may regard a necessity as a particularly strong kind of tendency, where the standing conditions are the sufficient, instead of merely the indispensable, condition of the consequent.

Now attempts have been made to bring this prospective use of 'can' and the corresponding retrospective use of 'could have' into line with disposition-statements. I no longer refer to Ryle's analysis since he has simply ignored this use. I am referring to the analysis of 'I can do X' into 'I will do X, if I choose'. (I use the Scotticism 'will' here because it is more flexible and does not import the overtones of resolution into what is merely intended as a hypothetical prediction.) On the same analysis 'I could have done X' means 'I would have done X, if I had chosen (to do X)'. On this interpretation, it will be observed, 'can' and 'could' provide inference-licences in place of the ones they withhold. They indicate dispositions as well as mere causal possibilities.

Mr. Nowell-Smith writes \(^1\) in defence of this interpretation 'It would indeed be remarkable if modal forms which are normally used in a hypothetical way were used categorically in one type of case alone'. Apparently, then, he fails to distinguish between the use of 'can' which indicates that something is necessarily true under certain conditions and the use which indicates simply that something is not necessarily false; or, alternatively, he identifies the latter use with a categorical use. Whichever course he has taken, it is untrue that modal forms are used only in the hypothetical way, exemplified by the analysis which he defends. As we have seen, the use which he attacks has its precise analogue in the logical use of 'can', and it even has a limited application on the

\(^1\) Ethics, p.275.
deterministic hypothesis towards which Mr. Nowell-Smith is apparently inclined.

We may notice further that this analysis of deliberation conceals the very notion of possibility which it attempts to analyse away. The complete expression for analysis is 'I can do X, and Y, and Z; and I must do at least one but no more than one of these'. The last half is quite as important as the first and unless we fail to apply the analysis to the whole of the expression it must yield the following result: 'I will do X, and Y, and Z respectively, if I choose to do X and Y and Z respectively; and I must either choose to do X, or to do Y, or to do Z, but no more than one of these.' In other words the indeterminacy which the analysis appeared to eliminate has recurred. The occurrence of one out of a group of acts of choice is represented as necessary but each of these acts is represented as possible. Accordingly, the analysans implies the following: 'I can choose to do X, and I can choose to do Y, and I can choose to do Z; and I must do at least one but no more than one of these choosings'. To persevere with the analysis would generate an infinite regress of such entities as choosing to choose to choose... to do X.

But it would be wrong to conclude from this infinite regress that 'I can do X' does not mean 'I will do X, if I choose to do X'. It does mean this, but the antecedent does not describe a causal condition in the way in which it would if the analysis had been the analysis of a disposition-statement. The function of the antecedent is to indicate that when I say 'I can do X' I imply a complete and exhaustive disjunction of the form 'I will do X, or I will do Y, or I will do Z'. Of course, other words might be substituted for 'choose' in the analysis such as 'try', 'intend', 'resolve', etc.
They would not serve to eliminate possibility any more effectively than 'choose'. But they do play slightly different roles from 'choose' in the antecedent of the analysis, particularly when the analysandum is placed in the third person singular as in 'He can do X'.

Reasons for supposing that the notion of causal possibility has a wider range than that which determinism permits have already been given in Chapter IV. Here I have concerned myself merely with saving the distinction between causal possibility and disposition from neglect, so that I can show how the relation between Prometheus and the fire is different from the relation between the hammer and the nail. A clear-cut distinction must be made between potentialities that are dispositions and potentialities that are bare causal possibilities. The latter are peculiar to agents alone whereas the former are common both to agents and dispositions. Thus the circumstances are constitutive of the dispositions of instruments, or objects which might conceivably become instruments, because they are the standing conditions under which given a certain antecedent a certain consequent will result. On the other hand the circumstances are constitutive of the agent's potentialities and what he is about to do because they limit the scope of causal possibilities or courses between which he can choose. They distinguish the choice open for today from the choice that was open yesterday.

Before leaving this topic it may be advisable to safeguard against one possible source of linguistic confusion and one elementary logical error. The possible source of linguistic confusion is between two ways in which the word 'can' may be used to indicate causal possibility. There is the same sort of difference between the first person singular present indicative use of 'can' and its
use in other persons as there is between the first person singular use of 'going to', 'about to', or 'shall' and their use in other persons. In both cases in the first person singular use the truth of the expression is conditioned by the agent's implicit or explicit awareness of its truth. My knowledge that I can do X, Y or Z is performative and constitutes its object, but my knowledge that he can do X, Y or Z is not. The elementary logical error would be to think that p implies q implies q implies p. In other words when I say that the circumstances are constitutive of the agent's possibilities, or that things are constitutive of persons, I am not propounding a brand of Idealism. I am not saying 'No persons, no things' but merely 'No things, no persons'.

...
I shall now take the distinction between the explanatory and the narrative type of responsibility as sufficiently established. But even so, there may seem room for some doubt whether I have attained the goal I defined in Chapter I. Granted the distinction between the two kinds of responsibility, nevertheless, it may be argued, we still require an explanation of why I do one thing rather than another. The narrative may be distinct from the explanatory type of responsibility, but what is to prevent it from presupposing the explanatory type. My doing one thing rather than another may for instance be explicable by some mechanism of choosing or other less explicit conscious process. I have in Chapter IV blocked this approach. I cannot accept the fact that I am going to do what I am going to do as explicable by my having chosen to do it, because my choosing to do it presupposes my persuasion that I am going to do it. Still less can I accept any mechanism which does not involve choice or some less explicit conative process as explaining my action. To do so would break down the distinction between predictions in the third person singular and certain predictions in the first person singular of the kind which has been examined in Chapter IV. Nevertheless, the feeling may linger that despite my distinction between two types of responsibility and despite the anti-mechanistic analysis of Chapter IV it remains necessary to explain by some mechanism why I do one action rather than another. This feeling may even remain after my arguments in previous chapters have been accepted as convincing, and may consequently lead to the conclusion that there
is some antinomy latent in the concept of choice or voluntary action.

I now propose to show why my going to do one thing rather than another requires no explanation. It requires no explanation because the idea of futurity, aboutness, or prospective process, is implicit in the idea of indeterminacy of the Libertarian kind. The force of this argument is that Libertarian Indeterminacy is not merely an indispensable condition of voluntary action or choice, as many have been prepared to concede. It would show that whether Libertarian Indeterminacy is indispensable or not, it is in any case a sufficient condition of voluntary action - and this reverses a prevalent impression that Libertarian indeterminacy is most likely an indispensable condition, but very improbably a sufficient condition of voluntary action or narrative responsibility.

