



Overview of Common ERP Components

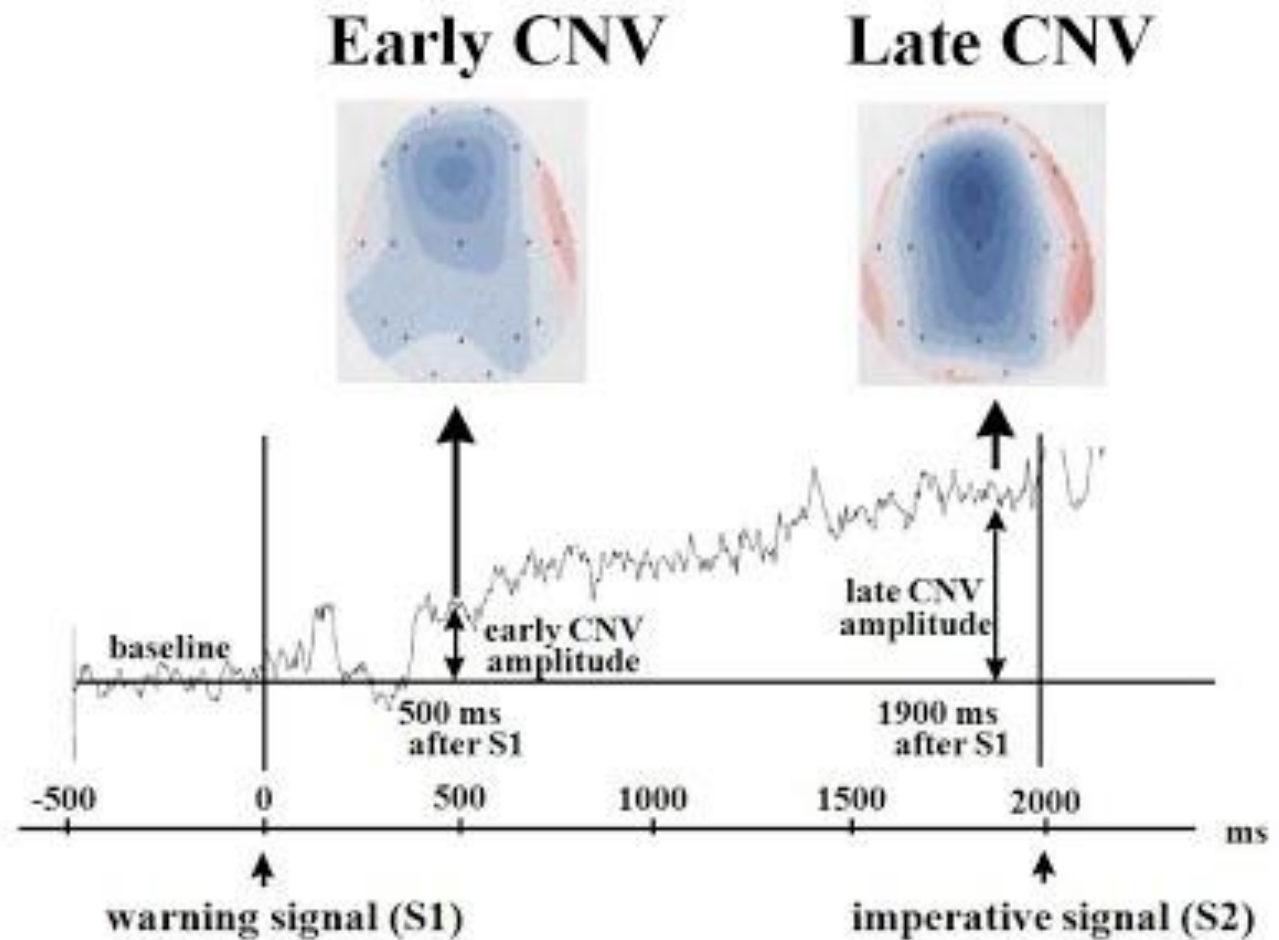
Part 1

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ERP Component Categories

- Exogenous sensory components
 - Endogenous components
 - Motor components
- Naming Conventions
 - N400
 - P2
 - P300
 - P2 vs N400

Contingent Negative Variation (CNV)

