

EXPLAINING WHY AND EXPLAINING HOW

1. *Explanation Without 'Why' Questions*

IN the preceding chapters my argument against the covering law model has avoided challenging a very common assumption about the logic of 'explanation': the assumption that explanation is given, or when fully stated would be given, in the form of a 'because' answer to a 'why' question. Mr. J. Cohen, for instance, makes it one of three general requirements of explanation that it be an "appropriate answer to the question 'why' the explicandum is the case".¹ Similarly, when Professor Braithwaite attempts to characterize explanation in general, he says it is simply "any answer to a 'why' question which in any way answers the question, and thereby gives some degree of intellectual satisfaction to the questioner . . .";² and Professor Ryle, as we noted in Chapter III, discusses explanation as if it were invariably expressed in statements of the form, '. . . because . . .'. Even when no such explicit declarations are made, discussions of explanation are usually confined to an examination of answers to the question 'Why?' And even when we *are* warned that there are other kinds of explanation, the philosophers who warn us seldom go on to say what the peculiarities of the other kinds are.³

Since a large proportion of explanations are in fact given in answer to 'why' questions, this special emphasis may be regarded as a very natural and proper one. But if we are to assess the adequacy of the covering law model as a general

¹ 'Teleological Explanation', p. 256. Cohen admits that he here *stipulates* a sense for 'explanation' rather than describes the way the term has in fact been used. But his sketch of what such a sense leaves out does not include answers to other questions than 'Why?'.

² 'Teleological Explanation', *Proceedings of the Aristotelian Society*, 1946-7, p. ii.

³ See, for instance, J. Hospers, 'On Explanation', *Journal of Philosophy*, 1946, p. 337.

theory of explanation in history, it is important to notice that explanations which cannot plausibly be regarded as answers to 'why' questions do quite frequently occur in historical narrative. For I think it can be shown that at least some of them raise difficulties for covering law theory. In the limited space still at my disposal, I cannot attempt to discuss at all fully the way in which the logical structure of explanation varies with the question asked. The fact that I draw attention to only one additional type of explanation to illustrate this thesis here should not, however, be taken to imply that I think there are no further types to be examined.¹

I shall argue in this chapter that there is an important distinction to be drawn between explaining why a thing happened and answering a certain kind of 'how' question about it. In the latter case, I shall maintain, the historian need not show that what is to be explained happened *necessarily* in the light of the particular events and conditions mentioned in the explanation, and, *a fortiori*, need not show that it happened necessarily in the light of some covering law or laws. For the demand for explanation is, in some contexts, satisfactorily met if what happened is merely shown to have been *possible*; there is no need to go on to show that it was necessary as well. To put the point another way, I shall argue that although, as Professor Toulmin puts it, to explain a thing is often to "show that it might have been expected",² the appropriate criterion for one important range of cases is broader than this; for to explain a thing is sometimes merely to show that it need not have caused surprise.

In earlier chapters I have argued that, in typical historical contexts, subsumption of case under covering law is not a necessary condition of giving a satisfactory answer to the question 'Why?' itself. In Chapter II, for instance, I denied that prior knowledge of a covering empirical law was a necessary condition of explaining a unique event on the ground

¹ Explanations are often, for instance, answers to 'what' questions; they explain what really happened.

² *The Place of Reason in Ethics*, Cambridge, 1950, p. 96.

that the historian could judge in a particular case that there was a necessary connexion between the event and the circumstances cited to explain it. In Chapter IV, I pointed out that a causal 'Why?' generally required the isolation of some insufficient condition of the event to be explained, and that it was quite unnecessary, in doing this, to show that a causal routine was instantiated. In Chapter V, I argued that when a human action is explained by reference to the principle which it applies, the force of the explanation does not depend upon the truth of the assertion that all men, or even any sub-class of them, apply such a principle in such circumstances. But the considerations I now wish to urge against the covering law theory in respect of explanations in answer to 'how' questions, are quite independent of all these. For the way in which the explanations now to be examined depart from the covering law model is different from that of any type of explanation examined so far.