In Chapter I we considered the various ways in which a temporally successive series of events could be necessarily connected. But one assumption that underlay our discussion was left unspecified. We assumed throughout that the temporal order was logically quite independent of the necessary connection between them - that one event could succeed another irrespective of whether the connection was one-one, many-one, or one-many. In the present chapter the assumption of logical independence shall be explicitly rejected. We shall derive the temporal order with its distinction between past, present and future directly from Libertarian indeterminacy. Accordingly the voluntary action which I am about to do not only depends for its voluntary nature on a certain causal independence from antecedents but at the same time acquires its character of aboutness or futurity

from this same causal independence or indeterminacy. It follows
further that this characteristic of aboutness can require no type of
explanation that is incompatible with Libertarian indeterminacy.

If we regard some sort of temporal order as more ultimate than
the necessary connection between events, it is indeed possible to
give accounts of the dating function of the present which are
perfectly consistent with Determinism. Fault may be found with them
on other grounds, but as accounts of the dating function peculiar to
the present in what I have called prospective process they seem
adequate. Their basic assumption is that events are in relations of
before and after in a timeless sense of the verb 'are'. Temporal
order is thus basically undated, but one can, it is supposed, account
for the distinction between past and future in terms of the relation-
ship of one particular series among concurrent series of events to
the other series of events with which the former is concurrent.
This privileged series according to one account is the series of
my utterances written or spoken: according to another it is the
series of my cognitive states. According to the first 'A was before
B' means that A is (timeless copula) before B and that also A is
(timeless copula) before this particular utterance of the sentence.
According to the second, the sentence means that A is (timeless
copula) before B and that also A is (timeless copula) before the
cognitive state expressed by the utterance. Likewise, according to
the first account, 'A will be before B' means that A is (timeless
copula) before B and that A is (timeless copula) after the utterance.
According to the second 'A will be before B' means that A is (timeless

1. cf. Chap. III.
2. e.g. Reichenbach, Elements of Logic, Chap. 7, Section 51.
cf. L. Jonathan Cohen, Tense Usage and Propositions (Analysis,
Vol. II, No. 4, 1951) for a more refined version.
3. e.g. A. J. Ayer, Statements about the Past, (Ar. Soc. Proc. 1951-2)
copula) before B and that A is (timeless copula) after the cognitive state expressed by the utterance.

Both theories give what is apparently an adequate account of one temporal characteristic, viz., that the temporal order of events is directly or indirectly related by our more colloquial modes of speech to one moment of time which we call 'the present'. Furthermore, they appear to explain why this date is not determined by arbitrary selection. The fact that I describe the Battle of Hastings in the past rather than the future tense for instance is not a matter of subjective choice. One event in the temporal series does not perform the dating function as well as any other. According to the one theory, what dates the serial relation between two events can only be the utterance of some proposition about them. Once we make an utterance the dating event is determined by a logical necessity. According to the other theory, the dating event is the cognition of the temporally ordered events and likewise determined by logical necessity.

It is not my intention here to enter into the deficiencies of these theories - they are indeed considerable - but simply to develop the alternative Libertarian account. This denies that all events that ever have or ever will occur are (timeless copula) in any sort of temporal relation to each other. Or more accurately, it denies that the timeless copula has a legitimate use in this connection. Instead it provides through the indeterministic hypothesis a relation whereby one can derive a serial order which is essentially of this dated kind. To show this, however, we must first examine the nature of serial order in general and then consider in greater detail what characterises temporal order in particular.

It is customary to regard any particular serial order of a set
of terms as relative to some specific relation which holds between the terms and acts as their ordering principle. I do not wish to depart from this analysis so much as to qualify a certain interpretation of it.

Russell has written:

We must not look for the definition of order in the nature of the set of terms to be ordered, since the set of terms has many orders. The order lies not in the class of terms, but in the relation among the members of the class, in respect of which some appear as earlier and some as later. The fact that a class may have orders is due to the fact that there can be many relations holding among the members of one single class.

In this way he introduces the question raised in his next sentence, viz.: "What properties must a relation have in order to give rise to an order?" and I propose to give his answer - with which I am largely in agreement - before returning to criticise the above quotation.

The properties of an ordering relation are three. It must be asymmetrical, transitive and connected. The relation father of, for instance, possesses asymmetry because if X is father of Y, Y cannot be father of X. On the other hand, it is not a transitive relation, because, although Y may be in turn father of Z, X is not father but grandfather of Z. We have to go to the more generic relation of ancestor of to find an instance of transitivity. To define the property of being connected I reproduce Russell's definitions of three more elementary concepts, viz., that of the domain, converse domain, and field of a relation, respectively. The applicability of these definitions appears, it is true, to be restricted to dyadic relations; but once this is appreciated, the modifications which would give these definitions greater universality

1. Introduction to Mathematical Philosophy, pp.30-1.
are sufficiently obvious and for my present purpose can safely be ignored.

The **domain** of a relation consists of those terms that have the relation to something or other, and the **converse domain** consists of all those terms to which something or other has the relation. The **field** of the relation consists of its domain and its converse domain together. 1

And this leads to the following definition of 'connected':

A relation is **connected** when, given any two different terms of its field, the relation holds between the first and the second, or between the second and the first (not excluding the possibility that both may happen, though both cannot happen if the relation is asymmetrical). 2

It will be observed that **ancestor of**, though both asymmetrical and transitive, is not connected, because it contains siblings. If, however, there were a living species that contained no siblings, **ancestor of** would, relative to that species, be a connected relation.

From this analysis of serial order it is apparent that the same set of terms may belong to the field of a number of relations which may possess all three of the properties just specified. Consequently the same set of terms may possess a number of entirely different orders. Let us take, for instance, a number of flashes of coloured light, no two of which are the same in intensity, saturation or duration. It is possible to serialise this set in accordance with any one of the three relations **intenser than**, **more saturated than**, **longer than**; and no one of the series thus derived need coincide with another.

Now does Russell's analysis of serial order apply to temporal order as well? Is for instance, the temporal order of the set of flashes likewise dependent upon a relation? If so, upon what relation? And is this relation just one among a number of relations such as those already specified: or is it in some sense more

1. _op. cit._, p.32.
2. _ibid._
fundamental to the set than these?

In the face of such questions as these we must reconsider our initial quotation from Russell - in particular the statement that 'order lies not in the class of terms but in the relation among the members of the class'. If we accept the latter part of this statement (i.e. that order lies in a relation among the members of a class) as applicable to temporal order, must we accept the former half as well (that order lies not in the class of terms)? There seem strong reasons for not doing so.

The temporal order of a set of events seems inseparable from that set taken as a set of particular actual individual events. I am not denying that the same set of events may have very different orders according to the relation that one selects, but merely insisting that if the temporal order depends upon a relation, that relation and that relation alone must be basic to the existence of the set as a set of things which actually happen. One must emphasize as well, that the relation must be basic to the existence of the members of the set as individuals, and not to the properties which these individuals possess. To one set of light flashes, another set might precisely correspond in the intensity, saturation, and duration of its members. Each member of either set might be the exact twin of one member in the other. But no matter how complete the correspondence between members of the two sets may be, it remains perfectly possible for the temporal order of the members in one set to be quite different in their set from the temporal order of their twins in the other set. Furthermore, no twin need be simultaneous with his partner. Given that a number of events have occurred, we have to rely upon observation to tell us the temporal order in which they have occurred. We can never derive this information solely
from a complete knowledge of their characteristics, in independence from inductively established causal laws. Accordingly, temporal order must be basic to the existence of individual events, and not to the characteristics which they exemplify.

