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President Bush's False 'Flashbulb' Memory of 9/11/01

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SUMMARY

Many people claim to remember how they heard about the terrorist attacks of September 11, 2001—including George W. Bush, the President of the United States at the time. On at least three occasions, the President was asked how he heard the news of the attacks. His answers contained substantial inconsistencies and provide a near-perfect example of a false flashbulb memory. Copyright © 2004 John Wiley & Sons, Ltd.

Like the Pearl Harbor bombing and the Kennedy assassination, the terrorist attacks of September 11, 2001, seem unforgettable to most Americans who lived through them. Many people feel that they clearly remember where they were and what they were doing when they heard the news; they often describe these memories as particularly vivid and emotional (see Christianson & Safer, 1995, for a review). Memories like these allow people to place themselves in a particular moment in history; thus, it comes as no surprise that people find themselves telling their story over and over again.

George W. Bush, the sitting President of the United States at the time of the attacks, is one such person. On at least three occasions, the President was publicly asked how he heard the news. The first and third recollections were taped and transcribed by news agencies; the second comes from a summary of an interview with the President. (Square brackets denote insertions or deletions.)

Memory 1. On December 4, 2001, the President was in Florida giving a speech and answering questions from the audience. One questioner was a young boy named Jordan:

Jordan: Mr President . . . how did you feel when you heard about the terrorist attack? The President: Well, Jordan, you're not going to believe what state I was in when I heard about the terrorist attack. I was in Florida. And my chief of staff, Andy Card—actually I was in a classroom talking about a reading program that works. And I was sitting outside the classroom waiting to go in, and I saw an airplane hit the tower—the TV was obviously on, and I use[d] to fly myself, and I said, 'There's one terrible pilot.' And I said, 'It must have been a horrible accident.' But I was whisked off there—I didn't have much time to think about it, and I was sitting in the classroom, and Andy Card, my chief

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who was sitting over here walked in and said, 'A second plane has hit the tower. America's under attack' (President holds town meeting, 2001).

Memory 2. On December 20, 2001 (Balz, personal communication), Dan Balz and Bob Woodward of the *Washington Post* interviewed the President for a story entitled '10 Days in September.' On that day, the President told a different story:

Bush remembers senior adviser Karl Rove bringing him the news, saying it appeared to be an accident involving a small, twin-engine plane. In fact it was American Airlines Flight 11, a Boeing 767 out of Boston's Logan International Airport. Based on what he was told, Bush assumed it was an accident. 'This is pilot error,' the president recalled saying. 'It's unbelievable that somebody would do this.' Conferring with Andrew H. Card Jr., his White House chief of staff, Bush said, 'The guy must have had a heart attack'....

[Deleted paragraph on the location of the rest of Bush's advisors and cabinet members].... At 9:05 a.m., United Airlines Flight 175, also a Boeing 767, smashed into the South Tower of the trade center. Bush was seated on a stool in the classroom when Card whispered the news: 'A second plane hit the second tower. America is under attack' (Balz & Woodward, 2002).

Memory 3. On January 5, 2002, the President was in California answering questions from an audience. Once again, someone asked him about his immediate reaction to the terrorist attacks:

Questioner: What was the first thing that went through your head when you heard that a plane crashed into the first building?

[Deleted first paragraph of reply, in which the President discusses his education program]

The President: Anyway, I was sitting there, and my Chief of Staff—well, first of all, when we walked into the classroom, I had seen this plane fly into the first building. There was a TV set on. And you know, I thought it was pilot error and I was amazed that anybody could make such a terrible mistake. And something was wrong with the plane, or—anyway, I'm sitting there, listening to the briefing, and Andy Card came and said, 'America is under attack' (President holds town hall forum, 2002).

Notice the inconsistencies in the three descriptions. Memories 1 and 3 are nearly identical, but they clearly differ from Memory 2. More to the point, Memories 1 and 3 seem to be impossible. There was no footage of the *first* plane crashing into the building (at least, not at that hour of the morning); thus, the President's story in Memories 1 and 3 cannot be accurate. How can we explain these inconsistencies?