In the first of the two sections following, I shall try to make clear the logical structure of the kind of explanation which I have in mind, going on thereafter to show the extent to which some historical explanations display the same structure. In the second section I shall consider briefly certain likely misunderstandings of, and objections to, the logical point argued for.

2. *Explaining How Something Could Be So*

The following extract from the 'Parade' column of a popular magazine provides a simple, sharply defined example of a sort of explanation which is often given in the ordinary course of affairs:

An announcer broadcasting a baseball game from Victoria, B.C., said: "It's a long fly ball to centre field, and it's going to hit high up on the fence. The centre fielder's back, he's under it, he's caught it, and the batter is out." Listeners who knew the fence was twenty feet high couldn't figure out how the fielder caught the ball. Spectators could have given them the unlikely explanation. At the rear of centre field was a high platform for the scorekeeper. The centre fielder ran up the ladder and caught the ball twenty feet above the ground.¹

¹ *Maclean's Magazine*, 1 Aug. 1952 (back cover). I discussed this example in a similar way in 'Explanatory Narrative in History', *The Philosophical Quarterly*, 1954, pp. 15-27.

Now in what does such an explanation consist? By comparison with examples considered in previous chapters, it is peculiar in important respects. What is explained—the catch—is the action of a rational agent, yet an explanation in terms of his reasons for doing what he did is not what is required. It would be easy enough to think of occasions on which a rational explanation of such a catch might be demanded and given. If the fielder had been 'dragging his feet' all season, we might very well ask, in surprise: 'Why this efficient display by Braun?'; and in such circumstances the threat of a salary cut might significantly be mentioned. But this is the wrong sort of answer to give to the demand for explanation which arises out of the circumstances supposed here.

To cite a covering empirical generalization, however, would be just as inappropriate. Doubtless the knowledgeable radio audience is well aware that in baseball—at any rate in organized league play—fielders usually catch long fly balls. But although there is usually nothing to wonder at when catches are made by centre-fielders, there is a real mystery about this particular case. What puzzles us is how the fielder managed to get his hand on the ball in view of the fact that the fence was 20 feet high. No generalizations about fielders catching long fly balls, even if known, are of interest in the present case until this prior problem has been solved. And once we learn about the scorekeeper's platform, it would be superfluous to call such generalizations to mind.

The point is not that baseball provides us with an intuitively intelligible subject-matter, so that what happens on the ball field is understandable without our knowing what causes it to happen, or what general laws it instantiates, or what reasons there are for doing what was done. The point is rather that to go on to mention such things would be appropriate only in the face of a *further* demand for explanation—and for explanation of a different kind. In the example we are considering, it is reasonable to assume from the context that there would be no such further demand. The problem which generates the demand for explanation here is not 'What made that happen?',

or 'What was his motive for doing that?', but rather 'How could that have happened, in the light of so-and-so?' Explanation is called for because what happened seemed *impossible* under the circumstances.

What *were* the circumstances? It may seem perhaps that these have been disingenuously misrepresented as I have presented the problem. For the question seems at first to be: 'How could the fielder have caught the ball at the twenty-foot mark, with absolutely nothing to stand on?', whereas in fact, there was a perfectly solid platform available, with a ladder attached. We assumed that we were dealing with a case of a fielder catching the ball 20 feet in the air, whereas it was really a case of his catching it from a 20-foot platform. All that the so-called explanation seems to have done is correct our first erroneous impression of what the *facts* of the situation really were. And this, as far as it goes, is perfectly correct.

But if we leave it at that we may be tempted to say one or other of two equally unsatisfactory things: either that nothing happened which required explaining, or that what is offered as explanation is just part of an ordinary answer to a 'why' question. For it might be said, on the one hand, that once the secret is out—once we get the facts straight—we must acknowledge that the original demand for explanation was just a mistake. The spectators in the stands were not mystified by the catch; the radio audience was just a little behind them in learning what actually took place. Being told that there was a ladder and that the fielder ran up it, merely lets us know how in fact the ball was caught. Yet such filling in of missing information would surely, in the circumstances envisaged, be called explanatory. We might imagine a member of the now enlightened radio audience trying the puzzle on a friend, going on after a suitable interval to give him 'the explanation'. But if we go on then to insist that if we do call this revision of our factual knowledge explanatory, it must be because we covertly recognize the fact that it clears the way for ordinary causal or rational explanation to be given, we shall still be in difficulties. For it would surely be quite possible to say, on hearing about

the platform and how the fielder used it, that the catch was now explained, although we had not the slightest idea what the centre-fielder's motives were, or whether catches off the platform were regular occurrences. The explanation appears to be *complete* without raising such questions at all.