Russell's account of serial order requires modification in one part. But what about the second part of his statement? Is it true that like other orders temporal order lies in a relation between the terms that are temporally ordered? To some the difference between it and other orders may seem sufficiently great not to justify in the instance of the one what is justified in that of the others. They might consider that temporal order is unique or 'sui generis' (to use the stock formula for philosophical deflation). Temporal order would be the ultimate relation between events and not derived from something more ultimate. The attraction of such a theory, however, is one of despair at finding a more fundamental relation. Three facts have to be explained:

(a) the present has a dating function, and is not arbitrarily selected from other moments in time to fulfil this function.

(b) temporal order is basic to the existence of events as individual things.

(c) (a) and (b) are true for temporal order alone and not for the converse order.

If we find an explanation of these three facts, the attraction of the 'sui generis' account will become less urgent. Without further delay I shall show how Libertarianism supplies the solution required.

II

The indeterminacy postulated by Libertarianism can no longer be regarded as in the first place a relation between events. In Chapter III I fell short of showing that the one-many or stage-by-stage structure peculiar to process was essentially constitutive of
events, because I gave the relation terms which were themselves events. Now I shall show that terms exist as events, and as things occupying a temporal position, only through this relation. For this purpose a diagram of the following kind will prove useful.

![Diagram](image)

Each of the points here represents a thing which is not in the first place an event, but only an event when taken in the relationships represented by the hatched line. These lines do not represent anything in time which could be regarded as analogous to length in space (e.g. duration). Consequently, I cannot be accused of spatialising time except in the rather trivial sense in which any diagram spatialises what it represents. The diagram has been employed solely for its synoptic virtues; it can and will be replaced by an alternative non-diagramatic device for representing exactly the same thing. It is a rather more serious matter that the diagram represents a very special case of the type of inter-relationship which I wish to examine. The tendency of the lines to diverge towards the right predominates, but nevertheless some of them do converge. The convergence could be avoided altogether in a less compact diagram but only through sacrificing some of the present diagram's synoptic virtues. I prefer, for the present chapter,
simply to ignore the convergent relation towards the right and to examine the divergent relation alone. In the next chapter I shall correct the serious inaccuracies thus entailed.

It is of prime importance to note that this type of relation is not the complete and exhaustive disjunction of logical contradiction holding between two propositions \textit{per se} (e.g. \( p \land q \)). By themselves the propositions which state the existence of \( B^1 \) and \( B^2 \) are in the logical relation of contrariety (not both \( p \) and \( q \)). But we must exclude yet another interpretation. Two propositions which by themselves are logically contrary may be logically contradictory given a third proposition (\( r \supset p \land q \)). The relation between propositions which state the existence for instance of \( B^1 \) and \( B^2 \) are, however, not even of this type. The relation is, in other words, between \( A, B^1 \) and \( B^2 \) primarily. The relation between the propositions about them is secondary or derived from this primary relation.

If we desire an analytic rather than a synoptic method for presenting the same relationship it will be convenient to use the following as short-hand symbols. Let us use ' \( \equiv \)' for equivalence or one-one connection and ' \( \land \)' for the conditioned complete and exhaustive disjunction. These symbols must be distinguished from the conventional symbols for logical equivalence ('\( \equiv \)') and complete and exhaustive disjunction ('\( \land \)') which are much smaller. Similarity of shape is nevertheless justified by the analogy between the logical and non-logical types of relation. The analytical representation, accordingly, is as follows:-
It is unnecessary to continue beyond the B-stage or even to go as far, since all the relationships represented by the diagram are implicit in the first line.

By either method, it will be observed, A alone of all the terms is distinguished by no numerical superscript. This indicates that it is the origin (not for the moment in a temporal sense) of the whole interlocking system of conditioned complete and exhaustive disjunctions. The system which it originates could, of course, be subordinate to some more comprehensive system, but is here treated as autonomous and A as an absolute rather than as a relative origin. This makes it possible to distinguish the disjunctions originated by A as first generation \((B^1 \land B^2)\), second generation \(((C^1 \land C^2) \land (C^2 \land c^1))\), ... nth generations disjunctions, so as to indicate most briefly the order of complexity. But once more, this mode of speech has in the first place no temporal significance since, as we shall see, it is the elements of these disjunctions and not the disjunctions themselves that have temporal order.

These sets of relationships successfully account for the three facts about time previously noted. In all the generations of disjunctions there are elements possessing the same degree of determinacy as the absolute origin A. We can select \(B^1\), \(C^1\) and \(D^1\) respectively from each generation as suitable examples. While alike in degree of determinacy they differ from each other in modality.
of existence. Relative to A, \( B^1 \) is a disjunct, \( C^1 \), the disjunct of a disjunct, and \( D^1 \) the disjunct of a disjunct of a disjunct.

In other words, if A is existent, \( B^1 \), \( C^1 \) and \( D^1 \) respectively are first, second and third order possibilities of existence. On the other hand the disjunctions of which these three terms are elements enjoy the same modality of existence as A but differ in degree of determinacy. Thus \( B^1 \wedge B^2 \) has the same modality of existence as A but comes after A in degree of determinacy. Its elements possess the same degree of determinacy but differ in modality of existence from A since they are only in the first order of possibility.

Within the confines of this system, then, we have an asymmetrical, transitive, and connected relation between groups of elements, viz., the relation of higher in degree of determinacy. In the series ordered by this relation A comes first, \( B^1 \wedge B^2 \) second, and so on. We can proceed at once to explain facts (b) and (c) about time.

What comes first in these series is more determinate in degree of existence. Anything which is equally determinate (e.g. relative to A) is not a member of the series but an element of a member. Consequently, although equally determinate, it is not an existence but merely a possibility of existence. This explains fact (b) that temporal order is basic to the existence of events as individual things. It also explains fact (c) that the temporal order alone is basic, and not the converse order as well. The converse order is determined by the relation higher in degree of indeterminacy of existence, which is basic to non-existence rather than the existence of the determinate elements.

Fact (a), however, remains to be explained. Why do we place some events in the future and others in the past? Again, why should we treat this classification as not an arbitrary one - why should
we call one instant 'the present' rather than some other instant?

