Imagination Inflation

Imagining an event that never happened can make a person more confident that it really did. This is imagination inflation: the act of vividly picturing a fictitious experience raises one's subjective certainty that the experience actually occurred. The effect is modest in a single laboratory session but grows with repetition and elaboration, and it matters to the law for one reason above all — several interrogation and interview practices ask people to imagine, picture, or explain how an event might have happened, and the research shows that doing so can nudge belief in the direction of the imagined account. This paper explains what imagination inflation is, the experiments that established it, why it happens, the debate over how large the effect is, and how it bears on confessions, recovered-memory work, and witness interviews. It assumes no background in psychology, and the science here favors no party.

What Imagination Inflation Is

The effect was first demonstrated in a study by Garry, Manning, Loftus, and Sherman (1996). Participants first rated how confident they were that each of a list of childhood events had happened to them — for example, breaking a window with their hand. About two weeks later they were asked to imagine some of those events in vivid detail, then rated their confidence again on the full list. For the events they had been asked to imagine, confidence that the event had occurred rose, while confidence in the events they had not imagined did not. A brief act of imagination, with no new information and no suggestion that the event was real, was enough to inflate belief that it had happened.

The finding has been replicated and extended in several directions. Goff and Roediger (1998) showed that the effect strengthens with repetition: participants who heard simple action statements and then imagined performing those actions one, three, or five times were progressively more likely to later remember having actually performed actions they had only imagined. Thomas and Loftus (2002) found that even bizarre actions, imagined repeatedly, produced false recollections. Seamon, Philbin, and Harrison (2006) showed that participants who repeatedly imagined familiar but impossible campus events — such as proposing marriage to a Pepsi machine — later reported false memories of them. And the effect is not limited to imagining: simply being asked to explain how a childhood event could have happened inflates confidence that it did (Sharman, Manning, & Garry, 2005), as does mere repeated exposure to the event description (Sharman, Garry, & Beuke, 2004).

Why It Happens: Familiarity and Source Confusion

Two mechanisms, not mutually exclusive, are thought to drive the effect. The first is familiarity. Imagining an event makes it easier to bring to mind later, and that fluency registers as a feeling of familiarity. Because genuinely experienced events also feel familiar, the mind can mistake the familiarity produced by imagination for evidence of a real experience. The second is source confusion, or a source-monitoring error. When a person imagines an event, they generate concrete details — sights, sounds, feelings — and those details are stored in memory. Later the person may recall the content but lose track of where it came from, mistakenly attributing self-generated, imagined details to a real experience rather than to their own imagination (Garry & Polaschek, 2000). Repetition and sensory elaboration aggravate both mechanisms: the more often and the more vividly an event is imagined, the more familiar it feels and the richer the pool of details available to be misattributed.

Imagination inflation is closely related to other constructive-memory phenomena and is one route by which fully developed false memories can form. In studies that go beyond confidence ratings to elicit detailed false memories of childhood events, suggestive techniques that include guided

imagination have led substantial proportions of participants to report rich, detailed recollections of events that never occurred (Scoboria et al., 2017). The most striking demonstration involved memories of crime: after three suggestive interviews that asked participants to repeatedly visualize a fabricated event, a majority came to report detailed false memories of having committed a crime in adolescence that led to police contact (Shaw & Porter, 2015). The magnitude of such effects is debated — researchers disagree about how to classify a "false memory" and what proportion of people are susceptible — but the underlying phenomenon, that imagining an event can manufacture belief and even recollection of it, is well established.

How Large Is the Effect? A Note on the Debate

The size of imagination inflation has been contested, and the disagreement is instructive. Pezdek and Eddy (2001) argued that part of the measured effect was a statistical artifact of regression toward the mean — because imagined items were often those participants were initially uncertain about, some apparent increase in confidence would be expected by chance alone. Garry, Sharman, Wade, Hunt, and Smith (2001) replied that the effect survives after accounting for regression and is, in their words, “a fact, not an artifact.” The honest summary is that imagination inflation is a real and replicable effect, typically modest in degree from a single imagining of a childhood event, but one that grows with repeated and elaborated imagining and that, under sustained suggestive conditions, can contribute to full false memories. Both the reality of the effect and its limits matter in court: it is neither negligible nor a guarantee that any particular memory is false.

