IX

FUTURE—AND PAST—CONTINGENCIES

My final disposition of the Ideal Chronicler was philosophically shoddy. One can hardly suppose one has dealt adequately with the problem of historical foreknowledge—the supposed knowledge of the history of events before the events have happened—by first inventing the possibility of someone having such knowledge, and then arguing that there is no such knower on the grounds that one has only imagined there being one. The question is not whether there is in fact a being possessing such knowledge, but whether there can be such a being, and this turns on the question whether such knowledge is possible. After all, to take a comparable case, there are forms of scepticism which no one has ever held, but this fact alone does not constitute a refutation of these scepticisms. Moreover, I cannot even claim to have invented the possibility of a being equipped with historical foreknowledge. For knowledge of the future is sometimes credited to God insofar as omniscience is ascribed to Him. Speculative philosophers of history, indeed, have at times regarded the whole of history as exhibiting some divine plan which they regard as their duty to discern, or which they credit themselves with having already discerned in part, perhaps through revelation. So I must offer some rather more positive arguments if I wish seriously to reject the possibility of historical foreknowledge. These I shall seek to give in the present chapter.

One conclusion warranted, I believe, by my discussion of narrative sentences, is that frequently and almost typically, the actions of men are not intentional under those descriptions given of them by means of narrative sentences. This does not, of course, entail that reference to human purposes are historically unimportant. The actions of the Palatine Elector are intelligibly explained with reference to certain ambitions which were certainly entertained by him, namely to gain, and then, having once lost it, to regain the crown of Bohemia. His various negotiations with France and with England, his attempts to raise money and to

secure alliances, may correctly be appreciated in the light of these ambitions, as constituting parts of what I have termed his *projects*. Yet his actions had, at every turn, consequences which he never intended and which, in view of our ignorance about the future, he *could* not have intended. Yet it is in view of these consequences, and in terms of their wider bearing upon the Thirty Years War, that his actions have acquired, in historical perspective, the significance they bear. We see them, briefly, in a way in which Frederick could not have, and certainly not at the time of their performance. He would, indeed, almost certainly have been horrified to learn the sorts of narrative sentences which were, in time, to cover his actions.

But this case is typical. It is a commonplace piece of poetic wisdom that we do not see ourselves as others do, that our image of ourselves is often signally different from the image of us held by others, that men constantly over- or under-estimate the quality of their accomplishments, their failures, and their dispositions. Such discrepancies are seldom decided in the individual's favour, for our criteria for assessing performances are by and large behaviouristic. These discrepancies are nowhere more marked than in history, where in the nature of the case we see a man's behaviour in the light of events future to his performances, and significant with respect to them. Historians have an advantage which the actor, and his own contemporaries, could not in principle have had. Historians have the unique privilege of seeing actions in temporal perspective. It is, accordingly, as I have repeatedly urged, a misguided lament to complain that we, being at a temporal remove from the actions which concern us as historians, cannot know them in the way in which a witness might have. For the whole point of history is *not* to know about actions as witnesses might, but as historians do, in connection with later events and as parts of temporal wholes. To wish away this singular advantage[1] would be silly, and historically disastrous, as well as unfulfillable. It would, in analogy to Plato's image, be a wish to re-enter the cave where the future is still opaque. Men would give a great deal to be able to see their actions through the eyes of historians to come.

But since actions are covered by historians with descriptions which the actor himself could not have given of them at the time, and since the actions cannot be construed as intentional under *those* descriptions, it is

somewhat difficult to know what to make of the free-will controversy in its historical applications. There is a natural temptation to suppose that 'is free' and 'is determined' are contradictory predictions, so that if one of them is false of a given action, the other must be true. But this thesis fits awkwardly with the fact that an action may be covered by any number of true descriptions, some of which are true narrative sentences, but only under some of these descriptions is the action intentional. It is, I think by common consent, a necessary condition for an action to be free that it be intentional. The analysis of intentions is complex and open to question, but that much, at least, may be granted. It may be granted, moreover, that some actions are intentional. Even a determinist may allow this, his claim being only that an action, even if intentional, is not for that reason alone free.[1] But let us suppose, however it is to be understood, that there are free acts, and that every such act is intentional. There remains the fact however, that these actions are only intentional under *some* descriptions, and that there are others under which they plainly are not intentional. *If* '*a* is intentional' is a necessary condition for '*a* is free', it follows that *a* is *not* free under those descriptions. But are we to say that it is therefore determined under these descriptions? It does not automatically follow save on the assumption that if an act is not free, it is determined. But the free-willist must now allow that the same action, admittedly free under some descriptions, is not free under others; and that even if 'not-free' is automatically to be understood as meaning 'determined', then the identical action is both free and determined. From which it would follow that these are sub-contrary predications which can accordingly both be true of the same action.

On the other hand, are we really prepared to accept the rule that 'not free' is synonymous with 'determined'? Commonly, one would think, a determinist has some independent analysis in mind of the predicate he wants to assert of every action. At the very least one would take him to mean something like this: every action is the effect of causes the presence of which is entailed by the fact that the action occurred, and that, given these causes, the action must occur. This minimal characterization, however, encounters some vexing problems when we think of actions as covered by narrative sentences.

Consider my earlier example in which Aristarchus is described as

having anticipated Copernicus—a sentence one might find in any modern history of astronomy. Certainly one would not wish to say that anticipating Copernicus is something which Aristarchus *intended*. Hence *this* was not something which, by the free-willist's criterion, could be counted a free act. But could we say that *under this description* Aristarchus was *caused* to anticipate Copernicus; that all the causes for the action were present, and given that they were, the action *must* take place? We might say so. But would we not be committed then to say, at the same time, that Copernicus' later actions must take place as well? For it is certain that Aristarchus could not have truly anticipated Copernicus if Copernicus was not later to do the things which Aristarchus did before. But then, if Aristarchus' action is determined, that is, must happen given the causes that now hold, then (logically) Copernicus' action must also happen, it must be true *at that time* that Copernicus' action must happen. But is this to mean that all the causes of the later event were present at the same time as were the causes of the earlier event? This would be a bizarre consequence, entailing, amongst other things, that an historian who sought to find the causes of Copernicus' behaviour in the fourteenth century would be misdirected: to explain it, he would have to examine events which took place in the fourth century B.C.

The alternatives are not especially tempting. Suppose we wished to retain our faith that the causes of an action, some of them, at least, are to be discovered in the immediately antecedent temporal neighbourhood of the action itself, and that historians of science are not misguided when they seek to understand Copernicus' behaviour in the light of rather local causes. But if an event *E*-2 is (at least in part) determined by causes which occur *after* an earlier event *E*-1, to which it is narratively related, then not all the causes of *E*-1 *under the required narrative description* were present when *E*-1 occurred. For in particular the causes of the later event which is logically required by the narrative sentence are not present. This, I should think, would warp rather badly the predictive claims sometimes made by determinists. For supposing we have two temporally separated events, *E*-1 and *E*-2, related by a narrative sentence, and that some of the causes of *E*-2 occur after *E*-1. Then quite clearly, even an ideally complete inventory of the world up to the time of *E*-1 would not provide adequate information for infallibly predicting *E*-2, nor even *E*-1 under the

narrative sentence. Hence there would be true descriptions of events under which they could not be predicted, even assuming perfect knowledge of that event's temporally antecedent causes. One *may* say that *E*-1 was determined by causes which occurred after it occurred, but this reverses the causal relationship which has counter-intuitive results for history. It would entail that some of the causes of an event are to be sought for in periods after the event has occurred, for example, that a full explanation of Aristarchus' actions would require research into causal circumstances holding roughly at the time of Copernicus.

I think there are two alternatives available to the determinist, assuming he will accept the minimal characterization I have given of his position. The first is to regard narrative sentences as bastards, and contend that determinism can account for all non-narrative descriptions of events. This is an heroic move, but I am not so sure it is a tolerable one, for it is by means of narrative sentences, to begin with, that we express our temporal perceptions of the world. Should the determinists retort that there is something wrong to begin with in perceiving the world in a temporal way, we may simply point out that descriptions of events as causes of other events are, as I have shown, special cases of narrative sentences, and already belong to our temporal perception of the world. If the language of causation is illegitimate, what really is the determinist arguing about? The second alternative really comes to much the same thing. It consists simply in saying that there are descriptions of events under which those events are not determined. But the determinist is doubtless no more ready to identify 'is not determined' with 'is free' than the free-willist is to identify 'not-free' with 'is determined'. It is for these reasons that it is difficult to know what to make of the free-will controversy in its historical applications. As covered by narrative sentences, it is hard to say that actions are either determined or that they are free. Indeed, in the typical case, they seem to be neither.

But now there is a form of determinism which may dispense with the annoying questions of causality, known, sometimes, as 'logical determinism'. It rests its case upon certain allegedly timeless properties of sentences, namely their truth values. Assuming some version or other of the Correspondence Theory of Truth, the logical determinist makes the

claim that (for example) should I read the *Times* at a certain time *t*-1, then the sentence 'Danto reads the *Times* at *t*-1' is true, and false if I do not. But then, if it is true at any time, it is true at every time, that is to say, in particular it has always been true, just as it always will be true, that 'Danto reads the *Times* at *t*-1'. It little matters whether anyone has ever uttered this sentence, or whether it has even been written down, or whether anyone in fact knows it. For from the fact that it is true, and from the fact that if a sentence is true, it cannot be false, it follows that the sentence cannot be false. But if it cannot be false, then it cannot have been the case that I did *not* read the *Times* at *t*-1. Briefly, whatever happens must happen, and whatever fails to happen could not have happened. Here there is no mention of causes. Logical determinism has been criticized, for instance by Ryle, as a case where

We slide . . . into thinking of anterior truths as causes of the happenings about which they are true, where the mere matter of their relative dates saves us from thinking of happenings as the effects of those truths which are posterior to them.[1]

But the logical determinist does not, I think, make this mistake. First because causes are events in time, and propositions are not; a sentence being true is not something which happens, but rather, if a sentence is true, what it is true of must happen. The logical determinist pretends to no knowledge of causes. Doubtless, he will argue, events have causes, something caused me to read the *Times* at *t*-1. But then again it is timelessly true that this would cause me to read the *Times* at *t*-1, and hence timelessly true that I should read the *Times* at *t*-1, and hence impossible that I should not.[2] In so far as Ryle himself speaks of anterior truths, he is entangled in the position he wants to criticize. To get the flavour of the determinist's argument, one must look to the writings of fatalists. The hero of Diderot's novel *Jacques le Fataliste* expresses the point in one of his interminable dialogues with his master. After chasing to bed a group of ruffians, he returns to the conversation:

M: Jacques, quel diable d'homme est tu! Tu crois donc . .
J: Je ne crois ni ne decrois.
M: S'ils avaient refusé de se coucher?
J: Cela était impossible.
M: Pourquoi?
J: Parce qu'ils ne l'ont pas fait.[3]

Let us try to reconstruct the sort of argument presupposed by this curious position. To begin with, there is the supposition that every proposition is either true or false. But since a proposition cannot be both true and false, it follows that if is true, it cannot be false. This, together with rules of synonomy permit us to argue as follows:

(1) *p* is necessarily either true or false.
(2) If *p* is true, then it is impossible that *p* is false.
(3) If it is impossible that *p* is false, then it is impossible that *p* is not true.
(4) If it is impossible that *p* is not true, it is necessary that *p* is true.

∴ (5) If *p* is true, then it is necessary that *p* is true.

By similar argumentation, we get

∴ (6) If *p* is false, then it is necessary that *p* is false.

And from (1), (5), and (6) we get

∴ (7) It is necessary that *p* is true or it is necessary that *p* is false.

Now truth is here supposed to be a relationship of a semantical sort between a sentence and an event, and though events occur in time, the relationship is apparently time-independent. Moreover, if a sentence is true, this relation must hold. The determinist would doubtless find it absurd to say that a sentence is necessarily true, is about some event, but the event might not happen. So if the sentence is necessarily true, the event must necessarily happen. So, finally, if the event happens, it necessarily happens, and it is impossible that it *not* happen. Such, in general, is the logico-philosophical baggage unwittingly carried by Diderot's fatalistic hero.

Narrative sentences hold no terrors, and raise no difficulties, for this kind of determinism. Indeed, its claim is that future events are determined, once and for all, to happen as they will. Though logical determinism does not require, as I pointed out, that the true sentences ever should be written down or known, Jacques the Fatalist liked to believe they were. 'Tout ce qui nous arrive de bien et de mal ici-bas,' he cheerfully informs his Master, 'est écrit là-haut.'[1] This sounds very like the I.C., and very like historical foreknowledge, where the history of events before the events have happened is known by some omniprescient

being. 'Savez-vous, monsieur, quelque moyen d'effacer cette écriture?' Jacques asks. I should like to take seriously the implicit challenge in this question, and examine the logic of historical foreknowledge now in connection with logical determinism.

One version of logical determinism was attacked by Aristotle in an exceedingly complex passage in *De Interpretatione*. He felt that the determinist's argument, if sound, ruled out the possibility of action and the efficacy of human deliberation. There would, he seems to have felt, be no point in deliberation if everything necessarily happens the way it does, and he felt that there is a point in deliberating, and in following the action deemed best in the light of one's information.[1] Accordingly, he undertook to destroy the determinist's argument. And the way in which he is most commonly interpreted to have tried to destroy it is this: he insisted that (1) is false. His positive claim was that it is not necessarily the case that every proposition is either true or false. This, if so, would certainly damage the determinist's argument, for though it might still be valid, formally, there would be nothing compelling in the conclusion if one of the premisses should prove to be false. (1) is false, Aristotle believed, because there are exceptions to it. Of course, Aristotle might either have destroyed his opponent's argument, or have deduced his own position, by attacking another premiss, namely (2). For (2) is equivalent to its own contrapositive[2]

(2*a*) If it possible that *p* is false, then *p* is not true.

And (2*a*) is plainly ambiguous. It can be interpreted in (at least) two ways:

(2*b*) If it is possible that *p* is false, then *p* is false.
(2*c*) If it is possible that *p* is false, then *p* is not definitely true.

But (2*b*) is false so that its equivalent contrapositive (2*a*) is false, and since (2) is required by the determinist's argument, the argument is destroyed by this interpretation. But the interpretation (2*c*) is very nearly Aristotle's own position. He might reason if it is only possible that *p* is false, then it is also possible that it is true. But, of course, not *definitely* true. Nor, again, *definitely* false. So if there are propositions of which we might say that

it is possible they are true and possible they are false, there are propositions which are not definitely true and not definitely false. This contradicts (1).

This, however, would almost certainly be challenged by the determinist, mainly by asking what interpretation is to be given to 'possible'. If Aristotle understands 'It is possible that *p* is true and it is possible that *p* is false' to mean only 'We are not sure whether *p* is true or whether it is false', then Aristotle is in turn saddled with a falsehood, that is, 'If we are not sure whether *p* is true or false, then *p* is not definitely either true or false.' This is, the determinist would claim, either a falsehood or a redundancy, the consequent only repeating, in a different way, what is contained in the antecedent. But if, on the other hand, Aristotle does not have an epistemological interpretation in mind—and the determinist has no quarrel with this at any rate—but means that *p* is really, objectively, neither true or false, then the determinist just rejects this interpretation. He will insist that for every value of *p*, '*p* is possible' is false—on this interpretation. Hence (appealing to material implication) (2*b*) is true. So there is no difficulty in this rendering of (2*a*). On the other hand, the rendering of (2*a*) which is favourable to Aristotle's claim in fact presupposes the point Aristotle would want to argue to. Accordingly, the issue must be joined as before, with the determinist affirming, and Aristotle denying (1). And the only point in this logical digression is to make it clear that Aristotle, in so far as he is understood to be maintaining 'Some propositions are neither definitely true nor definitely false' is doing so in the deep and not in the mere epistemological sense—'in the nature of things, and not merely in relation to our knowledge or ignorance of things' as Richard Taylor phrases it.[1]

'In the nature of things . . .'? The determinist finds this puzzling. Does Aristotle mean to say that there are, in the world, situations which are neither one way nor the other? Situations *s* in which '*s* is *F*' and '*s* is not *F*' are neither of them true and neither of them false? Aristotle does *not* say this. He does not say that there *are* or that there ever *were* such situations. He writes:

> In the case of that which is or which has taken place, propositions, whether positive or negative, must be true or false.[2]

This statement already shows that Aristotle has in mind no claim which

is merely 'in relation to our knowledge or ignorance', for there are innumerably many propositions concerning past or present situations of which we cannot say whether they are true of false. Yet Aristotle says, plainly, that they *must* be one or the other. By contrast with propositions about what is or has been, Aristotle writes:

> When the subject is individual and that which is predicated refers to the future, the case is altered (i.e. not the same—οὐχ ὁμοίως).[1]

And it is statements about the future, or those statements about the future which are about individuals, which constitute, for Aristotle, the sole exceptions to (1). But Aristotle is not saying that there will be situations, in time to come, which will be neither the one way or the other; that the present, and then the past, will someday contain ambiguous situations. For then *every* past and present situation would be ambiguous. But he has said that whatever is present or past is unambiguous in the required sense, namely, that sentences about these are definitely either true or false.

This is a puzzling teaching, for suppose we have a sentence '*s* will be *F*' which satisfies Aristotle's condition at 18a 35–36. Can we not say '"*s* will be *F*" will be true or false?' Aristotle might plead an ambiguity here. He might say that it depends upon whether a genuinely temporal use is being made of 'will'. If not, then the sentence says no more than what he himself says at 18a 27–28, and is true by definition. But if it makes a genuinely temporal use of 'will' then it is neither true nor false. Moreover, if it does make a genuinely temporal use of 'will' it is not equivalent to '"*s* will be *F*" is true or false'. For the former is about the future, and neither true nor false, while the latter—making a temporal use of 'is'—is about the present, and false. Aristotle could have said, alternatively, that the former sentence does entail the latter, that indeed, the latter has just the same meaning as the former, that both make genuine references to the future and *neither* of them is true or false. Now Aristotle might have made much the same point, I think, by simply regarding all propositions about the future as false. We are used, these days, to philosophical conflicts in which one group will hold, of a given class of sentences, that the members of this class are neither true nor false, and the other group will hold that these same members are false. The classical case of this is singular referring statements, like for instance, 'The present King

of France is bald' when there is nothing for these to refer to. Aristotle may have found this other possibility undesirable, perhaps because he regarded the disjunction of a sentence together with its denial as true.[1] 'There will be a sea battle tomorrow or there won't be one' he held to be true, and indeed logically true. He might have felt that if both disjuncts are false, this would fit such a claim ill. But it is not easy to see that the view that both disjuncts are neither of them true or false fits any better. Meanwhile, had he regarded both a given future-sentence *and* its denial as equally false, and still wanted to save the logical truth of *p* or not-*p*, he might have undertaken a refined analysis of future-sentences calculated to exhibit that, as these occur in ordinary discourse, they can both be false—an analysis of the sort Russell gave in his celebrated Theory of Descriptions showing that 'The so-and-so is such-and-such' and its apparent denial 'The so-and-so is *not* such-and-such' are not really contradictories, one of which *must* be true. But I myself have no such analysis to offer.

It is tempting to ascribe to Aristotle the view that the existence of a designatum for any given use of a singular referring expression ('When the subject is individual...') is a necessary condition (a 'presupposition') for any sentence employing such an expression to admit of a definite truth value. Then '*s* will be *F*' and '*s* will not be *F*' will neither of them have a definite truth value since *s* does not exist, *is* not. I do not believe, however, that he would accept this. For then '*s* was *F*' and '*s* was not *F*' would, by the same criterion, be neither of them true or false, and this conflicts with 18a 27–28. Nor could we amplify the necessary condition as follows: the present or *past* existence of a designatum for a singular referring expression. For suppose we speak of the beauty of Napoleon's fifty-seventh wife. There was no such woman. Yet a statement about her would be a statement about the past and must be definitely true or false, if Aristotle is right. A sinologist who laboured to establish that there was never such a person as Lao Tze would hardly take it lightly were we to tell him his sentence is not true—even if we consoled him by saying that it is not false either. So the amplification does not help. But the necessary condition, as I stated it at first, rules out any statement about the past as having a definite truth value, while to insist, in the face of this, that sentences about the past *do* have definite truth values raises the question: why not

then sentences about the future? So I do not think Aristotle could accept either the necessary condition or its amplification as a presupposition for singular propositions being true or false.

What I want to suggest is that Aristotle is taking time seriously, and if we appreciate his teaching in this light, it not merely stops being puzzling, but turns out to be just our ordinary way of looking at things. I shall try to reconstruct him along these lines, and will show that he is committed to something like the necessary conditions just outlined; a fact which explains our temptation to ascribe to him that view.

Let us speak of genuinely temporal uses of the words 'will be', 'is' and 'was'. We shall need six sentences now in order to achieve our analysis:

(1) *s* is *F*,
(2) *s* is not *F*,
(3) *s* was *F*,
(4) *s* was not *F*,
(5) *s* will be *F*,
(6) *s* will not be *F*.

Let us now specify when it is appropriate to use (5) and (6). I will say it is appropriate to use these when (1)–(4) are all of them false. And these are false in the special case where *s* has not taken place and is not now taking place. I shall say that when *s* has not taken place and is not taking place, (1)–(4) are all *time-false*. I shall say that it is appropriate to use (5) and (6) when (1)–(4) are all time-false. We may even say that when (1)–(4) are all time-false, (5) and (6) are *time-true*. Meanwhile, should any of (1)–(4) be time-true—on the grounds that *s* has taken place or is taking place, then (5) and (6) are time-false. I shall also say that if a sentence is time-false, it *is* false. But it does not follow that if it is time-true, it *is* true. In particular, say, (3) and (4) may be both of them time-true,[1] but one of them must be false.[2] Aristotle moreover may be understood as saying that when (5) and (6) are time-true, they are in no further sense true and in no further sense false. Briefly, (5) and (6) are both either time-false, and hence false, or they are both time-true, and neither true nor false.

But let us take the case where they are both time-true. There are three cases to consider:

(*A*) *s* never takes place,
(*B*) *s* takes place and is *F*,
(*C*) *s* takes place and is not *F*.

Assuming (*A*), (5) and (6) are always time-true, and (1)–(4) are always

time-false and hence *false*. But assuming (*B*) or (*C*) is the case (and they cannot both be the case), we have the following situation. At a given time (1) and (2) are time-true, and one of them is true and the other is false. At that time, (3)–(6) are time-false, and (5) and (6) are forever afterwards time-false and false. *After* that time, (3) and (4) are both time-true, and one of them is true and the other false. At *this* time, (1), (2), (5), (6) are all time-false, and hence false, and go on being false for ever. But, again, when (1)–(2) and (5)–(6) are all time-false, (3) and (4) go on being time-true for ever. Moreover, whichever of them is true goes on being true for ever, and whichever of them is false goes on being false for ever.

According to this analysis, there are no anterior truths except that, when (1)–(4) are time-false, (5) and (6) are, by definition, time-true, but not *otherwise* true. As I have pointed out, future-singulars are really never true, but they may be false, as indeed they always are when they are time-false. One *might* speak of them as becoming true, but this, strictly speaking, means only that at some time (the time at which they 'become true') (1) and (2) are time-true and one of them *is* true. But whether (1) and (2) ever become time-true (and one of them true) depends very much upon the way the world goes, and this in part depends, though perhaps not to the same extent as Aristotle supposed, upon human deliberations. We may speak of *making* certain propositions true or false, and accordingly say that the truth or falsity of propositions depends upon how things are, rather than, as the logical determinist would have it, the other way about.

This *is*, then, very much our common way of viewing truth, time, and the world. But Aristotle was always one to take seriously the common view of things. The trouble with the determinist's position is that, unlike Aristotle, he does not take time seriously. The logical determinist has an answer to Aristotle, and I shall take this up in a moment. But before doing so, I want to comment upon some of the implications of Aristotle's position, as I have attempted to reconstruct it for the problems which motivate this chapter.

One problem, which Aristotle's teaching raises, is that of how sentences in mixed tenses are to be evaluated. I am thinking, of course, of narrative sentences, sentences about the past, to be sure, but sentences whose truth

or falsity is contingent upon the truth or falsity of some sentence about the future. If sentences about the future are neither true nor false—though nonetheless time-true—are we to say that these sentences, logically dependent upon them, are neither true nor false as well? Or are we to say that they are false because time-false—even though the event referred to by them has in fact already happened, so that the sentences in question ought, by rights, to be considered time-true and either the statement or its denial just *be* true?

The question has some importance for us. For if there genuinely are future contingencies, then, it seems to me, there are past contingencies as well: incompatible descriptions, so to speak, hovering over a given past event, unable to establish definite semantical relations with it until something happens in the future. Talleyrand begat a child who was, it turned out, to paint some celebrated pictures, including the *Mort de Sardanapale*. We may *now* say:

(1) Talleyrand begat the man who painted the *Mort de Sardanapale*.

Indeed, some such sentence may have been whispered about the galleries when that painting first was shown. But until the painting was made, are we to say that (1) was true or false?

Talleyrand had multiple offspring, but only his bastard son, Delacroix, painted our picture. With this information, let us parse (1) as:

(2) Talleyrand begat Delacroix and Delacroix painted the *Mort de Sardanapale*.

This is a little story, as we would expect, (1) being a narrative sentence. But formally, it is a conjunctive proposition, and, if true, entails:

(3) Delacroix painted the *Mort de Sardanapale*,

which is true if (2) is true. But suppose that (2) is asserted after the conception of the painter but before the execution of the painting. The only way of rendering (2) so as to make it time-true is:

(4) Talleyrand begat Delacroix and Delacroix will paint the *Mort de Sardanapale*.

The question is whether (4) is true when it is time-true. It is hard to say that it is true, for if it were then:

(5) Delacroix will paint the *Mort de Sardanapale*.