So far the ordered series we have been examining has been of a timeless kind. When speaking of the existence of its terms we have used existence in a timeless sense. No distinction between past and future existence is provided in this series. But this is true only because we have taken A as the absolute origin of the system which it generates. Within this system, however, there are subsystems generated by each of the determinate elements. B\(^1\), for instance, generates a subsystem and this subsystem has a dual character. It consists on the one hand of elements like A which have the modality of existence. Since A\(^1\) entails and is entailed by B\(^1\) \(\land\) B\(^2\), B\(^1\) entails but is not entailed by A. On the other hand, this subsystem consists of elements like C\(^1\) which are only possibilities of existence of the first or higher order. B\(^1\) does not entail C\(^1\) but only C\(^1\) \(\land\) C\(^2\). Accordingly, the elements in any subsystem must fall into two classes: but we have still to see that the distinction between these two classes corresponds to the distinction between the past and the future.

Now each subsystem in the main system differs in its membership from the others. They may include or exclude each other in whole or part. The subsystem generated by B\(^1\), for instance, excludes the system A, B\(^1\), C\(^2\) \(\land\) C\(^3\), ((D\(^2\) \(\lor\) D\(^3\)) \(\land\) (D\(^3\) \(\lor\) D\(^4\))) which B\(^2\) generates. It includes, of course, many of the elements of this last system but excludes yet others, viz., C\(^3\) and D\(^4\). C\(^3\) and D\(^4\) are possibilities of existence relative to B\(^2\) but impossibilities of existence relative to B\(^1\). Each element in the complete system is then given an order in a set of elements, and itself gives an order to a set of elements which belongs to a subsystem. But since the set of elements ordered by one is not absolutely identical with the sets of elements ordered
by others it obviously is not an arbitrary matter which of the
elements plays the role of orderer. It is on the contrary a matter
ddictated by which elements are the elements ordered. In like manner
they dictate the division of each subsystem into two classes one
containing elements with the modality of existence and the other
elements with the modality of possibility of existence.

And now the correspondence with the distinction between past
and future becomes apparent: for, as we saw, the latter distinction
always has a date and the date is not a matter of arbitrary selection.
Here lies the parallel between the series we have constructed and
fact (a) about time. At any moment after 1815 it is (i.e. was or
will be) true to say 'The Battle of Hastings was before the Battle
of Waterloo', but before 1066 it could only have been true to say
'The Battle of Hastings will be before the Battle of Waterloo'.
In short there is no absolute serial relation of any date or dated
event to other dates or dated events in the temporal series. It is
always relative to some other. In the same way there is no absolute
order for any pair of terms in our set of disjunctive relationships,
since whether they both belong to one set is relative to some other
term. For this reason the terms exist as possibilities, or actuali-
ties in the timeless sense of 'exist', only relative to the absolute
origin A. Relative to other origins their existence as actualities
or possibilities is not timeless. The distinctions made by the
various past and future tenses in both the indicative and subjunctive
moods become necessary.

If, then, the Libertarian hypothesis is correct, we may conclude
that a temporally inflected language is something more than a con-
venient but dispensable linguistic device, as some have represented
it. Likewise it is something more than a mode of description
dictated by a purely contingent ignorance about the part of time we call 'the future', as others have believed. On the Libertarian theory the primary necessity for a temporally inflected language is neither linguistic nor epistemological, but ontological.

I have still to show, however, that temporal inflections have on the Libertarian hypothesis to be used in the manner peculiar to the standpoint of the agent as demonstrated in Chapter IV. From the agent's standpoint his immediate future is as determinate as his past, for it is in a prediction of the form 'I am going to....' that he expresses his purpose. In Chapter IV we showed how the agent's standpoint entailed Libertarian Indeterminism. If now we can show that Libertarian Indeterminism entails the agent's outlook on the immediate future, we will have demonstrated not merely the consistency of Libertarian Indeterminism and the responsibility created by choice, but its identity as well. It is usual for Libertarians to claim that indeterminacy is an indispensable condition of choice, but more unusual to contend explicitly as I do that it is a sufficient condition as well.

If the relationship between $A$, $B^1$ and $C^1 \land C^2$ provides a parallel for the relationship between past, present and future from the agent's point of view, which of these terms is the event which the agent must predict in order to express his intention? Obviously it is $B^1$, the origin of this subsystem - because $B^1$ is the last member of the set of determinate existents in the subsystem before it joins the set of disjunctions. Accordingly, all the set of determinate terms originated by $B^1$ (i.e. in this instance $A$ alone) must, with the exception of $B^1$ itself, be interpreted as belonging to the past, and $B^1$ must be included in the future along with the disjunctions which it originates.
But we have assumed here that the relationship between $A$, $B^1$, and $C^1 \land C^2$ is compatible with the agent's standpoint towards the future, whereas this is what has now to be proved. It is obvious to begin with that no term in its capacity as origin of a subsystem can be identified with the present. As we saw the present is not an event but a date when some events are in the past and others in the future. If anything can be identified with the present it must be the sum of the events in the two separate sets originated by the origin: i.e. the present consists of the pastness of one particular set of events and the futurity of yet another. One might, of course, be tempted to identify the origin with the so-called 'specious present': but that is a psychological or epistemological category, and not an ontological one. We are here concerned with what the origin is, and not with how it is known. One can without any logical absurdity identify, as I would, the specious present with the latest part of the past.

The only feasible question is whether the origin is the immediate past and not the immediate future. At first sight it might seem more natural to group the origin with the rest of the determinate existents which it originates, and exclude it from the group of less determinate existents (disjunctions) or determinate possibilities (disjuncts). In that case the origin would belong to the past, for the past is determinate. But on closer scrutiny there are better reasons for the reverse procedure. Each origin implies but is not implied by the set of determinate existents which it originates, e.g., $B^1$ implies but is not implied by $A$ and $C^1$ implies but is not implied by $B^1$ and $A$. On the other hand, each origin both implies and is implied by the set of disjunctions which it originates, e.g., $B^1 \equiv C^1 \land C^2$ and $C^1 \equiv D^1 \land D^2$. Now, this is just the relation
which from the agent's point of view holds between his most immediate and his less immediate future. What I am about to do entails the possibilities of action that lie before me in the future and likewise the possibility of these actions entails that I am about to do now what I am about to do. At the same time from the agent's point of view what I am about to do entails (i.e. is conditioned by) my past in so far as it is conditioned by the circumstances of action (cf. Chapter V). Furthermore, from the same standpoint, what I am about to do is not entailed by my past. Accordingly, we must interpret the set of equivalent terms including the origin as the future, and the set of determinate terms apart from the origin as the past. The origin is the immediate future and not the immediate past.