Imagination Inflation and the Law

The legal relevance is concentrated in three settings. The first is interrogation. Some interrogation approaches ask a suspect to imagine committing the offense, to speculate about how they might have done it, or to mentally walk through a hypothetical version of events. The research on imagination inflation — and the crime-memory study in particular (Shaw & Porter, 2015) — supports the concern, long voiced by false-confession scholars, that such techniques can lead a person to develop belief in, or even apparent memory of, an act they did not commit (Davis & O'Donohue, 2004). The second is recovered-memory and other therapeutic work: guided imagery, age regression, and similar exercises intended to recover supposedly lost memories use precisely the operations that produce imagination inflation, and can generate confident belief in events that never happened. The third is investigative interviewing of witnesses, where inviting a witness to imagine or speculate about details not actually remembered can inflate the witness's later confidence in those details.

These concerns inform the admissibility and weighing of confessions and recovered recollections rather than dictating any outcome. A defendant is entitled to put before the jury evidence about the circumstances and reliability of a confession (Crane v. Kentucky, 1986), and the manner in which a memory or admission was elicited bears on what weight it deserves. Whether an expert may explain imagination inflation to a court is governed by the usual standards for expert evidence — Daubert v. Merrell Dow Pharmaceuticals (1993), as extended by Kumho Tire Co. v. Carmichael (1999), or the Frye general-acceptance test still used in some jurisdictions (Frye v. United States, 1923) — and Federal Rule of Evidence 702. Such testimony explains how imagining an event can inflate confidence that it occurred; it does not determine whether any particular memory or confession is true or false, which remains a question for the trier of fact.

Special Issues in Legal Practice

The principles described above apply with equal force to every party in a legal proceeding. Memory operates the same way regardless of who is asking the questions, and the science summarized here favors no side. What differs between the parties is not the science but the vantage

point — the particular places where memory issues tend to surface, and the particular errors each party is best positioned to guard against. The two summaries below identify those recurring issues. They are offered for orientation, not as litigation strategy; in every case the controlling question is what the evidence in that case will, and will not, support, and the expert's role is to inform the trier of fact rather than to advocate for either side.

Special Issues for Prosecutors

For the State, imagination inflation is most relevant to how confessions and witness statements are obtained. The issue most likely to surface is that an interrogation or interview which asks a suspect or witness to imagine, visualize, or speculate about how an event might have happened can inflate that person's confidence in the imagined account — a vulnerability that defense experts may raise to question the reliability of a confession or an identification. The error best guarded against is allowing imaginative or hypothetical questioning to shape an account that is later offered as recollection. Interview practices that ask witnesses and suspects to report what they actually remember, rather than to picture or hypothesize, and that are recorded so the questioning can be examined, keep the resulting statements grounded in memory rather than in suggestion.

Understood this way, the science reinforces sound investigative practice: a confession or statement produced by open, non-suggestive questioning is far less vulnerable to attack than one elicited through imagination or speculation, and attention to how an account was obtained strengthens the evidence the State ultimately presents.

Special Issues for Defense

For the defense, imagination inflation bears on confessions, recovered-memory allegations, and witness identifications that may have been shaped by imaginative or suggestive questioning. The issue most likely to surface is a confession or accusation that emerged after a suspect was asked to imagine committing the offense, or after a complainant underwent therapy or interviewing that used guided imagery — circumstances in which the research indicates that confident belief, and even detailed recollection, can form for events that did not occur. The error best guarded against is overclaiming: imagination inflation describes a general tendency and a documented risk, not proof that a particular confession is false or a particular memory fabricated. The constructive course is to examine how the statement or memory was elicited — whether the questioning invited imagination or speculation, how many times it was repeated, and whether it was recorded — and, where admissible, to offer expert explanation of the effect.

The corresponding safeguard is to ensure the trier of fact understands the science: that imagining an event can raise confidence that it happened; that this occurs through familiarity and source confusion, often beneath awareness; and that the effect grows with repeated and elaborated imagining. Where admissible, expert explanation of imagination inflation can help the factfinder weigh a confession or recovered memory in light of how it was obtained rather than by its apparent vividness or the confidence with which it is held.

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