PART I

Defining a philosophical stance
Chapter 1

Epistemological crises, dramatic narrative, and the philosophy of science

What is an epistemological crisis? Consider, first, the situation of ordinary agents who are thrown into such crises. Someone who has believed that he was highly valued by his employers and colleagues is suddenly fired; someone proposed for membership of a club whose members were all, so he believed, close friends is blackballed. Or someone falls in love and needs to know what the loved one really feels; someone falls out of love and needs to know how he or she can possibly have been so mistaken in the other. For all such persons the relationship of seems to is becomes crucial. It is in such situations that ordinary agents who have never learned anything about academic philosophy are apt to rediscover for themselves versions of the other-minds problem and the problem of the justification of induction. They discover, that is, that there is a problem about the rational justification of inferences from premises about the behavior of other people to conclusions about their thoughts, feelings, and attitudes and of inferences from premises about how individuals have acted in the past to conclusions expressed as generalizations about their behavior, generalizations which would enable us to make reasonably reliable predications about their future behavior. What they took to be evidence pointing unambiguously in some one direction now turns out to have been equally susceptible of rival interpretations. Such a discovery is often paralyzing, and were we all of us all of the time to have to reckon with the multiplicity of possible interpretations open to us, social life as we know it could scarcely continue. For social life is sustained by the assumption that we are, by and large, able to construe each other’s behavior, that error, deception, self-deception, irony, and ambiguity, although omnipresent in social life, are not so pervasive as to render reliable reasoning and reasonable action impossible. But can this assumption in any way be vindicated?
Consider what it is to share a culture. It is to share schemata which are at one and the same time constitutive of and normative for intelligible action by myself and are also means for my interpretations of the actions of others. My ability to understand what you are doing and my ability to act intelligibly (both to myself and to others) are one and the same ability. It is true that I cannot master these schemata without also acquiring the means to deceive, to make more or less elaborate jokes, to exercise irony and utilize ambiguity, but it is also, and even more importantly, true that my ability to conduct any successful transactions depends on my presenting myself to most people most of the time in unambiguous, unironical, undeceiving, intelligible ways. It is these schemata which enable inferences to be made from premises about past behavior to conclusions about future behavior and present inner attitudes. They are not, of course, empirical generalizations; they are prescriptions for interpretation. But while it is they which normally preserve us from the pressure of the other-minds problem and the problem of induction, it is precisely they which can in certain circumstances thrust those very problems upon us.

For it is not only that an individual may rely on the schemata which have hitherto informed his interpretations of social life and find that he or she has been led into radical error or deception, so that for the first time the schemata are put in question, but also that perhaps for the first time they become visible to the individual who employs them. And such an individual may as a result come to recognize the possibility of systematically different possibilities of interpretation, of the existence of alternative and rival schemata which yield mutually incompatible accounts of what is going on around him. Just this is the form of epistemological crisis encountered by ordinary agents and it is striking that there is not a single account of it anywhere in the literature of academic philosophy. Perhaps this is a symptom of the condition of that discipline. But happily we do possess one classic study of such crises. It is Shakespeare’s Hamlet.

Hamlet arrives back from Wittenberg with too many schemata available for interpreting the events at Elsinore of which already he is a part. There is a revenge schema drawn from the Norse sagas; there is a Renaissance courtier’s schema; there is a Machiavellian schema about competition for power. But Hamlet not only has the problem of which schema to apply; he also has the other ordinary agents’ problem: whom now to believe? His mother? Rosencrantz and Guildenstern? His father’s ghost? Until he has adopted some particular schema as his own he does not know what to treat as evidence; until he knows what to treat as evidence he cannot tell which schema to adopt. Trapped in this epistemological circularity the
general form of his problem is: “What is going on here?” Thus Hamlet’s problem is close to that of the literary critics who have asked: “What is going on in *Hamlet*?” And it is close to that of directors who have asked: “What should be cut from Shakespeare’s text and what should be included in my production so that the audience may understand what is going on in *Hamlet*?”