Libertarian Indeterminism, then, is a sufficient condition of responsibility for voluntary action, and not merely an indispensable one. It entails the kind of futurity which from the agent's point of view is peculiar to himself. From the agent's point of view his future is not merely incompletely conditioned by the past, but the fact of its being only incompletely conditioned by other events is what gives it its futurity. At first sight then an important question may still seem to be left unexplained. How is it that I am about to do one thing rather than the other things which I could equally well do? Or, alternatively, if $B^1 = C^1 \land C^2$, why should I say that $C^1$ rather than $C^2$ (or vice versa) is the future? If the futurity of events consists of their indeterminacy this question could have no answer, or so it might seem. It can however be answered up to a point. The fact that I am about to adopt one of the particular courses open to me rather than the others is certainly not determined by my past. It is determined by my remoter future -
by the fact that the course I shall adopt determines and is determined by a further range of possibilities. $B^1$ for instance is not determined by $A$ because $A$ determines $B^1 \lor B^2$. It is on the contrary determined by $C^1 \land C^2$. My going to catch the 9.30 a.m. rather than my doing something else is determined by the possibilities of action open to me when I reach my destination. The determinate character of the immediate future is determined by the particular range of possibilities of the more remote future and that in turn is determined by the still remoter future. If there were no remoter future consisting of a certain set of possibilities and excluding others, then I could have no determinate future. In fact the entire distinction between past and future would lapse.

Certain further implications of my argument remain to be examined. It may seem that to each agent there must correspond an indeterministic system of relations similar to the one I have constructed. Therefore I may seem faced with the unpleasant dilemma of maintaining, either that there is only one agent in the universe since there is only one process of time, or that there are several processes of time since there are more agents than one. Even if one interprets Einstein's theory of relativity as entailing that there are many different processes of time, we have not escaped the dilemma, since many of our acquaintances seem to belong to the same time system as ourselves.

Another difficulty is that other things besides my voluntary actions occur in the future. I can predict that I am going to sneeze involuntarily, or that there will be an eclipse of the sun at a certain date in the remote future.

Both these difficulties, however, are the result of forgetting that from his standpoint the agent's position in the universe is
unique. It is not strictly parallel to the position of other agents. His future actions are not just one series out of a number of concurrent series of future events. If voluntary, they are done in consideration of the situation or the possibilities for the future which the situation permits. In deciding to catch the 9.30 a.m. the agent decides and acts in consideration of what he takes to be the facts about the future behaviour of trains, taxies, booking clerks, etc., etc.. The future of everything else, objects and other agents, is, in other words, constitutive of the future of the agent from his private standpoint: nothing is externally related to him. It is through this internal relation to him, accordingly, that events other than his actions have, from the standpoint of the agent, a temporal position in the past or the future. This has been shown in some detail in Chapter V.

One important qualification to the above account remains to be made. As applied to the interpretation of human agency in the form it actually takes, this analysis presents a misleadingly simplified picture. It may suggest that the possibilities which constitute both the near and the remote future of any agent lie open before him. Even if at any moment he does not know what he will do in the remoter future he at least can know what will be possible for him to do. In actual fact, however, we are always acquiring new knowledge about ourselves and the world in which we live. Consequently we have a continually changing idea of what respectively our past or future possibilities actually were or will be. Furthermore, this change in our conception of our possibilities is itself a contributing condition of their being possibilities. These facts do not, however, affect the basic validity of the
principle in terms of which we have interpreted human agency.

There is, then, nothing left to explain if one can establish that the future is incompletely determined by the past. It is precisely when one of two things is partially determined by the other in the way described above that it becomes possible to say of both that they are events and that the former will occur later than the other if the latter will occur. Such explanation as the occurrence of this rather than that partially determined event requires is entirely supplied by the possibilities and impossibilities for the remoter future to which it leads. The unresolved but specific possibilities of the remoter future both explain and are explained by the determinate form which the immediate future will take. There is nothing paradoxical about this conclusion, since it does justice to what we described in Chapter IV as the irreducible tendentiousness of the predictions in which the agent expresses his purpose. We must never forget that for the agent the future includes what he is about to do as well as the future of his environment and that further the potentialities of his environment are constitutive of what he is about to do (Chapter V).
CHAPTER VII

Conclusion

The purpose throughout the preceding chapters has been to present a coherent form of Libertarian doctrine. So far I have dwelt mainly on questions of internal consistency. In concluding, however, I wish to consider, first the general adequacy of my account as an account of all the relevant facts, second the general significance for philosophy of the topic, and third the general nature and appropriateness of the methods I have employed. For convenience I start from the assumption that I have done what I set out to do. I have resolved the alleged paradox in Libertarian Indeterminism by an analysis of various concepts associated with the words 'responsibility', 'chance', 'accident', etc.. The paradox depends upon the failure to see that in its formulation similar words have been used to express two different concepts which I have labelled 'explanatory responsibility' and 'narrative responsibility'. Further, I have shown that responsibility of the narrative kind for doing one thing rather than another must exist where a full (as distinct from a limited) responsibility of the explanatory kind for doing one thing rather than another is absent.

I

Apart from questions of internal consistency, facts may seem to present Libertarians with difficulties in at least two important ways. These two I shall now consider.

(a) First: Libertarianism may seem to rule out the possibility
of making definite and reliable predictions. Now we do predict with considerable accuracy and success. Indeed, the intelligent and voluntary behaviour of human beings is predictable as well as the behaviour of inanimate things. It won't do, of course, just to distinguish between the behaviour of purely physical objects, on the one hand, and the voluntary behaviour of persons, on the other, in order to confer indeterminacy upon the latter but withhold it from the former. Human agents, whatever else they are, are physical objects, and their behaviour is causally connected with the behaviour of physical objects. Any indeterminacy in their behaviour must accordingly be communicated to the behaviour of the physical objects.

However, we must not forget that the indeterminacy required by Libertarianism is definitely a restricted indeterminacy. It cannot entail the complete unpredictability of physical events. The accuracy with which we can predict an eclipse of the sun, for instance, is not incompatible with indeterminacy in human behaviour. Even if we grant that every component of our solar system, or even the universe, is causally related to the behaviour of each human agent, none of our actions are, at the present stage of technology, likely to affect the behaviour of the sun to an extent that would make our prediction inaccurate. Of course, the possibility of turning the earth into an incandescent mass by means of nuclear fission or fusion is by this time imaginable. In this way the earth's relation to the sun might be altered and our former predictions about solar eclipses invalidated by human agency. However, the extent of human impotence in altering the course of nature remains considerable and widely recognised.

It might be objected that one can predict the behaviour of the ultimate constituents of matter with an extremely high degree of
accuracy. Accordingly, since human beings are physical objects, it must in principle be possible to predict their behaviour with a similar degree of accuracy, even though as a matter of fact it may be impossible to compile the necessary data about the ultimate particles. The high degree of accuracy possessed by such predictions could not possibly permit any indeterminacy in the occurrence of the actions between which the agent chooses. The range of inaccuracy would be imperceptible to human sense organs unaided by scientific instruments, and normally we don't require scientific instruments to inform ourselves of the range of actions between which we must choose.

