

Anatomy of a Murderer – The Brain's Physiology

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Newsweek



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Anatomy of a Murderer

FRONTAL BRAIN THEORY

PHYSIOLOGY OF VIOLENCE

BIOLOGY OF A KILLER'S PSYCHE

WHY DO THEY EXPLODE?

The **shootings at Virginia Tech** left Americans wondering what could lead someone to commit such horrific acts. Neuroscience offers some clues. While **violence** clearly arises from a complex **interplay of social and psychological factors**, evidence suggests the **brain's physiology** can predispose a person to **aggressive behavior**, possibly leading an ordinary—if troubled—young man to become a killer.

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Sources. Society for Neuroscience, Scientific American Mind. Scans provided by Amen Clinics | Research By Marc Bain | Graphic By Xaquín G.V.

Anatomy of a Murderer

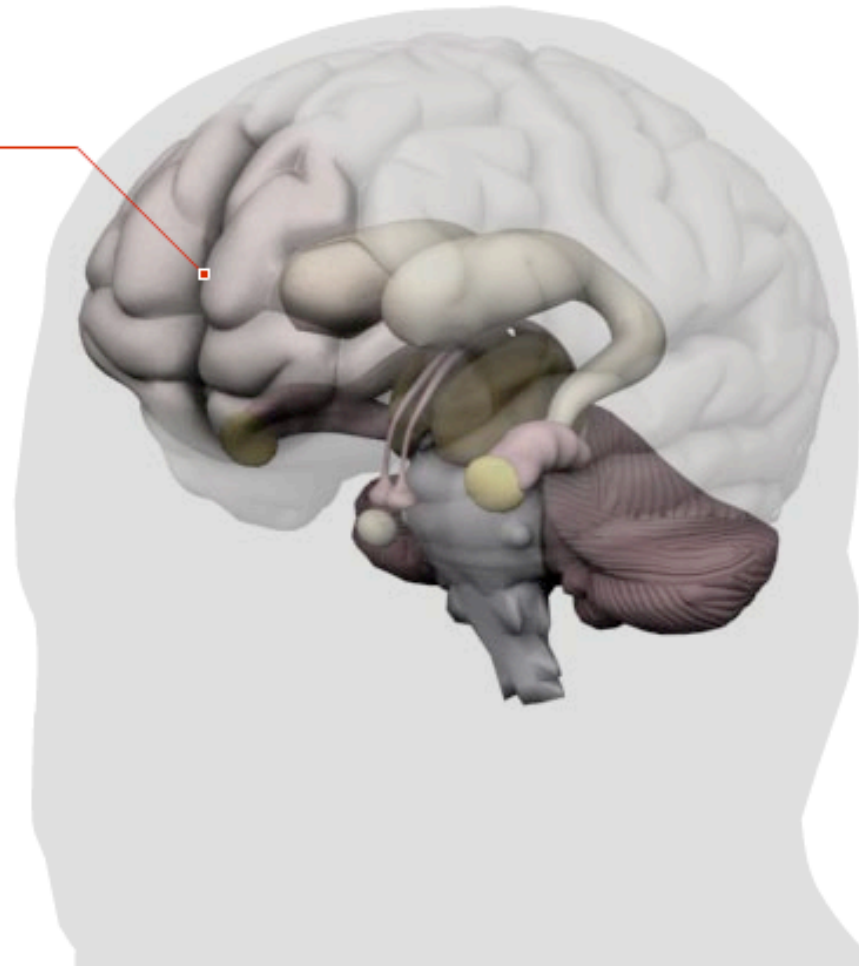
FRONTAL BRAIN THEORY

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PREFRONTAL CORTEX

Compared to the general public, murderers who kill on impulse have **lower levels of activity in their frontal brains**, notably the **prefrontal cortex**, which governs judgment, impulse control and planning. Moreover, people who **suffer damage** or **have lesions** in the area tend to be **less inhibited** and more **aggressive**.