But (5) is exactly the sort of sentence regarded by Aristotle as neither true

nor false. So we must regard (4) as either false, or as neither true nor false. I do not think it makes much difference *which* we say. Either way, however, it is clear that (4) is not equivalent to (2). Since both (2) and (4) are renderings of (1) at different times, it follows that (1) is true at one time, and either false, or neither true nor false at another time.

Personally, it seems to me that if we are to allow simple propositions to have no definite truth value, there is no good reason to disallow indefinite truth values to compound propositions as well. Indeed, since negative propositions are regarded as compound, the negate of (5), since it is a sentence about the future, will, and indeed must, in Aristotle's view, be neither true nor false if (5) is neither true nor false. At any rate, it will turn out that any compound proposition which is neither true nor false must contain, as one of its propositional parts, a simple sentence which is neither true nor false, and hence, in Aristotle's analysis, a time-true future-referring singular proposition. I shall say that when any such compound proposition *also* contains a time-true, past-referring, singular proposition, the entire compound proposition, such as (4), expresses a *past contingency*. So not every time-true sentence about the past is true or false. If the future is open, the past cannot be utterly closed.

Now we may turn to the question of historical foreknowledge. The medievals were particularly concerned with this question, largely because of two tenets of Christian faith which they found it difficult to reconcile. The first was that God is omniscient, and the second was that man is free.[1] The assumption is that God knows everything. Hence he knows everything about the future. And, since *p* is entailed by '*a* knows *p*' it follows that, if God knows the future, whatever he knows is true, and if true, it cannot be false. Hence, if I read the *Times* this morning, it is true that 'Danto read the *Times* this morning' and that was known by God all along. But what choice then did I have? I could not but have read the *Times* this morning. To say I could have done differently is to deny omniscience to God or to reject the analysis of '*a* knows that *p*' in accordance with which that sentence entails *p*. Aristotle's teaching can salve the sense of dilemma raised by the problem just sketched. For if '*a* knows that *p*' does in fact entail *p* (and this is a crucial logical fact concerning knowledge), then the former sentence expresses a sufficient condition for the latter one. However, by parity of analysis, the latter

expresses a necessary condition for the former. In particular, if *p* is not true, then '*a* knows that *p*' cannot be true. But sentences regarding the future, in Aristotle's analysis, are not true: they are not true and they are not false. Hence, if *p* is a time-true future-referring singular proposition, God cannot know that *p*. Neither God nor anyone can know the future. Much the same result could be obtained if we regarded these same sentences all as false. For one cannot know what is not the case. God may still be then omniscient, if one wishes to maintain that thesis. For to say that some being is omniscient, as Richard Taylor has pointed out, is to say that it knows everything that *can* be known.[1] But then the future cannot be known. We can have rational beliefs, up to a point, about the future, but not knowledge. In this regard, God has no special advantage over the rest of us. Aristotle's teaching then rules out historical foreknowledge—though not necessarily historical fore-belief.

But if the future cannot be known, the past cannot be known completely. In so far as we are logically prohibited from having knowledge of the future, we are, again logically, prohibited from knowing whatever is expressed in sentences which express *past contingencies*. We can only know narrative sentences when these are time-true and true, and they are not this when they contain a singular time-true future-referring proposition. But since it is by means of narrative sentences that we ascribe historical significance to events, God, even if omniscient, cannot *know* what the significance of events is before they in fact *have* this significance. So in this regard again God has no special advantage over the rest of us. But in what sense then can history be said to conform to a divine plan, originally laid down? If Aristotle is right, as I have construed him, we can, I think, now furnish an answer to Diderot's fatalist. It may very well be that everything that happens is written down *la-haut*. This would be an interesting fact about the universe, but there would be no need to erase it, for not even God could know if it was right. Indeed, he could know rather quickly that it was false unless it changed tense with the happenings in the world. For it would very quickly become time-false, and hence otherwise false, if it were written in language which takes time seriously. But suppose, one might suggest, it were written in an untensed idiom? With this suggestion, we may now come to the final encounter between Aristotle and the logical determinist.

The logical determinist may feel himself to be justifiably puzzled by Aristotle's teaching that propositions referring to the future are neither true nor false, and even more so by my amplification of this teaching in terms of time-truth and time-falsehood. His claim is that a proposition, if true, is timelessly true, and that in general propositions are true (or false) independently of the time at which they may be asserted. But this is plainly false. There are indeed propositions for which this is the case, but these are propositions which do not require temporal factors amongst their truth conditions. But Aristotle is pointedly not speaking of such propositions: he speaks of those with respect to which time must be taken seriously. If I say that Smith left his house, and Smith *has not* left his house, then I have spoken falsely—even though *an instant afterwards* Smith leaves his house. We say that Smith's wife, answering the phone, and replying to an impatient query that Smith has left the house, knowing that Smith has not, but means to and is on the verge of doing so, has told a 'white' lie. But a lie, whatever its colour, is false. *Tensed* sentences do very much depend upon the time of their utterance in order to be true or false: the time of their utterance indeed can make the difference between truth and falsehood.

Now there is a standard counter to this claim. It consists in saying that tensed-sentences are incomplete as they stand, are really not sentences at all but sentence-functions with an implicit temporal variable. By making the variable explicit as in: 'Smith leaves the house at t-x' we get something which is not merely not true, but not false either, any more, say, than '$x+3=9$' is true or false without giving a value to x. But now if we but put a constant for the variable as in: 'Smith leaves the house at t-1', we get a sentence which is either true or false, and, moreover, true or false independently of the time of assertion. In so far as a future-referring sentence does not specify the *time* of the event it refers to, it admittedly is neither true nor false: it just is not a sentence. And so for the grammatical alternatives in different tenses. Aristotle was unduly restrictive. But a sentence, even if grammatically in the future tense, when the time involved is made explicit, is then timelessly true or false. It is on sentences such as these, the logical determinist goes on to say, that he rests *his* claim.

But this counter-move has an obvious logical antidote. It is simply that the untensed sentence, 'Smith (tenselessly) leaves the house at t-1' does not

tell us, as the tensed sentence 'Smith left the house' does, that the action has already taken place, is in the past. To be sure, in a given context, in which speaker and hearer know the time referred to in the sentence, as well as the time at which the sentence is asserted, the hearer may, by doing some calculation, conclude that the action took place in the past. But this remains an extra piece of information which the need for specifying contexts already shows has not been quite incorporated into the sentence itself. In so far as this is so, the determinist cannot legitimately claim to have eliminated tensed idiom: he had only, so to speak, relocated it in the context; this is what we might expect in view of the conclusions of Chapter IV. We cannot give timeless equivalents for sentences which include temporal circumstances amongst their truth-conditions. So this move fails.

Aristotle may press the point further, for does the determinist's argument not require some version of the Correspondence Theory of Truth? If it does, then what analysis is he to give of the claim that a sentence in the future tense *is* true? The Correspondence Theory requires that there is something, say an event, which corresponds, however this is understood, with the sentence in question. But *is* there anything which corresponds with a future tensed sentence? If there *is*, in what sense are we properly using the future tense? If the determinist answers that there is not, but *will be* a factual correspondent to the sentence, is this not employing tensed language? To be sure, the determinist might argue that a future-tensed sentence may be understood to mean that a given event is timelessly later than a given reference event; but then we revert to the first argument, for the Thirty Years War is timelessly later than the Defeat of the Spanish Armada. The question, however, would always remain how we should enable someone to know that the latter event is future without telling him whether the former event has occurred or not. We can only say that the latter event is *future to* the former event, and that an event may be *future to* another event without being future, for in fact the Thirty Years War, though future to the defeat of the Spanish Armada, is *past*.

So whichever way we look at the matter, the determinist either fails altogether to find tenseless equivalents for tensed propositions, or else, in thinking he has succeeded in doing so, implicitly smuggles in the

precise sort of temporal information he meant to eliminate. Moreover, the very statement of his own position requires the sort of temporal information of which he boasted that his position is independent. He cannot get clear of time. Even if he should point out to Aristotle that his (or my) specification of the truth-conditions for tensed sentences presupposes temporal information—a past-tensed sentence is time-true if the event referred to *has* happened—this need not worry Aristotle. It strengthens, if anything, what I take to be his implicit claim, namely that we cannot speak of time without using temporal notions to begin with. There are perhaps problems enough about time, but these must be faced jointly by Aristotle and his opponent in *De Interpretatione*. One *may* find it puzzling that there should be past, present, and future; that there should be asymmetries in time reflected as asymmetries in the truth-conditions for sentences which take time seriously, but it would always be a good idea, when such puzzlement is felt, to specify what it would be like for time to have what is puzzling in it be removed. In the end it may turn out that a statement of our puzzle about time is really simply a description of the way time is. The logical determinist's timeless notion of truth turns upon a timeless notion of *time*. So what can he mean in saying that the *future* is determined?

One may go on being a determinist in spite of my previous statements. One may quarrel with Aristotle that deliberation makes a difference, but the issue must be joined elsewhere, I think. Aristotle, I submit, is right in the controversy just discussed, and his being right entails the impossibility of historical *foreknowledge*; but this does not mean that we cannot predict events within limits. To this matter I shall turn in the next two chapters, for it is a question which can best be discussed in the context of the problems of historical explanation.

X

HISTORICAL EXPLANATION: THE PROBLEM OF GENERAL LAWS

Towards the end of ch. VII, in considering the possibility that one way of distinguishing between 'plain' and 'significant' narratives might be that the latter, but not the former, offer explanations of what happened, I contended that a narrative already is, in the nature of the case, a *form* of explanation. In this chapter and the next I propose to defend this view.

To begin with, it seems a plain fact that in a good many cases, and unless he is committed to some general historical theory such as Marxism, an historian would spontaneously offer us a narrative when we ask him to explain for us a certain occurrence; and that he himself, when he wishes to find an explanation of an occurrence, will undertake to ascertain what we sometimes call the 'story'—meaning, roughly, the events which lead up to the event in question. But this is not uniquely the case with historians. If someone, for instance, has an automobile accident, and is asked afterwards to explain why (or to explain how) it happened, the answer naturally expected would be a narrative. Thus there is some justified inclination to say that historical explanations are simply narratives, and insist that this is all that 'explanation' is taken to mean in historical contexts. Since a narrative seems not merely to explain an occurrence, but to tell what happened over a stretch of time, there is again an inclination to say that telling what happened and explaining what happened are jobs which are done simultaneously, that in so far as a narrative explains, it also tells precisely what happened, and that in so far as it tells precisely what happened, it also, and at the same time, explains. In this way narrative description and historical explanation are of a piece.

Yet it may be legitimately objected that there is no contradiction in the complaint that one knows what happened, though one cannot *explain* what happened. Generally, this will mean only that one knows that a terminal event in a sequence of events has taken place, but that one is in ignorance of the precise sequence of events it terminates. A police officer, for example, were one to reply to his question 'What happened?' by

saying that 'An accident took place', might correctly say that he knows this, but that this is not the 'What happened' he is interested in. He wants to know the story of the accident; he wants, at once, to know what happened and why it happened. The following account would normally be taken to satisfy both demands (so far as it is correct here to speak of two demands, for my claim is that these are only different ways of making the *same* demand):

The car was driving East behind a truck; the truck veered left; the driver of the car thought the truck was making a left turn, and proceeded to pass on the right; but the truck then sharply veered to the right, for it had gone left to make a difficult right turn into an intersection which the driver of car had not seen; and so there was a collision.

Were the officer to persist, after this, in saying that he knows what happened, but still wants an explanation, we should, I think, be puzzled. We could have given a more detailed account, but hardly a clearer one; and it is difficult to think of any further detail which would make it any clearer why the accident took place. What more could he want? To be sure, we abstracted from the total set of happenings which occupied a stretch of time terminating with the collision a very select set, but this was because our criteria of relevance were operative, and certain events, though part of that stretch of time, are not to be counted part of the *story*, nor (to put it differently) part of the explanation. Perhaps at the moment the truck veered left the radio in the car was playing the Appassionata Sonata. This is not mentioned for it lacks significance. It might, of course, have had significance. The driver, a musician, was so intent upon a competitor's performance of a piece in his own repertoire that his attention was distracted from the conditions of the road. But this was not the case, and is at any rate ruled out by the claim that the driver thought: the truck is turning left. To be sure, this may have been a lie, and he may have been absorbed in the music, but then, in lying, he would not merely have failed to give the correct explanation, he would also have failed to say what happened. There is, therefore, some *prima facie* justification for saying that to tell what happened, by means of a narrative description, and to explain why something happened, is to do one and the same thing, and that a correct explanation of E is simply a true story with E as a final episode.

It may be argued, however, on the basis of considerations advanced in our discussion of narrative sentences, that there may be any number of true stories with E as a final episode, and that not all of these true stories would necessarily be counted, in a given context, as an explanation of E. Again, it might be argued, that there might be explanations of E which do not naturally fall into the form of a story. Indeed, the position has seriously been defended that a correct explanation has quite a different form, the form, namely, of a deductive argument, with a sentence describing E as its conclusion. So the sociological fact that narratives are often, and even typically, advanced as explanations, and the psychological fact that often, and even typically, we want, and are only satisfied with, a true story when we require an explanation, cannot be accepted as fully supporting, without further analysis, the claim I seek to defend. Before defending it, however, I should like to examine some rival analyses of the concept of historical explanation; for the fact is that few problems in the philosophy of history have received the sort of concentrated philosophical scrutiny that this one has, and by and large the discussion has been concerned with the adequacy of an analysis of historical explanation radically different from the one I am committed to defend. Accordingly, I shall commence with an analysis of that controversy which I hope to be able to resolve. Then I shall return to the analysis of stories.

The mooted candidate for an acceptable analysis of historical explanation, and for explanation in general, has been advanced, in its classical form, by Professor C. G. Hempel.[1] The main controversial element in his analysis centres about his insistence that, amongst other necessary conditions for an explanation e being an *adequate* explanation is this: e must include at least one general law. We may map the terrain of philosophical conflict which this thesis of Hempel's has given rise to by taking it in conjunction with two purported facts having to do with historical practice. The problem of historical explanation, as it is currently debated, emerges as a result of logical tensions amongst the following three propositions:

(1) Historians sometimes explain events.
(2) Every explanation must include at least one general law.
(3) The explanations historians give do not include general laws.

The difficulty is that while most of us would be prepared, with perhaps

some qualification, to assent to all three of these, we are logically prevented from assenting to more than *two*, at least as they have been stated here. For to no matter which pair of these we choose to assent, these will together entail the falsity of the remaining one. Specifically, (1) and (2) entail not-(3); (1) and (3) entail not-(2); and (2) and (3) entail not-(1). Hence, there are three possible positions to be taken, though we can in fact reduce this number by supposing it to be common ground that (3) is true. Moreover, (3) can be established as true, or true for the most part, by examining instances of purported explanations, as furnished by historians. It will then be seen that these almost never include general laws (it will be seen, in fact, these are almost always narratives). So the question then is which of (1) or (2) are we prepared to assert in conjunction with (3), given that we cannot, as they stand, assert *both*. Which of these choices we make will depend, in some measure, on our general philosophical commitments, and whether we take, as paradigmatic, the actual claims and practices of historians, or the claims and practices of logicians. Thus, to employ the mythical types often used as characters in the dramatic confrontations by means of which these questions are sometimes worked out in philosophical writings, the Logician will assert (2) and deny (1), and the Plain Man (in this case the Historian) will assert (1) and deny (2).[1] Here the division might be ultimate in the way in which philosophical differences so frequently appear, with arguments marshalled against counter-arguments in elegant batteries facing one another across a dialectical chasm, were it not that in some ways there might seem, to a moderate person, some truth in *both* positions. Eager as one might be to defend one of them, it would really be embarrassing to deny the other. So in effect, we can specify two radical, and two moderate positions, which might be taken, only assuming that (3) continues to be regarded as common ground:—

(A) (2) is absolutely true and (1) is absolutely false.

(B) (2) is absolutely true, and (1) can be restated in an acceptable way, though it is false as it stands.

(C) (1) is absolutely true, and (2) can be restated in an acceptable way, though it is false as it stands.

(D) (1) is absolutely true and (2) is absolutely false.

Obviously (*A*) and (*D*) are radical, and (*B*) and (*C*) moderate positions.

Moreover, two moderate philosophers may adopt the same position, in the terms in which I have stated them, and yet go on to disagree violently with one another, for there is considerable room for difference over the manner in which the required restatement is to be made. Even amongst the radicals, there might be considerable difference in the *reasons* they would accept for ruling out (1) or (2) as absolutely false. So philosophical differences, as well as different ways of appreciating historical practice, to appear even in this somewhat refined statement of the quarrel. I shall only try to identify, and then comment upon, one representative of each of the four positions. Each of these, incidentally, may be regarded as a different way of accounting for the purported truth of (3).

(*A*) It is not easy to identify a *single* philosopher who would defend (*A*), but it is by and large the view of those thinkers whom I shall identify as Historical Idealists, e.g. Croce, Dilthey, Collingwood, etc. These, whatever individual differences there may be amongst them, are unanimous in insisting upon a radical distinction between the behaviour of human beings and non-human entities, and a correspondingly radical distinction between the groups of disciplines which respectively study these two allegedly distinct kinds of behaviour. These are termed *human* sciences, in contrast with the *natural* sciences, or, to use the familiar German expressions, *Geisteswissenschaften* in contrast with *Naturwissenschaften*. It is, according to this school, the task of the natural sciences to explain non-human phenomena, and indeed to do so by means of identifying the laws which these phenomena invariably conform to. Hence to explain is to bring under a law, and (2), accordingly, is absolutely true. But human beings do not, characteristically and essentially, act in accordance with general laws. Human beings are free agents, historical events are unique and unduplicated, and the action of human agents must be appreciated in the light of certain inner occurrences, such as, purposes, motives, desires, which cannot be asserted of non-human entities.[1] It is the task of the *human* sciences to reconstruct these inner mechanisms which, since they cannot be observed must be reached in some other way. Only external behaviour can be *observed* and is unintelligible, in the case of humans, except by reference to unobservable occurrences in the agents' minds. This process consists in some sort of empathetic apprehension of the inner workings of another mind, a process often termed

'understanding', or, again to use the familiar German word, *Verstehen*. Hence (1) is absolutely false. Historians, as *human* scientists, do not explain—if 'explain' is understood in the sense claimed to be appropriate to the *Naturwissenschaften*. Rather, historians 'understand' the unique and never duplicated episodes in which free human agents have engaged down the ages. (3), then, is trivially true. Historians' explanations do not include laws for the simple reason that there are no historical explanations. The reason we do not find general laws mentioned in history books is because there are no explanations, in the strict *Naturwissenschaften* sense of the term, to be found there. This is not a defect, however, and to demand that historians explain is logically to misunderstand the nature of their discipline, as well as metaphysically to misunderstand the nature of human beings and the important differences between them and other sorts of beings.

(*B*) It must in some measure have been in response to the sorts of views roughly sketched under (*A*) that Hempel wrote his celebrated paper on the function of general laws in history. For one of the views subscribed to by the *Logical Empiricist* school, of which Hempel was an outstandingly active and creative member, was the *unity of scientific method*; the view, namely, that differences amongst kinds of phenomenon need not be reflected as differences in the scientific representation of the properties and behaviour in the subject-matter, and that scientific method is invariant as to subject. Strictly speaking, Hempel was not concerned in a direct way with phenomena, but—consistent with the way in which the Logical Empiricists viewed their job—with the language scientists used to describe phenomena. Now differences in subject-matter will indeed be reflected in science as a difference in scientific *vocabulary*, or more precisely, as differences in the so-called 'non-logical' vocabulary of this science or that, but this in no way bears on the logical structure of sciences which employ different non-logical vocabularies. There was, it is true, a tendency to regard the basic vocabulary of any science as explicitly definable by means of *observational* terms, or as reducible to sentences only making use of observational vocabulary; a programme of analysis which would oppose the idealist's claim that human behaviour can only be understood in the light of intrinsically *un*observable events. However, the thesis of physicalism need not be presupposed by the thesis

of the unity of scientific method, and one of the things Hempel meant to show was that explanation, in particular, has exactly the same structure whether it has to do with human or non-human behaviour. In addition, of course, he meant to show that we can, and *do*, explain human behaviour.

To *explain* some phenomenon, as Hempel saw it, is to perform some operation on a *sentence* (the *explanandum*) which describes the phenomenon in question. Hempel's view was that this operation consists in *deducing* this sentence from some set of premisses to be taken as adequate grounds for the explanandum (if we do not have adequate grounds, how can we be said to have explained?). The set of premisses he termed the *explanans*. I shall term this the *Deduction Assumption*, though it is plain that the logical feature of deducibility from premisses cannot be regarded as more than a necessary condition for explanations, even if we grant that an adequate explanation must be representable as a deduction. For it is nearly always possible to find premisses from which the explanandum may be deduced, though no one would regard this as an *explanation* at all. Nevertheless, from the Deduction Assumption, together with our pre-analytical notion of explanatory *in*adequacy, we may, I think, elicit the remainder of Hempel's analysis by means of a sort of transcendental argument.

(i) The explanandum, since it describes a particular occurrence, is singular in form. Let it be the sentence *Ga*. Now the Deduction Assumption alone tells us very little about the formal composition of the premisses which are to make up the explanans for *Ga*, except that, whatever they are, they (by definition) cannot be consistently true while *Ga* is false. But so many propositions might satisfy this condition: *Ga* is a deductive consequence of itself, of its own double negation, of any conjunction in which it itself is a conjunct, etc. No one would regard these deductions as explanatory, however, and without ensnarling ourselves in logical niceties, let us suppose that we ordinarily explain an event with reference to its conditions, so that one of the premisses must certainly describe some condition for the event which *Ga* describes, and this premiss must then be distinct in form from *Ga*. Since the condition is a specific condition, it, too, demands a singular proposition to express it. Let this proposition be *Fa*.

(ii) But of course, Fa in no sense deductively entails Ga. So if the premisses consisted uniquely of Fa, the Deduction Assumption would be violated. But notice that Fa must express a condition sufficient for the occurrence described with Ga, for otherwise Fa might be true and Ga false, and we would then not have an adequate explanation of why Ga is true. If the event might not have occurred even though the condition held, the holding of the condition fails to explain why it *did* occur, and the explanation is thus inadequate. So we need to specify that the condition is a sufficient condition, and by definition, to say that Fa is a sufficient condition for Ga is to assert that $Fa \supset Ga$. But *this* conditional sentence, together with Fa, really does yield Ga as a deductive consequence.

(iii) Let us imagine a condition Fb, indiscernible from Fa, except that when Fb holds, Gb does not, though when Fa holds, so does Ga. In other words, supposing that a and b are alike, and that the condition Fa and Fb are alike, but when Fb, 'Gb' is false, though when Fa, 'Ga' is true. And for the sake of simplicity, let us suppose that everything else is the same. Well, if we do suppose that, then either Fa and Fb are not indiscernible, or else Fa is not a sufficient condition for Ga. That is to say, unless, for every x, $Fx \supset Gx$—everything else being the same—then Fa is not a sufficient condition for Ga. To suppose that we do have a sufficient condition, then, is to commit oneself to the general proposition that under similar circumstances, the same things will happen when the same conditions hold. And indeed, if this general proposition is false, then we don't have a sufficient condition; and if we don't have that, we don't have an explanation. Plainly, then, our explanation really requires this general conditional sentence. Let this be $(x)(Fx \supset Gx)$. And since we can easily get $Fa \supset Ga$ from this by a well-known rule of inference, the latter is not independent of the former, and can be dropped as one of the premisses.

(iv) The explanans, then, minimally consists of (at least) two premisses, Fa and $(x)(Fx \supset Gx)$. But of course, the empirical interpretation of the latter is as a *general law*, and the empirical interpretation of the former is as an *initial condition*. Hence, to (empirically) explain an event is to connect that event with a condition, and by means of a law, which is what Hempel has represented. This satisfies both the Deduction Assumption and our pre-analytical notions.

Notice that what we have explicated here is the concept of an *adequate* explanation. But is an inadequate explanation really an explanation at all? If it is not, any more than a false face is a face, we need not qualify the term 'explanation' with 'adequate' any more than we need qualify the term 'face' with 'true'. And we will thus have explicated, by means of a transcendental argument, the concept of explanation.

Hempel and Oppenheim[1] specified a variety of further considerations, syntactical and semantical; but there is little point listing these here, and I shall merely indicate the manner in which their analysis was applied by Hempel to history.

To begin with, assuming he had given an explication of the concept of *scientific* explanation, it was plain that science could give explanations of single events. Given that no pair of events belong to all the same classes, it follows that every event is different in some degree from every other, while, from the fact that any pair of events share at least one property, it follows that no event is unique. In this regard there is no room for distinguishing history from the natural sciences on the ground that the former deals with single events, for so does science; nor on the grounds that it deals with unique events, for there are none. But it might be objected that such properties as a given historical event may share with other events are trivial or uninteresting, that there is a sense in which historical events are undeniably unique. How then might they be covered by general laws of the sort exacted by Hempel's analysis? Well, the fact is that historians themselves, when they undertake to explain events, while they do not precisely mention any laws, nonetheless tacitly presuppose their existence, their explanations accordingly being in the nature of elaborate enthymemes. On the other hand, and this is part of the relative backwardness of some of the social sciences, the fact remains that such laws as might be implicit and presupposed cannot be explicitly stated in wholly unexceptionable form. So, strictly speaking, if we mean by 'explanation', exhibiting an explanandum as a deductive consequence of an explanans containing scientifically acceptable general laws, then, of course, (1) is *false*. But we may restate (1). We may say that the explanations historians offer are really not explanations as such, but are, in Hempel's phrase, 'explanation sketches'. Places are, so to speak, marked off where the appropriate general law which is presupposed,

will, in time, be inserted, converting the sketch into a fully satisfactory explanation. Such a sketch

> consists of a more or less vague indication of the laws and initial conditions considered as relevant, and needs 'filling out' in order to turn into a full-fledged explanation.[1]

Along these lines, then, Hempel argues that (2) is true, (1) is true if we replace 'explain' with 'sketch explanations for'; and (3) is true if we realize that we are talking about *explanation sketches* which do not *include* general laws, but which presuppose them.