If we are to bring out the force of such explanation, it is not enough merely to say that it involves correcting our conception of the facts of the situation. We must ask, 'Why these facts rather than some other ones?' The particular facts cited in this case are explanatory because they successfully rebut a presumption—reasonable enough in the light of our knowledge of the moment—that the fielder could not have caught the ball. The presumption is that, in spite of the announcement that the ball was caught, this just *couldn't* have happened; and because of this we are very much surprised when told that it was. We feel like protesting: 'Fielders can't jump twenty feet into the air'—and yet we are not prepared actually to *disbelieve* the announcer's claim that the ball was caught. An explanation is called for because we cannot reconcile what we know, or think we know, with an alleged fact which we are nevertheless inclined to accept on independent grounds (e.g. the reputation of the announcer for accurate sports reporting). What we know seems to rule out the possibility of the occurrence which is to be explained. The explanation consists in showing that in spite of appearances to the contrary, it is not an impossible one after all.

The logical structure of such explanations may appear more clearly if we compare it with the structure of explanatory answers to the question 'Why?' In explaining why something happened, if a presumption enters at all, we rebut a presumption that it *need not* have happened, by showing that, in the light of certain considerations (perhaps laws as well as facts), it had to happen. But in explaining how something could have happened, we rebut the presumption that it *could not* have happened, by showing that, in the light of certain further facts, there is after all no good reason for supposing that it could not have happened. Let us call these explaining *why-necessarily* and explaining *how-possibly* respectively. The two kinds, in

spite of the parallel drawn between them, are logically independent in the sense that they have different tasks to perform. They are answers to different kinds of questions.

Explanations of the how-possibly pattern are often to be found in ordinary historical writing. The historian's problem is often to explain how some later event or condition could have come to pass in spite of known earlier conditions which give rise to a contrary expectation. If an historian sets out, for instance, to study the Hanoverian succession and settlement, what might he feel obliged to explain? Perhaps, very roughly, the fact that the initiative and power of the British Crown was, for the moment at least, less than that of Parliament. Many kinds of explanation of this fact might be sought and given. Various causes and standing conditions could be cited—the personal qualities of the new king, which made it unlikely that Parliament's position would be challenged; the general temper of the politically articulate classes; the growing economic power of the men who sat in the House of Commons, and so on. Constitutional historians, interested in the way institutions work, might seek to give a functional explanation, in terms of the roles of King and Parliament in the new machinery of government, showing that each had a part to play. In 'scientific' histories we might even be referred to certain general laws of political development. But the historian is just as likely to put his problem in some such form as: 'How could this constitutional situation have come about?'

The historian will say, in effect:

It is certainly strange at first sight to find the Crown taking second place in the constitutional arrangements of 1714 when you remember how Elizabeth used to bend her parliaments to her purposes. A student of the constitutional affairs of the late sixteenth century would have been very much surprised at things turning out this way. If we are to understand how such great changes could have come about in the intervening years, we shall have to look closely at the actual course of events. It is only by filling in these missing details that the disparity can be resolved.

The historian must discover the 'ladder' which, when known, removes the appearance of discrepancy between the consti-

tutional positions of the Crown under Tudors and Hanoverians.

The 'ladder' in historical cases need not, of course, be as complicated as this. It is suggested, for instance, by M. Ashley, in his *England in the 17th Century*, that the explanation of the dissolution of the Short Parliament in 1640 is to be found in the late arrival of Laud and Strafford at the Privy Council meeting at which the decision was taken.¹ The force of such explanation is not to show *why* this unlikely decision was taken; it is to show *how it was that it was taken* in spite of the presumption that it would not be—a presumption arising out of Ashley's presentation of Strafford as a man of great influence, and as opposed to the dissolution. The explanation rebuts the presumption that Strafford would have prevented what actually happened, by recording the hard fact that he simply wasn't there.

