Extract from:
Bradley Efron and Trevor Hastie
Computer Age Statistical Inference: Algorithms, Evidence, and Data Science Cambridge University Press, 2016
https://web.stanford.edu/~hastie/CASI_files/PDF/casi.pdf

Modern Bayesian practice uses various strategies to construct an appropriate "prior" $g(\mu)$ in the absence of prior experience, leaving many statisticians unconvinced by the resulting Bayesian inferences. Our second example illustrates the difficulty.

Table 3.1 *Scores from two tests taken by 22 students, mechanics and vectors.*

	1	2	3	4	5	6	7	8	9	10	11
mechanics	7	44	49	59	34	46	0	32	49	52	44
vectors	51	69	41	71	42	40	40	45	57	64	61

	11	12	13	14	15	16	17	18	19	20	21	22
mechanics	44	36	42	5	22	18	41	48	31	42	46	63
vectors	61	59	60	30	58	51	63	38	42	69	49	63

Table 3.1 shows the scores on two tests, mechanics and vectors, achieved by $n = 22$ students. The sample correlation coefficient between the two scores is $\widehat{\theta} = 0.498$,

$$\widehat{\theta} = \sum_{i=1}^{22}(m_i - \overline{m})(v_i - \overline{v})/[\sum_{i=1}^{22}(m_i - \overline{m})^2 \sum_{i=1}^{22}(v_i - \overline{v})^2]^{1/2}$$

with m and v short for mechanics and vectors, $\overline{m}$ and $\overline{v}$ their averages.