

WHAT IS INFORMATION?

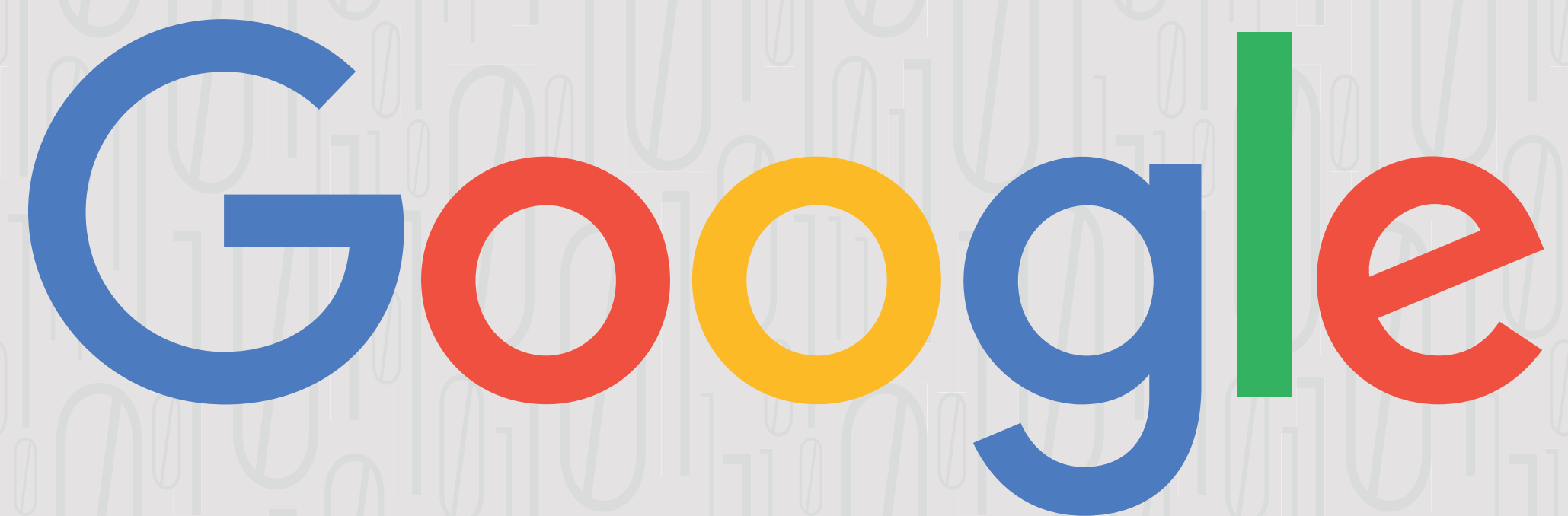
The outcome of an unpredictable experiment.

