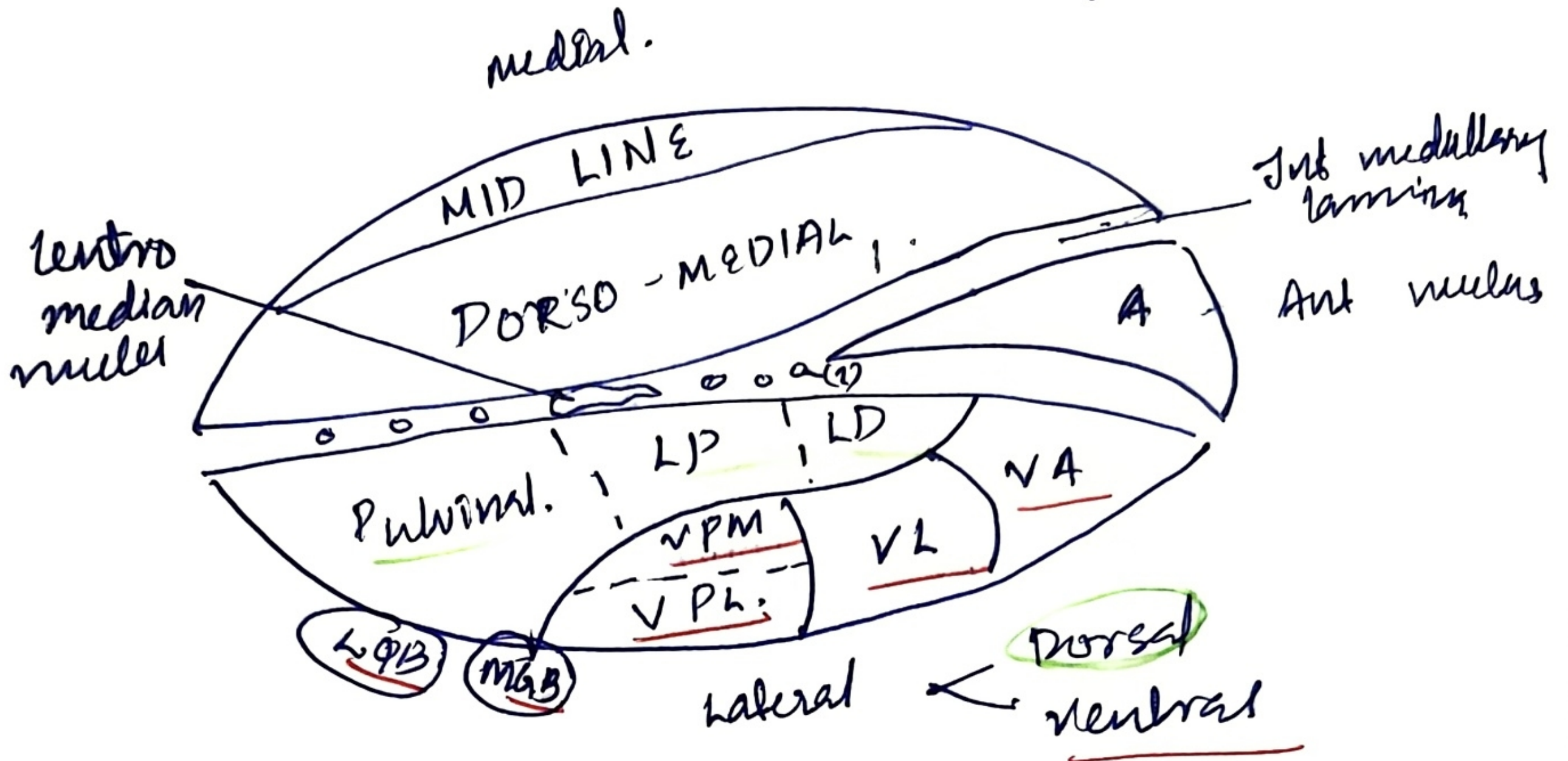


THALAMUS — Dr Raghav.



