

Loftus and Palmer aimed to investigate whether the language used when interviewing an eye witness about an event can act as a leading question and therefore distort the reconstruction of the event in the memory system. They were interested in factors that can influence the accuracy of eye witness testimony, making it unreliable.

Allport and Postman demonstrated how schemas already set in the memory system can affect the reconstruction of an event. Participants were shown a slide of a white man attacking a black man with a razor, and were told to report the scene to the second person, who then had to report it to the third and so on. The scene became distorted over time, and over 50% who received the final description had the razor in the hands of the black man.

It seems that participants' 'prejudice' schemas (blacks more violent than whites) cause them to distort the way they constructed and stored the information in memory. The study shows that we reconstruct our memory based on schemas already stored.

Eye witness testimony is important to the judicial system, as witness accounts can often influence the outcome of a jury. It is well reported that people are often inaccurate at remembering faces, weapons and numerical data such as speed and time. It is therefore evident that there are a number of variables that can affect eye witness testimony, such as the way in which a question is worded after a particular event.

Post event information can be added to the memory and then later recalled as if part of the original event. The post event information can therefore be integrated within the original memory, making it unreliable.

Carmichael showed how verbal labels given after a particular event can alter subsequent memory. He suggests that memory is not recorded like a photograph, but is rebuilt from stored elements.

Loftus and Palmer were interested in the reconstructive process and how leading questions asked after a particular event can change or supplement the existing memory of an event

Experiment 1 consisted of an opportunity sample of 45 American males who were split into 5 groups of equal sizes. Within these groups they were tested in various sizes depending on availability.

Participants watched 7 films of a car accident, each lasting between 5 -30 seconds. The videos were shown to each group in a different order.

Following this, participants were asked to complete a questionnaire, which included the critical question, 'How fast was the car going when they (verb) into each other?' 5 verbs were used. These were; hit, smashed, bumped, collided and contacted, each being given to 9 participants each.

The independent variable in this study was the verb used, and the dependent variable was the estimates of speed.

For experiment 2, 150 participants were split into 3 groups of equal sizes, within which they were tested in various sizes, again depending on their availability. The groups were shown a film of a car accident, which lasted about 1 minute long with the accident scene lasting 4 seconds.

They were then asked to complete a questionnaire which included a critical question related to the speed of the vehicle. The first group was asked 'How fast was the car going when they smashed into each other?' and the second group was asked 'How fast was the car going when they hit into each other?' The final group was not asked a question related to the speed of the vehicle.

▲ week later, participants were called back and asked to complete another questionnaire. This included the critical question, 'Did you see any broken glass?' Questions were presented in a randomised order, and participants could answer either yes or no to this particular question. There was in fact no broken glass in the film clip.

Loftus and Palmer found that the average estimate of speed for experiment 1 was 31.8mph in the 'contacted' condition, compared to 40.8mph in the 'smashed' condition, showing a difference of 9mph and when statistically analysed, it was significant and $p < 0.005$.

They concluded that changing a single word can have an effect on the answer given. The verb 'smashed' implied a greater speed than the verb 'contacted' and therefore implied a more serious incident, changing the reconstructive memory in the participants memory.

For experiment 2, Loftus and Palmer found that the average estimate of speed for the smashed condition was 10.46 compared to 8mph for the hit condition, highlighting a difference of 2.46mph and being found significant at $p < 0.05$. The smashed condition resulted in significantly more 'yes' responses and higher estimates of speed, which was found significant at $p < 0.025$.

▲ week later, 32% of the smashed condition reported seeing broken glass, compared to 14% of the hit condition, showing an 18% difference.

Loftus and Palmer concluded that the wording of a question can have a significant effect on the outcome of the participant. The verb 'smashed' acted as a leading question and affected the participants response to the broken glass question a week later, making the event seem more serious. Therefore a week later when asked, 'Did you see any broken glass?', participants were more likely to say yes.