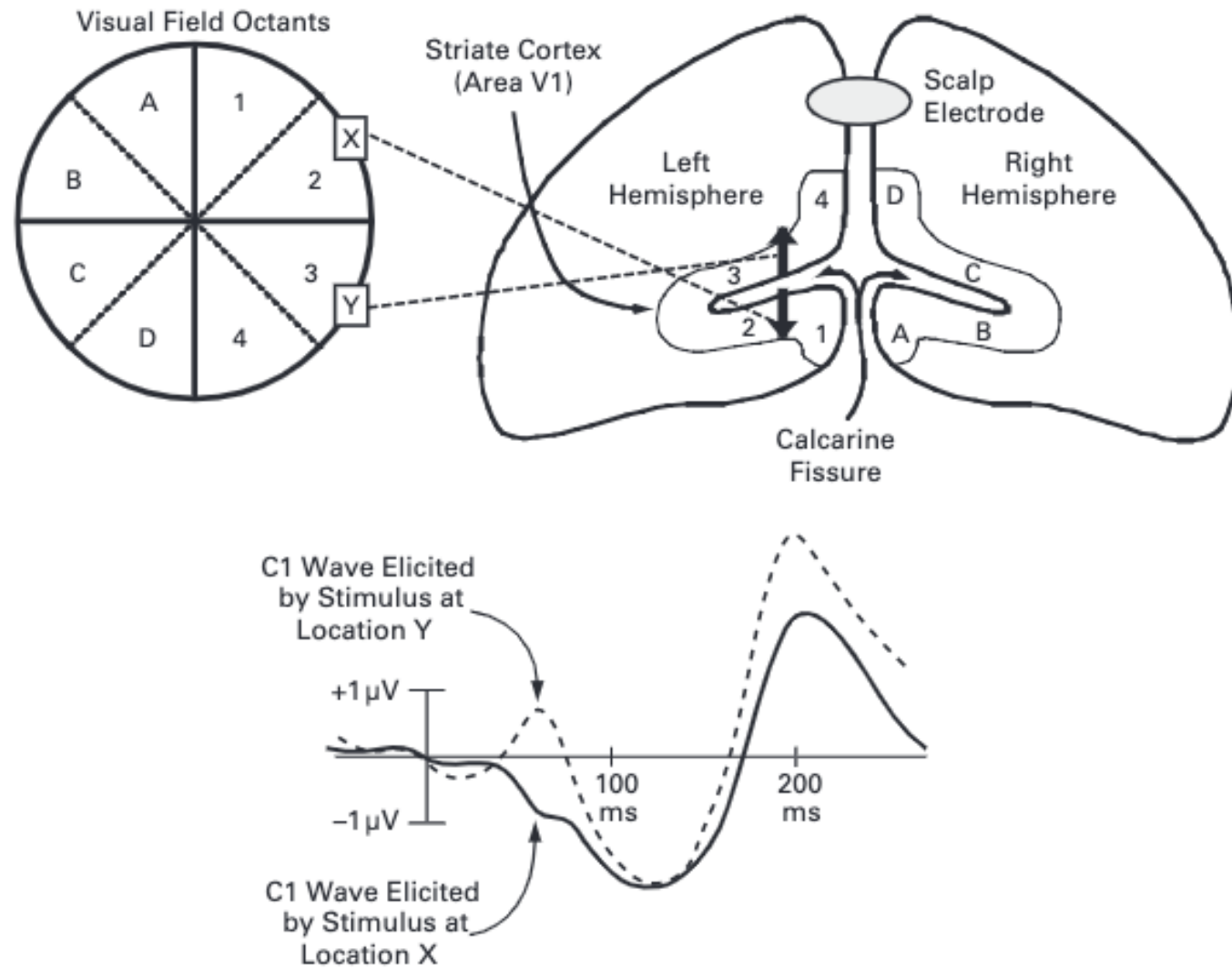


- Stimulus-preceding negativity (SPN)



