This <u>video</u> provides a popular science overview of specificity coding (which I like to call bijection coding), population coding, and sparse coding. It's very engaging, interesting, and relaxing. We can connect the concepts discussed after single neuron encoding.

The Jennifer Aniston cell is similar to specificity coding, while the work of Hubel, Wiesel, and LeCun is akin to sparse coding. The cyclic matrix mentioned previously also represents sparse coding. The attractor model of working memory represents population coding, as do Hopfield networks and the "remember faster, forget faster" toy model discussed today.

These models initially excite mathematicians and physicists, but the question remains: can they be experimentally validated? For models discussed today, experimental validation is unlikely within the next fifty years, as it is difficult to record synaptic changes.

Certain aspects of the models, such as "remember faster, forget faster," resonate with everyday experiences, but their experimental validation remains to be seen. Many models can produce the effect of "remember faster, forget faster."