Some people immediately called it a conspiracy. 'Bush slip reveals total 9/11 complicity,' screamed the website freeworldalliance.com: 'Complicit factions of the U.S. federal government, including virtually ALL upper-level members of the BushMob, actually FILMED their own attack on New York's World Trade Center—and Bush has admitted that he WATCHED IT!!!!' (Bush slip reveals total 9/11 complicity, 2001; capitalization, punctuation, etc. as in the original). The website bushwatch.com took a more moderate view, claiming that 'the most benign conclusion, then, is that Bush was not telling the truth when he told Jordan that he saw the first plane hit the first tower....' (Politex's Bush watch for Bush lies, 2001). Even *The Guardian*, a mainstream British newspaper, found Bush's statements worthy of comment, noting that 'the story that he was

watching TV contradicts reports from correspondents at the time that he got the news in a phone call...' (Engel, 2001).

What are we to make of this? Are we obliged to believe these accusations of outrageous conspiracies or blatant lies? Or should we believe something else entirely?

Fortunately, students of memory can offer a more benign hypothesis. We need not resort to wild conspiracy theories or presumptions of dishonesty to explain the President's shifting story; on the contrary, we need only consider the frailty of human memory. Over the past century, numerous studies have shown that people frequently suffer from false memories—fictitious 'memories' for events that did not really happen. For example, people who hear a list of sewing-related words will often falsely remember that the word 'needle' was on the list (Deese, 1959; Roediger & McDermott, 1995). A simple one-word change to a question can increase the likelihood that people will falsely remember seeing broken glass in a picture, when in fact there was none (Loftus & Palmer, 1974). Some sets of twins have 'disputed memories'—both twins remember a particular event, but each twin believes himself or herself to be the sole protagonist (Sheen, Kemp, & Rubin, 2001). In some cases, researchers can even 'implant' false autobiographical memories: In one study, participants were interviewed about several real childhood events as well as one fictitious event; then, in a follow-up session, some participants claimed that the fictitious event had really happened (Hyman & Billings, 1998). (These are just a few of the many papers on this topic; see Johnson & Raye, 2000, for a review of additional research.)

This is all very well for lists of words or distant childhood memories, but memories for shocking events, like the September 11 attacks, seem like they should be more resilient to change. One might think, for example, that the President could not possibly forget how he heard about such a momentous event. Indeed, people are generally quite confident that their memories for such events are accurate—they say that the experience is 'burned into their mind,' that they will never forget it. Years after the event, people will still claim to remember exactly how they heard the news about the Lincoln assassination (Colegrove, 1899) or the shooting of President Kennedy (Brown & Kulik, 1977). Brown and Kulik referred to memories like these as 'flashbulb memories,' noting that they have 'a primary, 'live' quality that is almost perceptual. Indeed, it is very like a photograph...' (Brown & Kulik, 1997, p. 74; see Conway, 1995, for a review). Brown and Kulik speculated about a possible process, the so-called 'Now Print!' mechanism, that takes immediate mental 'pictures' during extraordinary or emotional situations.

Although this notion may aptly describe the way most people feel about memories for shocking events, it has received criticism (e.g. McCloskey, Wible, & Cohen, 1988). Substantial research indicates that these memories also are subject to distortion and change, and are nowhere near as consistent as the 'flashbulb' metaphor would suggest. In one study of flashbulb memories, Neisser and Harsch (1992) developed a rating scale to try to quantify changes in memories of the Challenger explosion. Twenty four hours after the disaster, they asked people how they heard the news; then, 2.5 years later, they interviewed some of those participants again. When they compared the consistency of the two answers, they found that people did quite poorly: the average score was 2.95 out of a possible 7. McCloskey and colleagues (1988) asked similar questions; after a 9-month delay, they found that 25% of participants gave at least one inconsistent response. In fact, Neisser (1982) reported that he himself fell victim to the false-memory phenomenon: According to his memory, he was listening to a baseball game on the radio when it was interrupted by an announcement of the Pearl Harbor attack—an extraordinarily unlikely circumstance, since the attack occurred on December 7, 1941, and no baseball is played in December