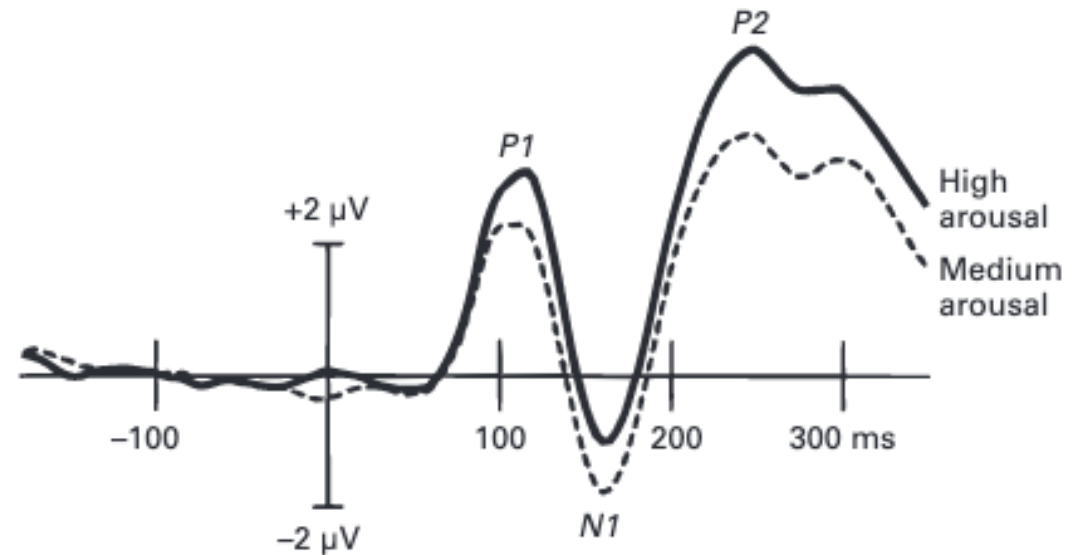
Visual Sensory Responses

C1



P1

- C1 is followed by P1
- 60-90ms poststimulus with peak between 100 and 130 ms
- Onset is hard to assess
- Modulated by selective attention & state of arousal



N1

- P1 is followed by N1
- Subcomponents
 - Earliest → peaks 100-150ms at anterior electrode sites
 - Two posterior → peak 150-200ms from parietal cortex and lateral occipital cortex
 - All subcomponents are influenced by spatial attention
- Highly refractory