The general analysis here exhibited is apparently due, originally, to Professor Karl Popper,[2] and can be said to enjoy a wide acceptance amongst empiricist philosophers, as well as amongst certain avant-garde historians.

If I am correct in saying that Hempel's position was a direct rebuttal of (*A*), the remaining two general positions have typically been occupied by philosophers concerned to rebut (*B*) in Hempel's formulation. In this sense, Hempel's analysis has determined the complexion of the subsequent history of the problem. Parenthetically, it would be a neat problem to try to explain, along Hempelian lines, the subsequent state of philosophical discussion which his own analysis clearly determined. But let us now turn to the moderate, and then the radical criticism of (*B*).

(*C*) Certainly what typically is sought for in historical explanations are the causes of an event, and certainly to assert that something *K* caused an event *E* is to commit oneself to the existence of some general law to the effect that *K*-like events cause *E*-like events. So much is covered by the sense of 'relevance' identified as operative in my earlier example. In so far as we indicate causes, or supposed causes of an event, we are clearly doing something which conforms to Hempel's notion of an explanation sketch. But have we any right to suppose that the sketch in question requires only explicit citation of the law appealed to in order to qualify as a fully-fledged explanation? For the law may, as many have pointed out, be a probability law. We may know that *E* occurred, and that *K* occurred, and regard it as likely that *K* caused *E* on the grounds that frequently *K*-and *E*-like events are joined. But suppose there are known cases where an *E*-like event has not been preceded by a *K*-like event, though in the main the connection holds. From a sentence describing *K* we cannot, by appeal to such a

probability-law, strictly *deduce* a sentence describing *K*. We do not, strictly speaking, have adequate grounds for the explanandum '. . . *E* . . .' for it is now logically possible for this sentence to be false and '. . . *K* . . .', as well as the probability law, to be true. In this sense we would then not have explained *E* even if we made the law explicit, and it may very well be the case that the only laws presupposed in historical explanations are of this kind, so that we cannot, by appeal to these, ever succeed in explaining events. Meanwhile, if there is some other law of strictly universal validity, the fact is that we do not know it and can hardly be said, in any obvious sense, to have presupposed it, and at any rate it could not be a law connecting *K* with *E* in as much as, by hypothesis, they are connected only by a probability law. So a different initial condition would be required from the one we refer to, and accordingly ours cannot be regarded any longer as a sketch for the final explanation, needing only to be 'filled in'. Rather, it would have to be scrapped. On the other hand, it may simply be that probability laws are ultimate, in which case nothing better is to be hoped for, and the filling in still does not yield an explanation in the stipulated Hempelian sense. But this may be the case not merely in history and in ordinary life, but in science as well, and we should then be obliged to conclude that perhaps neither plain men nor historians nor scientists have *ever* succeeded in explaining any phenomena at all. It now becomes a question as to whether we have failed so abysmally in our explanatory activities, or whether the criteria for an explanation have become, in Hempel's analysis, so exalted as never to be satisfied. Perhaps the deducibility assumption ought to be abandoned. But then, so far as we abandon it, we abandon, as well, the grounds for Hempel's entire analysis, which very nearly follows, as I outlined, as a logical consequence of this assumption. A closer look might be taken as well at the *use* of the word 'explain'. Surely, in one sense, and perhaps in the main sense of this term, historians, plain men, and scientists succeed in explaining things. They 'make clear', they produce 'understanding', of the things and events which before were dark and not understood. But then in this sense (1) is unquestionably true. Historians furnish understanding, they make clear to us why things came about as they did. Hempel, fastidious but misdirected in his semantical and syntactical stipulations, quite overlooked the central *pragmatic* dimension of the notion of explaining.

Yet (2) is not *absolutely* false. It is false in so far as it suggests that the laws in question are categorical, and enter into explanations as major premises in deductive processes. For the laws might, as we have seen, be only probability assertions which could not at any rate make the required deductive connections. But suppose we continue to question the Deduction Assumption: we might still give an acceptable sense to the idea that laws are included or involved in explanations, and so restate (2) as to make it unexceptionable, and compatible, at the same time, with the pragmatic aspect of explanation. For example, when a man offers to explain *E* with reference to *K*, he may be called upon to *justify* the explanation. Then indeed he might have to cite some general law, or to indicate roughly what law it is in virtue of which the explanation is apposite. But is there any reason to regard such a law as *part* of the explanation? The answer is no. The law may indeed be part of the *grounds* for the explanation, and failure to produce a law may expose one to the charge of having advanced a groundless explanation. But then there are many distinct kinds of grounds for any explanation; there being no need to include all of them, or to exclude any if some be included. For example, when we cite *K* in explanation of *E*, certainly we must have some confidence that '. . . *K* . . .' is true, but are we to include our evidence for this belief as part of the explanation? Even Hempel did not go so far. Why then go so far as he went in demanding that any grounds at all must be reckoned part of the explanation?

So if we understand 'includes a general law' as meaning only that the explanation includes, amongst its *grounds*, at least one acceptable general law, then (2) is not merely philosophically, unexceptionable it is plainly *true*: Or nearly so. For what we might at best hope to offer, in the request for this sort of backing for an explanation, is some general law-like sentence which may not quite be a law in the required Hempelian sense, unless, indeed, we loosen somewhat our criteria for laws, and consider general statements to be laws even when they allow of exceptions and extenuations. Thus we may seek an explanation for Jones building a fire. We may explain it with reference to his feeling cold. Can I provide an exception-tight law to justify this? Not easily. People feel cold without building fires (ascetics) or build fire without feeling cold (janitors), and people both feel cold and build fires without doing the latter *because* of

the former (it is their job, but they have no right to build fires on their own behalf). Yet there is no question that we accept as a truism that people build fires when they feel cold. We appeal to a 'law' which might run as follows: people (generally) when they feel (sufficiently) cold (tend on the whole to) build fires (of one sort or another) (more or less). It is such general truistic sentences which historians might properly be said to imply, and with which they might justify their explanations. But we cannot, by tinkering, remove the parenthetical qualifications in these and transform them into laws of nature.

This position, and some of the arguments in its favour, has been seriously advanced by Michael Scriven.[1] Professor Karl Popper was the first to draw special attention to the historical employment of trivial generalizations,[2] but, unlike Scriven, considered their rôle deductive rather than justificatory. Ernest Nagel has emphasized the rôle of probabilistic laws, and while aware they do not permit deductions, none the less considers them, unlike Scriven, as part of the explanation and not merely part of the *grounds* of explanation.[3] That so-called laws of nature, even in science (where we would most naturally seek for them) are highly idealized, and do not precisely hold in any given context where allowances have to be made of a *ceteris paribus* nature is a commonplace in the philosophy of *applied* science. That most of the generalizations which cover human behaviour are truisms may be confirmed by consulting nearly any sociological study chosen at random.

(*D*) It is not easy to identify a radical critic of Hempel, a philosopher who is unreservedly committed to the *absolute* falsity of (2), but perhaps Professor William Dray of all the main writers on this problem is closest to this view. Scriven who raises doubts as to whether there are ever laws of the required sort, nonetheless concedes that some sentences ('normic sentences') are, as ground for explanations, 'involved' in explanation. This might strike Dray as too much of a concession. He writes that 'in any ordinary sense of the word, the historian may use *no law at all*',[4] and his italics suggest that this is his radical view of the matter. There are more guarded moments in his book, however, where he suggests this is perhaps excessively rash. But for all that, the direction of his destructive argument seems to point toward the italicized phrase, and his avowed purpose of

destroying what he terms the 'Covering Law Model' encourages me to locate him here.[1]

Whether or not 'in any ordinary sense of the word' historians use laws is, of course, a factual question, open to empirical investigation, and this, as Dray realizes is not the kind of question that is being raised. The question is, even supposing they did use laws, whether their use of laws is in any way a necessary condition for any explanation they might give, and whether their use of laws would constitute a sufficient condition for an explanation. These questions Dray answers negatively. His argument rests upon the presumed psychological fact that an historian may reasonably stick by an explanation he has given without feeling himself to be committed to the independent truth of any law which might be proposed as covering the event, so that in some loosely specified sense of entailment, no law is *entailed* by his explanation. But again, and for roughly comparable reasons, an historian might accept a given law as independently true, and even as covering an event in question, without regarding it as explaining the event it may in fact cover.[1] To illustrate the first case: explaining the fact that Louis XIV died unpopular by showing that he pursued policies detrimental to French national interests, the historian may find it difficult indeed to say what law it is which sanctions this explanation, and may challenge with impunity any logician, who argues that there *must* be a law, to state what the law is. The explanation does not entail a law in any obvious way, and for all that the historian is *certain* that he has correctly explained the fact. To illustrate the second case: concerned to explain the fact that Sir Brian Tuke was bow-legged an historian would (Dray claims) find it unenlightening were a colleague to point out that all medieval knights were bow-legged.

If we reject the so-called Covering Law Model of historical explanation, what model shall we adopt? Dray suggests, with many reservations what he speaks of as a Continuous Series Model:[2] we explain a given event by sundering it into a series of sub-events until we have reached some set of sub-events which are just understood, events at which we 'doff our hats', and of which no explanation is wanted or needed. Yet Dray hesitates to sponsor this model with any marked enthusiasm, first because there are internal difficulties, but secondly because there is no reason to assume that there *is* any one model which every accepted

instance of historical explanation conforms to. Historians may provide explanations of widely differing forms, and Dray's programme, to judge from the rest of his book as well as his subsequent publications,[1] has been to offer a phenomenology, so to speak, of historical explanations. Like Scriven, meanwhile, Dray is insistent upon the pragmatic aspects of explanations. Explanation is always relative to a context and to a level of knowledge already possessed.

If I am right in committing Dray to the absolutely falsity of (2) and the absolute truth of (1), together with his critical arguments, we can see what reason he would give for the truth of (3), quite independently of what evidence in support of it one might produce from a scrutiny of historical writings. It is simply that we ought never to have expected to find laws in historians' explanations to begin with. We can account for the lack in this fashion, but we must refer to the history of the problem, and to the misleadingness of the Covering Law model, to account for the fact that anyone thought this lack worthy even of remark.[2]

The above, then, are some of the ways in which the main positions on the problem of historical explanation have been articulated. Even with these brief accounts, it should be clear that the partisans in this strife have often tended to approach the problem within a context of differing philosophical commitments, and with differing criteria of what constitutes a solution to a philosophical problem. This permits a good deal of non-lethal cross-fire, and a good deal of ground-shifting, without it being wholly clear how the problem might be solved to everyone's satisfaction. In part, this is due to the fact that much of the difference between this philosopher and that is due to straight-forward verbal disagreement, the contestants really quarrelling over how a certain key word is to be used. Professor Scriven, for instance, has contended that an explanation is whatever furnishes *understanding* of the phenomenon or event which wants explaining. There is no reason why Professor Hempel need contest this claim. He might ask, however, for an analysis of 'understanding', and might go on to say that he would recognize only that as providing understanding (in contrast with pseudo-understanding?) which he has said all (genuine) explanations exhibit: a deductive structure. As regards Professor Dray's reservations on the explanatory value of 'All medieval

knights were bowlegged' with regard to the fact that Sir Brian Tuke was bowlegged, Professor Hempel might say that there is a question to begin with whether this sentence satisfies the criteria for a general law, and that he is as aware as anyone of the difficulties in saying what these criteria are. Even so, the sentence, if true, is hardly so non-explanatory as Dray suggests. It indicates the direction in which we might seek for an explanation, for example, Sir Brian's position as a knight, in contrast, say, with a comparable general sentence 'All members of the Tuke family were bowlegged', and suggests that Sir Brian's disfigurement was an acquired rather than an inherited characteristic. As far as the contention, on the part of Dray and Scriven, that historians explain, and hence give explanations of events, Hempel might say only that he agrees, save that for the purposes of philosophical analysis he prefers to designate these as explanation sketches. Why quarrel over words?

So to some extent, the quarrel turns on verbal issues, but at the same time there is a different attitude towards history. Dray and Scriven appear to consider the practice of history perfectly satisfactory as it stands, but Hempel, if he does not openly advocate a reform of history in the direction of physics—the paradigm science—has certainly encouraged, among some historians at least, the view that history ought to be revised. Clearly he would not accept the thesis that such revision is impossible and that the distinction between history and any given natural science is ultimate, as the advocates of historicism have contended. Scriven's answer to this will be that the difference is indeed not ultimate, but that physics is *in fact* a good deal more like what history is *in fact*; that Hempel has misconstrued the logical structure of the paradigm science itself, and to this is due the mistaken notion that history requires revision—for there is no contrast of the presumed kind between history as such and physics as such, but between history and physics (or any science) on the one hand, and an idealized model, which corresponds to no actual science but only to a logician's fantasy, on the other.

But this in turn reflects a fundamentally different attitude towards the task of philosophy. Hempel might reply to Scriven's charge that it was not his purpose to *describe* science. That job is better left to the sociologist. Rather, he was seeking, as philosophers ought, rationally to reconstruct the concept of scientific explanation. His concern was to specify what

conditions must be satisfied if we are to pretend to have adequate grounds for something of which an explanation is solicited. It seemed wholly plausible to him that we have adequate grounds for an explanandum when we are able to deduce it from premisses which satisfy a variety of conditions.[1] To the claim that general laws are part of the grounds of an *explanation*, as Scriven has insisted, and may be appealed to for purposes of *justifying* an explanation, he might ask how 'justification'[2] is to be understood? There can be no doubt that Scriven has widened the area of discussion by bringing in pragmatic factors, but is not the question of using laws to justify an explanation—the question of what he calls 'role justifying criteria'—the crucial issue? These 'role justifying criteria' are called into play when he who offers the explanation is required to answer the charge that perhaps 'no causal connection exists between the phenomenon as so far specified and its alleged effect'. But how is this charge to be met except by proving that the connection holds? What is this except to bring forth the appropriate general law? And once having done this, does the justification not simply take the form of a deduction? And in so far as it does not, to that degree the justification has not in fact been achieved. So if 'justification' does not entail deduction, the meaning of the former operation is far from clear.

So the tensions which existed among our original three propositions reappear as further tensions among the varying solutions to these tensions, these last growing out of competing attempts to fix the meaning of certain key terms in accordance with competing attitudes towards language, history, and philosophy itself. Yet, as with our original three propositions, there seems to be an element of truth in each of the positions offered in solution to the original difficulties. Once again, it is difficult to assent to any one of them if this requires wholesale rejection of those remaining. Now I think it is possible to cull this element of truth from all four conflicting positions, and to offer an analysis of the rôle of laws in historical explanation which might simultaneously satisfy all contenders; an analysis which will dissolve the difficulty by exhibiting all four as complementary rather than exclusive. Assuming this can be done, we can, I think, then turn to the problem of determining in what sense the form of historical explanations is that of narratives.

The four positions I have identified have mainly had to do with the structure of the *explanans*, and the moot question was whether general laws are to be included in *explanantia*. (*A*) and (*B*) said yes, but were divided about whether there are *historical* explanations. (*C*) and (*D*) sided with (*B*) on the existence of historical explanations, admitting there were such things, but said that no laws are included in explanantia. Whereas (*C*) said general laws are *in some sense* involved in explanations, (*D*) rejected this out of hand. Yet the issue which was not raised in any of the positions has to do, not with the anatomy of the *explanans*, but with that of the *explanandum*. I shall argue that there are *explananda* which logically presuppose general laws, and explananda which do not. Accordingly, whether or not there are to be general laws in the explanans depends upon our original description of the event for which explanation is sought. I shall argue, further, that if the original explanandum is not one which logically presupposes a general law, it can be replaced with one which does, and vice versa, so that the question of general laws is in some important sense connected with the question of how phenomena and events are to be *described*.

Here I should like to make an obvious and trivial point. Phenomena *as such* are not explained. It is only phenomena as *covered by a description* which are capable of explanation, and then, when we speak of explaining them, it must always be with reference to *that* description. So an explanation of a phenomenon must, in the nature of the case, be relativized to a description of that phenomenon. But then if we have explained a phenomenon *E*, as covered by a description *D*, it is always possible to find another description *D′* of *E*, under which *E* cannot be explained with the original explanation. If there are indefinitely many possible descriptions of a phenomenon, there may be indefinitely many possible different explanations of that phenomenon, and there may, indeed, be descriptions of that phenomenon under which it cannot be explained at all.

Unless we explicitly give the description, or unless an intended description of it is implicit from the context, there is no sense to be made of any request to explain the designated phenomenon. Here I shall be speaking of Hempel's analysis to begin with. Now my point is that, strictly speaking, I can no more explain or ask for an explanation of the Civil War than I can explain, or ask for an explanation of the piece of

paper in the typewriter. Who would know what to make of the demand: explain that piece of paper!—unless a description were, so to speak, in the air, as for example, the piece of paper is white, or is here, or is blemished with jam spots? At best, the expressions 'the Civil War' or 'the piece of paper in the typewriter' are referring expressions. They can be the subjects of sentences, the objects of verbs, but by themselves they are not sentences, and hence, by themselves, are neither true nor false. Hence, for obvious reasons, they cannot serve as conclusions of deductive arguments. Briefly, what they refer to can only be covered by laws if first they are fitted into sentences, and the things they designate can then in principle only be covered by laws if first they are covered by descriptions. Linguistically naked, they are unintelligible. However, there are, in principle, descriptions which might cover them which logically prevent them from being covered by general laws.

Consider, for example, the admittedly questionable notion of a *complete* description of *E*. Let us imagine this to consist in taking all the logically discriminable true sentences about *E*, abstracting from each its predicative expression, and then conjunctively asserting all these predicative expressions of *E*, so that there will be as many predicative expressions in the conjunction as there are disciminable true sentences about *E*. It does not matter that we cannot furnish such a complete description. It is, however, by the principle of the identity of indiscernibles, logically impossible for two phenomena *E* and *E′*, to have identical complete descriptions. But then under a complete description, *E* cannot be covered by a law, for such a law would be logically restricted to a single instance, and would accordingly be disqualified as a law.

But we need not restrict ourselves only to complete descriptions. By Hempel's own criteria for a general law, a proposed law *L* must contain 'no essential—i.e. uneliminable—occurrences of designations for particular objects'. Hence in so far as a description *D* of a phenomenon *E* contains such designations, it cannot, under *D*, be covered by a general law. It is a moot question whether all such designations are in principle eliminable. Supposing, however, a favourable answer were given to this question, so that in principle we might eliminate, from *D*, all such designations and produce another description *D′* which contains none; still, *E* cannot be covered by a general law under *D*—it being admitted that there are

such descriptions—even though, under another description D', it can be so covered. But this is, as I shall show, a crucial consideration. It suggests that a phenomenon can be covered by a general law only insofar as we produce a description which contains no uneliminable particular designations of it. Or, briefly, we can cover an event with a general law only once we have covered it with a general *description*. But then it is easy to find descriptions of a phenomenon under which it cannot be so covered and cannot, accordingly, be explained along Hempelian lines. It immediately follows that any work of history will contain many descriptions of events under which the events cannot be explained if Hempel's model is correct. But it does *not* follow that the model is as such incorrect or that the events in question are unexplainable. Only unexplainable under the descriptions which have been given them. But then to explain these events requires a *redescription* of them. Indeed, to be able to re-describe the events is already, in a sense, to have explained them. For often we can only carry through the redescription when we know the explanation, and typically, again, the redescription entails a covering law.

But let us illustrate these claims by taking an example which is typical of a whole class of historical explanations, explanations which refer to the history of whatever it is that requires explanation. During the celebration of the last *fête nationale monégasque*, the streets were decorated, as one would expect, with the flag of Monaco. But side by side with these were to be found *American* flags. One might have wondered why, if there were American flags sharing pride of place with Monégasque flags, there were not flags of other nations, for instance English or French or German flags. Here is a context in which one feels the need of an explanation, an explanation indeed of two things: the presence of American and the absence of other flags alongside the national ones. And here is a wholly plausible explanation someone might give: he might tell us that the Prince married an American woman. At this point we might play Professor Dray's game; we might say that we know of no law which connects the event K (Prince Rainer III marrying the actress Grace Kelly), with the event E (Monégasques putting out American flags during their national holiday). Indeed, at this level of description, there is no law which connects these events, but with the appropriate *redescription* of each event, it is easy enough to furnish a law, and a law, in fact, which both licences and is

licensed by the redescriptions. Furthermore, we can even, once having carried through the redescriptions, frame the explanation in deductive form.

Here is a triad of descriptions, at different levels, of the event E:

a. The Monégasques put out American flags side by side with Monégasque flags.
b. The Monégasques were honouring a sovereign of American birth.
c. The members of one nation were honouring a sovereign of a different national origin from their own.

We may regard a as the description of the event before an explanation was available. We may continue to term it the *explanandum*. We may regard b as the description of the *same* event *after* the event has been explained. Had we known this description of the event to begin with, we would not have needed an explanation, either for the presence of American flags or for the absence of flags of other nations. We may regard c as a description of again the same event, though it could be a description of a good many different events of the same kind. We may regard c, indeed, as the result of eliminating terms designating particular objects in favour of general designatory terms which include the originally designated objects amongst their extensions. I shall term c the *explanatum*. Actually, b qualifies as an *explanatum* as well. The fact is that the move from b to c is relatively easy to make. The hard work is the move from a to b. It amounts almost to a transformation in perception, the objects, as it were, in the visual field remaining constant, but now seen in a whole new set of relationships. One has a genuine *sense* of having been illuminated. So one might yield to the philosophical penchant for making distinctions, and refer to b and c as, respectively, the *concrete* and the *abstract* explanatum. It is the latter which serves to put the event under a formal law.

But *what* law? I think it not difficult to state in at least a vague way what general law might be spontaneously advanced by anyone who felt illuminated by the redescriptive shift from a to b. It is something like

L. Whenever a nation has a sovereign of a different national origin than its own citizens, those citizens will, on the appropriate occasions, honour that sovereign in some acceptable fashion.

We assume, as independently known

K-1. The sovereign Princess of Monaco is of non-monégasque origin.

K-2. The *fête nationale monégasque* is an appropriate occasion for honouring sovereigns of Monaco.

K-3. Putting out the flags of a person's native country is an acceptable way of honouring that person as a native of that nation.

Having stated all these connections—and there might be persons for whom they should all have to be spelled out, as well as other connections, with special qualifications—there is no reason to doubt that we could, in the end, exhibit *c* as a deductive consequence of all of them together. Presumably the explanation here is the correct one, but it may take some doing to get it all stated in a correct formal way so that the deduction might go through. I have no objection, then, if someone were to say that I have provided only an explanation sketch. I have in a vague way indicated a law, even stated that law, and specified the relevant initial conditions. Nor have I any objection, if someone wants to point out that there is no clear *need* for working the explanation up, that all of what I have stated will perhaps be spontaneously understood by the person to whom the explanation is made. Pragmatically there is no point, but we are dealing with a philosophical question. Students of formal logic might find it equally tiresome to spell out all the steps required for a formal demonstration of an argument whose validity they intuitively recognize.

Now there are many questions left to discuss, but I should like to pause for a moment to indicate how the above analysis might be acceptable to the three last positions in the four specified earlier.

Surely, this analysis must satisfy Hempel. We have a law, which covers the event. We have given an explanation sketch which could, with appropriate care, be made into a fully-fledged explanation, and in general, apart from the remarks on explananda and explanata, the analysis is mainly his. On the other hand, it should really satisfy Dray as well. To begin with, the law *L* does *not* cover the event *E* as such, nor is *E* covered even under the description *a*—which is just the sort of description one would be most likely to find in history books. You cannot, moreover, deduce the explanandum (*a* again) from the explanans. It is what I have termed the *explanatum* which may be so deduced, and it may be some comfort to him to point out that we are able to provide the explanatum,

and indeed the law, only after we have had the explanation given us (or found it out for ourselves). The replacement of the explanandum with the explanatum (*a* with *b* and thence *c*) ought not to strike him as illegitimate. It is, in fact, exactly an instance of what he has elsewhere termed 'explaining what' in history. In fairness to Dray, it might be said that the man who gave the explanation did not *use* the law *L*. But to someone unfamiliar with honouring customs, with national symbols, and with a whole related meshwork of general notions or concepts, the explanation would be utterly opaque. The explainer would be obliged explicitly to mention some such law as *L* in such a case to justify his explanation, and this brings us to Scriven. For *L* would not merely play that justificatory rôle he has so much emphasized, but it would qualify as a truism or, in his terms, a 'normic sentence'. Moreover it gives a sense to the notion of justification; the sense of permitting a deduction. This will be wholly compatible with the contextual and pragmatic considerations he has so carefully outlined.

So it seems to me that by paying some attention to the question of how phenomena are to be *described*, we can elaborate a theory of the rôle of general laws in history which will reconcile, details apart, the main arguments of three of the main positions. But we have yet to come to terms with *A*. To this I now turn.

