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ABSENT (*Calculus of probabilities*)¹

Moreover the solution of this problem supposes another theory on moral probability of the events that one has followed until present. This new theory is from Mr. de Buffon, & we are going to put the reader in a state to be satisfied himself on the question *of the absent reputed for dead*, by him indicating the principles that it would be necessary to follow. It is constant that, when the concern is to decide by an assumption of the well-being of a man, who has against him only his absence, it is necessary to have greatest possible certitude that the assumption is true. But how this greatest possible certitude? When to take this maximum? How to determine it? Here is how Mr. de Buffon wishes that one is taken, & one is not able to doubt that his idea is very ingenious, & gives the solution of a great number of embarrassing questions, such as those of the problem on the sum that a Player A must wager at heads or tails against a Player B who would give to him an écu, if B would bring forth tails on the first throw; two écus, if B would bring forth tails again at the second throw; four écus, if B would bring forth tails again at the third; & thus in sequence; for it is evident that the stake of A must be determined on the greatest possible moral certitude that one is able to have, that B will not pass a certain number of throws; this which makes the question come back to the finite, & give to him some limits. But one will have, in the case of *absent* the greatest possible moral certitude of his death, or of an event in general, by the one where a number of men would be great enough in order that no one feared the greatest misfortune, which ought however to arrive unfailingly to one of among them. Example: we take ten thousand men of the same age, of same health, &c. among whom there must certainly die one of them today; if this number is not yet great enough in order to deliver each of them entirely of the fear of death, take twenty of them. Under this last assumption, the case where one would have greatest possible moral certitude that a man would be dead, this would be the one where of these twenty thousand living men, when he is absent, there would remain no more than one. Here is the route that one must follow & in all other parallel conjunctures, where humanity seems to require the most favorable assumption. *This Addition is by Mr. DIDEROT.*

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¹*Translator's note:* The article ABSENT consists of three parts. The first is that by d'Alembert written for the *Encyclopédia* of Diderot. The second and third parts are additions made for the *Encyclopédia Méthodique*.