(see Thompson & Cowan, 1986, and Neisser, 1986 for further discussion of this case). Thus, the term 'flashbulb' is misleading, because it inaccurately implies that these memories are as realistic and as unchanging as photographs; Rubin and Kozin (1984) proposed using the term 'vivid memories' instead, since it does not carry such connotations.

Still, the President's inconsistency seems quite substantial even if we take this research into account. In Memory 2, the President claims that one of his advisers, Karl Rove, told him about the first crash in person; in Memories 1 and 3, he makes the implausible claim that he learned about it when he saw the crash itself on TV. Maybe memories—even flashbulb or vivid memories—can be wrong sometimes, but can false memory really account for inconsistencies as serious as these?

Actually, yes. In fact, several of Neisser and Harsch's participants made the same sort of mistake. In fact, one participant's recollections seem quite similar to those of the President:

Memory 1 (24 hours after the event):

I was in my religion class and some people walked in and started talking about it.... Then after class I went to my room and watched the TV program talking about it....

Memory 2 (2.5 years later):

When I first heard about the explosion I was sitting in my freshman dorm room with my roommate and we were watching TV. It came on a news flash...(Neisser & Harsch, 1992, p. 9).

The memories of other participants changed in similar ways: The day after the Challenger disaster, nine of 42 participants said that they had heard the news from TV; a little over two years later, the number had increased to 19 (see Wright, 1993, for an additional example).

Unfortunately, we cannot readily identify the reasons behind such inconsistencies, since we have no way to know for sure what the participants saw and did between tests. Still, researchers have put forth several hypotheses, all of which have some bearing on the President's case. Brewer (1992), for example, observed that people make errors like these in all kinds of memory tasks—not just those involving vivid memories. In his own study of memory for everyday occurrences, he asked people to retrieve memories of particular events; in some cases, they responded with an accurate description of an event from a completely different point in time, a mistake he called the 'wrong time slice' error. This error may in part be an example of interference, in that information from one point in time can impair the retention of information learned at another point in time. For example, when John Dean testified in the Watergate trial, he made mistakes like these; in some instances, his report of a conversation included statements that had actually taken place in several different conversations on several different dates (Neisser, 1981). In the case of the Challenger tragedy, we can presume that the participants in the study did indeed see the footage of the explosion, since it was played over and over again in the subsequent weeks. So, when asked to recall how they first heard about the disaster, they did what Brewer's participants did: they remembered the footage but misjudged when they first saw it.

But why would people wrongly recall that particular time slice? Part of the answer lies in the strength and dominance of visual imagery. As many writers have noted, flashbulb memories almost always involve powerful, vivid mental images (which is what led Brown & Kulik to choose the metaphor of a photograph in the first place). We have known for

millennia that images like these are highly memorable, which is why most memoryimprovement techniques involve the generation and modification of visual images (Paivio, 1971; Yates, 1966). (It is worth noting, too, that the kind of image can make a difference; see, for example, Goldstein & Chance, 1974). Moreover, these images are not just memorable; they also affect judgements about memory itself. For example, when people retrieve visual images, they generally feel more confident that the memory is accurate (Brewer, 1988, 1995; Neisser & Harsch, 1992; Rubin & Kozin, 1984; Rubin, Schrauf, & Greenberg, 2003.) Visual images thus seem to strengthen memory, but they can also lead people astray. They can bring about broader memory errors precisely because they are easy to generate, easy to modify, and easy to remember. When people reflect on an event that they have not seen, for example, they may imagine how it must have looked; these images are memorable as well, and can easily be mistaken for real memories (Hyman & Pentland, 1996). For example, in one study, over 50% of participants falsely remembered seeing non-existent footage of the crash of an El Al jet in Amsterdam (Crombag, Wagenaar, & van Koppen, 1996). Thus, it comes as no surprise that people remember visual images most of all—but it also comes as no surprise that these images can be modified or even totally fabricated.