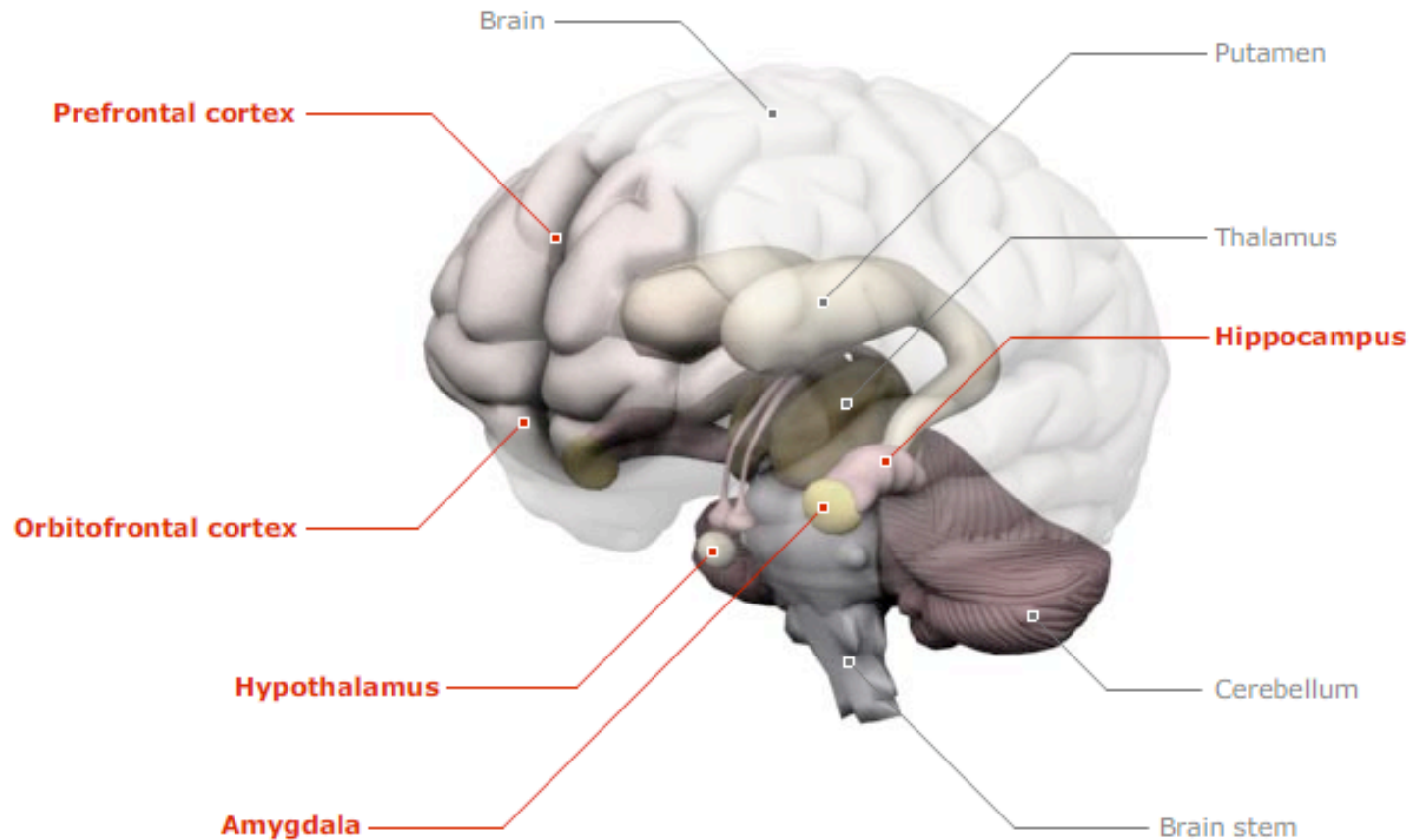


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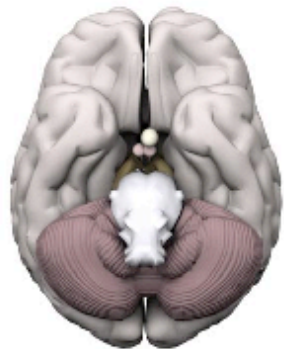
360° View ◀ ▶

