1. Whether there are two or three types (or more) of LTM may be important when attempting to help people recover their cognitive functions after illnesses such as stokes.
2. Tulving (1989) injected himself, his wife and 4 others with particles of radioactive gold that he could use to track brain blood flow in a scanner.
3. whereas when he thought about childhood experiences blood flow increased at the front of his brain.
4. Belleville et al (2006) demonstrated that episodic memories could be improved with training in older patients with mild cognitive impairment.
5. These findings give a strong indication that damage to specific areas of the brain leave the patients with deficits in one or more types of long term memory, whilst leaving other long-term memory stores intact.
6. He scanned each person’s brain whilst they thought about historical facts or childhood experiences.
7. However, he was perfectly able to read, write, speak and play piano. Other researchers investigated learning in people with Huntingdon’s Disease (a progressive, degenerative disease of the brain).
8. There is evidence to suggest that when a person uses episodic memory, they use a different region in the brain compared with when they use semantic memory.
9. This offers support for the biological basis of separate long-term stores
10. Being able to identify different aspects of LTM has led to psychologists targeting specific kinds of memory to make people’s lives better.
11. In the case of Clive Wearing, as illness caused the near total destruction of his hippocampus. This left him with an inability to store new episodic or semantic information for any more than a few seconds.
12. The activation of the different areas of the brain when recalling facts or episodes suggests a biological basis to the different types of memory in LTM
13. Critics challenge the need of distinguishing between types of LTM. Cohen and Squire suggest that semantic and episodic memory should be understood as the same type of memory, called ‘declarative memory’.
14. He found in 3/6 participants (including himself), that when they were thinking about historical facts blood flow increased at the back of his brain,
15. Research by Kan et al (2009) found that there was interdependence between episodic and semantic memory.
16. This shows that the tripartite division of long-term memory has had tangible benefits for people with cognitive impairment, making it a useful theory).
17. They found that HD patients had no problems learning new facts and knowledge, but had severe problems learning new motor skills.