Strictly speaking, the analysis just sketched must appear flatly incompatible with *A*, for it clearly supports Hempel's contention that the pattern of explanation is indifferent to the distinction between human and non-human phenomena, or any purported difference between the 'human' and the 'natural' sciences. There are, in fact, two considerations pertinent to my example which plainly show that we do *in practice* appreciate, and indeed understand human behaviour, in the light of very general concepts which, if stated explicitly, would take the form of general laws. The first is the plain fact that in having explained the putting out of American flags by referring to the national provenance of the female ruler of Monaco, most people, assuming them equipped with a modicum of relevant historical information, spontaneously 'see' the connection without having to fumble for the appropriate general law in virtue of which the connection holds. The very fact that they do not need to make

explicit to themselves, or require others to make explicit for them, what this general law is, shows, or strongly suggests, that thinking in terms of general concepts is so natural as to be very nearly unconscious. It is accordingly very easy to see why, in view of the psychological fact that the laws in question are never consciously entertained (or seldom so), philosophers would be tempted to say there is no general law, or that no general law is required to understand the explanation. The second consideration is that the felt need for an explanation, the sense of puzzlement, frequently, even typically arises when we are *unable* to assimilate the phenomenon in question into a given general concept. We think the flags are out to honour a friendly nation. But this does not fit. For why not the flags of other, indeed all, friendly nations? So it is with respect to some accepted general concept about flag-displaying behaviour that we are puzzled, and this again shows how prominent a rôle, even in the pragmatic aspects of the problem, general laws play. Someone, say a child, who was unconversant with the applicable general concepts, could only be equipped with a sense of puzzlement if he was first instructed in the appropriate generalities; lacking these, he feels no need for explanations. Meanwhile, it would be incorrect to say the events felt to be in need of explanation cannot be covered by a general law on the grounds that they are, to begin with, appreciated as *exceptions* to some general law. For it only follows that they are exceptions to a general law which it was a mistake to apply to them originally, and not that they are exceptions to *every* general law. There is, in explanation, an analogue to the phenomenon of illusion. Putting out flags *could* be an instance of honouring a friendly country. In this case it was not an instance of that, and the puzzle might have arisen from simply trying, and failing, to subsume it as an instance of that general concept. But the illusion is dispelled when we see the event, not as an exception to the general law originally proposed, but as a *proper* instance of a *different* general law altogether.

I shall return to these considerations in a moment. So far it seems that we have a strong counter-argument against one of the basic commitments of *A*. Yet it must be admitted that there remains something that can yet be done on behalf of that position. Let me begin by pointing out a further feature of Hempel's analysis. He claims, and has been severely criticized for doing so,[1] that explanation and prediction are of a piece,

logically speaking; that we use exactly the same apparatus whether we explain an event which has happened or predict an event which will happen if our apparatus is satisfactory—the difference being only when, relative to the time of the event's occurrence, we put the apparatus into play. We can be said to have explained an event if, and only if, we could have successfully predicted the event before it happened, using exactly the same law. This claim would certainly be objected to by the adherents of *A*, one of whose main theses is that human beings are free,[1] for it might seem to them wholly incompatible with human freedom that human behaviour is predictable. But then, accepting Hempel's rule for converting explanations into predictions, and vice versa: if human behaviour is explainable, it is predictable. So, if they wish to say it is unpredictable, they will also then want to say it is unexplainable by means of the use of general laws. Whether or not they are right in connecting predictability with the negation of the thesis that humans are free is an issue I do not wish to probe at this point. None the less, I think it possible to give a finer analysis of the relationship between explanation and prediction which will render my analysis of general laws acceptable to them, and so salvage part, at least, of their position. Once again I shall pay some particular attention to the question of description.

Now it seems to me that there is no doubt but what, if we knew the law *L*, and knew, in addition, that the monégasque Princess was of non-monégasque origin, and that a *fête nationale* was an appropriate occasion for honouring sovereigns, we could, with some security, have predicted the event in question. Or rather, we could have predicted it under the description *c* or *b*—the description we earlier characterized as the explanation. Yet it does not follow that we could, with the same security, and on the basis of the same information, have predicted the event under the description *a*. For though *a*, *b*, and *c* are all descriptions of the same event, and though *c* and *b* are deductive consequences of *L*, together with those initial conditions we have specified, *a* is *not*. I shall contend, now, that the law *L*—and a great many, if not all the laws which are elements of explanations in history—covers a class of instances which is both *open* and *non-homogeneous*. This is so because the descriptions which serve as *explanata* have open and non-homogeneous classes of events as their extensions. To refer to my illustration, there are many different events,

many different things which the monagasques might have done, which would indifferently be covered by c (or b) and by L. Putting out flags is but one way of satisfying the general description. Given the appropriate conventions, the description a entails the description c, but c does not entail a. For, appealing to the same conventions again, c is compatible with not-a. One can honour a foreign-born sovereign without necessarily putting out the flags of that sovereign's native country. So one could have correctly predicted c without also predicting a; or one could have been correct in predicting c (or b) and have been *incorrect* in predicting a. For a different event, d, might have happened instead of a, and yet be covered by the same law L and the same general description c. It will not do, accordingly, to say, simply, that we can predict the *event*. The question is under what description the same event might have been predicted.

This point is connected with an earlier one, where I spoke of the construction of narratives on the basis of documentary and conceptual evidence. In seeking to fill a gap in historical knowledge, where documentary evidence ('history-as-record') is unavailable, we may tentatively, and on the basis of some general law of the sort I have been discussing, or on the basis of some type-concept, postulate the occurrence of an event, or set of events, to fill that gap. We might, by chance, have hit upon what in fact happened. But a type-concept is just what it is: it has to do with what typically can be the case, and this is compatible with a whole range of qualitatively different events, all of which satisfy the same general description, and any one of which *can* have happened. But to be in a position to know which event in the range *in fact* happened, we require documentary evidence. Conceptual evidence, accordingly, at best supports a *plausible* account.

The laws, then, which may be said to be implicit, according to Hempel's account, in typical historical explanations, are peculiarly loose, in the sense that they can accommodate any number of qualitatively different instances. They indeed permit *creative opportunities*, for the class of events they cover is open, in the sense that we can in principle always imagine an instance, covered by them, which need not in any obvious way resemble past instances. It is this sort of situation, for example, which allows us to class, as works of art, things which do not necessarily resemble objects already classed as such, and which permits artists to pursue

novelty which, should they succeed in finding it, does not automatically disqualify them from having produced a work of art. What we have to do with here, in fact, is what Wittgenstein has notoriously discussed under the name 'family-resemblances'. It is in the nature of families to produce members of themselves whose exact resemblance to any existing member is more frequently the exception than the rule. The laws we appeal to, then, in historical explanations, could be inserted in, or made to justify, a practically inexhaustible class of explanations, none of which, as Dray has properly contended, actually *entails* the law. On the other hand, they may be said to entail the law when taken in conjunction with what I might term *rules of re-description*, in accordance with which we may replace a given description of an event with one of greater generality. This set of rules is perhaps difficult to specify; what, for example, are the criteria by which we class something as a work of art? It is, moreover, not always a simple matter to effect this re-description, for the same event may *appear* to sustain one general description when in fact it requires a different one. It is this which makes logical room for what I have called *illusions of explanation*.

Now there is one obvious objection which might be raised against this characterization of general laws. Suppose, in accordance with my analysis, one has explained an event, that is, one has covered it with a general law after first covering it with a more general description; one has made the move from explanandum to explanatum. The fact remains that exactly the same explanatum and general law could have held though the event explained was quite another one from what in fact occurred; was described with a different explanandum than the one we gave, so that the identical explanatory apparatus could hold whether the explained event occurred or not. Thus let E be the event in question, and let D be the explanatum of E. But suppose that E' is an event qualitatively distinct from E but nonetheless also covered by the general description D. The question now is why, since our explanatory apparatus cannot discriminate amongst the instances which it covers, we want to say that we have explained E, for we might, with the same apparatus, have explained E'. Suppose someone claims that we really have not then explained why E happened instead of E'. For the description D does not entail E any more than it entails E'—though either of these, with the appropriate rules,

will entail *D*. Since the explanation is compatible with other possible happenings, are we entitled to regard it as an explanation at all? As Alan Donagan writes:

> If it is supposed that an explanation need not logically entail what it explains but may be consistent with several other possibilities, then it will fail to explain why one or another of these possibilities was not realized, will fail to explain why what it purports to explain should have happened rather than something else.[1]

It is interesting that Donagan's statement here was offered by him as one of the arguments *in favour* of the Hempelian model, but that we are actually able to raise it as an objection *against* what is essentially a variant of the Hempelian model. On the other hand, it is not quite true to say that the explanation does not logically entail what it purports to explain. It *does* entail the explanatum. The problem is that it does not entail one rather than another of the various instances indifferently covered by the same explanatum. Thus we have to make a distinction between two senses of 'other possibilities'.

To begin with, there is one sense in which our explanation does rule out other possibilities. Consider only the action of putting out American flags with Monégasque flags during the *fête nationale*. This *could* be covered by any number of different general descriptions or explanata. It could, for instance, be an instance of the description 'honouring a foreign power'. It could, indeed, be an instance of the general description 'insulting a foreign nation': putting out American flags might constitute a studied insult against France. It could be both together. But these general descriptions are ruled out as 'other possibilities' by our explanation, assumed to be correct. It is perhaps a little strong to say they are ruled out, for there is always the possibility of overdetermination. Even if we accept the Principle of Sufficient Reason, and say that for each thing that happens, a sufficient condition for its occurrence must have obtained, this does not preclude the possibility of more than one sufficient condition having obtained. Nor is it an argument against something being an explanation that there should be another explanation of the same thing. People do kill two birds with one stone, go walking to get exercise and lambchops, and the Monégasques could at once have been honouring their sovereign, honouring one foreign country and insulting another,

and do all this by performing just the one action. But these are complications we may momentarily overlook, and simply say that, except for overdetermination, other possible general descriptions are ruled out when we have succeeded in covering an event with the correct explanatum. Having done this, however, there remains the second sense of 'other possibilities', namely, those other co-possible events, covered by particular descriptions each of which satisfies the same general description. And since the latter fails to discriminate amongst these, it does not rule out any of them. We could not deduce which of them held if we only knew that the general description were true. It is the sort of thing we can know only by independent historical investigation, and inasmuch, I add, as there is no comparable historical investigation for the *future*, our knowledge of the future is general and abstract by comparison with our knowledge of the past. Knowing even all the general laws there might be, we could not, if the laws were the sort I have been speaking of, predict the events of the future under particular descriptions. The present objection, however, is that we cannot *explain* events under these descriptions either.

We have, then, these two senses of 'other possibilities'. The first is that the same event may be covered by different general descriptions. It is this fact which makes overdetermination possible as well as illusions of explanation. The second is that the same general description can cover qualitatively distinct events. This fact serves to account for the general character of our knowledge of the future, and, symmetrically, for the further fact that without documentary evidence (history-as-record) our knowledge of the past would be as general and abstract as our knowledge of the future. Our explanation serves (discounting overdetermination) to indicate which, of the classes our event *might* be an instance of, it is *in fact* an instance of. I shall say that it rules out other possibilities in the *class-sense*. But having isolated the class the event belongs to, it does not allow us to say which of the many possible instances which could have held, did *in fact* hold. I shall say it fails to rule out other possibilities in the *membership-sense*. This would perhaps be unimportant if the members of the class in question were homogeneous, but since they are not, this failure *may* be regarded as a defect in this theory of explanation.

Now I am not certain that I can satisfactorily meet this objection.[1]

Nonetheless, a few things can be said. First, the objection presupposes the existence of other possibilities in the membership-sense. If there were no such, we could hardly be held responsible for having failed to elaborate a theory of explanation which accounts for them. But since other possibilities, in the membership-sense, are to be specified relative to a general description and a general law, of which they are instances, the objection again presupposes just the characterization of general descriptions and general laws which I have offered. So in effect the apparatus I have elaborated is tacitly accepted by the objection, and is, accordingly, assigned at least a partial validity. Secondly, let us suppose that we could find a description of some intermediate degree of generality between *a* and *c* (or *b*), relative to which some of what heretofore have been other possibilities in the membership-sense are converted into other possibilities in the class sense. Even so, the fresh explanatum, providing it remained of the kind I have been discussing, would leave us with the same general difficulties, if difficulties they are, for there would still be *some* other possibilities in the membership-sense. Indeed these difficulties would dog us all down the line, until we reached some kind of description of the event relative to which there were *no* other possibilities in the membership-sense. These descriptions might be of two sorts. Either they would be descriptions like *a*, or they would be general descriptions with homogeneous classes of instances. If the first, we are left with the question of a *general law* which will have *a* as a deductive consequence, and, by Hempel's criterion, since the law would contain designations of specific objects, it would disqualify as a general law automatically. If the second, it would be hard indeed to state what could be the law, and almost certainly false to say that such a law is presupposed in historical explanations, because any such law is almost certain to have non-homogeneous and open classes of instances. It is debatable whether we ever shall have such laws, and I can see no way of deciding, *a priori*, how such a debate could be resolved.

Meanwhile, in the nature of the case, it is not a simple matter always to say in advance what the other possibilities in the membership sense are; it is particularly difficult to specify the entire membership of the class. Perhaps it is impossible to do so, for there is always the possibility that human inventiveness will contrive a novel instance which we can recognize afterwards as belonging to the class but which we could not have

anticipated even though, in a general way, we might have predicted the general description this instance falls under. In a comparable way, even knowing that a man has a disposition to do kind things, and knowing that a given occasion is one on which he can be expected to do something kind, it is not always a simple matter to say what precise kind thing he will do. To be kind is to be creative in benignity, to be considerate, to surprise people by the singular appropriateness of one's gestures. To ascribe such a disposition to a person is then to allow room for creativity, kindness not being a ritual affair, and there being no precisely enumerable set of things which exhausts the manner in which the disposition functions. Many character traits are of this sort, so that one frequent claim of determinists, that if we but knew precise information about a person's character and about the conditions he was operating under, we could infallibly predict his behaviour, is only half right. We could do so under a general description, to be sure: we can safely say that the kind man will do the kind thing, the witty man say the witty thing, but this does not mean that in a more specific way we can predict the former's displays of good-heartedness of the latter's quips and *bons mots*. We can recognize them afterwards as proper instances without being able to predict them.

But in view of these considerations, it is somewhat empty to demand an explanation of why *E* happened rather than something else co-possible with *E* in the membership sense. One can, to be sure, perhaps specify some possible event *E*′, and ask why *E*′ did not take place while *E* did, and point out that *E*′ would have served the purpose as well as *E*. But the explanation for the non-occurrence of *E*′, while it may take various forms—to do *E*′ never occurred to the individuals, or occurred to them and was rejected for this reason or that—it need not in principle require laws different from the sort we have considered, would have to be made case by case, but would, in the end, be liable to exactly the same objections. So pending the provision of another sort of law altogether, the objection reveals a feature inherent in the structure of explanation and basically favourable to position *A*.

Perhaps too favourable, it might be argued. For the example I have chosen might seem specially selected to put *A* in the best light. This is not quite true. It was selected as a typical instance of a kind of historical explanation, and in fact was found to satisfy the other positions first, one

of which was diametrically opposed to *A*. There can, on the other hand be no question but what, in some sense of the term, we should only be able to decide which general description to give of the action—putting out flags—by verifying some fact about the Monégasque mind, and what their precise intentions were. Yet it does not follow that we need perform some operation of empathic projection to verify any such fact. To begin with, the emphasis I have placed upon creativity is already a limitation on this notion. For we ourselves, when we behave creatively, often find that we have hit upon a certain thing without being clear how we did it, or what, if anything, went on in our minds at the creative instant. To identify empathically with our minds at that moment would leave the empathizer no clearer than we, assuming he was successful in simulating our own mental state. Secondly, there are clearly general descriptions of actions under which the action was not intentional, in which case, of course, empathic projection would naturally be inappropriate. Finally, and as a special case, the general description—the explanatum—which the agents themselves would place upon the event might, on the basis of historical knowledge, turn out to have been the wrong one, an illusion of explanation which only later historical research is able to rectify. But in that case the explanation of the event under the new, and presumably correct description, would be far different from the one which those involved in the event would have given. So the participants in the events, as my chapter on narrative sentence has, I hope, demonstrated, have no privileged status when it comes to historical explanations.

I have tried, thus, to salvage that part of the truth which each of the positions arrayed can be said to have, and to synthesize a theory of the rôle, in historical explanation, of general laws; a synthesis which would satisfy all four positions as well as accord with actual practice. But where is there room in all of this for the position I committed myself to defend? For the theory I have synthesized seems, on the face of it, complete. What need we now do, in explaining events, save cover them with general descriptions and thence general laws? What further point need be made? What need have we for narratives? To these questions I shall devote the next chapter.

XI

HISTORICAL EXPLANATION: THE RÔLE OF NARRATIVES

The only support so far given to the claim that stories, or narratives, are forms of explanation, is the pragmatic consideration that in certain contexts what people typically want and expect, when the need for explanation is felt, *is* simply a true story. So much is a factual matter, and presumably beyond controversy. Beyond controversy, moreover, is the fact that the need is typically eased only when a story of the required kind is provided, and the further fact that those who are called upon to explain something will naturally tell a story. But what conditions must be satisfied by such a story remains to be determined.

I shall begin by once more looking to the description of that for which explanation is sought and given. One thing which, while it has been remarked on in discussions of explanations in history and elsewhere, has not, I think, been sufficiently appreciated, is that the explanandum describes not simply an event—something that happens—but a *change*. Indeed the existence of a change is often built into the language we employ to describe things: the description makes an implicit reference to a *past* state of the subject of change. I have already referred to the use of temporal language in my discussion in chapter V. Here, once again, we find that implicit reference to a lapse of time is already incorporated in explananda. Simply to describe an automobile as *dented*, for example, is implicitly to refer to an earlier state of this same automobile in which it was *not* dented; and to demand an explanation of the dent is accordingly to demand an explanation of the change. We require, of stories, that they have a beginning, a middle, and an end. An explanation then consists in filling in the middle between the temporal end-points of a change. The chief difficulty in regarding *S*, in chapter VII, as a story, is that there seemed, on the face of it, no connection between the temporally ordered events mentioned in it. No later event mentioned seemed, in any

obvious way, to refer to any earlier event also mentioned in S, and hence no intermediate event mentioned in S stands as a middle between the events which flank it temporally. S then consists in a sequence of beginnings or endings, but not beginnings or endings of the same stories. Or perhaps the events it mentions are middles in stories the beginnings and endings of which failed to get included in S. A story is an account, I shall say an explanation, of how the change from beginning to end took place, and both the beginning *and* the end are part of the explanandum.

Consider now two examples studied by recent philosophers of history, Mr Gardiner's[1] (and Professor Dray's) example of Louis XVI dying unpopular, and Professor Nagel's example of a change of attitude on the part of the Duke of Buckingham.[2] To say that Louis XVI died unpopular is presumably to presuppose that Louis was not always unpopular, for then his unpopularity could hardly be explained with reference to policies pursued by him which were felt to be detrimental to the French national interests. Reference to these then serves to explain the *change* in attitude towards that king. It roughly constitutes the middle in the story of how people's attitudes towards Louis changed. The beginning and the end of the story are the end-points of the change, and belong equally to the explanandum.

Again, and in an obvious way, when Nagel speaks of explaining the opposition, on the Duke of Buckingham's part, to the proposed marriage between Prince Charles and the Infanta, the presumption is that the Duke was not *always* opposed (for there would then be no tale to tell), but that there was a definite *change* in the Duke's feelings towards the marriage. But it is a mistake to say *simply* that what we want an explanation of is the Duke's opposition to the marriage, and to provide 'The Duke was opposed to the marriage at t-1' as the explanandum. What we want to have explained is the shift, and a more appropriate explanandum would be a *narrative sentence*, one which refers to two distinct events, for example (to use Nagel's own formulation) 'Buckingham changed his mind about the desirability of the marriage, and became an opponent of the plan'. It is important to note the temporal vocabulary in this candidate explanandum. The Duke *changed his mind*, the Duke *became* an opponent —implying that he was either neutral or a proponent before. From this it follows that it is a mistake to regard the earlier event referred to as part

of the explanans. For this is to mislocate it on a logical map of the structure of historical explanation. We could, indeed, describe the earlier event with a narrative sentence which referred to the later event, that is, not simply with 'The Duke favoured the marriage at t-0' but with something like 'The Duke, who was later to oppose the marriage, was until early in 1623 a supporter of the alliance'. It is a matter of indifference whether we say that we want to explain the later event, or the earlier event under the narrative description, for it is the *connection between* the events which has to be explained.

This connection is *not* a causal connection: rather, the events in question are connected as end-points of a temporally extended change—as the beginning and end of a temporal whole—and it is the change thus indicated for which a cause is sought. It seems to me then that Nagel misreads the connection, for he remarks that it is 'difficult to imagine a reasonable generalization which would permit us, given c_0 [Buckingham desires the marriage between Charles and the Infanta] to conclude that c_{12} [Buckingham changes his mind] would probably occur'.[1] And he says that 'there appears to be no connection between c_0 and c_{12} (the action for which an explanation is being proposed) other than that the latter is the "opposite" of the former'. But there is a connection, and Nagel has in fact already stated what it is. It is only that he was seeking a different sort of connection. The connection is that of part to whole. The earlier event is part of what has to be accounted for, and reference to it is already contained in the description 'The Duke changed his mind'. If this is so, then it would be a clear case of begging the question to suppose that the earlier event belongs to the explaining apparatus, used to account for the change. It is part simply of the change, and accordingly part of what has to be explained.

Now to speak of a change is implicitly to suppose some continuous identity in the subject of change. Traditionally, indeed, it was felt to be a metaphysical necessity that some unchanging substance must endure through a change, it being otherwise a misnomer to speak of change at all. Without pausing here to worry about substances, we must still speak of the subject of change, whatever metaphysical status the subject is to enjoy. Hence, to keep to our examples, and pending any further analysis

of what is involved, the Gardiner–Dray example has to do with a change in attitude, on the part of the French people, towards their king: 'they' changed their attitude. The Nagel example has to do with a change of mind on the part of the Duke of Buckingham: *he* changed his mind. It is this implicit reference to a continuous subject which gives a measure of unity to an historical narrative. This gives us a further reason for dismissing *S* as a narrative: it was never *about* the same thing. Therefore since there was no subject, there was, strictly speaking, no change.

The *form* of an explanandum in history may be represented as follows:

E: x is F at t-1 and x is G at t-3.

F and *G* are predicate variables to be replaced, respectively, with contrary predicates; and x is an individual variable to be replaced with a singular referring expression which designates the subject of change. Thus we get

E: The Duke of Buckingham favours the marriage at t-1 and the Duke of Buckingham opposes the marriage at t-3.

The shift *F–G* is the change in x which requires explanation. But to explain the shift requires reference to *something happening to* x *at* t-2, an event (of whatever degree of complexity) which *caused* the change in x. I therefore offer the following model as representing the structure of a narrative explanation:

(1) x is F at t-1.
(2) H happens to x at t-2.
(3) x is G at t-3.

(1) and (3) together constitute the explanandum, (2) is the explanans. To furnish (2) is to explain (1)–(3). Without worrying for the moment about the question of general laws, I wish to point out that it ought now to be perfectly clear in what sense an historical explanation takes the form of a narrative. It is so in the sense that (1), (2), and (3) simply has already the structure of a story. It has a beginning (1), a middle (2), and an end (3).

It might be objected at this point that my model, if it may be so designated, is in fact satisfied by *any* causal account whatsoever. We can easily fit it to Hume's paradigm, for example: Billiard ball *A* is stationary at t-1, is struck by billiard ball *B* at t-2, and moves at t-3. But if this is so, the objection continues, my analysis fails satisfactorily to differentiate

between historical explanations and causal explanations in general. I do not regard this as a very damaging criticism, however. For I should be perfectly content if I had shown both that there is no intrinsic difference between historical and causal explanations, and that causal explanations do in fact all have the form of stories. It may, of course, be true that there are explanations in science which do not have the narrative form. For instance, if we think of a physical system all of whose states are, in the appropriate sense, determined by an arbitrarily chosen initial state of the system, where the explanation of the system being in a given state consists in deducing the values of this state, in accordance with certain algorithms, from the values of the variables of the system at the initial state. But it should be noticed, as Russell pointed out, that the notion of *cause* has no place in such a representation.[1] I am interested only in causal explanations.

Secondly, it may be objected that any such explanation can always, in principle, be reconstructed in such a manner as to yield a deductive argument. This may be correct, but it would at best constitute a *formal* difference; a different way of expressing an explanation. This would leave intact my own claim that a narrative is a *form* of explanation. Meanwhile, it is worth noting that Hempel, who has been identified as the most uncompromising champion of the deductive argument model, presents his own celebrated example of the burst radiator in what is unmistakably a narrative form.[2] So it seems to me that there is as much justification for the claim that we can reconstruct a 'scientific explanation' as a narrative as there is for the reverse claim, and that an account in narrative form will not lose any of the explanatory force of the original, assuming it had any explanatory force to begin with.

Parenthetically, there is a certain resemblance between the narrative model and the alleged *dialectical* pattern which Hegel famously contended is exhibited everywhere throughout history. To some extent this is merely a numerical coincidence: thesis, antithesis, and synthesis can be mapped on to the structure of beginning, middle and end. Indeed, by applying narrative descriptions, we could almost give a sense to the Hegelian claim that the thesis 'contains' the antithesis and the synthesis. It is difficult, however, to know how far this analogy could be pressed, and I shall not attempt to elaborate upon it here. I turn, therefore, to the question of the place of general laws in narrative explanations.

It seems to me beyond argument that any decision one makes about what is to constitute the crucial middle in a narrative, the event *H* (that which happens to *x* and which causes *x* to change) must be selected in the light of some general concept, expressible, perhaps, as a general law. *H* must be the kind of event which can produce a change of the kind *F–G* in the subject *x*. One might at this point remark that narratives, rather than being simply explanation sketches which mark the place where laws are to be inserted, might instead be regarded as the *result* of taking an explanation sketch which makes use of general laws already, these marking the place where the description of an *event* is to be inserted. That is where we are certain of the law but uncertain as to what precisely happened, the narrative then consisting in an account in which the general knowledge of what *kind* of thing must have happened is replaced by the specific knowledge of what specific thing, of the required kind, *in fact* occurred. This is far closer to the idea of a sketch than any actual piece of first-rate historical narration is, which seems, on the face of it, not to be like a sketch at all, but instead to be complete and finished.