One might reply that it is just in the realm of sub-atomic particles that the principle of indeterminacy has its most striking applications. It is impossible, for instance, to determine the momentum and the position of electrons with equal degrees of accuracy. Accuracy in the measurement of any one of these variables involves a comparative inaccuracy in the measurement of the other. It is, accordingly, perfectly consistent with the findings of science to hold that there is a restricted indeterminacy in the universe. But in different ways this restriction may seem both too great and too small. Too great, because if there is restricted indeterminacy in the behaviour of the ultimate constituents of all physical matter, then everything in the physical universe is an agent, according to the thesis of the previous chapters. Too small, because the indeterminacy which the Libertarian wishes to attribute to the human agent is much less restricted. I would be in Edinburgh just now instead of Singapore if I had decided not to catch a train or a plane.

How can the equal possibility of two such widely different courses be explained in terms of the minute indeterminacies exhibited by electrons and their aggregates? Neither difficulty to my mind is insuperable.

To make a hard and fast distinction between things which are merely physical and things which are people who act voluntarily may seem difficult if we try and reconcile indeterminacy in the subatomic world with the thesis of the previous chapters. If restricted indeterminacy is a sufficient condition of agency, and also is exhibited by the ultimate constituents of physical matter, then everything must be capable of voluntary action. But even so, I see no reason why we should insist on such a hard and fast distinction. May there not be degrees of agency depending upon degrees of indeterminacy? After all we do recognise such gradations when we compare the actions of human agents with the actions of lower forms of life. Furthermore, we experience difficulty in distinguishing animal from vegetable, and even animate from inanimate. Human beings may owe their principal difference from other things to the comparative wideness of the range of actions open to them. We might suppose that the function of the human nervous system is to superimpose, one upon the other, the indeterminacies in behaviour of some of the constituents of our bodies - to trigger off larger indeterminacies by means of the smaller ones. This is, presumably, a hypothesis capable, when more fully elaborated, of empirical confirmation.

I am not at all sure, however, that the indeterminacies exhibited by electrons really require that I should speculate about whether electrons, or the objects they constitute, must be agents of essentially the same kind as human beings. The indeterminacy in the observed behaviour of sub-atomic particles seems, in many
cases at least, to be due to the fact that the observer must act upon them in order to observe them. His measuring instruments alter the behaviour of the thing measured. Consequently, this kind of indeterminacy is consistent with quite a different sort of hypothesis about the human nervous system. The behaviour of the constituents of matter, on this hypothesis, is not normally indeterministic. But in the human nervous system, and perhaps in others, special conditions exist which produce indeterminacy of behaviour. This indeterminacy may affect the observed behaviour of the material particles which exhibit the 'complementarity' phenomena described by Bohr, although their actual behaviour is not indeterministic. It is not, however, my intention here to arbitrate between the available hypotheses, nor even to formulate them exhaustively.

Before leaving the question of consistency between Libertarianism and physical science I would like, however, to consider very briefly the possible relevance of entropy. The universe as it ages shows an increasing randomness, disorganisation of energy, or entropy. Accordingly, the stage of entropy serves as a criterion for determining the temporal position relative to each other of two different phases of the same physical set-up. Entropy is a sort of temporal signpost. Now, I have no clear understanding of the concept of energy as used by physicists and consequently no clear understanding of the concept of disorganised energy. If, however, by 'an increase of randomness' they mean 'an increase in the number of dispositions of the universe that are possible at any one moment and a decrease in the probability of any one of these possibilities' the relevance of entropy to my argument must be fully apparent. In the previous chapter I have maintained that this increase in the number of

2. cf. Eddington: The Nature of the Physical World, Chap. IV.
possibilities is not merely a criterion for determining serial order in time but the relation from which the temporal series is derivative. Consequently, subject to the qualifications I have made, the presence of entropy provides empirical confirmation for my argument. It does not establish it, of course, because a logical analysis cannot be established by empirical means.

This only completes one phase, however, in our reply to the question whether Libertarianism is consistent with prediction. Objections are often based not upon the predictability of physical occurrences in general but of human behaviour in particular. We make quite a habit of predicting the behaviour of social groups and the voluntary actions of individuals.

Predictions about social groups, indeed, are often based upon our knowledge of the social organisation of a society, and those about individuals upon our knowledge of their character. These predictions, however, are seldom specific to the last degree. I don't predict exactly how many students will come to my lecture tomorrow, nor who they will be, but only that the majority will turn up, because there are no holidays, nor epidemics etc., and because I know several things about them, such as their anxiety to pass examinations or their willingness to be bored. Provided the indeterminacy of behaviour in a number of individuals is restricted, it will always be possible to make reliable predictions about the groups they comprise. In much the same way we make reliable predictions about gases when we regard them as collections of individual molecules. We do not know how each individual molecule will behave but we know they will observe the limits which are formulated in the laws of mechanics. The analogy between gases and social groups is not, of course, complete even in relevant respects. Other factors
which determine the latter will come into evidence when we turn to predictions about individual persons.

Many of our predictions about an individual's behaviour are simply based upon our knowledge of his intentions. This may be derived either from observation of his actions or simply from his statements of intention. Now no Libertarian would wish to deny that an agent's intentions play a part in determining his actions, nor is there any reason why he should deny it. Of course, if he does treat intentions as causal conditions of actions, the Libertarian must suppose that indeterminacy in agency is antecedent to the intention.

Often, however, it must be admitted, we predict individual behaviour some time before any specific intention has been formed by the agent. We rely upon our knowledge of his character. The concept of character, however, is somewhat amorphous. In some of its applications it seems very similar to that of habit. If we respond to a certain kind of situation in a certain kind of way sufficiently often we will create a psychological tendency to continue responding in that way in similar situations. The Libertarian, however, has no need to deny the existence of such tendencies. The limits of indeterminacy which he postulates might be psychological as well as physical. In any case, even supposing some of our actions are entirely the product of habit, there are many of our actions which are not habitual.

On the other hand character often is supposed to consist of a more reflective, less mechanical, pattern in a man's behaviour than habit. There may be a peculiar kind of set in his deliberate purposes in accordance with which he invariably behaves in a certain manner. But is this set itself deliberate or purposive? I think
in many discussions it has been wrongly assimilated to the habitual or more mechanical form of behaviour. One must admit, however, that the set in an individual's choices, which we call his character, is seldom as deliberate as the actions he performs in accordance with the set. Preeminently it is the specific properties of the action which are fully deliberate and not the general characteristics which predispose the individual in that particular action's favour. It is, however, a familiar fact that often we apprehend only dimly the more general characteristics of a phenomenon. Somebody with a good but relatively untutored ear can recognise some composition as Mozart's at first hearing without being able to define his criterion for recognition. Similarly, an agent may choose in doing a particular action to realise some general characteristic without being able properly to distinguish the general from the particular aspect. It is part of the discovery of one's own personality to bring to reflective consciousness the general course one has espoused and of which one has hitherto only had a particularised awareness in one's particular responses to particular situations. One's character, then, or the set in one's purposes, is not a predetermined cast in which one's actions are moulded. The character of his actions has been chosen by the agent in choosing to do various characteristic actions, even though he is unaware that he has performed these actions for the sake of their common characteristic. Consequently, a Libertarian can recognise that we base predictions about action upon knowledge of character as cheerfully as he can recognise that we can predict an action upon knowing that the agent has chosen or intended to do it.