VPM + VPL → Ventral post. nuclei
(2) intralaminar nuclei

* Connects. of non specific nuclei

Afferents

RAS
retrosplenothalamic tract
striatum
hypothalamus

→ CMN
ILN
mid line

Efferents

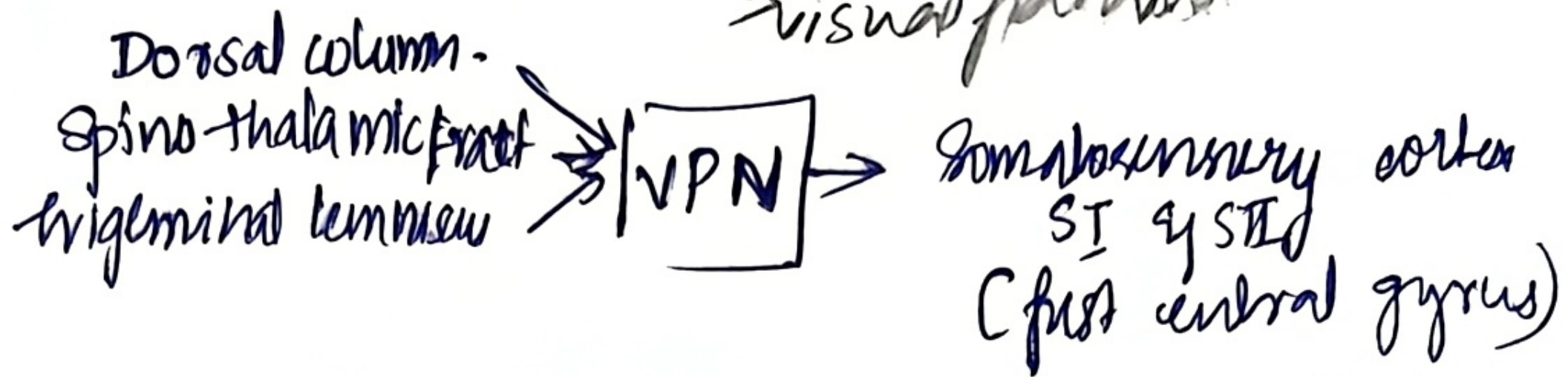
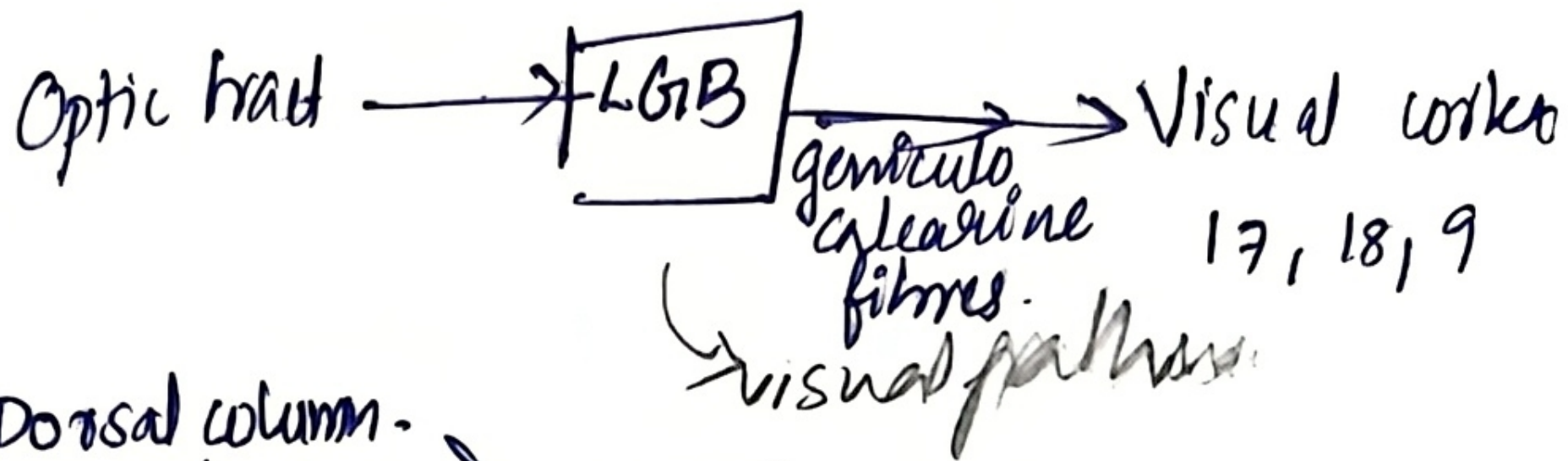
→ Neo cortex
limbic system