Suppose, to illustrate with a simple case, we know that a change has taken place in a certain *x*—say an automobile—between *t*-1 and *t*-3. The change consists in the shape of a bumper: it is dented where it was not dented before. Now we wish to account for this change. *A priori*, we normally assume some such deterministic maxim as this: automobiles do not just spontaneously change in the fashion remarked upon: they only do so when something happens to them. This is hardly a law. It is, better, a methodological directive which assures us there is a story to be told, sending us to look for a causal episode. But we have more than this directive to go on: we will normally be able to specify in a general way what sort of causal episode must have occurred. And this is to appeal to a general concept which allows us to *posit* an explanatory middle to the story the beginning and ending of which we know. We can do no more than posit a causal episode under some such general description as 'something *y* struck *x* with a certain force at *t*-2'. Just on general principles then, we can be said to know the truth of the following narrative:

I. The car is undented at *t*-1.
II. The car is struck by *y* at *t*-2.
III. The car is dented at *t*-3.

This, however, is really just an explanation *sketch* for a narrative, a narrative only being available when we know what hit the car when. So *H* marks the place where, in the light of a known general law, the description of a particular event is to be inserted to convert the explanation sketch into a fully-fledged (narrative) explanation. This required description can be found only by making an historical investigation,[1] *guided*, no doubt, by the narrative sketch and the general law in accordance with which it was constructed. For there is no way, apart from such an investigation, of determining what was the specific instance covered by the known general law and the known general description. From these alone, for instance, we could not deduce

II′. A truck struck the car at 3.30

for the narrative sketch could be true while the narrative consisting in replacing *II* with *II′* be false. Yet *II′* is the *kind* of event which could complete the story and explain the change (tell what happened and explain what happened at once). Yet, on the basis of the identical general principles which allow us to know that the narrative sketch is true and that the narrative *could* be true were *II′* to replace *II*, we can also know that the following does *not* complete the story nor furnish an explanation of the change:

II″. The driver of the car coughed at 3.20

even though the event thus designated occurred and did so within the interval defined by *t*-1 and *t*-3. I do not say that *II″* might not ultimately need to be mentioned in the story: the driver's cough may have been violent, may have distracted his attention from the conditions of the road and exposed him to collisions, but these are complexities I need not grapple with here. For the only point I am seeking to make is that the construction of a narrative requires, as does the acceptance of a narrative as *explanatory*, the use of general laws. But these must, as we have seen, be supplemented by rules which allow us to identify the things that happen as instances of the general description which is as much as the general law allows us to give. Thus not merely does *II′* satisfy the general description in my narrative sketch, but so does

II‴. The owner of the car struck it with a sledge-hammer at 3.30.

The general law, no more than the general description *II*, cannot tell us which of these is the case. For this we require what I have termed 'documentary evidence'. And this is a job for historical inquiry. On the other hand, *II'*, while compatible with either account, could more readily be seen as belonging to a narrative completed by *II'* than one completed with *II'''*.

The problem is somewhat more aggravated when it is a question of explaining the shift in attitude towards the marriage of Charles on the part of the Duke of Buckingham. We can say, indeed, that something must have caused him to change his mind, but this is hardly more than to insist upon the methodological directive to *look* for a cause. Moreover, our general knowledge of automobiles permits us to say, without further concern, that if there is a dent, it must have been struck by something with a certain force. It is not so simple to say what sort of thing could cause men in general to change their minds about marriages. Here we would have to know what sort of man the Duke of Buckingham was. Suppose even that we know that he was a proud man, however, we would be able, at best, to offer, as a general description of the 'middle of the story', that something caused this disposition to actualize in a change of attitude. Yet this would still leave open a variety of *other possibilities* of the class-kind. The Duke, for instance, may have been an astute politician, and have seen an alliance with the Hapsburgs of Spain as detrimental to the national interests of England. He may have had personal ambitions, wanting to ally the Prince with someone from whose union he stood to gain. So we have a double problem on our hands. First to rule out other possibilities of the class-kind—something which is done almost as a matter of course in the case of the dented car—and then to rule out other possibilities of the membership kind. Not knowing what law is involved, historical inquiry is to that degree unguided. Once, however, we have the explanation, it is not difficult to find the required general description and the law. The explanation is given in the following brief account:

[King James's] son and his favourite Buckingham, indignant at their reception in Spain whither they had gone to hasten the negotiations, returned to England and declared themselves unwilling to participate further in the unholy alliance.[1]

This is a less detailed account, to be sure, than the one in Trevelyan's *England under the Stuarts.*[1] But C. V. Wedgwood is working on a wider canvas. The change in the Duke's attitude—a story in itself—is part of the middle in a larger story: the change in marriage plans of Charles. This, in turn, is part of the middle of a yet larger story, the change in policy on the part of James towards the Palatine Elector. This, in turn, is part of the middle in a further story, the change in England's position towards the war between Protestants and Catholics in Germany, and this in another story, the change in status of the Hapsburgs, the change in status of the Catholic Church . . . and so on.

Each of these changes is contained as part of the story of the next change mentioned, the final story containing them all. But then to explain the final story we must work our way back, step by step, to the Duke of Buckingham's shift in attitude. Changes are nested within changes, and stories require increasingly complex middles to explain the outermost change. We might represent it graphically as follows:

( )
(( ))
((( )))
(((( ))))
. . . ((((( ))))) . . .

Obviously, this is too neat. For we have cases like the following:

(( ) ( ) ( ))

which raise special questions of multiple causation and overdetermination, as well as cases like this

(( )(( ))())

where we have overlaps. But barring these complications, which are in the end problems in the concept of causality, I think no special further problem is raised by them concerning the relationship between narratives and general laws. Philosophically, this is as far as we need go in the matter. Yet I should like to add to this account a few words on the concept of causality.

First of all, it does not seem to me that we require, for the analysis of

causality in history, any different analysis from the classical one given by Hume. What is involved in any of the cases I have considered is nothing more, I believe, than a constant conjunction of like events with like events. It is of course true that we ourselves need not have personally built up these associations by performing, individually, the inductive generalizations which permit us to make the causal explanations. There is a social inheritance here, and the bulk of the generalizations we employ have been built up over the generations and have been built into the concepts we most of us employ most of the time in organizing experience and explaining how things happen. So immediate, for the most part, is our descriptive response when confronted with an instance which falls under a concept, that it is easy to see how some philosophers should have been persuaded that a special sort of capacity, an intuitive understanding or *Verstehen*, is exercised, as though we knew immediately and directly, or could know immediately and directly, what caused what happening in this change or that in this subject or that. And of course we do, in a way. Especially when human behaviour is involved, for we are far more familiar, most of us, with how humans behave than we are with how any other group of things behave. But if our familiarity were to be brought to this level with *any* kind of behaviour on the part of any kind of thing—animals, machines, or electrons—we should respond, here too, with the same immediacy and certitude.[1] Philosophers might argue that no law is needed nor used in the explanation of such behaviour—the explanation is just 'seen'. But psychologically true as this may be, it leaves unaffected the logical features of explanation, and should something happen of a wholly unprecedented sort, totally unlike any other change which ever took place so far as we knew, even in the case of human behaviour, we should, I submit, be totally unable to even begin to provide an explanation, to 'see' what were the causes of this change, until we had managed to cover the event with a general description and bring it together with like instances. If this should be doubted I can only, in the spirit of Hume, request him whose doubt it is to produce an instance, even an imaginary one, so remotely unlike anything ever seen before as to utterly defy this natural operation of the human understanding. In all the annals of history, surely, no such wildly deviant occurrence is to be found.

Yet, in acknowledging the basic cogency of Hume's analysis, I must enter some qualifications which my discussion of historical explanation seems to me to require. These, while going beyond Hume's account, are not in any sense to be regarded as incompatible with it. If anything, they extend and amplify his account and help to make clear why so frequently people have felt that in history Hume's analysis meets its nemesis, made up, as it is, of unique events and unprecedented causal sequences.

First, to accept the idea that like events have like causes, and that to speak of causes is to speak of constant conjunctions, requires nonetheless a stipulation that the likeness holds only at a certain level of generality. Our task, in cases where explanation is sought, is to find the correct general description of the event in question, to see it in the proper causal perspective. When we have achieved this, to quote the apposite law is easy, and nearly automatic. For we know, albeit still in a general way, what must have been the *kind* of cause which was responsible for the change. But there is a considerable distance between the establishment of this connection, and the identification of the specific event which falls under the general description. In history this is particularly so, for there is an endless variety of instances which fall under roughly the same general description. Indeed, part of the fascination of history lies in this spectacle of an innumerable variety of qualitatively different actions and passions, exhibited by human beings down the ages, which are for all that still instances of the same general description, and are covered by the same general principles we employ in everyday life, principles which, if enunciated, come in the end to be little more than truisms. It is for this reason, again, that we learn very little from history in the way of fresh general principles which we have not already acquired as part of our cultural inheritance. It is this, in turn, which supports the frequent claim that history is not a science. And if one of the things we expect from a science is the discovery of new general principles, then this charge is almost certainly true. This does not, of course, prevent us, if we wish, from collecting all these truisms—which have, perhaps, more verifying instances than any scientific law—into a body and labelling this a science. But this would require us to speak of common sense as a science, and would only cloud some relevant distinctions. On the other hand, these magnificently supported general principles, abetted by even the most

extravagant imagination, would never have enabled us to predict the immense variety with which these principles have been illustrated and exemplified in the past.

Secondly, it is easy to see why there should be felt a certain looseness in causal explanations in history; why we fail to feel, in history, the sort of inevitability between cause and effect that we believe we ought. Hume brilliantly analysed the psychological origins of the concept of causal necessity, arguing that it is not found in events, is not objective, but is read into the conjunctions of events said, respectively, to be causes and effects, and is a habit of mind. But an exactly comparable psychological explanation can take care of the feeling of *non*-necessity between events said to be cause and effect in history. It consists in the fact that the necessity only holds at a level of generality in terms of which we do not usually think when we appreciate historical occurrences. Hume's billiard balls were notably and obviously like any billiard balls, it requiring a special effort to see differences between any chosen pair of billiard balls. Were a man able to pick, from a pile of billiard balls, just the one billiard ball he had played with a year ago in Pawtucket, he would exhibit a power of discrimination unshared by the majority of his fellows, who persist in treating such entities with a certain anonymity. For practical purposes they are right to so treat them, though *a priori* we know the differences are there. What is true for billiard balls is *a fortiori* true for collisions between them. But the instances covered by general descriptions—for example 'a revolution'—are obviously and often immensely different. We do not automatically think of just any revolution when we think of the French Revolution. Dents in automobiles are again causally homogeneous. We have a fairly circumscribed idea of what must have been the kind of thing which happened to a car in order to put a dent in it. But the sort of thing which might make a man like the Duke of Buckingham change his mind about the marriage of a Prince are not so easy to enumerate in advance. Once we know what turned the trick, we can bring it under a general principle readily enough. But at the same time, that very general principle admits of so many, and so various a set of instances, that we see no reason why this rather than that should have caused the Duke to change his mind, and so we feel less of the necessity, the certainty, than we do in the case of billiard balls or dented vehicles. Yet, at a certain level of generality,

there is no difference between these cases. We may say that had the Duke been less arrogant, or the Spanish more ready to tolerate his behaviour, he would not have changed his mind. This may be so. But if billiard ball B had had a lesser mass, or if billiard ball *A* had been, by reason of being glued down, more resistant to impact, *A* would not have moved. The Duke's disenchantment with Spain, together with popular feeling in England against the Spanish Hapsburgs, together caused James to change his policy. But we could at the moment of impact tilt the billiard table, and say both caused *A* to move. The counterfactual problems are invariant.

That the explanandum, in a typical historical explanation, should be a description of a change, or imply a description of change, follows, I think, from the fact that what is being sought for and ideally provided by such explanations is a *cause* (or set of causes). For suppose we cite something *y* as the cause of *x* being G at *t-n*. It is clearly not enough simply to be able to demonstrate that *y* happened, that *x* is G afterwards (at *t-n*), and that *y*-like things can or regularly *do* cause *x*-like things to be G, so that there is a law-like connection between *y*-like things happening and *x*-like things being G. For all of this may in fact be true and still *y* may not have caused *x* to be G. Suppose, for example, that *x* is a female mammal and that *x* is pregnant at *t-n*, and that *y* refers to an episode of intercourse between *x* and some specific male mammal *m* at some appropriate time before *t-n*. There can be no question that such an event is just exactly the sort of event which causes *x*'s to be G. Yet it by no means follows that *x* having had intercourse with *m* caused *x* to be pregnant, for it might have been done on a different occasion with a different male mammal. So we could, in principle, specify a set of laws and conditions which wholly satisfy Hempel's model, and which yet fail to explain *x*'s G-ness. There would be one piece of information which Hempel has failed to make room for, namely information having to do with *x*'s condition *before y*. Thus, suppose *y* takes place at *t-2* and *x* is G at *t-3*, and *y can* cause *x* to be G. Still, if *x* was G at *t-1*, i.e. before as well as after *y*, then clearly *y* is not the cause of *x* being G. That which leaves something in the same condition it was before cannot be the cause of that condition in *x*. A cause must make a difference. Hence, from the fact that we seek for a cause

when we try to explain something being in a certain condition, it follows that the explanandum, if only implicitly, is a description of a *change*. If the radiator was burst *before* the cold spell, the cold spell cannot explain the radiator's being burst.

I labour this wholly obvious point because it is not always obvious that we are in fact referring to a change when we demand an explanation of some event, and because it may seem unduly artificial to render explananda in terms of beginnings and endings. Consider, for example, my own illustration of the putting out of American flags during their *fête nationale* by the celebrating monégasques. It may plausibly be argued that all we are looking for in such a case is just an explanation of this event, and that we do not, so to speak, perceive the event as the terminus of a change. To be sure, we might be aware of some change or other. Thus: on Friday Monaco is flagless, a fact which we would hardly remark upon that day any more than we would remark that there were no eagles in Monte Carlo on Friday. But on Saturday the town is beflagged. The explanation of *this* change is that this is the *fête nationale*, but this is not the change that interests us and indeed it is being contended that we are not in any sense at all interested in a change, but only in there being American flags on the streets. Is it at all necessary to see this as part of a change and what, really, could we offer as the beginning of it? I answer that the explanation of the event *entails* a specification of what the beginning was, for it tells us what sort of change took place. For we have cited the marriage of the Prince to an American-born woman as the explanation of this event, and have now perceived the event under the general description 'honouring a foreign-born sovereign'. Now surely, if this *is* the explanation of the event, then putting out American flags was not something done on *fêtes nationales* by monégasques before the marriage of the Prince, and if they did engage in that practice, then surely the marriage of the Prince cannot explain that practice. The explanation might run now: 'The Prince married an American woman, and so the populace now began to put out American flags on the national holidays.' But the beginning of the practice is not what I am terming the beginning in a change. The beginning in the change is what the practices were *before* the causal event occurred which is purportedly the explanation of the practices.[1]

The general point to be made is that we can always refute an historical

explanation (and indeed any causal explanation) of something x being in a certain condition G as a consequence of a proposed causal episode y, if we can demonstrate that x was G antecedently to the occurrence of y. This is particularly and obviously so when we propose explanations for the *origin* of something. Thus it is a plausible explanation of the origin of the practice of decorating evergreens at Christmastime to point out that in the late middle ages, in Alsatia, plays were presented the day before Christmas (Adam and Eve's Day) depicting the story of Paradise; that for scenic purposes apples were hung on trees, in this case evergreens, which would be the only trees bearing foliage at this season; and that given a natural human propensity towards embellishment, the decorations grew increasingly elaborate. One may refute this as an explanation of the *origin* of the Christmas tree—and refutations of this sort are very much the business of history—by discovering that evergreens were decorated at Christmastime earlier than this.

In view of these considerations, we can give a sense to what is sometimes offered in explanation of x being G, namely that x always has been G. This, of course, is simply to be understood as a way of saying that no special explanation is required for the fact that x is G *now*: a stranger may demand an explanation of why Jones is irascible this morning and be told that Jones is irascible *every* morning. Or one may ask why the monégasques put out flags on their national holiday and be told that they always have done so. But of course in either case the explanation, if we may term it such, may lead to a fresh demand for the origins of Jones's irascibility or the monégasque practice, and this, in turn, is a request for a cause, and hence implies a change.

The beginning, as specified in an explanandum, is then that state of x before x changed into its present condition. This fact permits the use of a special class of narrative sentences which *negatively* describe x as x was before the change, descriptions, again, which it would often be weird and pointless to suppose could have been given at that time. Thus an historian, writing the history of Alsace, might say, of a certain period, that the Alsatians had not yet developed their quaint custom of hanging apples on evergreen trees the day before Christmas. But, put into the present tense, we could hardly expect this sentence to appear, say, in the journal of a contemporary traveller in Alsatia. This would have the ludicrous effect

as would a diplomatic message from Saxony to Paris in 1617 saying that the Thirty Years War had not yet begun—though nothing untoward is felt in an historian writing, of Europe at that period, that this was the eve of the Thirty Years War. Meanwhile, I can imagine a child suddenly acquiring the concept of the past by being told that there was a time, once, when people did not have Christmas trees. Etiological myths often begin with some such phrase as that.

Roughly, then, what we select as the beginning of a narrative is determined by the end, a claim borne out by the legitimacy of narrative descriptions of the beginning with reference to the end. One chief task in narration is to set the stage for the action which leads to the end, the description of which is the explanation of the change of which beginning and end are the termini. I have referred to *temporal wholes* in my discussion of narrative sentences, and suggested that it is characteristic of history that it organizes the past into temporal wholes. I realize that words like 'whole' are notoriously difficult to analyse, and that by 'whole' we are sometimes said to mean more than just a collection of parts. We mean a *unified* collection, and the chief difficulty, perhaps, has to do with the concept of unity. 'Unity', of course, is frequently a term of critical appraisal: we respectively commend or discommend a work of art in accordance with whether it has unity or not, whether or not its parts hang together. Doubtless we have differing criteria of unity, depending upon the genre of the work of art—poem, painting, musical composition—we are critically appraising, but I am here concerned only with the concept of unity as it applies to narration, and it seems to me we can make a beginning towards specifying a criterion of narrative unity by taking seriously the suggestion that a narrative and a deductive argument might constitute alternative *forms* of explanation. If this is so, then certain formal fallacies in deduction, certain deficiencies in an argument which prevent it from going through, might find their analogues in narratives. That is, we might find a number of conditions which, if an argument fails to satisfy them, render the *narrative* invalid. These would then be necessary conditions for a valid argument. By analogy we might constitute these as necessary conditions for a 'valid' narrative. I do not say we can elicit all the necessary conditions for narrative unity in this way, but we can get some. Moreover, by exploring the analogy between deduction and

narration, we can begin to glimpse where the analogy gives way, and this will enable us, I hope, to determine what special and irreplaceable rôle narratives play in historical explanation.

I shall take the simplest case which will satisfy Hempel's criteria for an explanation, a *modus ponens* argument:

(1) $(x)Fx \supset Gx$,
(2) Fa,
(3) Ga,

where (3) is the explanandum (a sentence describing a singular occurrence), and where (1) and (2) jointly constitute the explanans, respectively as general law and initial condition. I shall assume that the explanans satisfies all of Hempel's criteria and that, moreover, (3) follows, by logic alone, from (1) and (2). I have already registered my dissatisfaction with this model, my main complaint being that Fa–Ga is a *change*, that this change is what we want an explanation for, that these changes are not always covered by general laws although the connection between these changes and some assigned *cause* for the change typically is covered by a general law, and so on. None the less, just with this simplified model we can make a few logico-aesthetic points.

(A) Suppose we were to replace (2) with Fb. This would be a violation of a rule in natural deduction, and the premisses would no longer entail (3). But similarly, suppose we were to replace (3) with Gb. This conclusion would no longer be entailed by (1) and (2). Logically, we want the same variable to be replaced by the same constants throughout. The narrative analogue might be spoken of as *unity of subject*. In the above argument, no constant can appear in the conclusion which does not antecedently appear in the premisses. Narratively, 'the continuity or persistence of elements which a characteristically historical explanation emphasizes may be of a kind which serves to render the *explanandum*—when it is some human action or sequence of actions—intelligible or justifiable'.[1] There is an immensely difficult problem here in historical ontology, the problem, namely, of what *are* the elements which persist through a change. It is rather simple when we are concerned with the Duke of Buckingham's shift in attitude. But it is considerably more complex and metaphysically challenging when we are interested in such a change as, say, the break-up of feudalism, or the emergence of nationalism,

or, for that matter, the progressive embellishment of the Christmas tree. However this issue is to be decided, from a *formal* point of view a narrative requires a continuant subject.

(*B*) It is a commonplace in logical theory that no predicate may appear in the conclusion of a deductive argument which is not antecedently contained in the premisses. Let us suppose that our conclusion satisfies condition (*A*) but contains an extra piece of information. For example, suppose it is a conjunctive assertion of two propositions about *a*—*Ga* and *Ha*. Clearly, (1) and (2) by themselves do not provide adequate evidence for the assertion of this conjunction, and the explanation would accordingly be incomplete. But an analogous point may be made about narratives, whether historical or fictional. Suppose that at the end of the play we know both that Macbeth is dead and that he is detested by Macduff, but that the play itself only accounts for the former fact. Since the author has (on our supposition) made a point of the fact that Macduff hates Macbeth, but has not shown us why he does so, we would feel a natural gap in the story and an artistic flaw in the play, the gap and the flaw being removed when episodes are introduced to account for Macduff's hostile attitude towards Macbeth: the fact that Macbeth caused the death of Macduff's wife and children. There may *in fact* be lots of things true of Macbeth at the end of the story for which no explanation has been furnished in the body of the play. From amongst all these only a certain few have been selected for narrative explanation. But of course this is so for any explanation, historical or otherwise. The point once again is that we do not explain events as such, but rather events under a certain description; it being as important in history as it is in science to choose a description. But once chosen, the event must be thoroughly explained relative to that description.

(*C*) Suppose we simply added a premiss (3*a*): *Ea*. The deduction would go through as before, but (3*a*) would make no contribution to the logical work. It would be superfluous and deductively inert. It violates a rule of deductive elegance, which requires that a valid deduction contain all and *only* those sentences required for the conclusion. Aesthetically, and with reference to a narrative analogue, this would represent a breach of artistic taste. It is a flaw in a narrative if it contains episodes which fail to contribute to the action. The scene with the drunken Porter in *Macbeth*

is an instance of a narratively inert episode, and has indeed been criticized on just these grounds. This does not, of course, mean that its inclusion could not be otherwise justified. It may, for instance, provide some relief from the mood of intense horror created by the immediately prior murder scene. Historians too may introduce narratively inert information. But I am here interested only in the explanatory aspect of narratives.

On the basis of these analogies, then, we can, I think, state some of the necessary conditions for narrative unity. Thus, if *N* is a narrative, then *N* lacks unity unless (A) *N* is about the same subject, (B) *N* adequately explains the change in that subject which is covered by the explanandum, and (C) *N* contains only so much information as is required by (B) and no more. I do not say these are the only criteria for unity, and there may be other criteria for a satisfactory piece of historical writing which may even conflict with some of these, for instance, (C). But I do not wish unduly to complicate the issue under discussion by going further than this, for the rôle of narratives remains to be accounted for.

That there are these analogies between deductive arguments and narratives helps support my claim that a narrative is a form of explanation if a deductive argument is. But now I should like to show where it seems to me that the analogy gives way, and why, accordingly, narratives are not always reducible to deductive arguments.

I have so far represented a story, in a minimal way, as having some such form as this:

(i) *Fa*,
(ii) *y*,
(iii) *Ga*.

Here *Fa* and *Ga* together, and in that order, represent a change in *a*. This change may not be covered by a general law, but once reference is made to *y*—a causal episode—then some general law is being appealed to, some general assumption is made, to the effect that *y*-like things cause *a*-like things to change from *F* to *G*. Such a narrative I shall now term an *atomic narrative*, containing a beginning (i), and ending (iii), and a middle (ii). Graphically, I shall represent it as follows:

F G
/ . /

—where the strokes represent the termini of a change, and the dot represents the cause of the change.

But now it may happen that there are changes such that no single cause can serve to explain them. In this case, we may suppose that *a*—the subject of change—has gone through a *sequence* of changes, and that accordingly a sequence of causes must be assigned in order to explain the major change. Roughly in the way that a man, say, can only get from Westchester to Nairobi by taking (say) an underground train, a plane, a train, and a boat in that order, there being no single mode of transportation which will serve to carry him the whole distance. In cases of this sort, where no single cause can account for the change, but only a sequence of causes, each accounting for a successive change, I shall speak of a *molecular narrative*, to be represented graphically thus:

F G H I
/·/·/·/

where the three succeeding changes are *F–G*, *G–H*, and *H–I*.

In a molecular narrative, each unit /·/ is covered by a general law of the sort at least that I have characterized above, but there need not be any general law which covers the entire change. There may be a question as to why we require the notion of a molecular narrative, and cannot consider any such molecular narrative as simply an end-to-end series of atomic narratives. The answer to this is plain. It is because we are interested in the *larger change* (in the above representation) *F–I*, of which the intermediating changes are *parts*. But this serves, in turn, to answer what might seem an objection to our account, and indeed an objection to the entire enterprise of history. The objection is this: why, in order to account for *I*, do we need anything more than the last unit in the chain of atomic narratives. For is it not the case that the cause represented by the dot in

H I
/·/

is the cause of *I*? In which case why go all the way back to

F
/?