The content and organization of the memory may also have played a role. People often relate memories in the form of narratives, whether they are reflecting on their own memories or trying to communicate them to others. As Bruner (1986, p. 13) noted, narratives are 'good stories, gripping drama, believable (though not necessarily 'true') historical accounts.' Gaps in the story can be reconstructed based on a *script*, a general idea of what usually happens in such a situation (Bartlett, 1932; see Rubin & Greenberg, 2003, for a review of the role of narrative in memory). Neisser and Harsch, for example, propose that the participants in the Challenger study retrieved a vivid visual image, and knew it was quite reasonable that they would have heard about the explosion from TV; then, over time, they developed the erroneous belief that the TV had been the source of the news.

These well-researched phenomena provide a simple, uncontroversial explanation of the President's changing story. In particular, they show how Memory 2 can be related to the implausible Memories 1 and 3. According to Memory 2, Karl Rove told the President about the first crash, but, as in many such situations, the early information was inaccurate. The President was not told that it was an attack involving a passenger jet, but rather that it was a small twin-engine plane—a surprising and disturbing event, to be sure, but not on the level of a national emergency, and nowhere near as shocking as what was to come. In any case, the President, like most Americans, presumably saw the footage many times in the subsequent months, including footage of the first crash when it became available. Then, when the President tried to remember how he heard about the first attack, he did just what so many other people have done, retrieving information from the wrong time slice and recalling a vivid, memorable visual image instead of the more mundane statements of Karl Rove.

The President may also have worked this image into a complete narrative. According to one report, footage of the aftermath of the first crash (but not the crash itself) was shown at the school, as people sought out televisions to find out what was going on (Planes crash into World Trade Center, 2001). In other words, the President may have seen the end of this sequence of events, but not the beginning. After seeing the footage of the crash, he may have incorporated it into the video he saw at the school, completing the story by adding cause to effect. In the few seconds or so it took him to formulate an answer to the

question, this story may have seemed reasonable enough; there *was* footage, after all; people do tend to learn these things from TV; and he was watching TV that morning. It is worth noting that the President sounds a bit tentative when relating Memories 1 and 3: Both times, he starts by discussing the second attack, only to interrupt himself and talk about the first; when he does talk about the first crash, he backtracks, making statements like 'the TV was obviously on.' Such hesitations and revisions create the impression that the President is reasoning it out—perhaps reconstructing it—as he goes.

The President's shifting memory does differ in one important respect from the memories of Neisser and Harsch's participants. In that study, memory errors were irreversible once they had been established. Even when participants were confronted with their original memories—which they themselves had written down—they did not change their stories; they did not suddenly remember the event as they originally did. The President's memory does not fit this pattern, though: he first reports an implausible memory, then switches to a plausible one, then changes back to the implausible version. (The disparity in delay intervals may account for this difference: the President's recollections all took place within the space of a month, but Neisser and Harsch's participants were retested after 3 years.)

That aside, we should give the President some credit: although his memory of the first crash changes from one point to the next, his memory of the second is quite consistent. On all three occasions, he remembers that he was sitting in the classroom when Andy Card walked in and told him about it (a memory perhaps bolstered by a widely-published photograph of Card whispering in the President's ear). Moreover, his memory of Card's statement remains the same from one point in time to the next, with the President using almost the same words in each case.

The picture of Card raises one final point about the President's memory. The President has access to substantial mnemonic aids: his movements and activities are known and recorded, and he is surrounded by people who can tell him what really happened. We might expect that he would be better off than the average university undergraduate—however, like so many others, he appears to be suffering from a near-textbook case of false recall.

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