* C. of specific sensory nuclei

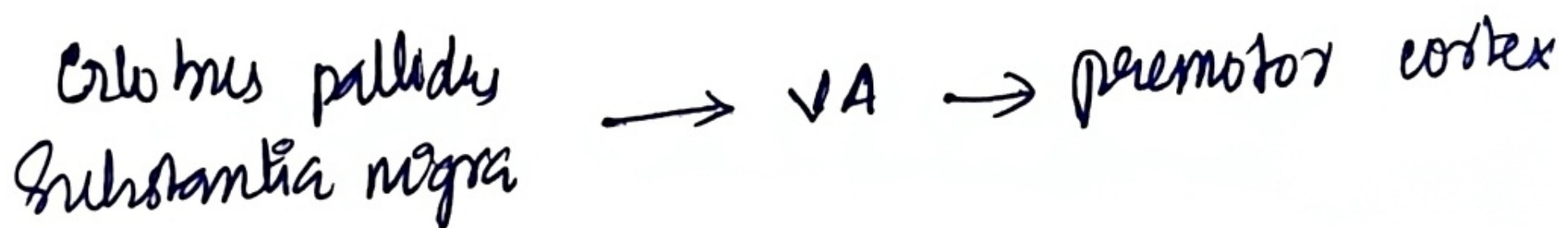
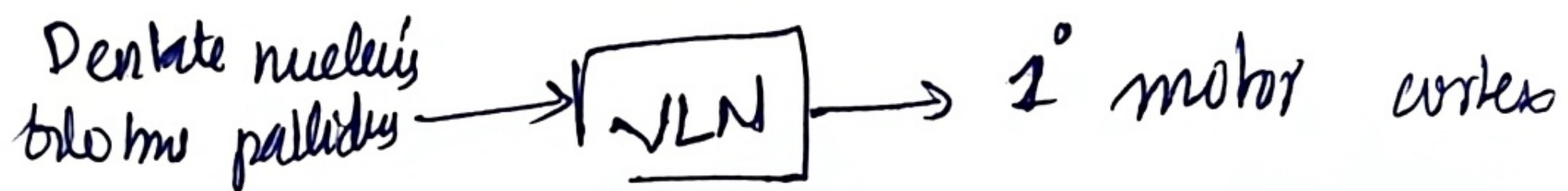
lateral lemniscus
inferior colliculi

