



We are born with all our neurons in places but few connections.

Synapses are created at tremendous speed (tens of millions per second).

New and old synapses are pruned. This pruning is experience driven.

Number of synapses reach maximum at age two. In adulthood there remains only half.

In first two years we identify natural language and commit our brain to it. Wiring prevails.

Later child use language to collect knowledge about world. Cutting prevails.



How information is created by cutting. Basis is binary, information is analogous. That is called **connectome**.

connectome

In 2005 Olaf Sporns and Patric Hagmann suggested the term "connectome" to refer to a map of the neural connections within the brain.

Sebastian Seung "Connectome"

"Teacher, why does the stream flow?" "Earth tells water how to move" "Teacher, why is the canyon so deep?" "Water tells earth how to move"





An acorn grew <u>on</u> an oak.

An acorn grew into an oak.

An acorn grew behind an oak.

An acorn grew on an oak.



An oak produces an acorn.

An acorn grows

An acorn grew into an oak.



An acorn produces an oak.

An oak grows.

An acorn grew behind an oak.



An acorn produces an oak

An oak grows.





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