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Although dicing is one of the oldest of human pastimes, there is no known mathematics of randomness until the Renaissance. None of the explanations of this fact is compelling.
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Until the end of the Renaissance, one of our concepts of evidence was lacking: that by which one thing can indicate, contingently, the state of something else. Demonstration, versimilitude and testimony were all familiar concepts, but not this further idea of the inductive evidence of things,
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Probability is a child of the low sciences, such as alchemy or medicine, which had to deal in opinion, whereas the high sciences, such as astronomy or mechanics, aimed at demonstrable knowledge. A chief concept of the low sciences was that of the sign, here described in some detail. Observation of signs was conceived of as reading testimony. Signs were more or less reliable. Thus on the one hand a sign made an opinion probable (in the old sense of Chapter 3) because it was furnished by the best testimony of all. On the other hand, signs could be assessed by the frequency with which they spoke truly. At the end of the Renaissance, the sign was transformed into the concept of evidence described in Chapter 4. This new kind of evidence conferred

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probability on propositions, namely made them worthy of approval. But it did so in virtue of the frequency with which it made correct predictions. This transformation from sign into evidence is the key to the emergence of a concept of probability that is dual in the sense of Chapter 2.

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