→ MGB
medial geniculate
body

→ Auditory cortex
41, 42

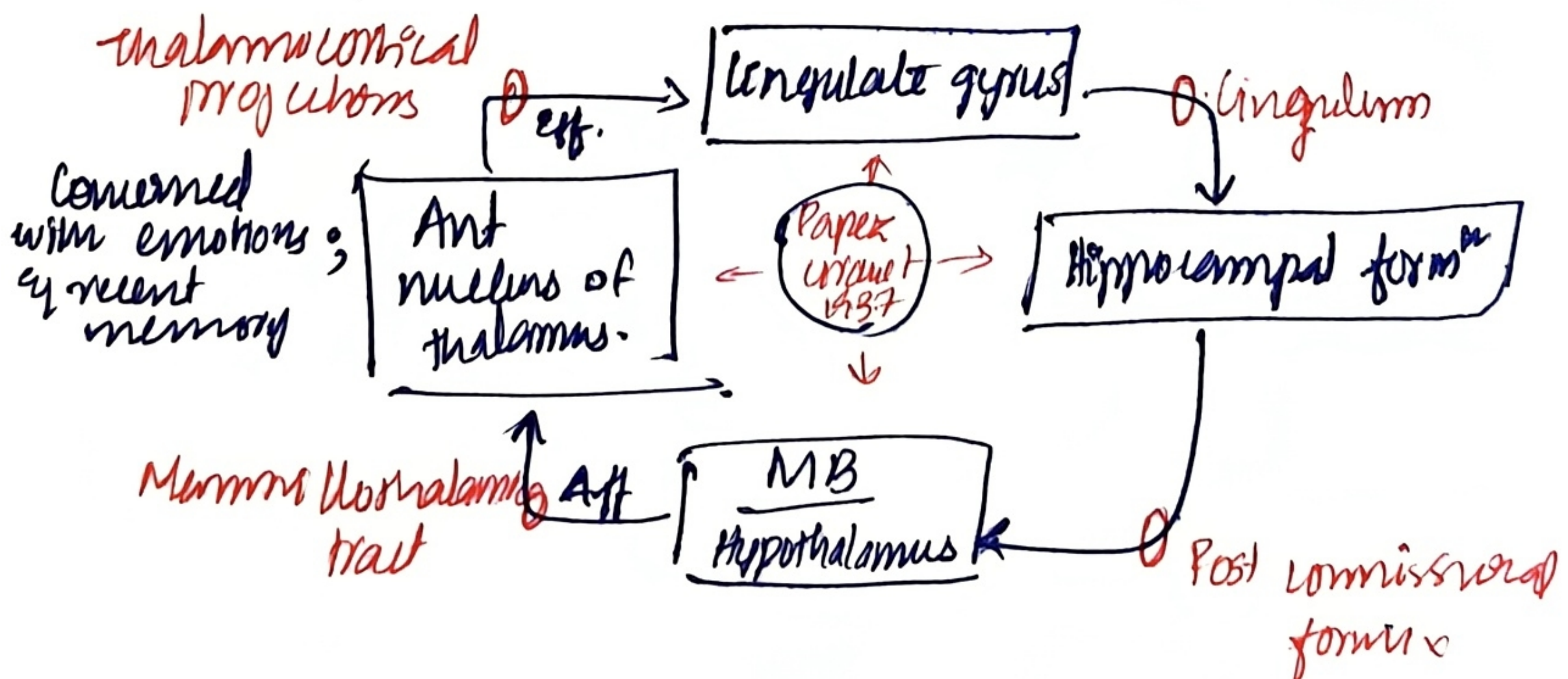


Connections of motor control nuclei



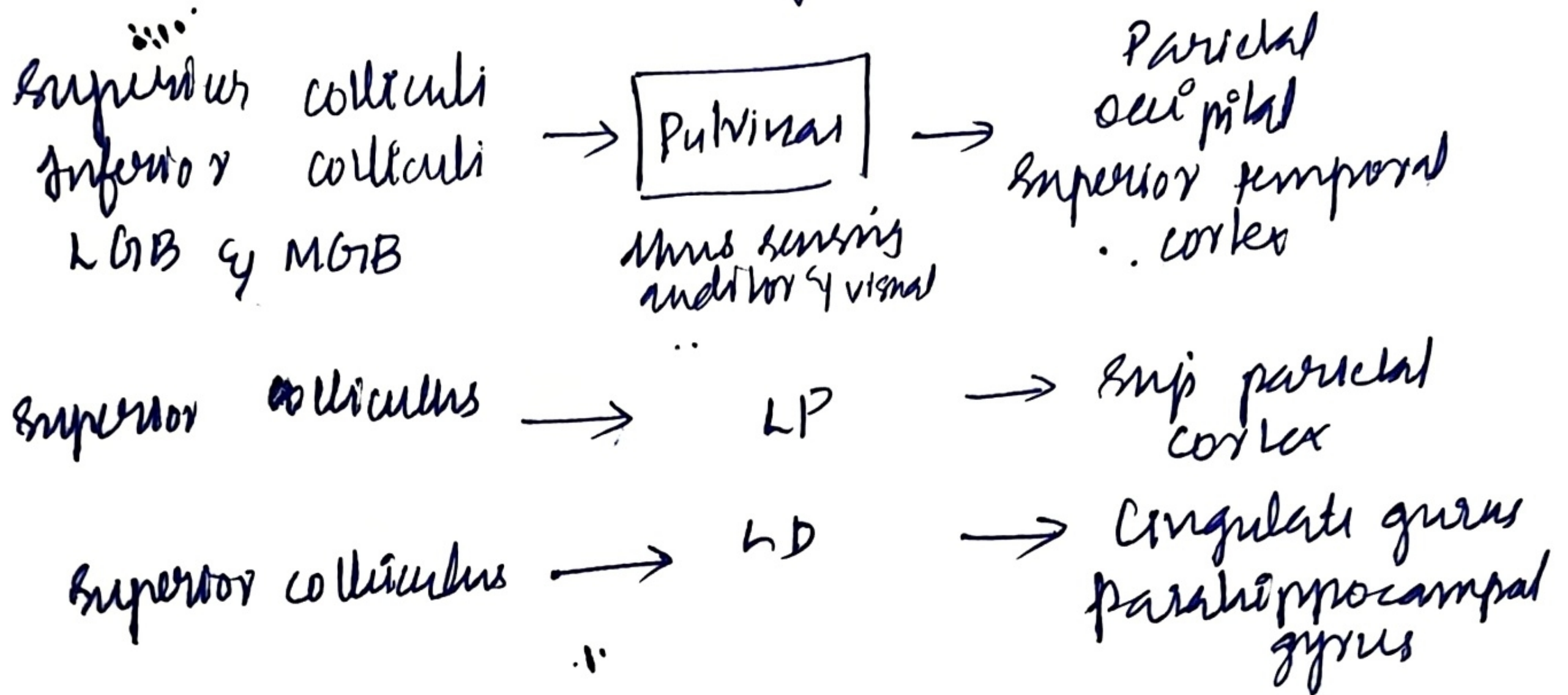
Connection of limbic system nuclei

Papez circuit.



Dorsal medial nucleus has reciprocal innervation with the prefrontal cortex ... functions in thinking, memory, judgement & emotional behaviour !!

* Connections of integrative nuclei



Functions of thalamus

* Final sensory relay station

* Center for integratⁿ & modificatⁿ of peripheral sensory impulses

* processing of sensory info

* Crucial center for perception of senses

* Center for integratⁿ of motor function.

* Role of arousal & alertness

* Role in emotional aspect of behaviour

* Role in language.

* Generates & synchronization of EEG.

* Center for integration of somatic & visceral functions.

Thalamic Syndrome.

- * Blockage of thalamogeniculate branch of post cerebral artery
- * Damage to posteroventral & posterolateral nucleus
- * Loss or reduction of sensations
- * Asteriognosis
- * thalamic phantom limb (unable to locate the limb)
- * thalamic over reaction (threshold for pain, temp & touch is exaggerated)
- * Ataxia
- * Involuntary movements } motor function
- * thalamic hand (flexion of wrist & hyperextⁿ of fingers)