In still other cases, a logical pattern can be discovered which is, at any rate, similar to the one just noted, for example, in the following explanation by Trevelyan of the success of the Revolution of 1688–9:

In the affair of the Revolution the element of chance, of sheer good luck, was dominant. It was only the accident of James II that gave our ancestors the opportunity to right themselves. At the end of Charles II's reign nothing seemed less probable than that England would soon become either a powerful state or a free and peaceful land. The violence of her factions for half a century past had reduced her to prostration before a royal despotism in the pay of France. One of two things seemed certain: either the system would continue unchallenged till all religious and political Dissent had been crushed out of existence and till France had conquered Western Europe; or else another turn of the tables, possibly another civil war, would produce another violent overturn, but no true 'settlement'. Nothing could really have saved England except the apparently impossible—a reconciliation of Tory and Whig, Church and Dissent. That miracle was wrought by the advent of James II, who united against himself the old antagonists. The eleventh-hour chance thus given to our ancestors was neither missed nor abused.²

In this example, it is true, the presumption which is rebutted

¹ Harmondsworth, 1952, p. 72.

² *The English Revolution*, pp. 240–1

is cautiously represented as a mere 'probability'. But the demand for explanation clearly arises out of the apparent unlikelihood of what happened in the light of what was known about the preceding situation. And the explanation is given by showing that with the addition of James II to that situation, the presumption of improbability no longer holds good.

3. *How-possibly and Why-necessarily*

I have tried in the preceding section to mark off a type of explanation often given in answer to a 'how' question, and to show that many explanations in history approximate more closely to this 'how-possibly' model than to the model of the covering law. Let me go on to sharpen my account of the way explaining how something could be so differs from explaining why it is so by considering some likely misconceptions of, and objections to, what I have said so far.

Some misunderstandings of the argument advanced will probably arise out of my saying that explanation can be given by merely showing that what happened was *possible*. It may be thought, for instance, that in arguing for the legitimacy of such 'possibility' explanations, and in claiming that they are important in history, I am surreptitiously taking sides in the traditional dispute between determinists and libertarians. It may appear that a type of explanation which consists merely of showing that a certain course of action was 'open', and which stops short of requiring, say, that an agent's adoption of that course of action was necessitated by his circumstances, his character, his training, and so on, is peculiarly appropriate to a study like history, which deals with the actions of men who possess some degree of freedom of choice. The covering law model, with its requirement that if an action is to be explicable, it must be shown to be predictable, has always seemed unacceptable to some of its opponents because it appears to put free actions beyond the scope of explanation altogether. And the how-possibly model may perhaps be thought to show how such actions can, after all, be accounted for, short of meeting this demand.

I must insist, however, that the logical distinction which has been drawn between explaining something how-possibly and showing it to have been predictable, has not the slightest relevance to the free will question. For the independence of the two questions can be shown not only for human actions, but for what happens to inanimate objects as well. Suppose that a person is told that the resort he is in the habit of visiting each year has been destroyed by an avalanche. 'That's impossible!' he may protest; 'There's never enough snow on those hills to guarantee a decent day's skiing'. The sort of explanation required by this objector would include an account of the unprecedentedly severe winter which preceded the disaster. Adding further facts to the stock he was working with would relieve the logical tension between what he already knows and what he is now asked to believe. His perfectly reasonable presumption must be rebutted; he must be shown that there could have been an avalanche after all. The essential feature of explaining how-possibly is thus not that it is given of happenings which cannot be brought under law. It is rather that it is given in the face of a certain sort of puzzlement.

In many cases, both in explaining human actions and explaining natural events, it will be *empirical* knowledge which gives rise to the protest: 'That's impossible!' But it is important for an understanding of historical cases to realize that the notion of 'possibility' must often be taken more broadly than that. For there are many kinds of possibility: physical, logical, rational, moral, &c. (just as there are kinds of necessity). If an historical agent fails to do something which his purposes and principles would seem to require him to do, a how-possibly explanation may take the form of showing that his principles were in fact otherwise, or that he did not in this case appreciate the nature of his situation. In this way a presumption of impossibility in the rational sense would be rebutted. The distinction I wish to draw between explanations in terms of possibility and necessity thus cuts across the distinction drawn in Chapter V between rational and non-rational explanations. And in history, since the context of discussion is an account of

human actions, it is to be expected that explaining how-possibly will generally be in terms of rational possibility.