The resemblance between Hamlet’s problem and that of the critics and directors is worth noticing; for it suggests that both are asking a question which could equally well be formulated as: “What is going on in *Hamlet*?” or “How ought the narrative of these events to be constructed?” Hamlet’s problems arise because the dramatic narrative of his family and of the kingdom of Denmark, through which he identified his own place in society and his relationships to others, has been disrupted by radical interpretative doubts. His task is to reconstitute, to rewrite that narrative, reversing his understanding of past events in the light of present responses to his probing. This probing is informed by two ideals, truth and intelligibility, and the pursuit of both is not always easily reconciled. The discovery of an hitherto unsuspected truth is just what may disrupt an hitherto intelligible account. And of course while Hamlet tries to discover a true and intelligible narrative of the events involving his parents and Claudius, Gertrude and Claudius are trying to discover a true and intelligible narrative of Hamlet’s investigation. To be unable to render oneself intelligible is to risk being taken to be mad, is, if carried far enough, to be mad. And madness or death may always be the outcomes which prevent the resolution of an epistemological crisis, for an epistemological crisis is always a crisis in human relationships.

When an epistemological crisis is resolved, it is by the construction of a new narrative which enables the agent to understand both how he or she could intelligibly have held his or her original beliefs and how he or she could have been so drastically misled by them. The narrative in terms of which he or she at first understood and ordered experiences is itself now made into the subject of an enlarged narrative. The agent has come to understand how the criteria of truth and understanding must be reformulated. He has had to become epistemologically self-conscious and at a certain point he may have come to acknowledge two conclusions: the first is that his new forms of understanding may themselves in turn come to be put in question at any time; the second is that, because in such crises the criteria of truth, intelligibility, and rationality may always themselves be put in question – as they are in *Hamlet* – we are never in a position to claim that now we possess the truth or now we are fully rational. The
most that we can claim is that this is the best account which anyone has been able to give so far, and that our beliefs about what the marks of “a best account so far” are will themselves change in what are at present unpredictable ways.

Philosophers have often been prepared to acknowledge this historical character in respect of scientific theories; but they have usually wanted to exempt their own thinking from the same historicity. So, of course, have writers of dramatic narrative; *Hamlet* is unique among plays in its openness to reinterpretation. Consider, by contrast, Jane Austen’s procedure in *Emma*. Emma insists on viewing her protégé, Harriet, as a character in an eighteenth-century romance. She endows her, deceiving both herself and Harriet, with the conventional qualities of the heroine of such a romance. Harriet’s parentage is not known; Emma converts her into the foundling heroine of aristocratic birth so common in such romances. And she designs for Harriet precisely the happy ending of such a romance, marriage to a superior being. By the end of *Emma* Jane Austen has provided Emma with some understanding of what it was in herself that had led her not to perceive the untruthfulness of her interpretation of the world in terms of romance. *Emma* has become a narrative about narrative. But Emma, although she experiences moral reversal, has no more than a minor epistemological crisis, if only because the standpoint which she now, through the agency of Mr. Knightley, has come to adopt, is presented as though it were one from which the world as it is can be viewed. False interpretation has been replaced not by a more adequate interpretation, which itself in turn may one day be transcended, but simply by the truth. We of course can see that Jane Austen is merely replacing one interpretation by another, but Jane Austen herself fails to recognize this and so has to deprive Emma of this recognition too.

Philosophers have customarily been Emmas and not Hamlets, except that in one respect they have often been even less perceptive than Emma. For Emma it becomes clear that her movement towards the truth necessarily had a moral dimension. Neither Plato nor Kant would have demurred. But the history of epistemology, like the history of ethics itself, is usually written as though it were not a moral narrative, that is, in fact as though it were not a narrative. For narrative requires an evaluative framework in which good or bad character helps to produce unfortunate or happy outcomes.

One further aspect of narratives and their role in epistemological crises remains to be noticed. I have suggested that epistemological progress
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consists in the construction and reconstruction of more adequate narratives and forms of narrative and that epistemological crises are occasions for such reconstruction. But if this were really the case then two kinds of questions would need to be answered. The first would be of the form: how does this progress begin? What are the narratives from which we set out? The second would be of the form: how comes it, then, that narrative is not only given so little place by thinkers from Descartes onwards, but has so often before and after been treated as a merely aesthetic form? The answers to these questions are not entirely unconnected.

We begin from myth, not only from the myths of primitive peoples, but from those myths or fairy stories which are essential to a well-ordered childhood. Bruno Bettelheim has written:

Before and well into the oedipal period (roughly, the ages between three and six or seven), the child’s experience of the world is chaotic . . . During and because of the oedipal struggles, the outside world comes to hold more meaning for the child and he begins to try to make some sense of it . . . As a child listens to a fairy tale, he gets ideas about how he may create order out of the chaos that is his inner life.¹

It is from fairy tales, so Bettelheim argues, that the child learns how to engage himself with and perceive an order in social reality; and the child who is deprived of the right kind of fairy tale at the right age later on is apt to have to adopt strategies to evade a reality he has not learned how to interpret or to handle.