UBIQUITOUS EXAMPLES

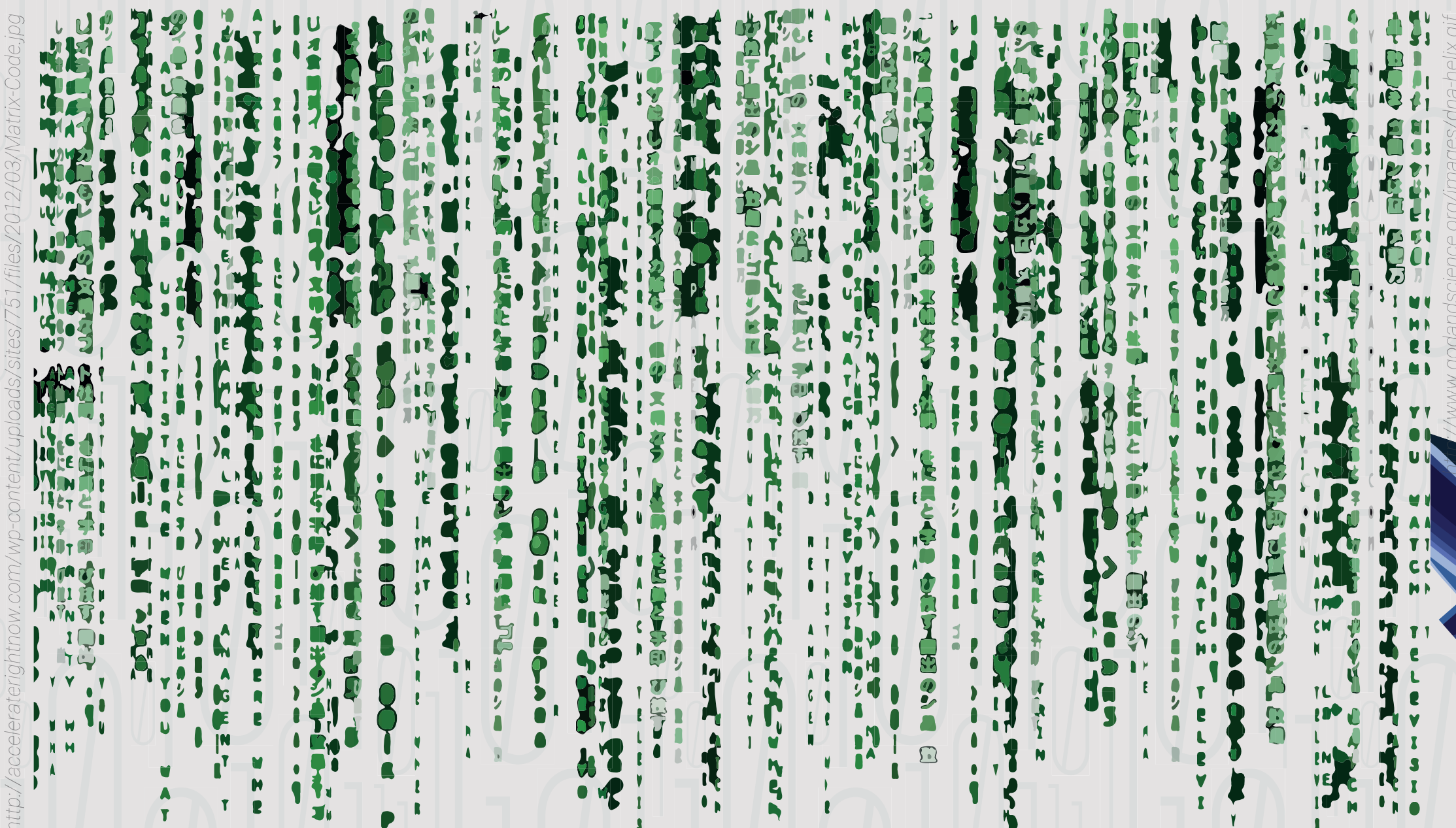
Tossing a coin



A google request



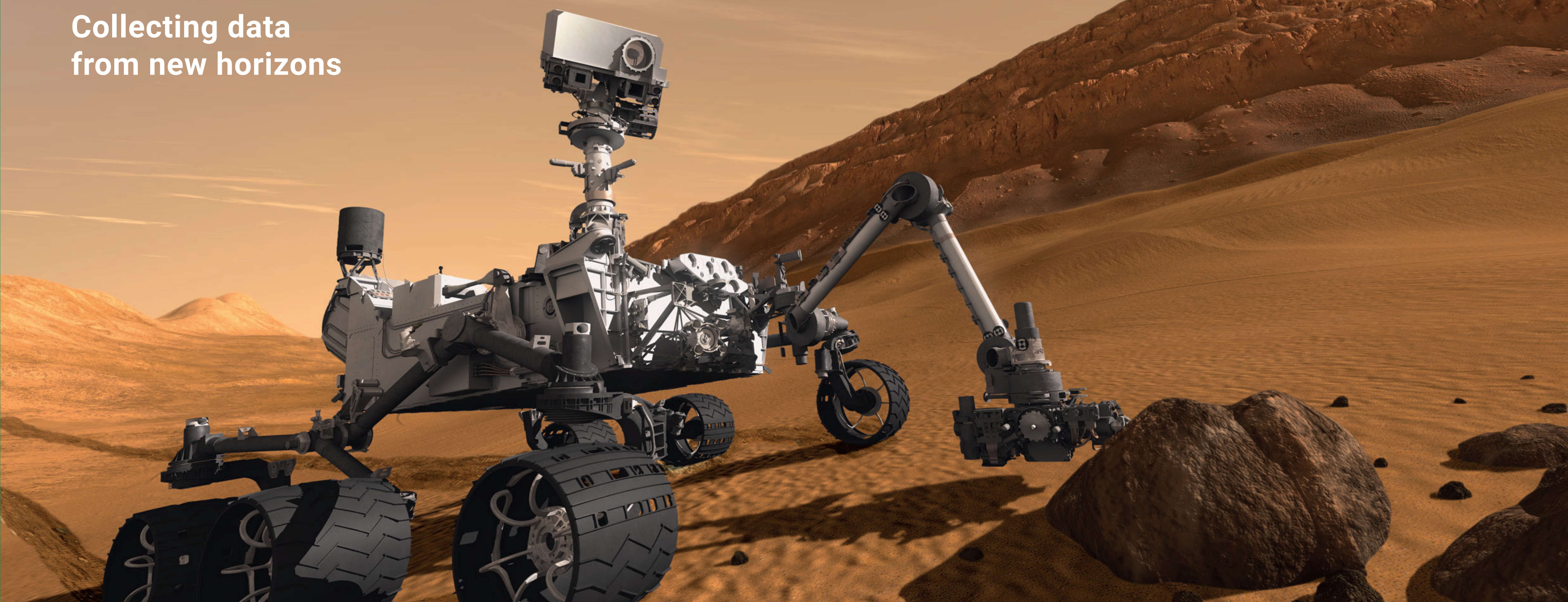
Code cracking



Assembling a DNA sequence from a new species

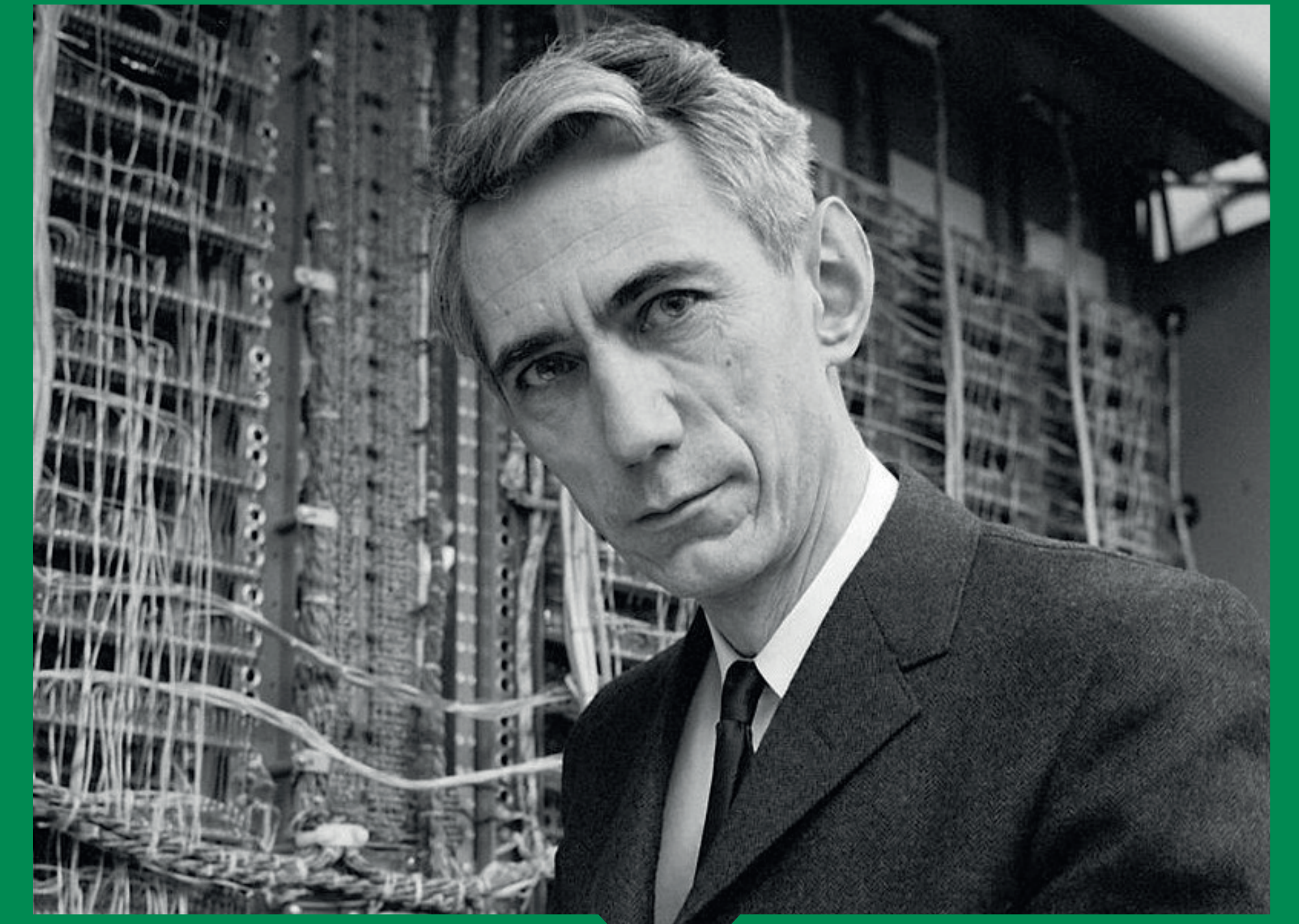


Collecting data from new horizons



ENTROPY

The less predictable (the more random) an experiment outcome is, the more informative it is.



Information randomness is measured by **entropy**, a notion I borrowed from physicists. Moreover, information can be **compressed**, say for storage, and I proved that the limit to compression is entropy.

It can also be transmitted, say wirelessly, and I proved that the limit to transmission is **capacity**.