It is important for me to make it clear, too, that in presenting 'how-possibly' explanations as a distinct type, I do not pretend that all explanations employing the notion of 'possibility' will display the presumption-rebuttal pattern which has been elicited here. For in many cases, especially in rational explanation of actions, answers to 'why' questions may also turn on this notion. Their force will often derive from showing that no other course was possible to the agent, under the circumstances, than the one he in fact took; and this, of course, is to represent the action as *necessary* (in the appropriate sense). The following example from Halévy's *History of the English People in the Nineteenth Century*, illustrates the point:

It was impossible to ask for an extension of the protection given to cereals by the Act of 1815; for that Act prohibited the import of corn at a price below 80s a quarter, and the present price barely exceeded 50s. The utmost they could ask was that the prohibition be made more stringent by repealing the clause which permitted the foreign importer to store his grain in the British warehouse. . . .¹

Halévy here explains the failure to extend the 1815 Act by showing that this was impossible. This pattern of explanation—the accounting for a non-occurrence by reference to an impossibility—is very common in history. But it is quite different logically from the type we have been discussing here.

It is equally important for me to make it clear that not all answers to 'how' questions are 'how-possibly' explanations. 'Explaining how' may sometimes, for instance, be in terms of a method of doing something, rather than an account of happenings. We ask: 'How do you change a tyre on a Morris Minor?', and get a reply phrased in a timeless idiom. 'Explaining how' may also mean making clear the detailed steps or stages by which something came about. Thus Chester Wilmut states the theme of his recent book, *The Struggle for Europe*, as: "Not only how Hitler was overthrown but how Stalin

¹ Op. cit., vol. ii, p. 5.

emerged victorious, how Russia came to replace Germany as the dominant power in Europe, and how Stalin succeeded in obtaining from Roosevelt and Churchill what he failed to obtain from Hitler."¹ This sense of 'explaining how' is a very common one in history, but it is quite different from explaining how something could be so. Indeed, a covering law theorist might argue with some plausibility that explaining how something came about is different from explaining why it happened only in the fact that in the first case there would be an *essential* inclusion of the details, in a fairly strict temporal sequence, whereas in the second case there is at least a suggestion that certain considerations ought to be picked out—and that an order of importance, rather than of time, would be employed. And it would be difficult to deny that if a complete explanation had been given of how something came about, the explicandum would be rendered at least as predictable as it would have been by a corresponding explanation why. In this respect, explaining how something came about is more like explaining why than like explaining how-possibly.

The chief objection to my distinction between explaining how-possibly and explaining why-necessarily will no doubt be that, although there are interesting differences between them, they do not justify my claiming that the two kinds of explanation are logically independent. It may be argued that although, in answer to a 'how-possibly' question, all that need be mentioned is the presence of some previously unsuspected necessary condition of what happened—the fielder's ladder, or Strafford's absence, or the stupidity of James II—nevertheless this does not amount to a full explanation of what happened. In so far as the explanation stops short of indicating sufficient conditions, and, at any rate implicitly, appealing to a covering law, it will be said to be defective—an incomplete explanation, which can only be completed by transforming it into an appropriate answer to a corresponding 'Why?'

Now there is at least this much excuse for regarding a why-necessarily explanation as more 'fundamental' than a

¹ London, 1952, preface

how-possibly: that, having given a how-possibly answer, it always makes sense to go on to demand a why-necessarily one, whereas this relationship does not hold in the opposite direction. Having been told why something happened, to go on to ask 'How?' could only mean 'how it came about', not 'how it could be so'—it would be to ask for more details to be filled in. But this is not to say that a how-possibly answer cannot be quite complete *with respect to its own peculiar kind of question*, without enlarging it to a specification of the conditions from which the explained event could have been predicted—perhaps in accordance with a covering law.