The child asks himself, “Who am I? Where did I come from? How did the world come into being? Who created man and all the animals? What is the purpose of life?” . . . He wonders who or what brings adversity upon him and what can protect him against it. Are there benevolent powers in addition to his parents? Are his parents benevolent powers? How should he form himself, and why? Is there hope for him, though he may have done wrong? Why did all this happen to him? What will it mean to his future?²

The child originally requires answers that are true to his own experience, but of course the child comes to learn the inadequacy of that experience. Bettelheim points out that the young child told by adults that the world is a globe suspended in space and spinning at incredible speeds may feel bound to repeat what they say, but would find it immensely more plausible to be told that the earth is held up by a giant. But in time the

² Ibid., p. 47.
young child learns that what the adults told him is indeed true. And such a child may well become a Descartes, one who feels that all narratives are misleading fables when compared with what he now takes to be the solid truth of physics.

Yet to raise the question of truth need not entail rejecting myth or story as the appropriate and perhaps the only appropriate form in which certain truths can be told. The child may become not a Descartes, but a Vico or a Hamann who writes a story about how he had to escape from the hold which the stories of his childhood and the stories of the childhood of the human race originally had upon him in order to discover how stories can be true stories. Such a narrative will be itself a history of epistemological transitions and this narrative may well be brought to a point at which questions are thrust upon the narrator which make it impossible for him to continue to use it as an instrument of interpretation. Just this, of course, happens to Descartes, who, having abjured history as a means to truth, recounts to us his own history as the medium through which the search for truth is to be carried on. For Descartes and for others this moment is that at which an epistemological crisis occurs. And all those questions which the child has asked of the teller of fairy tales arise in a new adult form. Philosophy is now set the same task that had once been set for myth.

Descartes’s description of his own epistemological crisis has, of course, been uniquely influential. Yet Descartes radically misdescribes his own crisis and thus has proved a highly misleading guide to the nature of epistemological crises in general. The agent who is plunged into an epistemological crisis knows something very important: that a schema of interpretation which he has trusted so far has broken down irremediably in certain highly specific ways. So it is with Hamlet. Descartes, however, starts from the assumption that he knows nothing whatsoever until he can discover a presuppositionless first principle on which all else can be founded. Hamlet’s doubts are formulated against a background of what he takes to be – rightly – well-founded beliefs; Descartes’s doubt is intended to lack any such background. It is to be contextless doubt. Hence also that tradition of philosophical teaching arises which presupposes that Cartesian doubts can be entertained by anyone at any place or time. But of course someone who really believed that he knew nothing would not even know how to begin on a course of radical doubt;
for he would have no conception of what his task might be, of what it would be to settle his doubts and to acquire well-founded beliefs. Conversely, anyone who knows enough to know that does indeed possess a set of extensive epistemological beliefs which he is not putting in doubt at all.

Descartes’s failure is complex. First of all he does not recognize that among the features of the universe which he is not putting in doubt is his own capacity not only to use the French and the Latin languages, but even to express the same thought in both languages; and as a consequence he does not put in doubt what he has inherited in and with these languages, namely, a way of ordering both thought and the world expressed in a set of meanings. These meanings have a history; seventeenth-century Latin bears the marks of having been the language of scholasticism, just as scholasticism was itself marked by the influence of twelfth and thirteenth-century Latin. It was perhaps because the presence of his languages was invisible to the Descartes of the Discours and the Méditations that he did not notice either what Gilson pointed out in detail, how much of what he took to be the spontaneous reflections of his own mind was in fact a repetition of sentences and phrases from his school textbooks. Even the Cogito is to be found in Saint Augustine.

What thus goes unrecognized by Descartes is the presence not only of languages, but of a tradition, a tradition that he took himself to have successfully disowned. It was from this tradition that he inherited his epistemological ideals. For at the core of this tradition was a conception of knowledge as analogous to vision: the mind’s eye beholds its objects by the light of reason. At the same time this tradition wishes to contrast sharply knowledge and sense-experience, including visual experience. Hence there is metaphorical incoherence at the heart of every theory of knowledge in this Platonic and Augustinian tradition, an incoherence which Descartes unconsciously reproduces. Thus Descartes also cannot recognize that he is responding not only to the timeless demands of skepticism, but to a highly specific crisis in one particular social and intellectual tradition.

