CHAPTER ONE

AVICENNA ON CHANCE

Introduction: chance and causality

The concept of ‘chance’ (ittifāq) is analysed and duly developed by Avicenna in the *Physics* (al-Samā' al-Ṭabī'ī) of al-Shifā in conjunction with the concept of ‘fortune’ (bakht). Two chapters are dedicated to chance. Chapter thirteen of the Cairo edition, entitled ‘On fortune and chance and the divergence [of opinions] regarding them; clarification of their true nature’, opens with the enumeration of four different views on chance put forth by four different schools of thought, mentioned by Aristotle. Avicenna goes on to present his own explanation and argument. In chapter fourteen, entitled ‘Critique of the arguments of those who erred regarding the issue of chance and fortune and refutation of their doctrines’, Avicenna refutes the four schools previously mentioned and introduces in the debate fundamental related issues such as the concept of the accidental and the role of matter.¹

The discussion is closely modelled on Aristotle’s exposition of chance in book 2 of the *Physics* (195b31–200b8): Avicenna addresses the same topics and uses the same examples as Aristotle. Like Aristotle, he contests the idea that the world as a whole or in its parts came about by chance rather than for a purposeful end.

A long section of the argument is dedicated to asserting the purposiveness of nature and the notion of a universal order. On occasion, Avicenna criticizes late Peripatetics for misinterpreting Aristotle and adding superfluous and erroneous qualifications to their master’s

¹ The terms *fortune* and *chance* respectively reflect the Greek τύχη and τὸ αὐτόματον. The expression *min tilqā‘i nafsi-hi* (spontaneous), closely equivalent to τὸ αὐτόματον, occurs only once, at the opening of chapter thirteen. In Ishāq ibn Hunayn’s translation, τὸ αὐτόματον is consistently translated as *min tilqā‘i nafsi-hi*. See Aristotle, *al-Ṭabi‘yyāt*, Arabic translation by Ishāq ibn Hunayn, pp. 111–135. However he uses the verb *ittafaqa* to denote chance occurrences, p. 114, and the term *ittifāq* for τύχη, pp. 115 and 125, and τὸ αὐτόματον, on p. 130. More on the terminology used by Avicenna later.
position. This shows his eagerness to preserve the true meaning of Aristotle’s view. These chapters are not, however, a literal commentary on Aristotle’s parallel passage. Rather, he extracts Aristotle’s ideas and construes his own argument. The result, although not at variance with Aristotle’s fundamental message, is distinct. Most notable is Avicenna’s unambiguous and systematic exclusion of chance as an essential or substantial cause in the natural world besides the four natural causes. A comparison between Aristotle’s passage on chance and fortune and Avicenna’s gloss, reveals that Aristotle does not reject chance as systematically as does Avicenna. His use of the term *ittifāq* rather than *min tilqā‘i nafsi-hi* (spontaneous) to denote the general concept of chance is itself telling. While *ittifāq* (coincidence) does not exclude the deterministic view that every event has a necessary cause and hence cannot be otherwise, *min tilqā‘i nafsi-hi* has much stronger indeterministic overtones, since it suggests something coming about by itself, without a cause. It is beyond the scope of this study to determine Aristotle’s true position since this has long been the subject of debate, but I shall draw comparisons with Aristotle’s text which constitutes the basis of Avicenna’s.

It is my intention here to show that the argument pursued by Avicenna in this account of chance epitomises his deterministic agenda, laid down in the *Metaphysics* of *al-Shīfa*. According to his definition of chance (*ittifāq*) in the *Metaphysics* of *al-Shīfa*, ‘chance comes to be from these clashes (*mušādamāt*), and if all matters are analysed, they [are seen to] rest on the principles that necessitate them, which come from God most high’.2 This definition contains in a nutshell the main elements of Avicenna’s view of chance: a coincidence generated by the clash of two different bodies or causal chains that can ultimately be traced back to God, the causer of all causes.

That his deterministic position concerning the philosophy of nature derives from and confirms his metaphysical position can be inferred from the fact that he refers the reader to the first philosophy, as metaphysics was known in Aristotelian terminology. The link he establishes between metaphysical and physical determinism is also observable in his use in these two chapters of key concepts such as divine power, which in his metaphysics is developed into a deter-