To insist, nevertheless, that no explanation is complete until a lurking covering law has been discovered is surely just to fall into a kind of determinist myopia. Such a claim finds little warrant, at any rate, in an examination of the sort of problem which gives rise to an explanation of how something could be so. It is, of course, always open to a covering law theorist to maintain that the event explained *is* law-covered. But it matters very little for our present discussion whether his claim is based on empirical data in individual cases, or whether it derives from an *a priori* theory that every move we make must instantiate a law. For claiming that a certain happening *is* law-covered is quite different from claiming that the alleged covering law is *required* in order to give an explanation; and reasons have already been given for thinking that it would *not* be required in order to resolve the particular kind of puzzlement which is expressed by the question: 'How could that have happened, in the light of so-and-so?' To put the point another way: it is surely not necessary, in order to rebut the presumption that law *A* applies, to show that, in fact, the event in question is governed by a quite different law, law *B*. Let us not try to base a theory of explanation upon the practice of those who insist on answering unasked questions.

If it is objected that, in practice, a 'serious investigator' would soon transform the original 'how' question into a full-blown 'why', we must ask whether this is intended as a statement of fact, or as a point of logic. For I should agree that, in

many cases, historians may begin with how-possibly questions and then, after detailed investigation, offer an answer to a 'why' question. But I cannot see that this justifies the claim that an answer stopping short of this in the way outlined is not a logically complete explanation *of its type*. A how-possibly explanation can be complete, without specifying a set of sufficient conditions, in a sense of 'complete' in which an ordinary answer to the question 'Why did this happen?' may not be. For, as we saw in Chapter II, an answer to a 'why' question which gives only some or a few necessary conditions of what is explained, if it is challenged, may have to be added to in order to provide a more satisfactory answer to the *same* question. But in the case of a how-possibly explanation, to demand a set of sufficient conditions would be to *change* the question. Thus, if it were maintained that a 'serious investigator' would have to, or would ultimately have to, supplement with other necessary conditions the kind of answer that merely rebuts a presumption of impossibility, then I must suspect that this investigator is really just the covering law logician in disguise.

NOTES

NOTE A, p. 31. It is interesting to notice that when Hempel offers an example of the way a 'probability hypothesis' may 'cover' an explanation, his theory leads him to analyse the logical structure of the explanation in a very unpalatable and artificial way. He points out, for instance: "If Tommy comes down with the measles two weeks after his brother, and if he has not been in the company of other persons having the measles, we accept the explanation that he caught the disease from his brother." According to Hempel, "there is a general hypothesis underlying this explanation; but it can hardly be said to be a general law to the effect that any person who has not had the measles before will get them without fail if he stays in the company of somebody else who has the measles; that a contagion will occur can be asserted only with a high probability". In such cases, and in many historical cases, he claims, the explanation "if fully and explicitly formulated . . . would state certain initial conditions and certain probability hypotheses . . .".

But the case is surely one in which, although we should probably appeal to general medical theory in defending the explanation, our 'law' would be of the form: 'The only way to catch the measles is from someone who has it already.' That Tommy caught the disease from his brother can in fact be *deduced* in this case from the law stated and the statement Hempel gives of the initial condition—"he has not been in the company of other persons having the disease". If we asserted the explanation as a mere probability, this would not be because we used a general 'probability hypothesis', but because we were not entirely sure of the initial condition. What we can be quite sure of, however, is that the mere probability of the general 'hypothesis', 'Whoever exposes himself to someone who has the measles will catch them himself', is quite irrelevant for an assessment of the explanation actually given.

NOTE B, p. 96. There are at least two quite different kinds of situation in which *ceteris paribus* has a clear and unobjectionable employment. There is, first, the kind exemplified above where, having formulated a causal law for a type of situation in which we have found it safe to ignore all but one or a small number of antecedent conditions, the law can be regarded as stating a sufficient condition, *ceteris paribus*. Here the qualifying phrase registers our assumption of a normal application situation for the law.