The answer is this: the cause in question does serve to explain *I*, but the fact is that we are not specifically interested in *I* as such, but in the *change*

F–I, and for this change the cause cited is not sufficient. Here is one further instance of the sort of mistake which arises from thinking of the explanandum in an historical explanation as simply the description of an event. When, on the contrary, we see that the characteristic historical explanandum describes a change, and often, indeed, a *vast* change covering, perhaps, centuries, we can immediately see why we cannot reduce a narrative explanation to its final episode (or atomic narrative).

But now what of our analogy between narratives and deductive arguments? To begin with, it may be argued that, just as we must refer to several changes, and hence several causes, in order to account for a large 'molecular' change, so, in a deductive argument, we may need *several* distinct premisses in order to derive a conclusion, no single one of which by itself entails the conclusion. Thus, thinking of condition (*B*) above, we could not, for example, deduce *Ha* from just the two premisses *Fa* and $(x)(Fx \supset Gx)$. But by *adding* a further premiss, we can complete the argument validly. According to Hempel's model the added premiss must either be a general law or a statement of another required initial condition or both. Now suppose we add the general law $(x)(Gx \supset Hx)$. This would do the trick, but the fact is we can in such a case eliminate the *two* general laws in favour of another one, for since we can validly derive $p \supset r$ from $p \supset q$ and $q \supset r$, the two laws collapse into one—$(x)(Fx \supset Hx)$. But such an elimination cannot obviously be made in every valid narrative. Thus suppose we have

F G H
/·/·/

which presupposes two general laws, and refers to two distinct causes, say *k*·1 and *k*·2. The laws are as follows:

k·1 *F–G*,
k·2 *G–H*.

We may not be able to collapse these laws into a single larger one, and moreover we may not be able to find a single cause for the change *F–H*, so here the analogy would break down.

On the other hand, there is one further possibility. Suppose we eliminate our general law, and replace it with this *one*: $(x)(Fx \cdot Gx \cdot \supset \cdot Hx \cdot)$, and we add the further initial condition *Ga*. Here neither *Fa* nor *Ga* alone

entail the conclusion, and the law requires their conjunction if its antecedent is to be satisfied. This would certainly be analogous to the case of a narrative which requires more than one cause to account for a large-scale change. Indeed, we might even have laws in which the required initial conditions are to be satisfied in sequence, for example, $(x)\,(Fx_{t-1} \,.\, Gx_{t-2} \supset .\, Hx)$, where the subscripts indicate the order in which the initial conditions are to be satisfied. We might term such laws *historical* laws. Then, with the aid of historical laws, together with a specification of temporally distinct initial conditions, we could indeed deduce our conclusion. Such laws would, in fact, enable us to make predictions, or better, *qualified* predictions. For since the two forms $(p \cdot q) \supset r$ and $p \supset (q \supset r)$ are demonstrably equivalent, it follows that if we have an *historical law* of the form

$$\left(C^{o}_{t-o} . C^{I}_{t-I} \ldots . C^{n}_{t-n}\right) \supset E$$

and, if C^{o} occurs at t–o, we can predict that E will take place *if* $C^{I} \ldots C^{n}$ take place in the required temporal order. Roughly in the way that we might say (predict) that a rocket will cover a certain distance providing three serial explosions occur, and then, supposing the first *does* occur, go on to predict that the rocket will cover the required distance if the two *remaining* explosions take place.

There may *be* historical laws. There may even be historical laws in history, for all one knows. But should they be discovered they would not add any further support to determinism than would the existence of non-historical laws. Nor would they in any way entitle us to conclude that there is historical inevitability any more than the existence of general laws of a non-historical sort entitle us to conclude that there is inevitability in nature. So the discovery of historical laws would in no degree support the prophetic pretensions of substantive philosophers of history.

Meanwhile, I think, I may justifiably claim that whether we can transform a molecular narrative into a deductive argument is contingent upon the question whether there exist historical laws, and moreover there would remain, even if *some* historical laws should be discovered, the question whether for *each* molecular narrative a general historical law might be found.

Be this as it may, the fact remains that, in history at least, few, if any historical laws are known, but this in no way diminishes or jeopardizes the explanatory force of narratives. If anything, it jeopardizes a philosophical programme which is committed to the view that every explanation requires, as a necessary condition, that it be capable of deductive formulation. I have conceded that this may very well be a *sufficient* condition, but not a necessary one if molecular narratives be accepted as explanatory. This does not again entail that narratives can be constructed without the use of general laws, but only that no general law need be found to cover the *entire change* covered and explained by a narrative.

The rôle of narratives in history should now be clear. They are used to explain changes, and, most characteristically, large-scale changes taking place, sometimes, over periods of time vast in relationship to single human lives. It is the job of history to reveal to us these changes, to organize the past into temporal wholes, and to explain these changes at the same time as they tell what happened—albeit with the aid of the sort of temporal perspective linguistically reflected in narrative sentences. The *skeleton* of a narrative has this form:

/./././. . . . ./

but the skeleton may be fleshed out with extra descriptions, anecdotes, moral judgements, and the like. But these, I am suggesting, are, philosophically at least, of secondary interest.

One final word. Even supposing we had really extraordinary historical laws, involving vastly many variables and covering immense stretches of time, there would still be no reason to suppose that the connection between these laws and the temporal wholes which instantiate them would be any less loose than the connection between the laws I have been discussing and their instances. So not merely would such predictions as we might make by means of these laws be conditional, but they would also be general. They would tell us at best what will happen only under certain highly *general* descriptions providing that certain initial conditions—again under highly general descriptions—sequentially hold. So once again the prophetic aspirations of substantive philosophers of history would be subverted, and once again there would be the problem of writing the history of events before the events happened, a task which

the existence of historical laws would not enable us to discharge. Our knowledge of the future would remain abstract in contrast with our knowledge of the past. And the task of history itself would still be to tell the story of what precisely happened, even if the story should fall under a general historical law as an instance, and even if the law should be known. History alone would be able to exhibit the amazing variety of temporal wholes which none the less all fall under a single historical law. Our fascination with the *details* of the past would, if anything, increase. One does not find sonnets less interesting or beautiful upon being told that all sonnets have an invariant form. If anything our admiration for poetic creativity increases upon learning that so many distinctly individual and dissimilar works should all have been produced in conformity with the most rigid and invariant set of rules!

XII

METHODOLOGICAL INDIVIDUALISM AND METHODOLOGICAL SOCIALISM

I have sought to make out a case against substantive philosophy of history by emphasizing certain logical features of what one might call the language of time. And in the course of this I have tried to explicate our concept of history, suggesting that it is the illicit extension of modes of description which are essentially historical beyond the domain in which they have application which defines the aspiration of substantive philosophy of history. I have sought, then, to draw a borderline which we are tempted to cross but cannot. The analyses of history and of substantive philosophy of history are interdependent, roughly in the manner in which the Transcendental Analytical and the Transcendental Dialectic are in Kant's *Critique of Pure Reason*: for the Dialectic exhibits the unhappy destiny which attends Reason when it seeks to extend those forms of understanding specified in the Analytic beyond the domain where they have application, the domain, namely, of experience. It is in the spirit of critical philosophy that I should wish to have my argument understood.

To this case, however inadequately it may have been stated, I have nothing further to add. But before ending I should like to dismiss another kind of charge, which is sometimes made against substantive philosophy of history, namely that it holds the view that history is not something which men make, but that the moving agents of history are certain superhuman or superorganic entities. I do not wish to say that it is innocent of this charge, but rather that it is no philosophical crime to be guilty of it; and if philosophical historians subscribe to such entities, they may or may not be wrong, but their wrongness will be factual and empirical, and not conceptual and philosophical. To show this, however, requires some detailed conceptual analysis, for the issues here are exceedingly tangled, and the discussion is composed of topics in ontology, meaning, methodology, and language which resemble one

another almost too much for us to expect enthusiasts to take the time to sort them out. I shall endeavour to do this now, hoping, in transit, to contribute somewhat further to the correct analysis of historical sentences.

By *historical sentence* I shall mean: a sentence which states some fact about the past. Historical writings consist chiefly of historical sentences, and are further distinguished by the fact that a considerable number of the historical sentences which compose them employ, as grammatical subjects, proper names (e.g. 'Frederick V') or definite descriptions (e.g. 'The Elector Palatine in 1618') of individual human beings who actually existed. Neither of these linguistic features carries us very far towards an adequate characterization of historical writings. Historical sentences do not uniquely occur in historical writings, and while it is perhaps (logically) inconceivable that there should be an historical writing which contained *no* historical sentences, there is little difficulty in conceiving an historical writing in which *none* of the historical sentences which compose it employs expressions which refer directly to individual human beings who actually existed. Indeed, an historical writing *all* the sentences of which employed such expressions would be far more difficult to imagine.

Individual human beings are not the only individuals directly referred to by the subjects of historical sentences. There are, in addition, what I shall term *social individuals*, individuals which we may provisionally characterize as containing individual human beings amongst their parts. Examples of social individuals might be social classes (The German bourgoisie in 1618), national groups (the Bavarians), religious organizations (the Protestant Church), large-scale events (The Thirty Years War), large-scale social movements (the Counter-Reformation), and so on. Social individuals are not the only kind of individuals, other than individual human beings, which may be referred to by the subjects of historical sentences, so these two kinds of individual-referring historical sentences do not make up the entire class of historical sentences. Nevertheless, it is with just these two kinds of sentence that I shall be concerned here.

It will, I think, be universally admitted that, from the point of view of

ready communication, neither kind of sentence could easily be eliminated from the language of the historian. It is difficult to see how, for example, an historian could convey, by means only of sentences which referred directly to individual human beings, the information so neatly and intelligibly communicated by 'The Thirty Years War began in 1618'. Nevertheless, case of communication and considerations of narrative economy notwithstanding, certain philosophers and historians have expressed a certain mistrust with regard to this latter kind of sentence—a mistrust the source of which lies in mistrust with regard to social individuals as such. These thinkers exhibit a pardonable reluctance to concede that the social world is made up of individual human beings *and* other, super-human individuals which, though they may be said to contain human beings amongst their parts, none the less are not wholly to be identified with these parts, and which enjoy, so to speak, a life of their own. In some sense or other, they appear to be saying that the social world is made up of individual human beings alone, and that there is nothing which both contains individual human beings amongst its parts and is itself an ultimate occupant of the social world. So at first glance what seems to be in issue is a question in ontology. Thus Mr J. W. N. Watkins, a philosopher, writes:

The ultimate constituents of the social world are individual people who act more or less appropriately in the light of their understanding of their situation. Every complex social situation, institution, or event is the result of a particular configuration of individuals, their dispositions, beliefs, and physical resources and environments.[1]

And Professor H.-I. Marrou, an historian who otherwise never wearies of cautioning us that there are more things on earth and in heaven than are dreamed of in our philosophy, writes:

Ce qui 'a réelment existé', ce n'est ni le fait de civilisation, ni le système ou le supersystème, mais l'être humain dont l'individualité est le seul véritable organisme authentiquement fourni par l'expérience.[2]

The use of the word 'civilisation' here is almost certainly polemical, to be taken in antagonistic reference to Professor Toynbee's well-known thesis that civilizations do indeed have a life of their own, and that they,

moreover, constitute the least units of historical study. But in fact he is rejecting all allegedly superhuman entities in history:

> A lire certains travaux contemporains, on a l'impression que les acteurs de l'histoire ne sont plus *des* hommes, mais des entitiés, la Cité antique, la féodalité, la bourgoisie capitaliste, le proletariat révolutionnaire. Il y a la un excès.[1]

And Watkins impugns in general the view that 'some superhuman agents or factors are supposed to be at work in history'—for example 'the alleged long-term cyclical wave in economic life which is supposed to be self-propelling, uncontrollable and inexplicable in terms of human activity'—and insists that 'human beings are . . . the sole moving agents in history'.[2]

These writers exhibit in these passages such an essential unanimity of attitude, that it must seem sheer pedantry to distinguish between their positions. Nevertheless, it seems to me that they are in fact maintaining distinct, and possibly even independent views. Professor Marrou's views seem quite unequivocally to be a thesis in ontology. He is insisting that, in the social world, *only* human individuals are real, and superhuman or social individuals, are not. His criterion for applying '*x* is real' is patently an epistemological one: '*x* is real' if, and only if, we experience *x*. Mr Watkins, by contrast, *may or may not* be defending an ontological thesis. He has said only that human beings are the *ultimate* constituents of the social world, and the context quite clearly implies that he means, by 'ultimate', that human beings are the only *moving agents* in the social world. It does not follow from the fact that human individuals are the sole moving agents in the social world, that they are the only members of the social world, but only that, whatever else may be a member of the social world is not a moving agent. So Watkins, whether in addition he would also subscribe to Marrou's ontological thesis, is actually concerned with a thesis about *explanation*. What he seems to be saying is this: if indeed there are such things as social individuals, their behaviour is to be explained, ultimately, with reference only to the behaviour of individual human beings, and *not* with reference to the behaviour of other social individuals. This is because (he would claim) human beings alone are *causal* agents in history.

There are, as we shall see, further differences it will be useful for us

to emphasize. But, because each of their positions bears a similarity to a third possible thesis, the thesis, namely, that sentences which ostensibly refer to social individuals are 'reducible' to sentences which only refer to individual human beings, it is important to recognize that neither of them is advocating this sort of reductionist programme. The strategy of such philosophical reductionism in current or recent philosophical discussion is this: if we have a set {S} of sentences which employ terms of kind T ostensibly referring to objects of kind O, and another set {s} of sentences employing terms of kind t ostensibly referring to objects of kind o, then, if we can replace every context . . . T . . . in {S} with one or more contexts . . . t . . . in {s}, we will only need to admit objects of kind o in our ontology. If such a programme were in fact to succeed, of course it would not *follow* that there are no objects of kind O, but only that we do not require to *suppose* that there are such objects. Neither author is suggesting that sentences ostensibly referring to social individuals is eliminable in this or *in any other sense* from the language of historians. Indeed, I think, even if Professor Marrou were adamant in rejecting social individuals, he might still feel that sentences of this sort have an indispensable rôle to play in historical writings. And for him, at least, this rôle does not consist in expressing some fact about social individuals but perhaps, instead, in expressing, in some fashion or other, facts about individual human beings which perhaps could not as readily be expressed by means of sentences which directly are about individual human beings, if indeed those facts can be expressed by means of those sentences at all.

At this point I deem it advisable to introduce a concrete example in which it seems to me that an historian is expressing some fact about a social individual, however we are finally to analyse the concept of a social individual. In this example, the historian is seeking to explain a change, in which, to be sure, masses of individual human beings were in one manner or other involved, but a change, never the less, which they were very likely not aware of. This change took place 'insensibly', and was completed after roughly seventeen years.[1] It is a change described as follows: the loss of 'whatever spiritual meaning the [Thirty Years War] had'. It will prove particularly instructive to note in what

way reference to individual human beings is made. Miss Wedgwood describes the background of the change in this way:

While increasing pre-occupation with natural science had opened up a new philosophy to the educated world, the tragic results of applied religion had discredited the Churches as the directors of the state. It was not that faith had grown less among the masses; even among the educated and the speculative, it maintained a rigid hold; but it had grown more personal, had become essentially a matter between the individual and his creator....

Inevitably, the spiritual force went out of public life, while religion ran to seed amid private conjecture, and priests and pastors, abandoned by the state, fought a losing battle against philosophy and science. While Germany suffered in sterility, the new dawn rose over Europe, irradiating from Italy over France, England, and the North. Descartes and Hobbes were already writing, the discoveries of Galileo, Kepler, and Harvey had taken their places as part of the accepted stock of common knowledge. Everywhere, lip-service to reason replaced the blind impulses of the spirit.

Essentially, it was only lip service. The small group of educated men who appreciated the value of the new learning disseminated little save the shadow of their knowledge. A new emotional urge had to be found to fill the place of spiritual conviction; national feeling welled up to fill the gap.

The absolutist and representative principles were losing the support of religion; they gained that of nationalism. That is the key to the development of the war in the latter period. The terms Protestant and Catholic gradually lose their vigour, the terms German, Frenchman, and Swede assume a gathering menace. The struggle of the Hapsburg dynasty and its opponents ceased to be the conflict of two religions and became the struggle of nations for a balance of power....[1]

Briefly, and with extraordinarily sure touches, Miss Wedgwood is here describing and explaining the way in which the Thirty Years War changed from a religious to a political conflict, and when she makes reference to individuals, it is mainly in order to *illustrate* this change, or to provide evidence that a change has in fact taken place. It is, as it were, taking soundings in the flow of history. Here are some examples:

The ageing Emperor, the Electors, of Saxony, Brandenburg, and Bavaria, the Swedish Chancellor, Richelieu... still held their course. But all around them had grown up a new generation of soldiers and statesmen. War-bred, they

carried the mark of their training in a caution, a cynicism, and a contempt for spiritual ideals foreign to their fathers.[1]

And again:

Frederick of Bohemia had lost his crown because he had offended subjects in order to obey his Calvinist chaplain; his son, Prince Rupert, Calvinist in religion and morality, fought in England against Presbyterians and Independents, because his religion was for him, as for most of his generation, nobody's business but his own.[2]

These various individuals are selected for special mention, and certain facts about them singled out and contrasted with one another, not because of any intrinsic interest they may have—for indeed they may have no intrinsic interest—but because of their *historical* significance: they make clear to us that a great change in attitude and behaviour of individuals in roughly the same social positions has taken place. Consider one further example. The battle-cry shouted by soldiers at White Hill was 'Sancta Maria!' The battle-cry shouted, later, at Nordlingen, was 'Viva España'. Those who might have witnessed these two battles would almost certainly not have seen the significance of these shouts. For the significance lies in the contrast between them, a contrast which is significant to an historian who sees in them signs that 'insensibly and rapidly, the Cross gave way to the flag'.

I think it reasonably certain that very few of these changes were *intended* by anyone. Men followed their own purposes, acted in the light of their views of their situations, were not alive to the 'significance' of what they were doing. Moreover, the changes here described may not have been reproduced within the biography of any *single* individual who lived through the change: to modify slightly an example as old as Leibniz, we may change the colour of a dish of blue powder by the device of adding yellow powder, so that the content of the dish changes from blue to green without any *single* particle having to change colour. Even if certain individuals did in fact change, we still could not, from this alone, deduce the scope of the changes which incontestably took place. Even if we had complete biographies of every individual human being alive during this period, we would still have to make careful comparisons and contrasts to infer that changes of this sort had happened. To put the matter baldly, the change took place, not in individuals, but in *society*.

Now it seems to me that what took place in the period covered by this account is a fairly clear example of what Watkins terms 'organic-like social behaviour', which is to say that

> Members of some social system (that is a collection of individuals whose activities disturb and influence one another) mutually adjust themselves to situations created by others in a way which, without direction from above, conduces to the equilibrium or preservation or development of the system.[1]

Watkins further says that

> Such far-flung organic-like behaviour involving people widely separated in space and largely ignorant of one another, cannot be simply observed. It can only be theoretically reconstructed—by deducing the distant social consequences of the typical responses of a large number of people to certain repetitive situations.

Miss Wedgwood's account is an instance of this for a variety of reasons, but for the present I wish to draw attention to the fact that the social changes she has drawn our attention to are *not*, as such, observable. All that can be observed, indeed—waiving for now questions concerning problems of verifying, through observation, statements about the past—is the behaviour of individual human beings. But this behaviour is nevertheless to be appreciated and understood with reference to a social system in course of modification, and is to be taken as *evidence* for the fact that the system itself is being modified. It would only be through accepting the most thoroughgoing verificationism that we could say that her account was *about* the individuals, statements about whose behaviour provide, perhaps, the only evidence in the nature of the case available for the verification of statements about the changing social system.

With this in mind, we may now recognize those further differences, earlier alluded to, between the positions of Watkins and Marrou. The fact that we cannot observe social systems as such, but only the behaviour of a set of individuals, must entail, by Marrou's criterion, that social systems as such are not 'real'. Never the less, he is prepared to concede that the concept of a social system may have a theoretical use, in the sense that we might require such a concept in order to explain the behaviour of individual human beings. Consistent with this, I suppose, he would insist that electro-magnetic fields are not 'real' either, and

that the use of field theories in no way commits us to supposing fields part of the physical world. Fields, like social systems, would be 'abstractions'. Thus:

> Même s'il apparaît a l'examen de toutes données documentaires, que tel phénomène historique s'explique par l'un de ces abstraits socio-culturels, l'historien devra toujours se garder d'oublier et de laisser oublier, que ce n'est là qu'un construction de l'esprit, inévitable, sans doute (comme étant le seul moyen de saisir la complexité du réel) et, dans les limites d'emploi, légitime—mais tout de même une abstraction, un produit dérivé, et non pas le réel lui-même, ni, comme on finit toujours par le croire, du surréal![1]

Watkins, by contrast, seems quite prepared to allow that the social world contains, in addition to individual human beings (who may never the less be its 'ultimate components'), social systems, the behaviour of which is 'organic-like'. In fact he is concerned precisely with the explanation of just such things as these, but quite oppositely to Professor Marrou, he does not believe—and this is his main contention—that we in any ultimate way require reference to facts about such social systems in order to explain other facts about them. Theories which do make that sort of reference are what he terms 'half-way theories', and these are contrasted with 'rock-bottom explanations':

> We shall not have arrived at rock-bottom explanations of such large-scale social phenomena until we have deduced an account of them from statements about the dispositions, beliefs, resources, and inter-relations of individuals.[2]

And the plain suggestion here is that Watkins does not believe that, in speaking of such large-scale social phenomena, we are merely speaking of individual human beings and their beliefs, dispositions, resources, and inter-relations, for then the distinction between 'half-way' and 'rock-bottom' explanations collapses.

I shall now begin to concern myself in a critical way with Watkins's position, which he has termed *Methodological Individualism*,[3] for it seems to me that Professor Marrou's views can best be appreciated and assessed in the light of such a discussion.

Let me begin by emphasizing that there are a number of closely related but nevertheless distinguishable theses which must be carefully

kept apart from Methodological Individualism. Here are some things it is *not*.

(1) It is *not* a theory of meaning. It does not hold that every statement about social phenomena is 'really' or 'ultimately' a statement about individual human beings. Nor does it propose to demonstrate that every *predicate*, nominally true of social individuals, may be explicitly defined by means of predicates which range over individual human beings. Hence it is not an *analytical* theory, in accordance with which *sentences* about social individuals are held to be, at least in principle, translatable, without loss of meaning, into sentences wholly about individual human beings. On the other hand, it *does* require that there be *some* kind of relation between these two classes of sentence. For instance, it may very well be that only through verifying, by observation, certain sentences about individuals, shall we ever be able to confirm a sentence about social systems. But this does not mean that sentences about social individuals are really to be understood as about that, the observation of which will confirm them. The Methodological Individualist is not neccessarily committed to the Verifiability Criterion of meaning. Indeed, as we shall see, it is important that these two classes of sentences have, and retain, their distinctive sorts of meanings. In general then, it would be irrelevent to demonstrate that sentences about social individuals (or social phenomena however understood) are 'irreducible'.

(2) If it is not an analytical theory, neither is it a constructionist theory. It does not subscribe to Russell's celebrated dictum that inferred entities should always, in the interests of parsimony, be replaced with logical constructions. It does *not* hold that societies are logical constructions out of individuals in the way in which Russell used to say that stars and tables are logical constructions out of sense-data. The Methodological Individualist is not after a *Logische Aufbau der Gemeinschafftswelt*. Such a programme, like its analytical counterpart, might be philosophically interesting and intellectually challenging and possibly even important, but the viability of Methodological Individualism does not depend upon *its* viability, nor would the shipwreck of such a programme be of more than external interest to the Methodological Individualist. When Watkins speaks of *constructions*, he has in

mind the construction of a theory of a scientific, and not a metaphysical sort, and whose purpose is not to eliminate, but to account for social systems. Such a theory indeed has sentences about individual human beings in its *base*, but we must distinguish between the base of a theory and the rest of the theory; quite clearly the concept of a *base* loses all meaning if there is not something else, distinguishable from it, for which it *is* the base: a building cannot be *all* foundation.

(3) Methodological Individualism is not an ontological theory, in accordance with which only human beings are real in the social world. Someone may wish to say that societies, or social individuals, depend for their existence upon individual human beings, and that if there were no individual human beings, there would be no social individuals either. But plainly, if something exists contingently, it still exists. The Methodological Individualist is not motivated by a metaphysical monism, and the controversy between him and his opponents is not analogous to the controversy between those who hold that images *are* simply brain-states, and those who deny they are brain-states. Indeed, he is almost militantly dualist. His position *is* analogous to the epiphenomenalist who, holding that images (and mental events generally) are distinct from brain processes (and physical events generally), still insists that the former are causally connected with the latter in a unilateral way, and can only be *explained* with reference to the latter.

(4) Accordingly, the Methodological Individualist does not deny in advance that there are, or may be found, general law-like sentences which relate various properties of social systems. Nor does he maintain that such laws, should they be found, would really only be laws describing the behaviour of individual human beings. He might, indeed, as I have already suggested, insist that such laws can be confirmed only through the verification of sentences about human beings. But this would in no way entail that the laws in question are not really laws which describe the gross behaviour of social individuals.