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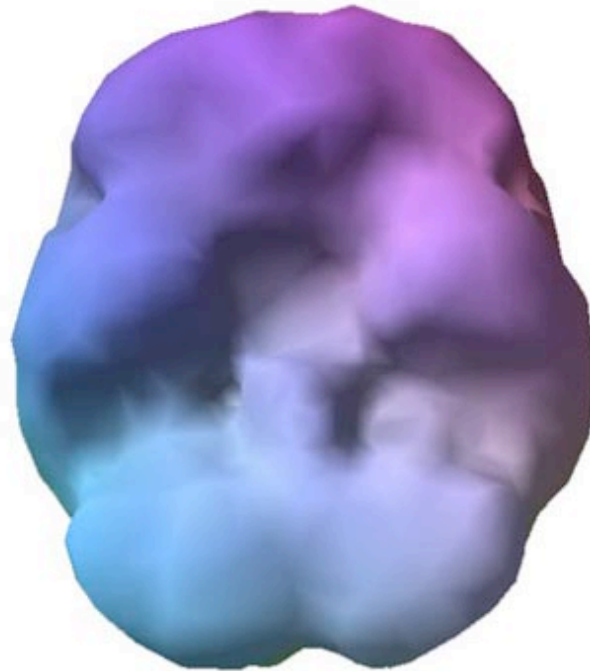
BIOLOGY OF A KILLER'S PSYCHE



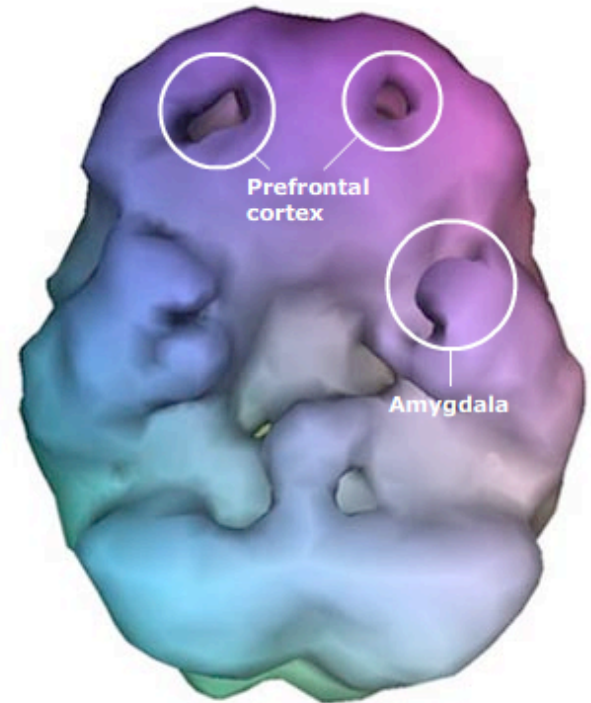
Underside of the brain

BIOLOGY OF A KILLER'S PSYCHE

These **scans** show differences in **blood flow and activity** between a **normal brain** and the brain of convicted **murderer Kip Kinkel**. On May 20, 1998, the 15-year-old Kinkel killed both his parents, and the following day, armed with three guns, killed two students and injured 25 others at Thurston High School.



The blood flow and activity of a **healthy teenage brain**, characterized by fullness and symmetry.



The holes that appear in **this scan**, taken for **Kinkel's trial**, indicate diminished activity, implying his brain's physiology may have played a role in his crimes.

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