There is also a familiar use of the expression in contexts where we have explicitly in mind certain limits to the applicability of the law qualified. Such a use is common in theoretical discussions in economics, where, for the purpose of more easily grasping the interrelation of a complicated set of conditions, attention is directed to a few of them at a time. The effects of varying such factors separately is shown by means of 'laws' to which *ceteris paribus* is added to indicate our awareness that in a real situation the relationship envisaged would hardly ever be uncomplicated by the

other factors; and the 'law' is thus not to be taken as a guide to prediction and action as it stands.

The use of the expression by some covering law theorists (cf. Gardiner, *op. cit.*, pp. 11-12, 93-94) as a logical bridge by means of which to pass plausibly from a particular explanatory statement to a covering law is different from either of the foregoing. For the 'law' thus obtained does not indicate an abstract relationship which is seldom, if ever, instantiated. Nor does the qualification indicate that in certain standard contexts the 'law' has been found reliable. It merely generalizes a concrete causal relationship found on a particular occasion.

NOTE C, p. 126. A certain apparent difficulty about our use of the words 'understand' and 'explain' disappears in the light of such a 'scale' of rational explanation. Ordinarily, I think, we tend to assume that these two notions are correlative: when I know the explanation of something then I understand it; and when I understand it, I am in a position to give the explanation. But the relation between the two is more complicated than that, for in many cases we should hesitate to claim understanding of what was done even though we know the explanation. This would probably not often be so in cases where, in order to give a rational explanation, all we have to do is supply the agent's beliefs, whether correct or not. But if reference has to be made to quite peculiar purposes and principles in the calculation we shall probably be less comfortable—and show it by hedging a little about the propriety of saying we 'understand' the action thus explained. In a sense we understand a certain action so long as, not our principles, but the agent's, enjoin it. But if we find his principles uncommonly wrong-headed, or perhaps in moral cases even revolting, we may want to say: 'Although I see how he figured it out, I find it quite impossible to understand his acting that way.' That is, we allow our notions of 'explanation' and 'understanding' to get out of step in order to register our awareness of just how far we are having to descend the scale in order to achieve what I have called an explanatory equilibrium.

NOTE D, p. 132. It may be of interest, in this connexion, to refer back to Gardiner's parallel from the practical sphere: the case of the general who is forced to make up his mind what course of action to take. For it might be claimed that this case is even more appropriate for elucidating the logic of the explanation of action in history than Gardiner seems to have realized. In Chapter II, I argued that the general's decision was like typical explanations of historical events in that it required *judgement*, it did not apply pre-formulated general knowledge 'covering' the particular case. But the general's decision is also like typical explanations of individual actions in history in that, if a tremendously complicated general statement were extracted from the decision reached, it would be a principle of action rather than a generalization.

NOTE E, p. 146. This point appears to be misunderstood by Mr. J. Cohen when he argues (in 'Teleological Explanation', *Proceedings of the Aristotelian Society*, 1950-1, p. 268 n.) that "it is always possible to unpack a law from a dispositional explanans". Cohen points out that, although from the explanation, "She slammed the door because she was angry", we can-

not assume the truth of the 'law', "She always slams doors when angry", this really only requires us to say that "the explanatory law requires qualification" to a greater extent when derived from a dispositional statement. (This would be due to what Ryle called the highly determinable character of the dispositional term.)

But Cohen's 'law' is a law of a particular thing, rather than of a type or kind of thing. It would not, I think, be counted a law at all by covering law theorists.

