Case Studies – Brain Damage

Directions: All of the following case studies are based on actual patients. Using the information provided, indicate as much as you can about the location of the brain damage experienced by each of the following individuals.

Note: Answers may vary, but be sure to explain your diagnosis.

Case	St	tudy	#1
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Jill Bolte Taylor, PhD describes her stroke in her book, <i>My Stroke of Insight</i> . As a neuroantaomist, Dr. Taylor is able to discuss what it felt like to live through a stroke and the experience of being very conscious of what was happening to her body. Dr. Bolte Taylor reported losing control over her right arm as it fell limp at her side. She also lost the ability to perceive where her body ended and where the space around her began. She tried to call for help, and after much effort dialed the numbers to both her workplace and her doctor's office or to find that she could not articulate the words she had been practicing in her mind. In addition Dr. Bolte Taylor could no longer distinguish writing as writing, but rather viewed printed words as a series of squiggles she could not decipher.	١,
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Case Study #2 In his book, <i>The Man who Mistook His Wife for a Hat</i> , Oliver Sacks, PhD describes the case study, which became the namesake for the book. The individual displayed some minor issues with muscle strength, coordination and reflexes on the left side of his body. During a neurological exam, he took off his left shoe to scratch his foot but then forgot what he had just done. He could describe pictures in magazines only by indicating their more specific features, but was unable to describe the picture as a whole. He mistook Dr. Sacks for a grandfather clock until he spoke, and believed that his wife's hair was his hat. He lacked the ability to recognize facial expressions or the faces of specific people until they spoke. He often sang to himself as he completed tasks. He could easily complete a task uninterrupted, but when distracted could not recall the task on which he was previously focused.	,
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Case Study #3 Dr. Ramachandran in his book <i>Phantoms of the Brain</i> describes patients who have lost a limb yet continue to experience feelings in the missing appendage. In a talk for the American Psychological Association in 2011 titled <i>The Human Brain, Illusion and Delusions</i> , Ramachandran described a patient with a missing hand who felt sensations in his missing hand when he was touched on the face. In addition, when water was dribbled onto his face, he felt as if it were running down his arm. The patient also felt as if the water were running towards the ceiling when he lifted his arm.
Case Study #4 In An Anthropologist on Mars, Oliver Sacks, PhD describes a patient named Greg who had a seizure and experienced amnesia, this caused him to forget that he was blind and that he had broken his leg as a result of a fall from the seizure. He did not experience visual hallucinations or "phantoms". He lived however only in the present and did not recall that his father had passed away until he was reminded. He recalled memories from many years ago as if they had just occurred. While attending a Grateful Dead concert at Madison Square Garden, Greg discussed New York City as it has been in the 1960s rather than in the present. However, while driving to the concert, Greg was able to recall the smell of pretzels and connect that to similar smells from the past. Greg became confused when more recent songs were played at the concert, and the next day had no recollection at all of attending the concert claiming, "He had never been to Madison Square Garden."

The famous case study of Henry Molaison (Patient H.M.) was conducted following a surgery to eliminate epileptic seizures. After the operation, patient H.M. could no longer form any new memories. He could recall memories from before the surgery, but could not establish any new memories. H.M. had a normal level of intelligence and vocabulary. While he could not learn any new words or return to a conversation once distracted, he could however learn to complete new tasks.
Case Study #6 The railroad worker Phineas Gage experienced great trauma to his brain when a tamping iron he was using to move dynamite from bedrock was suddenly sent hurling through his head as a result of an accidental explosion. After the accident, Phineas' changed from being relatively reserved and proper to someone who no longer seemed in control of his emotions. Phineas exhibited some motor difficulties especially with his right side. He had some trouble walking and difficulty with the vision in his left eye near the entry point of the tamping iron.