One of the signs that a tradition is in crisis is that its accustomed ways for relating seems and is begin to break down. Thus the pressures of skepticism become more urgent and attempts to achieve the impossible, to refute skepticism once and for all, become projects of central importance to the culture and not mere private academic enterprises. Just this happens in the late middle ages and the sixteenth century. Inherited modes of ordering experience reveal too many rival possibilities of
interpretation. It is no accident that there is a multiplicity of rival interpretations of both the thought and the lives of such figures as Luther and Machiavelli in a way that there is not for such equally rich and complex figures as Abelard and Aquinas. Ambiguity, the possibility of alternative interpretations, becomes a central feature of human character and activity. *Hamlet* was Shakespeare’s brilliant mirror to the age, and the difference between Shakespeare’s account of epistemological crises and Descartes’s is now clear. For Shakespeare invites us to reflect on the crisis of the self as a crisis in the tradition which has formed the self; Descartes by his attitude to history and to fable has cut himself off from the possibility of recognizing himself; he has invented an unhistorical self-endorsed self-consciousness and tries to describe his epistemological crisis in terms of it. Small wonder that he misdescribes it.

Consider by contrast Galileo. When Galileo entered the scientific scene, he was confronted by much more than the conflict between the Ptolemaic and Copernican astronomies. The Ptolemaic system was itself inconsistent both with the widely accepted Platonic requirements for a true astronomy and with the perhaps even more widely accepted principles of Aristotelian physics. These latter were in turn inconsistent with the findings over two centuries of scholars at Oxford, Paris, and Padua about motion. Not surprisingly, instrumentalism flourished as a philosophy of science and Osiander’s instrumentalist reading of Copernicus was no more than the counterpart to earlier instrumentalist interpretations of the Ptolemaic system. Instrumentalism, like attempts to refute skepticism, is characteristically a sign of a tradition in crisis.

Galileo resolves the crisis by a threefold strategy. He rejects instrumentalism; he reconciles astronomy and mechanics; and he redefines the place of experiment in natural science. The old mythological empiricist view of Galileo saw him as appealing to the facts against Ptolemy and Aristotle; what he actually did was to give a new account of what an appeal to the facts had to be. Wherein lies the superiority of Galileo to his predecessors? The answer is that he, for the first time, enables the work of all his predecessors to be evaluated by a common set of standards. The contributions of Plato, Aristotle, the scholars at Merton College, Oxford, and at Padua, and the work of Copernicus himself at last all fall into place. Or, to put matters in another and equivalent way: the history of late medieval science can finally be cast into a coherent narrative. Galileo’s work implies a rewriting of the narrative which constitutes the scientific tradition. For it now became retrospectively possible to identify those anomalies which had been genuine counterexamples to received theories.
from those anomalies which could justifiably be dealt with by ad hoc explanatory devices or even ignored. It also became retrospectively possible to see how the various elements of various theories had fared in their encounters with other theories and with observations and experiments, and to understand how the form in which they had survived bore the marks of those encounters. A theory always bears the marks of its passage through time and the theories with which Galileo had to deal were no exception.

Let me cast the point which I am trying to make about Galileo in a way which, at first sight, is perhaps paradoxical. We are apt to suppose that because Galileo was a peculiarly great scientist, therefore he has his own peculiar place in the history of science. I am suggesting instead that it is because of his peculiarly important place in the history of science that he is accounted a peculiarly great scientist. The criterion of a successful theory is that it enables us to understand its predecessors in a newly intelligible way. It, at one and the same time, enables us to understand precisely why its predecessors have to be rejected or modified and also why, without and before its illumination, past theory could have remained credible. It introduces new standards for evaluating the past. It recasts the narrative which constitutes the continuous reconstruction of the scientific tradition.

This connection between narrative and tradition has hitherto gone almost unnoticed, perhaps because tradition has usually been taken seriously only by conservative social theorists. Yet those features of tradition which emerge as important when the connection between tradition and narrative is understood are ones which conservative theorists are unlikely to attend to. For what constitutes a tradition is a conflict of interpretations of that tradition, a conflict which itself has a history susceptible of rival interpretations. If I am a Jew, I have to recognize that the tradition of Judaism is partly constituted by a continuous argument over what it means to be a Jew. Suppose I am an American: the tradition is one partly constituted by continuous argument over what it means to be an American and partly by continuous argument over what it means to have rejected tradition. If I am an historian, I must acknowledge that the tradition of historiography is partly, but centrally, constituted by arguments about what history is and ought to be, from Hume and Gibbon to Namier and Edward Thompson. Notice that all three kinds of tradition – religious, political, intellectual – involve epistemological debate as a necessary feature of their conflicts. For it is not merely that different participants in a tradition disagree; they also disagree as to how to