Reflexes

Again...
- Subcortical...
- Some reflexes reflect later voluntary movements = postural reflexes.
- Primitive reflexes = nourishment & seeking protection.

Encoding Stage

- Fourth month to fourth month...
- Information-gathering.
- Storage of this information in the cortex.
Decoding Stage

• The infant processes information more efficiently.

Reflexes & Voluntary Movement

• Several primitive reflexes in early infancy resemble later voluntary movement.
• Yet there is a considerable lag between the inhibition of a postural reflex and the onset of voluntary movement.

Reflexes & Voluntary Movement

• Early reflexive activity information is stored for later use.
• Some controversy exists...
Neuromaturational Theory

• As the cortex develops it…
• Myelinization allows for…
• Dynamical systems theory says...

Possible Red Flags

• Preseveration of a reflex beyond the age it should have been inhibited.

• The role of reflexes in assessing nervous system development …
• It is common for doctors to elicit reflexes in infants to...
Possible Red Flags

• Complete absence of a reflex.

Possible Red Flags

• Unequal bilateral reflex.

Possible Red Flags

• Responses that are too strong or too weak.
Rhythmical Stereotypies

- Performed over & over for their own sake.
- Tend to increase before voluntary control of the particular system.

Rhythmical Stereotypies

- Repetitive rhythmical movements (normal in infants, 4 weeks – 1 yr.)
- Neuromaturation vs. Self-organization

Rhythmical Stereotypies

- Legs & feet (kicking, “bicycling”)
- Torso (prone back arch, rocking from creeping position, sitting rock)
- Arms, hands, fingers (waving, object banging)
- Head & face (head shaking, tongue sticking, sucking)