So we see that Methodological Individualism has nothing whatsoever to do with a number of interesting and exciting positions it might be thought to resemble. Very briefly, it appears to hold (*a*) that sentences about social individuals are logically independent of sentences about individual human beings, (*b*) that social individuals are ontologically

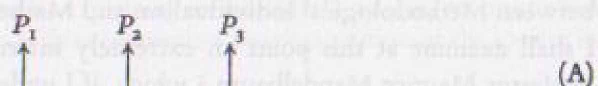
distinct from individual human beings, (*c*) that social individuals are causally dependent upon the behaviour of individual human beings and not the other way about, (*d*) that explanations of the behaviour of social individuals are always to be rejected as ultimate unless these explanations are framed exclusively in terms of the behaviour of individual human beings, and (*e*) the explanation of the behaviour of individual human behaviour must never be in terms of the behaviour of social individuals; (*a*) is a thesis about meaning, (*b*) and (*c*) are theses about the world, and (*d*) and (*e*) are theses about the ideal form of a social science.

Now the natural methodological position which is opposed to Methodological Individualism I shall term *Methodological Socialism*. And once again, there may be positions, analogous to (1)–(4), which resemble but are nevertheless distinct from Methodological Socialism. Thus someone might hold that sentences about individual human beings can be translated into sentences about social individuals, or that social individuals are real and that human beings are not, and so on. Hegel seems to have subscribed to such views as these. But to avoid any pointless diversions from our main concern, I shall characterize Methodological Socialism as follows: simply replace every occurrence of 'individual human beings' in the theses (*a*) through (*e*) in the preceding paragraph, with the expression 'social individuals', and every occurrence of 'social individuals' with 'individual human beings'. The resulting sentences (*a*)–(*e*) will now characterize Methodological Socialism. Notice that (*a*) and (*b*) are left unaffected by the substitutions. The controversy between the two positions turns, accordingly, on (*c*), (*d*) and (*e*), and in whatever sense the Individualist will say that individual human beings are *ultimate* in the social world, the Socialist will say that *social individuals* are ultimate in the social world.

Not surprisingly, the most conspicuous example of a theory which satisfies this specification of Methodological Socialism is Marxism, and not surprisingly, Marxism has been one of the main targets of the Methodological Individualists, e.g. Watkins and Popper. One need but think of how subscribers to either of our methodological positions would *explain* this fact, in order to produce specific explanations which very nicely fit the characterizations I have given of these two

positions. Now that in Marxism which primarily illustrates Methodological Socialism is that part of Marx's theory known as *historical materialism*. Marx believed (and believed himself to have shown) that there is a one-way interaction between social processes and at least some psychological processes, so that what we think, and how we act, are to be explained by reference to our relations *vis-à-vis* the prevailing system of production; and whatever it is that causes changes in the system of production, it is *not* something which is brought about by individual human action. Crudely put, we explain some facts about systems of production with reference to other facts about systems of production; and we explain some facts about individual human beings with reference to some facts about systems of production; but we never explain any facts about systems of production with reference to any facts about individual human behaviour; and finally, we never explain any facts about individual human behaviour with reference to other facts about individual human behaviour.

Letting S stand for some fact about a social individual, and P some fact about individual human psychology, we may represent this position schematically as follows:



where the arrows indicate the directions of causality, and where the *absence* of an arrow between any two points signifies the absence of a causal tie.

A theory which, on the other hand, satisfies the conditions of Methodological Individualism, would look schematically as follows (using just the same conventions as above):

Meanwhile, Methodological Socialism will tolerate provisional, or 'half-way' theories of this form:

where the broken lines indicate only apparently causal ligatures. And *mutandis mutandum*, Methodological Individualism will allow provisional or half-way theories of this form:

$$S_1 \ldots\ldots S_2 \ldots\ldots S_3 \ldots\ldots \quad (II)$$

It is important to stress that Marxism is only an *example* of a theory which could satisfy Methodological Socialism, and that (B) is only an *example* of a theory which would satisfy Methodological Individualism. So the latter is not in fact committed in any sense whatsoever to the *independent* thesis that we can explain facts about social individuals with reference to *psychological* facts about individual human beings. That is to say, Psychologism is only a particular example of a theory which satisfies the criteria of Methodological Individualism.[1] But surely no one, not even the most militant Individualist, would say that for this reason alone it is *correct*. At best he would say that such a theory is *acceptable*.

The issue now before us is whether there is any good reason for choosing between Methodological Individualism and Methodological Socialism. I shall examine at this point an extremely interesting discussion, by Professor Maurice Mandelbaum,[2] which, if I understand it properly, is intended to furnish just such good reasons for *rejecting* Methodological Individualism, at least as a general methodological programme. Professor Mandelbaum has argued for the existence and autonomy of what he terms *societal facts* which, he maintains, are 'as ultimate as psychological facts' and 'cannot be reduced without remainder to concepts which refer to the thoughts and actions of specific individuals'.[3] Societal facts 'are facts concerning the forms of organization present in society'.[4] About the relations between psychological and societal facts, Mandelbaum says a number of things. I shall set down those that strike me as his four main theses.

(i) Sentences about societal facts cannot be translated into sentences about psychological facts without leaving a societal remainder.[5]

(ii) Sentences about societal facts must be ('it is ... necessary to ...') partially translated into sentences about individual facts, for 'unless we do so

we have no means of verifying any statements we may make concerning societal facts'.[1]

(iii) Societal facts *may* depend for their existence 'upon the existence of human beings who possess certain capacities for thought and for action'. But this does not entail that the former set of facts is *identical* with the set of facts upon whose existence it is contingent.[2]

(iv) The existence of societal facts does not entail that there *are* no individual facts, or that individuals are not 'real'. Rather, there are these two distinct sets of facts which may be said 'to interact'. Thus: 'There are societal facts which exercise external constraints over individuals, no less than there are facts concerning individual volition which often come into conflict with these constraints.'[3]

Now it should be plain that very little of this is incompatible with Methodological Individualism as I have characterized it, but at best it is incompatible with some of the things which might be thought to *resemble* Methodological Individualism. The sole point of conflict comes in thesis (iv) where, since quite clearly *two* way interactionism is intended, there is an incompatability with (*c*), and with the thesis which animates Mandelbaum's argument, namely:

(v) In understanding or explaining an individual's actions, we must often refer to societal facts, i.e. facts concerning the organization of the society in which he lives.[4]

Let us now take a close look at Mandelbaum's arguments for (v). It consists of two parts, an informal (or Wittgensteinian) part, and a formal (non-Wittgensteinian) part. The informal part is this: one could not teach someone, who is strange to our culture, what a member of our culture is doing when he presents a withdrawal-slip to a bank-clerk, without, in process of doing so, teaching him something about the way in which withdrawal-slips function in that system of operations which make up our banking system. But since reference to a banking system is *ipso facto* reference to a societal fact, we cannot explain to someone, who is strange to our culture, what such a man is doing, without bringing into our explanation reference to a societal fact. Now notice how the word *explain* is being used here. It is being used in *this sense*: explaining *to* someone what that person does not understand. It is the sense in which a teacher explains a lesson, or the meaning of a

word. In Mandelbaum's example, the teacher is making explicit what members of our own culture take for granted, and apply, perhaps, in a categorial kind of way when they are engaged in banking operations.

The *formal* part of the argument is essentially the translatability thesis (i). What Mandelbaum says here is this. Suppose we have a language L_s in which only terms designating societal facts appear, e.g. 'institution', 'mores', 'ideologies', 'status', 'class'; and suppose there is another language L_i which contains terms only for describing the thoughts, actions, and capabilities of individual human beings. Now Mandelbaum insists that we cannot translate sentences from L_s to L_i 'without remainder'. In fact, Mandelbaum is not quite sure of this point. He even suggests that it may be theoretically possible to effect this translation after all, only it would be immensely difficult in practice, and of no scientific interest.[1] But the point, he admits, is not really a matter of how societal concepts are to be analysed, but how individual actions are to be *explained*, so this brings us back to the informal part of the argument.

The two-language thesis I regard as a confusion. It merits a few words on that account, despite Mandelbaum's concession that, since no matter of principle may be involved, but only a matter of practice, no philosophical importance attaches to it. The fact is, that if we could not make the translation, this would be more damaging to his position than if we could. For we use L_s to talk about societal facts, and L_i to talk about individuals, and what he wants is a way of talking about individuals which makes reference to societal facts. So what he requires, I think, is this. We have some terms which refer to individual human thought and action which presuppose something about societal facts, and some terms which refer to individual human thought and action which do *not* involve that sort of presupposition. I do not know if there is in fact the latter sort of term, but let us suppose there is. Now any term, the correct application of which to an individual human being presupposes some fact about the organization of society, I shall call an *S*-predicate, and any term the correct application of which to an individual does not involve such a presupposition, I shall call an *I*-predicate. A sentence which employs an *S*-predicate will be called an *S*-sentence. Any

sentence which uses *I*-predicates *alone* (i.e. as non-logical terms) I shall call an *I*-sentence. Thus:

(*s*-1) The bank-tellér certifies the withdrawal-slip,
(*s*-2) The man makes marks on the piece of paper.

are respectively instances of an *S*- and an *I*-sentence. But

(*s*-3) The man certifies the withdrawal-slip

is also an *S*-sentence, since it does not use an *I*-predicate *alone*, but also uses an *S*-predicate.

We may use all three of these sentences to describe one and the same event. We may further say that (*s*-1) and (*s*-3) do, but that (*s*-2) does *not*, presuppose some fact about the organization of our society. A Trobriand Islander could be taught to understand (*s*-2) without being taught, in the process, any such facts. We may indeed say that *I*-predicates are trans-cultural. Any term, the meaning of which can be taught without bringing in some fact about the organizational peculiarity of a given society, naturally belongs to the *I*-vocabulary. We may now reconstruct Mandelbaum's thesis as follows: an *S*-sentence cannot be translated without remainder into an *I*-sentence or a set of *I*-sentences. The question now is how 'without remainder' is to be interpreted. I shall interpret it in a way which will, I hope, not merely be congenial to Mandelbaum, but which will demonstrate my revised version of his thesis.

Consider the following lists of terms, the ones in the right-hand column being *I*-terms which correspond to the *S*-terms in the left-hand column. The terms in either column refer to an individual human being, an action, and a material object respectively:

bank-teller	man
certifies	makes marks on
withdrawal-slip	piece of paper

Between the correspondent terms in either column, there are no entailment relations. We cannot deduce that someone is a man from only the information that someone is a bank-teller, nor vice versa. Not every bank-teller is a man nor every man a bank-teller; not every piece of paper is a withdrawal-slip, and even if every withdrawal-slip were *per accidens* a piece of paper, no logical difficulty would face a bank which

resolved to introduce plastic withdrawal-slips; and finally, one may certify a withdrawal-slip without making marks on anything (the bank-teller could just say 'O.K.'), and it is plainly true that not every instance of making marks on something is a case of certifying something (not even when the marks are made on a withdrawal slip: the teller might write 'No good.'). Hence it is quite feasible that if '... man ...' is offered as a translation of '... bank-teller ...', the former could be false while the latter is true; and since the weakest condition we can place upon translations is that they be *equivalent*, the former would not be a translation of the latter.

But now there *may* be societies in which such entailments hold. Thus it may have been the case in a certain period in English history, that only males could be bank-tellers. But this would be only in virtue of some organizational feature, hence societal fact, having to do with a temporary peculiarity of British society. So the translation could go through only through presupposing *this* sentence: 'All bank-tellers in this society are male.' And *this* would be an *S*-sentence.

By 'without remainder' I shall therefore mean: you cannot translate an *S*-sentence into an *I*-sentence without presupposing another *S*-sentence. This is generally true. Hence anyone who proposed to *eliminate*, by translation, *S*-predicates in favour of *I*-predicates, could only do so on the basis of allowing exactly the sort of sentences he proposed to eliminate. Hence any such programme is inherently self-defeating, and the programme is demonstrably impossible.

What, however, are we more precisely to understand by these societal facts, implicit reference to which is presupposed in any such translation or, for that matter, in instructing cultural outsiders? I suggest that they are rules, norms, and conventions, as, 'Only males can be bank-tellers.' Indeed, it seems to me that this is the most natural way in which we may interpret Mandelbaum's thesis (iv), for we naturally speak of people being constrained to act in accordance with this rule or that, and of people chafing under these rules and wishing to have them changed. Thus a woman whose great ambition in life is to become a bank-teller in a major bank might find herself frustrated by such a rule, and this might, with some latitude, be regarded as an instance of the interaction between an individual and a social fact.

But understood in this way, it is hard to see how either (iv) or (v) is any longer incompatible with Methodological Individualism. The Methodological Individualist is clearly not denying that there are rules, that people act in conformity with them, change them, are frustrated by them, and so on. As for (v) it has turned out to be very little more than a thesis about *meaning*, and the Individualist may very well agree with Mandelbaum that, when called upon to explain a given piece of behaviour to a stranger, in exactly the sense of 'explain' which applies in such contexts, we may have to tell him some of the rules, norms, and conventions. It may further be agreed that, in the categorial sense mentioned earlier, we understand actions, under *certain* descriptions of them, with reference to some rules, norms, and conventions. But this is *not* the sense of 'explain' which interests the Methodological Individualist. Rules, he may go on to point out, are broken all the time, and when a rule is broken, it is not by that fact alone to be considered *abrogated*. Only rules which *hold* can be broken. But he will add that his interest lies in *laws*, in the precise sense in which we speak of scientific laws. When such a law is broken, this demonstrates that the 'law' does not hold, and that is the end of the matter. The question for him is not whether there are rules in the former sense, nor whether we understand actions with reference to them. The question, rather, is whether there are *laws* covering the behaviour of societies, whether these laws are ultimate, and whether, in the social sciences, we are to be able to explain the workings of societies simply by reference to the behaviour of individual human beings. Even when tightened up, therefore, Mandelbaum's theses are not merely compatible with Methodological Individualism, but they are utterly irrelevant to questions concerning the latter's status. The fact that they could have been so much as considered to be relevant is due, in the end, to an equivocation on the word 'explain'.

The natural wish of the Methodological Individualist is to demonstrate the *logical impossibility* of Methodological Socialism—a wish, whose fulfilment would very nearly confer, upon his own position, the accolade of logical necessity. Watkins has attempted to demonstrate the logical impossibility of historical materialism, and while it is true that the refutation of historical materialism would no more demolish

Methodological Socialism than a refutation of Psychologism would demolish Methodological Individualism—since these are only *instances* of the main positions—the fact is that Watkins's argument could easily bear transfer to the more general position. The demonstration presupposes four distinct theses:

(α) There are predicates which range over social individuals.
(β) There are predicates which range over individuals.
(γ) It is a necessary condition for E to be an adequate explanation of a phenomenon e, that a sentence describing e be exhibited as a deductive consequence of premisses.
(δ) There can be no non-logical term in the conclusion of a deductive argument which does not appear in that argument's premisses.

Now, if there is to be an explanation E of some piece of individual behaviour e, the explanandum, i.e. the sentence which is used to formulate e, must employ predicates which range over individual human beings. Let S be such a sentence. The explanation will minimally require that S be exhibited as a deductive consequence (γ) of premisses, and amongst these premisses must appear at least one sentence which contains at least one predicate which ranges over individual human beings (δ). Accordingly, from premisses containing sentences which employ *only* predicates ranging over social individuals, S cannot be deduced, and hence e cannot be explained. As Watkins puts it,

> No description, however complete, of the productive apparatus of society, or of any other non-psychological factors, will enable you to deduce a single psychological conclusion from it, because psychological statements logically cannot be deduced from wholly non-psychological statements.[1]

And he adds:

> That an explanation which begins by imputing some social phenomenon to human factors cannot go on to explain those factors in terms of some inhuman determinant of them, is a necessary truth.[2]

I do not in fact think it is a necessary truth, though I do agree that it is a necessary consequence of the theses (α)–(δ), but the chief difficulty with this, for the Methodological Individualist, is that *an exactly analogous argument will show that Methodological Individualism fails*. This argument is easily constructed by substituting, in the above proof, 'predicates which range over social individuals' for 'predicates which range over individual human beings', and vice versa. Thus the argument boomerangs. If it is cogent, and entails the impossibility of Methodological Socialism, it also entails the impossibility of Methodological Individualism. The wisest course at this point appears to be logical disarmament and peaceful philosophical co-existence.

On the other hand, the conflict between our methodologies, if we are now to assume that each of them is possible, can be pitched at another point. Let us accept the general correction of the four theses (α)–(δ), but consider in more detail precisely what is required if we are both to accept them and regard each of our methodologies as possible. It seems to me that the following adjustment must be made: an explanation, acceptable to Methodological Individualism, of the behaviour of some social individual, must employ, amongst its premisses, at least *one* sentence which employs as least one predicate ranging over social individuals. Similarly for Methodological Socialism. It must allow, amongst the premisses of *its* explanations, at least *one* sentence which employs at least *one* predicate which ranges over individual human beings. Not merely can this condition be met, but in meeting it, we will have something which seems to me a far more plausible way of representing either methodology than any we have so far discussed. The condition could be met if, amongst the premisses of the explanations, we had at least one law-like sentence of the following forms:

$$(L\text{-}1)\quad (x)(y)(P_i x \supset P_s y)$$
$$(L\text{-}2)\quad (y)(x)(P_s y \supset P_i x),$$

where P_i is a predicate which ranges over individual human beings, and where P_s is a predicate which ranges over social individuals, and where the antecedent is understood as describing a set of initial conditions for the state of affairs described by the consequent. Now any explanation, which included a law-like sentence of the form (L-1) amongst its premisses, would to that extent satisfy Methodological Individualism, for certain facts about the behaviour of individual human beings would then be initial conditions for certain facts pertaining to social individuals, and, for exactly similar considerations, an explanation containing, amongst its premisses, a law-like sentence of the form (L-2) would to

that extent satisfy Methodological Socialism. Historical Materialism, incidentally, is precisely the claim that there are known laws of the form (*L*-2), in which certain facts about the prevailing productive systems are initial conditions for certain psychological facts pertaining for individual human beings.

Now we can give a more general interpretation of these law-like sentences. We can simply lay down the rule that the predicates in the antecedent range over a *different kind* of phenomena than the predicates in the consequent. Such law-like sentences then would be understood to describe causal connections between phenomena of different kinds; for example, that causal connections hold between certain brain-states of an individual, and certain psychological states of that same individual —assuming that 'brain-states' and 'psychological states' are instances of different kinds of phenomena. It is through the establishment of law-like sentences of this sort that we speak of *reduction* in a scientific sense. And it is important to stress that we can *only* speak of reduction, distinct from ordinary causal explanation, when we are dealing with essentially different kinds of phenomena. *Reduction* in this sense will mean: explaining one kind of phenomena with reference to phenomena of a different kind. This is *causal* reduction, of course, and must be distinguished from philosophical reduction, i.e. where a given set of terms is held to be translatable into another, and favoured set of terms. I have stressed that Methodological Individualism is *not* a thesis about philosophical reductionism, and is not concerned to demonstrate that the *meaning* of predicates which range over social individuals is to be rendered by means of predicates which range over individual human beings. But I am now saying that it is a thesis about *scientific* reduction; indeed it could not well subscribe to both kinds of reductionist programmes, for scientific reduction clearly presupposes that we are dealing with distinct kinds of phenomena: otherwise we could effect any reduction we chose by the simple device of making definitions. I am further suggesting that Methodological Socialism is also a thesis about scientific reduction, and if this construction of the matter is correct, Methodological Individualism is the claim that explanations employing laws of the form (*L*-1) are to be alone accepted as ultimate, or 'rock-bottom' explanations in the social sciences, and that laws of the form (*L*-2), and all so-called explanations

tions which employ them, are to be rejected. Exactly the reverse of this will then be the claim of Methodological Socialism.

Having put the conflict in this form, we may once again ask whether any good reason may be found for choosing between Methodological Individualism and Methodological Socialism, and I shall say in advance that I am quite unable to find one. Never the less, a few words more might profitably be devoted to analysing the conflict in the form it has taken, and so to suggesting why it is hard to find good reasons for deciding it one way or another.

The concept of reduction in science has been analysed in considerable detail by Ernest Nagel, and in what follows I shall assume the essential correctness of his analysis,[1] and shall refer the reader to his work for arguments I shall not seek to summarize here. He is, of course, not responsible for the following remarks.

Suppose we were to speak of macro- and of micro-properties of societies. As a model, one might think of individual human beings as standing to societies in something like the relation in which molecules stand to gases. This might ultimately prove a misleading analogy, but for the moment it will be convenient to employ it to raise some problems. Now, in the case of gases, we speak of reduction in the following sense: some relationships and proportions between some macro-properties of gases are explained with reference to some relationships and proportions between molecules, for example variations in the temperature of a gas are explained with reference to variations in the mean kinetic energy of molecules in random motion, and hence with reference to the mechanical behaviour of aggregates of molecules. I suppose the Methodological Individualist, so far as he would accept this analogy, would speak of reduction in an exactly similar sense: relations between properties of societies, considered macroscopically, are to be explained with reference to relations between individual human beings, i.e. to societies considered 'microscopically'.

Now before the reduction of thermodynamics to mechanics was achieved, in the nineteenth century, scientists had reasonably clear criteria for applying the terms of the former theory to gases; reasonably clear laboratory procedures for measuring variations in the properties

denoted by these terms, and hence reasonably clear ways of confirming or disconfirming, law-like sentences intended correctly to describe relationships of co-variation amongst these properties. All of this was retained after the reduction was effected. All the known laws of thermodynamics were preserved. What had been achieved (in unspeakably rough terms) was this: the behaviour of gases, as described by thermodynamics, had been explained with reference to the behaviour of molecules, as described by mechanics, and so one might, if one wished, speak of mechanics as the more 'ultimate' of the two theories, and of molecules as 'the ultimate constituents' of gases. In general, we could speak as follows: if *T-1* is a theory which explains and predicts the behaviour of phenomena *P-1*, and *T-2* is a theory which explains and predicts the behaviour of phenomena *P-2*, then, if *T-2* is reduced to *T-1*, in the sense that we can now also explain and predict the behaviour of *P-2* with reference to *P-1*, *T-1* is a more ultimate theory than *T-2*. Or, to revert to Watkins's language, *T-2* may be considered a half-way theory for *P-2*, and *T-1* a 'rock-bottom' theory for *P-2*. This does not, of course, mean that either *P-2*'s are not 'real' or that sentences about *P-2*'s are 'really about' *P-1*'s.

Now let us suppose there were a theory of society comparable to thermodynamics, i.e. a theory which is concerned with societies in a macroscopic way. Imagine that such terms as 'social density' and 'cultural-economic elasticity' were among the terms of this theory, and that there were well-confirmed laws like 'Social density varies inversely as the cube of cultural economic elasticity'. *Should there be* such a theory, the Methodological Individualist would say: one can ultimately explain the variations in these properties, one can ultimately account for co-variations between them, by means of a theory concerned with the behaviour of individual human beings. To this theory we shall be able ultimately to reduce the macro-theory of society. But, of course, for us to speak of reductions in the scientific sense, it is first required that we have two theories. Of course, one *might* interpret Methodological Individualism as a negative injunction *against* seeking macro-theories of society. If so, it becomes extremely difficult to see what could now be meant by 'reduction' or by 'individuals being ultimate'. Moreover, by the Methodological Individualist's own admission, there are properties

of societies which are different altogether from the properties of individuals. Are these properties to be left unaccounted for? Surely the whole point of Methodological Individualism is that all relations and proportions between such properties are to be explained, ultimately, by reference to the behaviour of individual human beings. So the Methodological Individualist would find it self-defeating to adhere to such a negative injunction. When Watkins says, of Methodological Individualism, that it is a regulative principle, part of whose purpose is to discourage research in certain directions, he places himself in the ironic position of making the viability of his methodological programme dependent upon the success of exactly the sort of research it is calculated to discourage, and we can complete this uncanny dialectic by making exactly similar points about the Methodological Socialist.

But let us suppose that the social sciences advance, and that one day a reduction is achieved which is exactly of the sort to bring joy to the Methodological Socialist's heart! The behaviour of *individual human beings* really is explained with reference to large-scale variations in the macro-properties of societies! The result would be in many ways the reverse of the example of gases. Not merely would the direction of explanation—*von oben bis unten*—be different, but the operational problems would be different as well. For while the macro-properties of gases lie within the realm of observables, the micro-properties do not. Conversely, the behaviour of human individuals lies within the realm of observables, while it has long since been agreed that we do not observe the workings of societies as such. So it is with this difference that I shall now concern myself.

It is a commonplace consideration, I should think, that when a causal theory is advanced in the sciences, asserting, say, that changes in a dependent variable *v-1* are explained and predictable by reference to changes in an independent variable *v-2*, it is necessary that we have some independent means of measuring variations in these two variables. The Boyle–Charles law is thus confirmable by observations on pressure-gauges and thermometers. Yet suppose the *sole* way in which we could assign a value to the mean kinetic energy of unobservable molecules was by measuring the temperature of an observable body of gas. One might begin to wonder about the status of a law which held that

variations in temperature were explained and predictable by reference to variation in the mean kinetic energy of gas molecules. Imagine someone were to assert that the motion of an eel through water is due to the simultaneous motion of millions of sub-microscopic limbs connected to the eel's side, like an immense galley. As the rotational frequency of the unobservable oars increases, the eel moves faster in proportion, but unhappily, the only way in which we can assign a value to the 'mean rotational frequency' of the 'ultimate constituents' of the eel would be by measuring the rate at which the eel moves through the water. Scientists might decently reject the entire account as a fairy-tale, but in fact the reduction of thermodynamics to mechanics did not consist in asserting a simple connection of co-variation between the micro- and macro-properties of gases. The relation was far more complex, and mechanics itself had a long and distinguished history before it was modified and extended to account for thermal phenomena. The fact is that there are various ways in which we can assign values to the mean kinetic energy of molecules in random motion, but, of course, never by directly applying yardsticks to molecules. These remain beyond observation, and our relations to them are indirect, and via elaborate pieces of laboratory and mathematical apparatus. Nevertheless, it remains possible to raise doubts about molecules. A radical empiricist retains the option of trying to eliminate reference to them in favour of a reconstructed theory which makes use only of observational predicates. Or one may regard them, as Professor Marrou regards those '*abstraits socio-culturels*', as concepts only, though of an unquestioned use for the organization of experience. But these options have to do with issues in ontology and in meaning, and it will be common ground that the theory, meanwhile, has an uncontested explanatory and predictive power.