However, one must not ignore the influence of genetic factors in the formation of character. Where one member of a pair of
identical twins has had a criminal record; the other twin has had, in a very high proportion of the cases investigated, a remarkably similar criminal record. Where the twins, on the other hand, are not identical, there is no noteworthy correlation. In principle, nevertheless, the Libertarian can admit that the limitations to indeterminacy are inherent in the agent as well as in the circumstances in which the agent acts. Accordingly, he can willingly admit that temperament, for instance, is largely dependent upon genetic factors and that consequently the actions to which an agent's temperament give rise are genetically determined in part. But there is no reason why he should concede more than this.

(b) It is the second apparent difficulty for Libertarians which has personally worried me more than any other. Is Libertarianism consistent with the phenomena of second sight or precognition? If we can apprehend the future directly at any given moment, it cannot be (in the Libertarian interpretation of the phrase) within our power to alter that part of the future. Not so much has been made of this difficulty in recent discussions of the problem of free-will, perhaps because the phenomenon of precognition has only recently approached scientific respectability. Personally I find it worrying because I sometimes have a very strong feeling that certain of my experiences are precognitive, and have even taken ineffective measures to prevent the precognised event from occurring. I strike the personal note here because from an impersonal standpoint one can hold aloof from apparent precognitions. But if one is afflicted by them one remains worried and sometimes disorientated if they are sufficiently disturbing, even while aware of the various

hypotheses which explain them away. In any case none of these hypotheses convincingly explain the most impressive feature of many precognitions. What impresses is not so much the identity in cognitive detail between the event as supposedly precognised, and its actual occurrence. When the 'precognition' takes place during sleep, as so often it does, this identity can be remarkably inexact. Many experiences taken as experiences which involve one personally have a peculiar, quite unique feel about them which is almost inexpressible in words. It is principally this identity in feel which arouses recognition when the 'precognised' event actually occurs. It can, of course, be explained away by supposing that one has really had the feel of the event for the first time and only imagines that one recognises it. But when this has been said one continues to imagine, and one may then continue to feel uneasy about Libertarianism.

Let us then take 'precognitive' experience at its face value and examine more fully the relevant implications. One fact of importance is that so far as the evidence goes we do not precognise the whole of our future. Why is this? It may have the same sort of explanation as the fact that we do not remember the whole of our past. The reason for this seems to be psychological or physiological rather than any incompleteness in our past. We may remember, forget, and remember again the same event several times over. This suggests that there are events actually in the past even at the point where there is a gap in one's memory. On the other hand, we precognise very much less of the future than we remember of the past. Of course, we might conceivably precognise, 'forget', and precognise again the same event in the future. But the important point is that if we do this at all, we do it very much less than we do the comparable things to the past. It must be admitted that probably we have many
more precognitions than we recognise. Many may take place in dreams which we later forget. But it remains plausible that the apparent infrequency of our precognitions is real and at least partly due to an incompleteness in the future rather than to a gap in our awareness. Much of the future may not be determinate enough to be precognised. May Libertarians not congratulate themselves on this residue of indeterminacy?

We must now ask whether the future can indeed be partially determinate and partially indeterminate. We might argue that it must be either one or the other, but not partially both. The fact that we can precognise anything at all shows, it might be argued, that the distinction between past, present and future is not fundamental to the order of events. It must show that all things which ever have occurred, are occurring, or will occur do exist (in a timeless sense of 'exist'). They are (timeless copula) in temporal relations of antecedence, simultaneity, or subsequence to each other. The apparent emptiness which we describe as 'future' is a mere epistemological emptiness. In any act of knowing we happen, for the most part, to be ignorant of a certain batch of events that exists (timelessly) after the act, and we label this batch 'the future' to distinguish it from other batches of which we are ignorant. But our ignorance, or partial ignorance, of this batch is a purely contingent limitation of human nature carrying no logical necessity whatever.

In the preceding chapter I have argued that the distinction between past, present and future is basic to temporal series and that the temporal distinction between before and after depends upon the former. The particular diagram I used for this purpose already contains hints for deciding whether all of the future must be
determinate if some of it (the precognised part) is determinate. For the most part the lines in this diagram diverged from A to D but some converged.

I maintained that \( B^2 \) is in the future relative to A because relative to A it is indeterminate as a member of the disjunction \( B^1 \land B^2 \). But what about \( C^2 \) relative to \( B^2 \)? \( C^2 \) is, relative to \( B^2 \), a member of the disjunction \( C^2 \land C^3 \); but likewise \( B^2 \) is, relative to \( C^2 \), a member of the disjunction \( B^1 \land B^2 \). Within certain limits, then, \( C^2 \) has as good a right to temporal antecedence to \( B^2 \) as A. But only within certain limits. Beyond these limits A originates in succession the disjunctions \( (C^1 \land C^2) \land (C^2 \land C^3) \) and \( (D^1 \land D^2) \land (D^2 \land D^3) \). \( C^2 \) on the other hand only originates \( B^1 \land B^2 \) and \( D^2 \land D^3 \). \( C^2 \) in other words is an element in a disjunction originated by A whereas A is not an element in any disjunction originated by \( C^2 \).

Our diagram can, then, be used to explain the peculiar characteristic of a precognised event. We interpreted the set of determinate terms originated by each term in the diagram as in the past relative to that term, which is accordingly in the immediate future. Now,
relative to A, \( C^2 \) is determinate even though it is an element in the disjunction \( (C^1 \land C^2) \land (C^2 \land C^3) \) originated by A. This is because \( B^1 \land B^2 \) is also originated by A. The possibility of \( B^1 \) rules out the possibility of \( C^3 \) and the possibility of \( B^2 \) rules out the possibility of \( C^1 \). Since both \( B^1 \) and \( B^2 \) are possible relative to A, \( C^2 \) of the group \( C^1, C^2, C^3 \) must alone be possible relative to A: and what is alone possible must be necessary. Accordingly, \( C^2 \) must belong to the set of determinate terms originated by A.