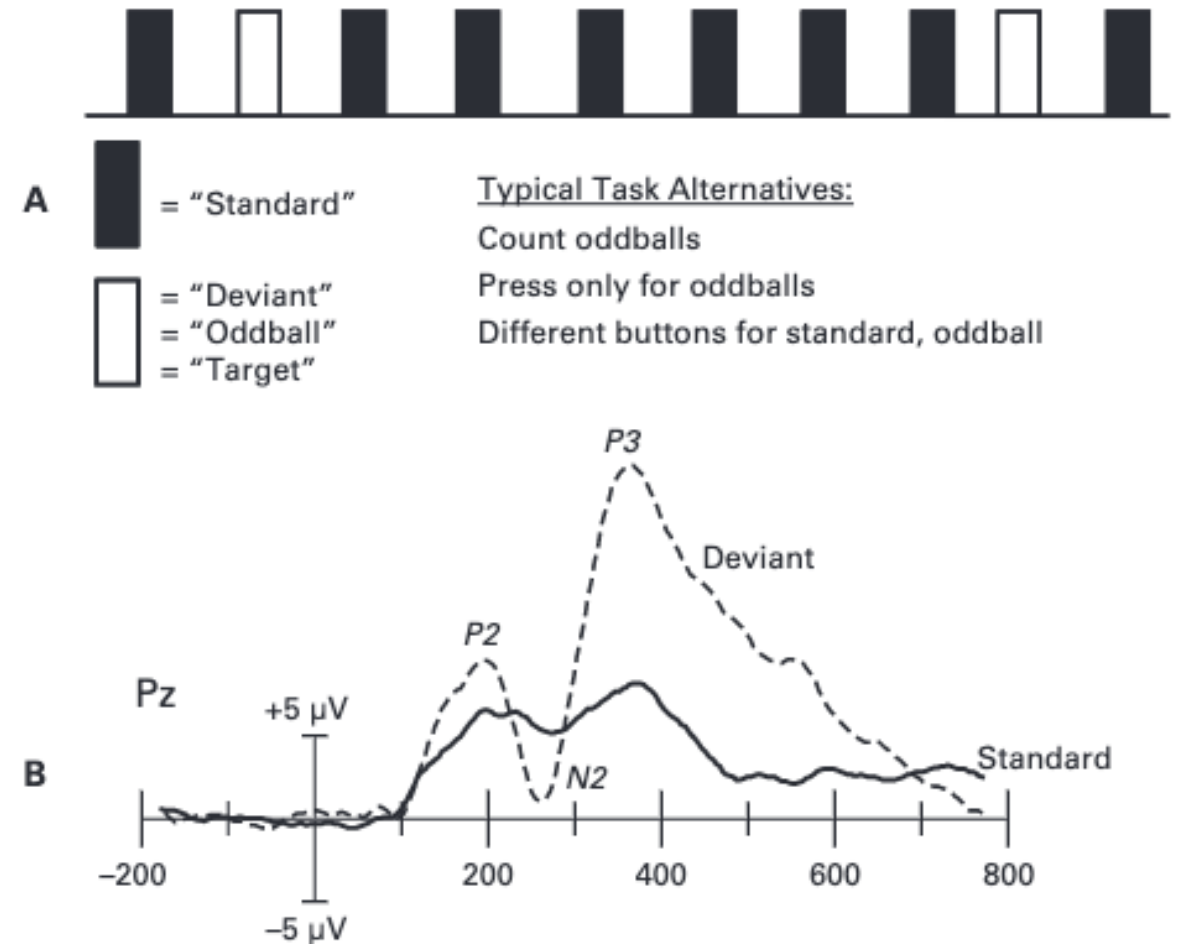
N170 & Vertex Positive Potential

- VPP: Difference from 150 to 200ms at vertex site in response to faces and non-face stimuli
- N170: Faces elicit a more negative potential than non-face at lateral occipital electrode sites

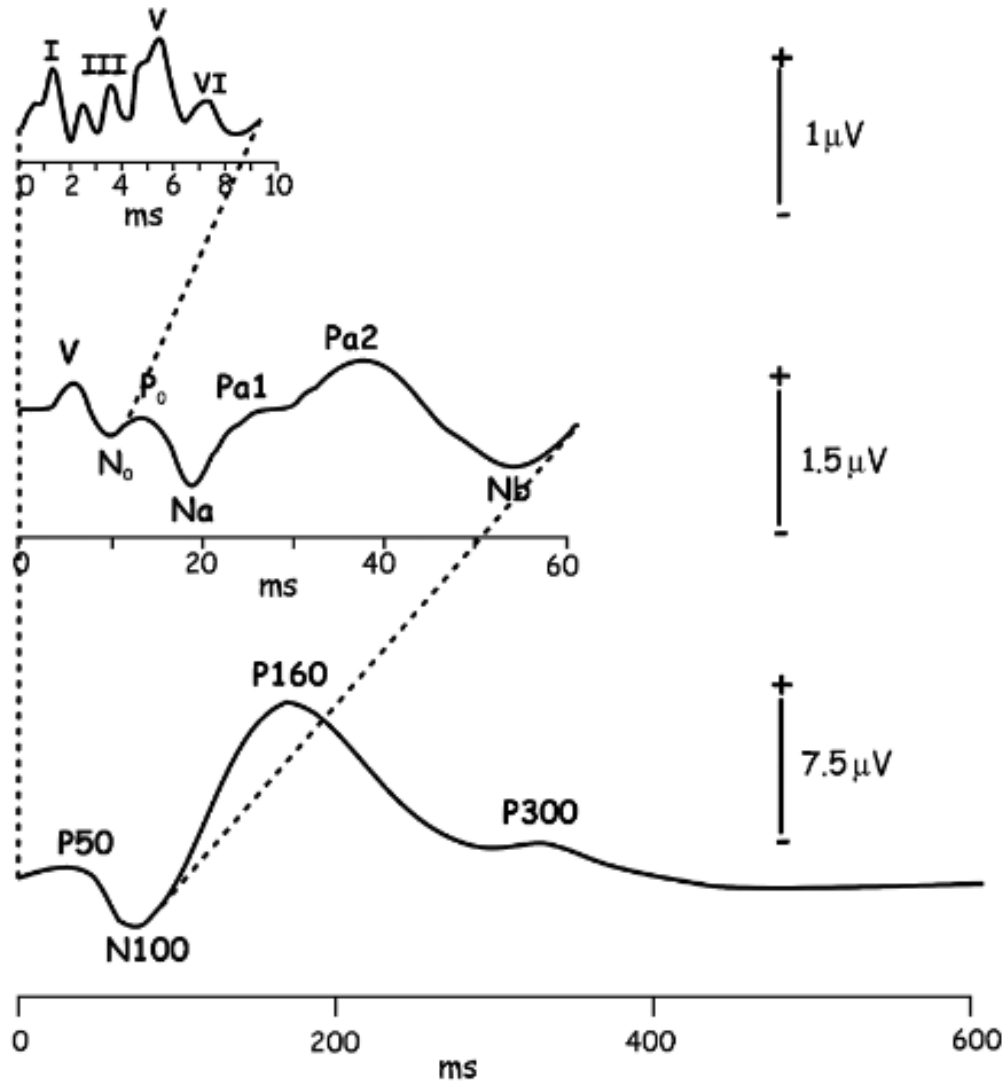


P2

- P2 follows N1 wave
- Larger for stimuli containing target features
- Enhanced when the targets are relatively infrequent



Auditory Sensory Responses



- Subcomponents
 - Frontocentral component
 - Vertex-maximum potential
 - Laterally distributed component