



PART 1

Read the text below and answer questions 1–13.

THE CONSTRUCTIVE NATURE OF MEMORY

A

Memory is often spoken of as if it were a faithful recording: an experience is “stored” and later retrieved intact. Contemporary cognitive research, however, portrays remembering as an active reconstruction rather than a replay. This is partly because the brain is engineered for efficiency. In everyday situations, it is rarely useful to preserve every perceptual detail of a scene or the exact wording of a conversation; what matters is extracting meaning, patterns, and implications for action. As a result, people typically retain the gist of events and the relationships between key elements, while many specifics are lost. The same adaptive economy that makes memory practical also makes it fallible: when detailed traces are weak, the mind fills gaps in ways that produce a coherent narrative. Because the final product of reconstruction usually feels smooth and complete, individuals can experience strong confidence even when their recollection contains distortions.

B

A major explanation for how the mind fills gaps comes from schema theory—an account of memory in which past experience is organised into structured knowledge about “typical” situations. Schemas help individuals interpret new events quickly, guiding attention and supplying expectations about what is likely to occur. Yet these same expectations can shape recall. When details are missing, the mind may supply information that fits the schema, producing additions that are plausible rather than historically precise. This does not necessarily involve intentional deception; rather, it reflects a system that prioritises coherence and interpretability. In practical terms, schema-driven remembering means that people may confidently report details that feel consistent with an event type—what a room “must have looked like,” or what a person “probably said”—even if those details were never perceived.

C

The foundational evidence for schema effects is often associated with Frederic Bartlett’s early work on reconstructive memory. In his well-known “War of the Ghosts” studies, participants read a story that included unfamiliar cultural elements and later reproduced it from memory. Bartlett observed not just forgetting, but systematic transformation. Unusual features were dropped, confusing sequences were reorganised, and unfamiliar motives were made more familiar. The remembered story became shorter, more conventional, and more consistent with the participants’ cultural expectations. This



pattern implied that recall is guided by pre-existing knowledge structures rather than governed by a passive storage system. The broader lesson for cognitive science is that memory is shaped by interpretation at the time of encoding and by reconstruction at the time of retrieval, both of which can insert schema-consistent material when the original trace is incomplete.

D

A second influential line of research demonstrates that memory can be altered not only by what people already know, but also by what they encounter after an event. Studies of eyewitness testimony show that questions and conversations can introduce misleading details that later become difficult to distinguish from the original experience. Elizabeth Loftus's experiments are particularly cited because they revealed how subtle linguistic cues can reshape reports. In a classic paradigm, participants watched footage of a traffic accident and then answered questions about it. When the verb in the question was changed—asking how fast cars were going when they “hit” each other versus when they “smashed” into each other—participants exposed to the stronger wording tended to estimate higher speeds and were more likely to report having seen broken glass, even when none was present. Such findings suggest that post-event information can be incorporated into a memory, producing a blended account that feels authentic. The implications are substantial for legal contexts: the phrasing of interviews can unintentionally contaminate recollection.

E

Emotion adds another layer to reconstruction. Highly emotional events can produce memories that are vivid and confidently held, sometimes described as “flashbulb memories.” However, vividness does not guarantee accuracy. Under arousal, attention may narrow to central aspects of an event—such as a threat or a striking action—while peripheral details are encoded less reliably. Later, because the emotional intensity and clarity of certain features are strong, people may infer that the entire memory is precise. This can lead to overconfidence about timelines, distances, or secondary elements. Emotional arousal therefore influences both what is stored and how it is judged: it may strengthen selected components of a memory while simultaneously increasing the subjective sense that the whole recollection is trustworthy.

F

Neuroscience helps explain why distortion is possible even when a person is genuinely trying to remember accurately. Episodic memory is closely linked to the hippocampus and related medial temporal-lobe structures, which bind together elements of an experience—people, places, objects, and sequences. Importantly, retrieval is not merely “accessing” a



fixed record. When a memory is recalled, neural networks associated with perception and meaning are reactivated, and the memory trace can become temporarily malleable. Through reconsolidation, the recalled memory is stabilised again, but it may incorporate updates, interpretations, or newly introduced information. This mechanism can support learning and adaptation, yet it also provides a route by which repeated questioning, discussion, or exposure to other narratives can gradually shift what a person later experiences as the past.

G

Although these processes highlight memory's vulnerabilities, constructive remembering also has adaptive value. The capacity to recombine fragments of past experience supports imagination, problem-solving, and planning. Rather than functioning as an archive, memory operates as a flexible system for generating models of the world: people can mentally simulate future situations, test decisions, and anticipate consequences by drawing on earlier episodes and general knowledge. In this sense, the same constructive mechanisms that can produce distortion also enable humans to prepare for challenges and exploit opportunities. The most defensible conclusion is therefore not that memory is "unreliable," but that it is designed for meaning and utility. Recognising this design helps explain why confidence is an imperfect guide to accuracy, why interviewing methods matter in legal settings, and why personal recollections may diverge even when individuals are sincere.

Questions 1–5

Which paragraph contains the following information?

- 1 Evidence that subtle changes in questioning can reshape what people later report about an event.
- 2 The argument that remembering prioritises meaning and efficiency rather than perfect detail.
- 3 A classic study showing that recall may become more conventional and culturally familiar over time.
- 4 A biological explanation for how retrieval can leave a memory open to later modification.
- 5 The idea that memory's flexibility supports imagining and preparing for what has not yet happened.

Questions 6–9

Complete the summary below. Choose **ONE WORD ONLY** from the text for each answer.



How memory can be reshaped

Bartlett found that the remembered story became shorter and more **6** with participants' cultural expectations. Later eyewitness research showed that questions and conversations can introduce misleading **7** that later become difficult to distinguish from the original experience. In Loftus's experiments, participants exposed to stronger wording tended to estimate higher **8** These findings have important implications for **9** contexts, where interview phrasing can contaminate recollection.

Questions 10–13

Select the correct answer.

10 How does contemporary cognitive research characterise remembering?

- A** As the exact retrieval of information preserved during an experience.
- B** As an active reconstruction that retains meaning more reliably than every specific detail.
- C** As a process in which schemas replace most information at the moment of encoding.
- D** As a mechanism that becomes inaccurate mainly when emotion is involved.

11 According to the passage, why does memory often include gaps that must be filled during recall?

- A** Because the brain intentionally deletes details to prevent emotional distress.
- B** Because schemas prevent new information from being encoded in the first place.
- C** Because memory extracts meaning efficiently rather than preserving every detail.
- D** Because post-event suggestion replaces all original traces immediately.

12 What does the passage indicate about “flashbulb memories”?

- A** They can feel vivid and certain even when some peripheral details are wrong.
- B** They are usually accurate across all details because emotion heightens attention uniformly.
- C** They occur only when an event closely matches an existing schema.
- D** They are created mainly by repeated questioning in legal interviews.

13 Why can recalling a memory create an opportunity for it to change?

- A** Retrieval permanently removes details that were weakly encoded.
- B** Recollection prevents neural networks linked to perception from becoming active.
- C** The recalled trace temporarily becomes malleable before being stabilised again.
- D** Reconsolidation restores the original memory without incorporating later information.



Answer Key

1. D
2. A
3. C
4. F
5. G
6. consistent
7. details
8. speeds
9. legal
10. B
11. C
12. A
13. C