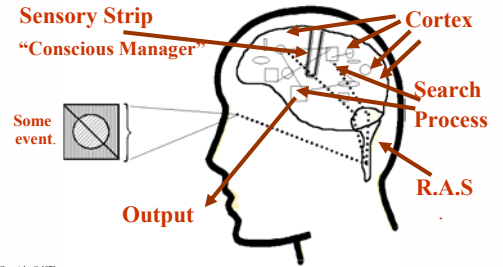


## Search phenomena: The basis of creativity



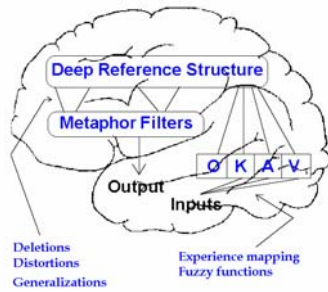
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## Search for recognition, meaning, and response



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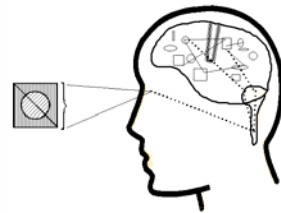
## Retrieving unique meanings



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## Different Internal & External Reactions

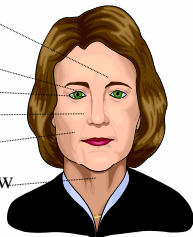
Unconditioned Stimulus	Conditioned Stimulus
1. High Frequency Search	1. Low Frequency Search
2. Low Volt Action	2. High Volt Action
3. Stimulates Sensory Strip	3. Bypasses Sensory Strip



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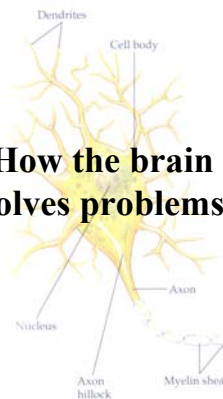
## Search phenomena

- relaxed ocular muscles
- slowed blink reflex
- pupil dilation
- flushing
- flattened cheeks
- slow and lowered swallow
- slowed head nod
- lowered breathing



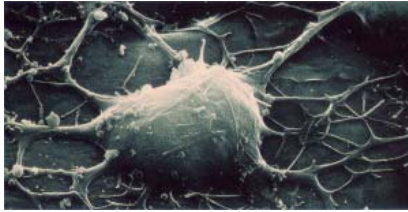
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## How the brain solves problems



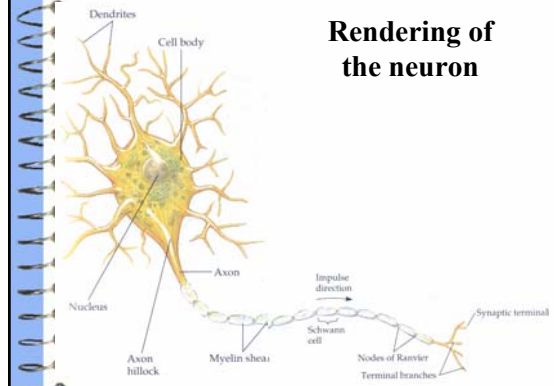
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## A photo of a neuron



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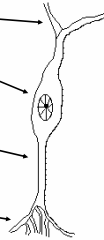
## Rendering of the neuron



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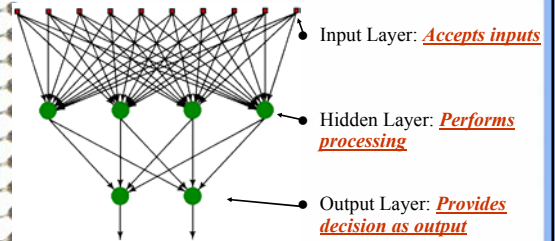
## Simple neuron's typical parts

- Dendrites: Accepts inputs
- Nucleus: Processes the inputs
- Axon: Turns the processed inputs into outputs
- Synapses: Makes contact between other neurons



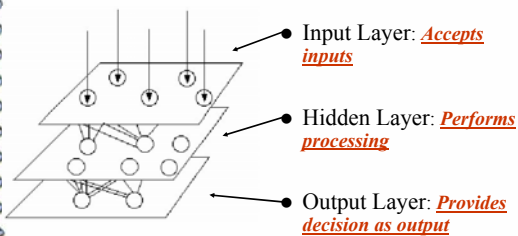
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## Simple neural net



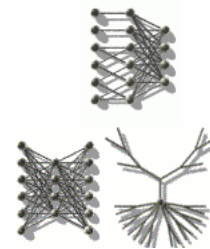
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## Artificial neural net



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## It's not that easy

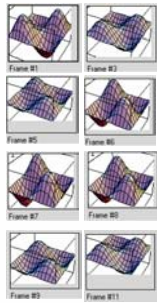


- Cortical associative memory function
- Massive parallel micro-worlds
- Centralized mindsets
- Cross-modal transfer
- Continuous-time recurrent neural networks
- Chaotic dynamics

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## Neural net decision making: Energy convergence

- Decision is made at point of greatest energy conservation.



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## Ideomotor activity

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## The stimulated cortex

- Identified patterns
- Excitation in awareness
- Synaptic action undetected
- Emotion/affect building
- Motor inhibition firing
- Meaning being aroused
- External muscle activity



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## Multi-channel output

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## Multi-channel messages

- Multiple Meanings
- May not be in awareness
- Integration is not complete
- Each is equally valid (but not for the conscious mind)
- Each needs a response



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