INDEX OF NAMES

- Acton, Lord, 122.
 Alexander, P., 152.
 Ashley, M., 163.
 Ayer, A. J., 86.
- Beard, C. A., 89, 110.
 Braithwaite, R. B., 1 n., 8, 86 n., 156.
 Bridgman, P. W., 76.
 Bury, J. B., 15.
 Butterfield, H., 11, 85, 119, 130, 134.
- Caesar, 5, 144.
 Campbell, N. R., 77.
 Carr, E. H., 48 n.
 Chamberlain, N., 100.
 Charles I, 148-9.
 Charles II, 138, 151, 163.
 Churchill, W., 167.
 Clarendon, 151.
 Cleopatra, 103.
 Cohen, J., 74, 156, 171-2.
 Cohen, M., 46 n., 72 n., 87, 93, 97, 109, 111, 141-2.
 Colbert, 142.
 Collingwood, R. G., 9-10, 14, 89-90, 95-99, 103, 106 n., 107, 111, 114-17, 122, 123, 128, 130, 139-40, 153-4.
 Columbus, 142.
 Comte, A., 3.
 Cornforth, Mrs. K., 141-2.
 Crawford, R. M., 10-11, 43, 107 n., 121 n., 147.
 Croce, B., 14.
 Cromwell, O., 148-9.
 Cromwell, R., 138.
- Danto, A., 121 n.
 Disraeli, B., 129, 131-2, 146, 151.
 Ducasse, C. J., 8, 87, 93, 97.
- Elton, Lord, 147.
- Feigl, H., 65-66.
 Fisher, H. A. L., 15, 59.
- Gardiner, P. L., 1 n., 13-30, 33, 38, 40, 43, 45-50, 52, 54, 55 n., 56-57, 60, 65, 73, 79-86, 98 n., 102, 107, 111 n., 113 n., 118, 121 n., 129, 134, 142-6, 150-1, 171.
- Gardiner, S. R., 147.
 Gasking, D., 102 n.
 George III, 136.
 Gottschalk, L., 89.
- Halévy, E., 99, 153-4, 166.
 Hanson, N. R., 88 n.
 Hare, R., 27, 28 n.
 Hempel, C. G., 3-6, 12-13, 15-16, 19, 23-26, 28-30, 32, 37, 40, 43, 45, 46 n., 52, 55 n., 59, 60, 76, 102, 107, 120, 127, 135, 143-4, 170.
 Herodotus, 82.
 Hitler, A., 100-1, 166-7.
 Hook, S., 11, 59 n., 60 n., 89.
 Hospers, J., 156 n.
 Hume, D., 3, 60, 86, 92, 107.
- James II, 122, 163-4, 167.
 Jones, I. D., 138-9, 148-9.
- Kaufmann, F., 8, 86 n.
 Keir, Sir David, 151.
 Kneale, W., 75, 77.
- Laud, 163.
 Louis XIV, 24-25, 32-37, 43, 51, 54, 73, 97, 102, 122, 125, 134.
 Lucas, J. R., 34 n.
- MacIver, R. M., 100-1.
 McTaggart, J. M., 71.
 Mandelbaum, M., 9, 43, 46 n., 55 n., 90, 107, 110-11.
 Mill, J. S., 3.
 Monck, 138-9.
 Muir, R., 136.
- Neurath, O., 110, 112.
 Nightingale, F., 92-93, 97.
 Northrop, F. S. C., 106.
- Oakeshott, M., 8-10, 13 n., 49, 89-90, 112-14, 116.
- Peel, Sir Robert, 131, 146.
 Peters, R. S., 8 n., 23, 121 n.

Philip II, 142.

Popper, K., 1-3, 5, 7, 12, 19, 23-24,
28-30, 39, 59, 63, 83-84, 102, 143-4.

Renier, G. J., 112, 114 n.

Roosevelt, F. D., 167.

Russell, Earl, 68-69, 111.

Ryle, G., 40-41, 60, 62, 64, 88, 91-93,
97, 117, 136, 144-51, 172.

Shaftesbury, Earl of, 134.

Shelburne, 136.

Stalin, J., 166-7.

Stebbing, S., 75, 77.

Strafford, 163, 167.

Strong, E. W., 82.

Swabey, M. C., 100 n.

Teggart, F. J., 112, 139-40.

Thomson, D., 153.

Toulmin, S., 63-64, 69 n., 79, 157.

Trevelyan, G. M., 12, 51, 122-3, 125,
134, 139, 163.

Urmson, J. O., 152.

Ushenko, A. P., 87.

Vagts, A., 89, 110.

Waismann, F., 69.

Walsh, W. H., 10, 134-6.

White, M. G., 6, 17, 23, 39, 42, 81-82,
84.

Whitehead, A. N., 141.

William III, 122, 134.

Williams, D. C., 60 n.

Wilmot, C., 166.

Wisdom, J., 153.

PRINTED IN GREAT BRITAIN
AT THE UNIVERSITY PRESS, OXFORD
BY VIVIAN RIDLER
PRINTER TO THE UNIVERSITY