objects of environmental origin are recorded as having been observed within the hen's egg; for example, flukes, roundworms and insects; feathers, horsehair and faecal matter; sand, pebbles and even a coffee bean. Many of these were described by Bonnet[1] and are included in the brief discussion given by Romanoff and Romanoff[2]. However, the only object at all similar to the one described here was observed about 275 years ago by Perrault[3]. This object was a metal pin in the shape of a frog's thigh bone; under a whitish crust, it was black and slightly rusted. Perrault was of the opinion that the pin reached the egg after having penetrated the intestinal and oviducal walls. Romanoff and Romanoff suggest that "inanimate foreign bodies of extraneous origin are probably picked up when part of the hen's oviduct is everted as an egg is laid, and are then passed up the oviduct by means of antiperistaltic contractions". Essentially the same explanation is offered by Bonnet.

How our particular nail entered the egg we leave to the speculations of biologists more schooled in such matters, although of the two possibilities listed above we must admit to some bias in favour of the earlier one by Perrault.

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Subjective Probability, Gambling and Intelligence

In a communication in *Nature*, Mr. H. C. A. Dale[1] made some interesting suggestions about the relationship between subjective probability, intelligence and the tendency to gamble. Certain experiments of our own in the realm of subjective probability may throw further light on this complex question.

In a recent experiment, as yet unreported, we gave our subjects the opportunity of choosing between: (i) a single packet of sweets, or (ii) a one in five chance of winning five packets, or (iii) a one in twenty-five chance of winning twenty-five packets. The subjects consisted of three groups of schoolchildren aged 9, 12 and 15 years respectively. Each age-group consisted of upper and lower 'streams' differentiated on the basis of ability and attainment as shown in the school records.

We found that 81 per cent of all the children preferred the uncertainty of winning a larger prize to the certainty of a smaller one. This tendency, as shown in Table 1, diminished with increase in age ($P < 0{\cdot}001$).

Table 1. Preferences at Different Ages

Age (years)	Certain	1 in 5	1 in 25	Total
9	4	22	40	66
12	8	28	26	62
15	23	20	7	50
Total	35	70	73	178

Table 2. Preferences for Certain or Uncertain Prize in the Age-Groups Combined

	Upper 'streams'	Lower 'streams'	Total
Certain prize	12	23	35
Uncertain prize	84	59	143
Total	96	82	178

But we cannot attribute this weakened tendency to gamble to increased ability with age because, as shown in Table 2, the proportion of the children preferring the uncertain larger prize is greater in the upper than in the lower 'streams' at each age ($P < 0{\cdot}02$).

Although the uncertain prize is preferred by children in the upper 'streams', their preference is for a small gamble rather than for a large gamble. The differences between the 'streams', as shown in Table 3, are significant ($P < 0{\cdot}02$).

Table 3. Preferences for Short or Long Odds

	Upper 'streams'	Lower 'streams'	Total
1 in 5	48	22	70
1 in 25	36	37	73
Total	84	59	143

In a true gambling situation, if one prize is certain, provided it is large enough in relation to the individual's scale of values, almost everyone will prefer it, however much larger the uncertain prize; and vice versa, if the certain prize is negligible, the uncertain but worthwhile prize will be preferred. At intermediate values of the certain prize, the preference for it will be weighed against the subjective probability of winning the large prize, and this subjective probability will vary from person to person and be affected by age. Thus in our results, a relatively higher proportion of the younger subjects prefer the gamble, presumably because their subjective probability of winning the uncertain prize is relatively greater than in the case of the older children.

There are three more general considerations to which we would direct attention in respect of the relationship between subjective and mathematical or statistical probabilities. In the first place, the relationship is complex and cannot be reduced to a simple formula. In certain circumstances the two types of probability tend to coincide; in other circumstances they diverge and this divergence seems to be of a systematic nature[2]. Secondly, subjective probabilities are, in general, very much influenced by age and experience. Thirdly, the subjective probability relating to any particular preference expressed is affected by the number and value of alternatives offered[3].

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