It must belong to what is past relative to A being in the immediate future. On the other hand, we interpreted the set of disjunctions originated by a term as being in the remoter future relative to their origin being in the immediate future. Now \( C^2 \) is relative to \( B^1 \) or \( B^2 \) a member of a disjunction. Therefore, it must be a future possibility relative to \( B^1 \) or \( B^2 \) being the immediate future. Accordingly, relative to A, \( C^2 \) has the status of pastness but, relative to \( B^1 \) or to \( B^2 \), which are, relative to A, future possibilities, \( C^2 \) also has the status of futurity. This is just the characteristic of a precognised event. When it has been precognised it seems in a sense past, but since, if it occurs at all, it comes after something which has not yet occurred, it is in another sense future.

The possibility of precognition, it appears, follows from a specialised form of Libertarianism. It is not merely consistent with the latter. If we investigated further, I think several freak, or more esoteric, temporal experiences of other kinds would be found likewise explicable by means of other specialised forms. But since the general principle of explanation should by this time be obvious I shan't postpone the conclusion of my central thesis for the sake of a digression.
Has the topic of this analysis any very great significance for ethics or other branches of philosophy? Recent writers on ethics such as Stevenson\(^1\) and Hare\(^2\) have tended to treat their views on free-will, if they have any, as somewhat of a luxury. The issue, they seem to feel, has little urgency and in no way imperils their more important views on the logic of 'right', 'ought' and 'good'. Where other branches of philosophy apart from ethics are concerned the issue may well seem to have outlived its significance. It was a live issue when doctrines of predestination or theological determinism engaged the general interest. They no longer do so. It was a live issue in the hey-day of classical physics. But now physicists make fewer assumptions. It was a live issue when Freud was a scandal. But now he seems no more than a pioneer in a science, the basic concepts of which we must continue to scrutinise and revise. Why should the subject of free-will excite us? Hasn't it gone a bit musty?

I can do little at this late stage to stay the yawns of my reluctant readers. But perhaps I can shame them by making a virtue of the number of hares which I have started in the course of my analysis. So many have taken cover in so many of the thickets on the contemporary philosophical scene that to conceal my embarrassment I have on many occasions pretended to be blind. But the discerning reader is under no obligation to follow my example. My action has the excuse of brevity and emphasis on one point. His would show lamentable lack of initiative. And if I have now come to my destination with reasonable speed no fair-minded person will challenge

1. Ethics and Language, p.312ff.
2. The Language of Morals, p.vi.
my right to cross the hares' feeding ground on my way.

I have, however, shown a marked lack of concern with ethics. This may seem the more remarkable since many Libertarians have looked upon themselves as the guardians and preservers of that department. Morality, they suppose, depends for its applicability upon the freedom of the will. I am not disposed to deny this. I merely think there is very little point in affirming it at the present stage of philosophical thought. At the moment the precise status of predicates like 'right', 'ought' and 'good' is highly controversial, and consequently the metaphysical implications of their use are likely to be more unsettled than ever. But there is a more important reason for my silence on the subject of ethics. I think it unlikely that we shall discover very much more about the logic of 'right', 'ought' and 'good' until we discover far more about the logic of statements about actions or agents in general. The present analysis has been designed as a contribution in that direction. This explanation of my silence on the subject of ethics also indicates the ethical significance which I attach to the problem of free-will. In many ethical writings, for instance, distinctions between actions and intentions or motives, or between actions and their consequences, are absolutely fundamental. Almost invariably they are misconceived. To develop this point to any further useful extent would be, however, to enter upon another discussion rather than terminate the present one.

III

I have, it may have been observed, been treating my subject as primarily ontological in scope and only secondarily psychological. I have treated choice as the sort of thing we have or by which we
are faced, rather than as one of our mental processes distinguishable from the other volitional or conative processes in which we engage. As I have tried to indicate, this is a matter of emphasis rather than a limitation in subject. It can be explained by the importance I have placed upon the distinction between the agent's and the alien standpoint. When we take the agent's standpoint towards his future voluntary action in abstraction from the alien standpoint the nature of our enquiry becomes ontological. Choice is then the thing by which he is faced. When we include the alien standpoint which the agent in acting must take towards other agents, and himself regarded impersonally, the enquiry must become psychological as well. I must admit, however, that the psychological sections of my discussion are often sketchy and incidental to the main ontological direction. This is because the ontological aspect throws more light upon the psychological than vice versa, and because at the same time it is less familiar. In not making an adequate allowance for the distinction between the agent's and the alien standpoint most writers on the subject have given too great a prominence to psychological categories at a stage in the enquiry where they are inappropriate.

Admittedly, however, more psychological questions have been raised by my analysis than have been settled. In a fuller treatment I would have to be more explicit about the role of consciousness in action. More, for instance, needs to be said about the extent to which conscious processes are themselves actions and the extent to which they are merely activities involved in action. More also has to be said about the ontological status of, and distinctions between, choosing, intending, desiring, acting spontaneously or impulsively or by habit, conflicts of desires, strength and weakness
of will, and so on. All these questions, however, had better be treated as the subject for an enquiry the introduction to which I am now completing.

Finally after the scope let us consider the method of enquiry I have used. I would hesitate to call my method of analysis 'linguistic'. It would be less misleading to call it 'logical' or 'conceptual'. Whether it is entitled to the label 'linguistic' or not, it is certainly not confined to the area of ordinary linguistic usage. At no time did I wish to suggest that the philosophical problem has arisen from the misuse of ordinary language. To do this would be extremely silly, for the philosophical problem arises from the extension of the use of ordinary terms for a comparatively extraordinary purpose. To point out that full-blooded Libertarians or Determinists use such words as 'cause' and 'responsible' to give the kind of explanations of phenomena which ordinarily we never require, is both correct and too common. It misses the point that these words are being deliberately used for purposes other than ordinary discourse. There is a job that has to be done somehow. The only question is how to do it. And the job hasn't been created by philosophers. It has been created by scientists.

Granted the scientist is concerned with a different sort of explanation from the ordinary man, and accordingly that he will use the word 'cause', if he has to use it at all, in a rather different manner from the ordinary man. Granted also that the philosophers who formulated the paradox of Libertarianism were not using the term 'responsible' in exactly the way in which the ordinary man uses it when he says 'John is responsible for doing that'. Indeed, it is extremely likely that ordinarily when we use this term for what I have called 'narrative' purposes we also use
it at the same time for what Hart calls ascriptive purposes. But even if we grant all this there still remains the problem of how to use terms in relatively extraordinary ways so as not to confuse one of the relatively extraordinary uses with another. This is the sort of problem I have been tackling. Accordingly I would be happier to call my analysis 'logical' or 'conceptual'. The question of label is not entirely trivial when raised in the contemporary context. Labels can be used as slogans. Under the slogan of 'linguistic analysis' many banal facts have been pointed out in recent years. One of them has been that the use of 'freedom' in the expression 'the freedom of the will' is not a normal one. To give this fact philosophical significance is simply to kick the ball out of play. It only demonstrates the irrelevance of ordinary usage to certain philosophical problems, viz., to those philosophical problems which are provoked by the comparatively extraordinary jobs which our language may intermittently have to perform.