Now precisely such options would remain with the sort of reductive theory I am supposing. The radical empiricist and the instrumentalist alike can specify interpretations of the laws and language of this theory of an exactly analogous sort to those which they would specify in the kinetic theory of heat. In point of unobservability, there would be little for them to choose between molecules and organic social systems. Their positions, in either case, are quite independent indeed from that of the Methodological Individualist, whose claim, only, is that such a

theory is not 'ultimate', even if, *pro tempore* it might be supposed to have genuine predictive and explanatory power. His objection certainly cannot be based on ontological grounds, nor upon the sort of reservations concerning meaningfulness which animates the radical empiricist. But what is it exactly that his objections *are* based on? What exactly would be wrong with such a theory? It is this I find very hard to determine. I *think* I know what he *fears* such a theory would entail. I shall turn to this in a moment. But I should like, before doing so, to point out how very little philosophical interest remains in this controversy. The philosophical interest it might *appear* to have derives from the other, interesting, issues which resemble it. Once isolated from these, it quickly degenerates into a quite unphilosophical preoccupation with science-fiction. But it is a *dangerous* preoccupation, for it might become a self-fulfilling thesis. Social scientists, persuaded in advance that a certain sort of theory is suspect, might abandon the quest for such theories. And this might, in the end, have consequences of exactly the sort feared by the Methodological Individualist.

What the Individualist fears, I submit, is this. He feels that theories of the sort he wishes to reject would entail that we do not hold our destinies in our own hands, that we are, as it were, dragged along by the development of the social individuals we are part of, and which have a life of their own.[1] Now even if this were entailed by such theories, it would be wholly contrary to the spirit of Philosophy to refuse to look for such theories. We may sympathize with, but scarcely approve of the attitude which, according to legend, led Pythagorians to do away with the man who discovered that there is no rational number, the square of which is equal to 2. On the other hand, it seems to me that the theories in issue entail no such thing, and an important step towards seizing our destinies in our own hands might be taken with the discovery of exactly these sorts of theories. It does not follow, from the fact that we successfully explain the gross, thermal behaviour of gases with reference to the mechanical behaviour of molecules, that we cannot control the mechanical behaviour of molecules. By applying gross heating and cooling apparatuses to bodies of gas, we may modify the value of the mean kinetic energy of the molecules contained in it, but, by symmetrical

analogy, should we ever be able to explain the behaviour of individual human beings with reference to the behaviour of large-scale processes in *social* individuals, nothing would prevent us from similarly *controlling* those large-scale processes by operating at the 'micro-level', i.e. upon individual human beings. Science is not noted for *diminishing* our control over things.

Nevertheless, even were we to assume the correctness of methodological individualism in assuming that social processes are but the complicated outcome of individual actions, the extent to which we do have control over our own destinies is in some measure limited. For usually, I have argued, the outcomes of our actions is seldom intended by us, and actors, unless they survive, and know retrospectively, are blind to the significance of their actions because they are blind to the future. We see this nowhere more clearly than in the sort of historical account at the beginning of this chapter. The changes Miss Wedgwood described were 'insensible' and few were aware they were taking place. This, not because a more delicate instrument could have detected them, for no such instrument could be built: the changes could not have been detected at the time, for it is only in the light of future events that they could so much as have been described. To have been able to control or modify these changes would accordingly have required that men see their own actions in a perspective unfortunately not available to them, the perspective, namely, of historians future to their actions. Not knowing how our actions will be seen from the vantage point of history, we to that degree lack control over the present. If there is such a thing as inevitability in history, it is not so much due to social processes moving forward under their own steam and in accordance with their own natures, as it is to the fact that by the time it is clear what we have done, it is too late to do anything about it. 'The owl of Minerva takes flight only with the falling of the dusk.' Philosophies of history attempt to capture the future without realizing that if we knew the future, we could control the present, and so falsify statements about the future, and so such discoveries would be useless. We capture the future only when it is too late to do anything about the relevant present, for *it* is then past and beyond our control. We can but find out what its significance was, and this is the work of historians: history is made by them.

XIII

HISTORICAL UNDERSTANDING: THE PROBLEM OF OTHER PERIODS

It is a matter of common recognition that the task of history is to establish the record of what happened when, and it has often been suggested that it is either an ancillary or an auxiliary office of this discipline to reconstruct the events and periods of the past from the inside, as it were: from the viewpoint of those who lived them through. To the achievement of this, a philosophical generation more permissive than our own enlisted a repertoire of methodologically dubious aids: emphatic intuitions, sympathetic understandings, vicarious identifications, and the like, through the exploitation of which the mind of the historian was to achieve harmonic resonance with other minds in other eras, across the otherwise impenetrable insulations of time and change. A justified dissatisfaction with these, whether as instruments of discovery, explanation, or confirmation, went hand in logical hand with a behaviorist ideology according to which reference to interiors of any sort was regarded as disreputable when not dispensable. Since that ideology has somewhat tarnished and since the quality of life as lived in different periods haunts the historical curiosity, I should like once again to take up what I shall designate as *the problem of Other Periods*, and concern myself with the degree to which we might succeed in achieving an *internal* understanding of what it would have been like to live in periods other than our own. Periods, like persons, have interiors, and my nomenclature connotes a resemblance, which I shall make much of, to the problem of Other Minds. It is part of my thesis that our problem, however, is not to be appreciated as a logical product of the problems of Other Minds and of Other Dates. It arises not from the fact that members of other periods are other minds and noncontemporaries, but rather from the nature of establishing the record itself or, if I may

employ the continental idiom, from the historicity of history. I see the problem, accordingly, as implicated logically in the concept of history, so that its discussion is at once an analytical step toward determining the contours of that concept and a metaphysical step toward appreciating the unique characteristics of historical existence.

I

In this part, I offer some brief analyses of aspects of the problems of Other Dates and of Other Minds, into which our problem cannot be simply factored. These vignettes are hopefully arrayed in an order of decreasing philosophical banality, and I hope through them progressively to isolate the notion of sympathetic understanding (= *Verstehen*) and to show that *Verstehen*, while not quite so reprobate as critics of it have felt, is quite incapable of landing us in the interior of other periods so far as they really *are* other.

1. The problem of Other Dates is generated from the fact that events are logically independent of one another and is merely complicated by the fact that we cannot now observe events whose nearest temporal edges lie behind us. The argument (Russell's) roughly is this. Nothing that happens is, in the logically appropriate sense, necessitated by any other event, nor does it in its turn necessitate other events. Hence the events of the present can coherently be supposed as happening, just as they do happen, whatever may have been the character of past events. The present, as we find it, is logically compatible with any past whatever, including, as Russell famously suggested, no past to speak of at all. How then are we justifiably to claim any knowledge regarding the past, or even whether there is a past about which knowledge can be claimed? For any inference will be based upon evidence drawn from the present, and any laws we employ (with causal laws and laws of evidence conveniently conflated) presuppose precisely what is called in question. I shall not be concerned with the problems—or puzzles—that this argument gives rise to, save to mention that they in their nature give way to instantaneous skepticism and thence to skepticism simply, and the threats seemingly raised against history

are derivative and momentary. The doubts, indeed, are sufficiently corrosive to dissolve away the foundations of common sense and of science, the laws of both of which are presupposed in history's establishment of the record. So history is affected precisely at the point where it is indiscernible from applied science (or extended common sense). The jeopardized laws will capture of the past only what the past has in common with the present, and so no special character of the past as such, in contrast with the present, is illuminated by the problem of Other Dates. Indeed, even if everything called in question here were rehabilitated totally, the problem of Other Periods would remain.

2. At its most superficial level, which has to do with confounding the skeptic, the Other Minds problem shares parity of form with that of Other Dates. It asks whether there are other minds and what, if anything, goes on within them. It suggests that outward behavior might be just as it is, whatever might go on in the mind, including the possibility that there might be no mind for anything to go on in at all. Thus the problem seems generated out of the seeming logical independence of external and internal events, and seems complicated only by the fact that we cannot occupy another's mind to observe with the intimacy of our own mind what might go on therein. So, consistently with the behavior exhibited by other than just us, the behavior in question could be that of automata, anaesthetic nonautomata, nonaesthetic nonautomata with inveterate propensities to feign, native speakers in private tongues, *res cognitans* tethered to dying animals or protein clockworks, or multiplex entities in ontological analogy with oneself. I shall not here consider these startling possibilities, for they face us also with our contemporaries, e.g., those I see hastening, in cloaks and hats, past my very window. If this is so, no special extra wound is inflicted by sly considerations that noncontemporaries—Nicolai Gogol, Gogol's wife, Heliogabalus, or Maria Mancini—might, for all I know, have been, whatever their behavior, automata, etc. And should we find balm in those easeful, reassuring words that certain bits of outward behavior after all constitute logically adequate evidence for ascribing mental predicates to others, then the problem

of Other Minds reduces, so far as history goes, to the problem of Other Dates: a further, but not especially different aspect of establishing the record. Thus, supposing the voicing of *Que je souffre!* to be pain-behavior and logically adequate for ascribing 'is in pain' to him who voices it, it should be sufficient to establish that St. Sigismund of Burgundy voiced *Que je souffre!* at *t* in order to establish that that saint, at *t*, was in pain. Ascribing pain to others is, surely, indifferent to the time they suffer it; so, unless people in other periods were subject to a wholly different class of mental predicates in virtue of living in that period, the problem of Other Minds, thus construed, does not allow the problem of Other Periods to arise.

3. The Other Minds problem, however, does not end quite here, and there are features of it that bring us perhaps closer to our problem. Philosophers have latterly assured one another that sentences employing mental predicates are invariant in meaning through shifts in grammatical person, and indifferently as to self- or other-ascriptive uses. I have not, according to this view, mastered the sense of such predicates if I think I have difficulty in applying them to others though no corresponding difficulty in applying them to myself, for successful application to others is a necessary precondition for successful application of them to oneself, logical anaesthesis vis-à-vis one another's feelings notwithstanding. Perhaps all this so: I shall at any rate not argue it here. But the position leaves it open that one might have learned to apply such predicates correctly to others without yet having learned what it really means to be subject to such predicates oneself. I *shall* argue that there are two stages of understanding these predicates—we might as well call them *two-stage predicates*—and that the ultimate distinction between self and other is recaptured in the difference between the stages of understanding these predicates, defined as a class through their duplicity.

4. There is a widely recognized class of predicates the understanding of which requires one to have experienced instances under them. So that even though one may exhibit knowledge of the logic of such predicates through using them correctly, one misses

their main use if one cannot apply them to instances; and in order to do this, one must have mastered these predicates in connection with having experienced instances. There are famous difficulties with this empiricist thesis, but these arise in connection with a far wider class of predicates than concern me here, it being more *my* purpose to show that the predicates that do concern me are of this class. These are mental predicates, the understanding of which requires one to have experienced *oneself* as instantiating them. So that even though one can successfully apply them to others, one's understanding is deficient until one can apply them to oneself. It is thus that we say that he does not understand what 'love' means who has never been in love. Now I can imagine a cool type of man—a certain Testadura, say—whose equanimity of spirit is such that nothing fazes him and who has mastered nevertheless the predicate 'is angry' sufficiently to apply it with routine success to others and, emptily, the predicate 'is not angry' to himself. Such expressions as 'hidden anger' or 'suppressed ire' strike him as comical if intelligible: as though, behind unruffled human façades, inner duplicates of their bearers raged away: irate ghosts in placid machines. Unless his threshold is pathologically high, Testadura can be taught the meaning of anger through a sort of emotional education. We expose him to some systematic administration of frustrations and vexations until his erstwhile *sangfroid* one day boils over in the manifested, public throes of anger-behavior. And then we tell him he is angry. In having thus learned what 'angry' (fully) means, Testadura will have achieved a dimension of understanding in light of which his recently held imagery concerning 'hidden anger' is revealed as a metaphysical cartoon: he will (to a degree) have acquired an *interior*. This manner of acquiring an interior understanding of a two-stage predicate I shall speak of as *situational ostension*. But I want to stress that learning what an interior is is not to have added just another fact to the stock of facts picked up in the course of learning one's routine way through the world. It involves, rather, the *transformation* of a whole *body* of facts, a simultaneous transformation of oneself and of the world. For, as one acquires an interior, the world (or parts of it) acquires an in-

terior as well. Such learning could be said to resemble a religious conversion; e.g., suddenly one sees what heretofore were just *things* as "divine visual language" (Berkeley).

5. We vest people with interiors, and eke out an understanding of their internal psychographies, as we undergo our own *éducations sentimentales* in a fashion not radically dissimilar to that through which I have put Testadura: by living through the situations that compose the banal fabric of human life: anger, fear, love, hope, jealousy, ecstasy, boredom, regret, sorrow, and the erotic entropies of the aging heart. It is, indeed, the internal mastery of these concepts which, in common speech, is called "experience"; and my remarks on situational ostension suggest a continuity between experience, so understood, and the experience dwelt on by empiricists who insisted upon comparable accounts of learning the meaning of 'red' and who have been stigmatized as shallow by the shallow. In whatever way (and there is a way) it is nontrivially true that the blind do not understand the meaning of 'red', the chill of heart sustain an exactly analogous ignorance of 'love' (which suggests that all basic predicates could be two-staged). It is at this point that the idea of *Verstehen* arises as a legitimate extension of our linguistic reach. Let us say that *m* can make a correct sympathic ascription of a predicate *F* to *n* only if *m* has experienced himself as instantiating *F* and if *n* satisfies whatever may be the public criteria of *F*-ness. This presupposes that public criteria exist for ascriptions of *F* and that *m* has internally mastered the meaning of *F* using these public criteria. So he could all along have made correct ascriptions of *F* to others. But only on the basis of the right experience can he make correct *sympathic* ascriptions. I shall now think of *Verstehen* as correct sympathic ascription of mental predicates.

6. The modalities of sentiment are as impenetrable to the uninstructed imagination as are the modalities of sense. He who is deprived in a given sense modality is impotent to call up correct images of sensory instances under that modality. So the blind do not call up images of red, but only, perhaps, ingenious surrogates: trumpet blasts (Locke) or heat (Geach). And so it is with those who, because of belonging, perhaps, to a different sex or because

of some physiologically based absence of libido, are incapable of situational mastery of the language of the emotions: through modal deprivations they cannot exercise *Verstehen* under those modes.

These are large claims, but they would entail that the extent of our power to exercise *Verstehen* is precisely limited by the opportunities the *present* affords for situational ostension. Accordingly, we can make sympathic ascriptions of predicates to figures in the past just so far as they resemble us, and, relative to the successful employment of *Verstehen*, distinctions between past and present are irrelevant. As it happens, the standard gamut of human experience is run through by us all; so in the end *humani nihil alienum* to other humans. So far as there is, then, a common human experience, *Verstehen* will serve some purpose in some general *science humaine*. But to the degree that the life of other periods really has been different from ours, our incapacities for imagination exactly resemble modal incapacities, and *Verstehen* is inert. If pastness makes an internal difference, *Verstehen* will not help. Should we find, however, a logical barrier beyond which *Verstehen* could not pass and should this barrier be internally connected with the nature of pastness, we should perhaps have identified a defining limit on historical understanding and have discovered something about the historicity of history. So let us press on one step.

7. I now wish to consider a crucial class of sentences I designate as *complex sentences*. These are constructed of sentences together with the nonsentential fragments generally termed "propositional attitudes." Thus "Odysseus believed that Penelope was faithful" and "Marco Polo hoped that Prester John was alive" are complex sentences. The analysis of these is notoriously unresolved, at least for those of extensionalist persuasions, and, while not without views on these matters, I wish to stress only what is noncontroversial here, namely that our examples, if supposed true, entail the existence of Odysseus and of Marco Polo but *not* of Penelope or Prester John. Accordingly, we may regard each sentence as about whichever individual(s) it is, the existence of which is entailed by the sentence being true, and then regard the balance of the sentence as a rather complicated predicate. Thus '. . . believed that

Penelope was faithful' is a one-place predicate, true of Odysseus and assorted suitors, rather than a two-place predicate taking Odysseus (say) and Penelope as arguments. Since these predicates contain at least one well formed sentence, I shall call them *sentential predicates*. A complex sentence, then, is syntactically identified by its containing a sentential predicate.

Now I know with as much reliability as I know anything about the past that men have held what now appear strange beliefs: the circle can be squared, that Prester John abides, that tree-sprites dwell in wishing oaks, that the orbits of the planets can be inscribed in the five regular euclidian solids. I believe I understand sentential predicates in which such sentences figure and am as much master as anyone in correctly applying such predicates to others. But since these are not *my* beliefs and never have been, I cannot make *sympathic* ascriptions of these predicates to others. I have no internal understanding of what it is like to believe that Prester John is saving souls in Ulan Bator; for I am unable, in the light of my other beliefs, either to hold this belief myself or to imagine how the world would look to one who truly believed it. For there would have to be so many sentential predicates true of me if this one were, or so many others false of me if this were true of me—that I should in effect be unimaginably different from what I am, and live differently in the world (or live in a different world) than I do. Oh, to be sure, there are all manner of possible transformations, of metamorphoses and metempsychoses (though few of us can make sympathic ascriptions of such predicates of change, having never lived through one): Saul became Paul; Tiresias became a Cretan harlot and settled a famous quarrel between Zeus and Hera; Pope Gregory a porcupine; Gregor Samsa a cockroach. I can imagine these or similar things happening to me, but I cannot imagine what it would be *like* for them to have happened. A writer can make me feel *just as though* I were living through the events, whether historical or fictive, he describes. But that is for just that reason not at all like living through those events; for one must be radically self-alienated in order to feel *just as though* one were living through the events one is in fact living through: that would be to

be separated by psychic distance from one's own life. But could I not just get set down in another period, remaining in every other respect coincident with myself? The past is logically porous enough for that sort of transportation; there are open places for the likes, say, of the Connecticut Yankee. True. But he was no dweller of the middle ages, and in fact brought there with him a bit of knowledge that persons in that period could not have had, namely a knowledge of events in *his* past and *their* future. And so he could not fit smoothly into medieval ways, was always a stranger, a temporal outsider. But here we have touched a limit which seems peculiar to history as history: knowledge of the past estranges us from times other than our own!

II

I wish now to specify three classes of reasons that inhibit internal understanding of other periods, these being internally related to the concept of history.

1. Among the sentences it is the task of historians to establish are those I term *narrative sentences:* sentences the truth of which entails that at least two time-separated events have happened. Thus "Washington became first president of the United States," taken literally, entails at least the two events of the advent of Washington and the advent of some later president; "Jan Hus anticipated the Reformation" entails that a reformation occurred and that, before it did, Jan Hus engaged in protoreformative activities; "The father of Felix Mendelssohn was born in 1780" entails that there are two parturitional events (among others); etc. These are sentences typical of what historians establish and which, for obvious reasons, would look odd in any but the simple past tense. However, mere grammatical criteria are insufficient to distinguish narrative sentences: though in the simple past, "The father of the composer of the *Italian Symphony* was born yesterday morning" would look weird. I have elsewhere worked at the logic of narrative sentences, but here I merely stress that the sort of knowledge they express, as well as the mode of organizing the world they effect, are peculiarly and irreducibly historical.

Events under narrative descriptions could not have been experienced as such by those who lived through them—unless those people had a knowledge of the future we would very likely impugn as impossible. Subsequent events, internally related via narrative ligatures to earlier ones, permit redescriptions of earlier ones which would have been inaccessible to contemporaries, participants in those events or not. The objects and places—"the place where Danton met his death," "the mask that inspired *Les demoiselles d'Avignon*"—existing and observable at the earliest time referred to by a narrative sentence could not have been observed under the sentence's description at that time. Sympathetically to try to attain an internal understanding of those events requires use of nonnarrative descriptions only—hence, in effect, an erasure of the subsequent record (forgetting the future, as it were), a deliberate holding of it in abeyance; therefore, this is an impossible demand. We simply know too much to be able to attain that state of innocence of the future—and hence of the present, since it is the future that will retroactively give a shape and color to the present—which those who lived through events must be supposed to have had. *Not knowing how it is all going to end* is the mark of living through events.

2. But it is not merely objects as narratively redescribed through the aid of relative pronouns—'the place where . . . ,' 'the object which . . .'—but objects under their normal descriptions that enter differently in our perceptions and the perceptions of those whose period they come from. Consider spinning wheels. We recognize these at sight, much as we do pennies, apples, or bitterns, and so far as correct identifications of spinning wheels is concerned, we score as high with these as with anything in our world. But spinning wheels are not just further items in the inventory: they are not any longer even, in heideggerian terms, *tools:* they are *former* tools, left stranded upon the present by tides of industrial change and preserved here by sentiment and by some modest claim to significant form. Their chief role is to be peered at by schoolchildren as tangible holdovers from olden times. And their position in our world is in the antique shop, the authentic reconstruction, the de-

liberately atavized decor: *not* in the *Zeugganzes* of textile manufacture or domestic economy. The natural tense for sentences in which spinning wheels are spoken of is the *imperfect*, less marked in English than in some other languages, which is employed in speaking of what *used* to be the case. When sentences about spinning wheels (or anything) shift from present to imperfect, then has a shape of life grown old. For spinning wheels do not, merely as single objects, fall out of the present: they are extruded with changes in the whole system of life, and, when these occur, it is impossible to force spinning wheels back into the world, for the place they once fit into no longer is open.

I can entertain a charming fantasy of coming upon some isolated village, where the old ways are kept, not by an act of will on the villagers' part and in the Williamsburgh spirit, but spontaneously. It would have the quality of a dream to enter such a place, with ladies in wide skirts and men using the second-person singular and maidens spinning at the hearths. For this to be possible, for these people really to see spinning wheels as they once were seen, the whole history of spinning jennies, Crompton mules, not to mention punchcards and circuitry, would have to be unknown by them, and hence the whole of modern life. They must see themselves not as deliberately keeping change at bay, but as living life in the natural way. They could not know the changes and events that separate their counterparts in *our* history from *us*. They have, in brief, to be ignorant of our past, which would have been the future of their true contemporaries, who are our predecessors.

I do not say that Benjamin Franklin would have seen spinning wheels exactly as they would have been seen by a simple girl in Salem, separated by sex and class and wisdom from him. But these are not *historical* incongruities: Franklin and the Salem girl were part of the same form of life. And I am thinking of periods as defined with respect to a form of life. Periods are not mere chronometric units, e.g., like decades or centuries. Units of time have no interiors, but forms of life do: for forms of life are *lived*, after all, and so two-stage understanding of forms of life is feasible.

And so with forms of life *Verstehen* is possible; yet it will carry one to forms of life similar to one's own only insofar as they are similar, and, where similarity breaks down, external understanding alone remains possible. This is quite enough for any descriptive purposes. But my point is that to use words as members of another period used them would require one to live the form of life that defines that period, and a difference in language, then, separates us from other periods (and of objects insofar as to speak of these in different sorts of languages is in effect to constitute them different objects). I can know how the words are used, but I cannot use them that way: it is not *my* language.

3. The mere fact of having lived my life does not *especially* qualify me to say what my life is *like*, since I have lived no other. Were all lives utterly uniform, there would be no external basis for comparison and, hence, no way of knowing what one life was like in contrast with any other. We achieve a sense for the quality of our lives obliquely and by indirection: through illuminations diffused by the lives of others, shadowing forth the eccentric inscapes of our own. One thus would attain no *consciousness* of the quality of a life if one knew only one's own (supposing one could *know* that under those conditions). I think it is the same with forms of life. The quality of a period would be unknown to those who lived in it if it were the only form of life they knew. Consciousness comes through contrasts with other forms of life or through changes in one's own (it being no accident that the Father of History was a famous great traveler). It is the *retroactive* consciousness, brought about through changes, which is specifically historical, and if a form of life were isolated but changing, then its participants would achieve consciousness of an aspect of it only after it had changed, when, as Hegel stunningly suggested, the owl of consciousness takes flight when it is too late for anything *but* understanding. Such isolation does not in fact exist, of course, but I believe the extent of our self-consciousness regarding our form of life is roughly a function of our provincialisms. There is one regard in which we happen always to be provincial, namely with respect to the future. We are, through contrasts with predecessors

and contemporaries, alive to much concerning our period, but much remains hidden and will be revealed only through contrasts we cannot draw, with periods later than our own.

Though we cannot live forms of life which have vanished and for which there is no place any longer in the structure of the world, we can often know more about the quality of life there than those who lived it. There is, then, perhaps a final analogy to be drawn with the phenomenon of Other Minds, namely, that there is no privileged access to the interior of a period on the part of those whose period it is. Access to the interiors of periods is achieved not by some sort of reflex act, as a berkeleyan impressed with our analogies might surmise, bur refracted back through the knowledge of other periods, other forms of life. The full quality of life could be captured only through refractions from which we are precluded, for we have no knowledge of the future. We know as much of the future of the ancient Greeks as is identical with the history that intervenes between them and us. And, although this inhibits our exercise of *Verstehen* with respect to their form of life so far as it truly is different from our own, we have, paradoxically, a better understanding of it than they might have had in virtue of that very fact. It is no disadvantage for *autrui* that there should be an incongruity between the *pour soi* of a period and that period's *pour autrui*. And to live in a period is not necessarily to be in a favored position for appreciating the quality of life that defines it. The present takes its form from the future, and, by the time it has that form, it is past.