

THINKING ABOUT "CONSPIRACY THEORIES": 9/11 and JFK

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ABSTRACT

The phrase "conspiracy theory" harbors an ambiguity, since conspiracies are widespread and theories about them need not be mere speculations. The application of scientific reasoning in the form of inference to the best explanation, applied to the relevant evidence, establishes that the official account of the events of 9/11 cannot be sustained. Likelihood measures of evidential support establish that the WTC was brought down through the use of controlled demolition and that the Pentagon was not hit by a Boeing 757. Since these hypotheses have high likelihoods and the only alternatives have likelihoods that range from zero to null (because they are not even physically possible), assuming that sufficient evidence has become available and "settled down", these conclusions not only provide better explanations for the data but are proven beyond reasonable doubt.

1. "Conspiracy Theories"

We need to come to grips with conspiracies. Conspiracies are as American as apple pie. All they require is that two or more persons collaborate in actions to bring about illegal ends. When two guys knock off a 7/11 store, they are engaged in a conspiracy. Most conspiracies in our country are economic, such as Enron, WorldCom, and now Halliburton as it exploits the opportunities for amassing profits in Iraq. Insider trading is a simple example, since investors and brokers collaborate to benefit from privileged information. Ordinarily, however, the media does not describe them as "conspiracies".¹ The two most important conspiracies in our history are surely those involving JFK and 9/11.

One fascinating aspect of 9/11 is that the official story involves collaboration between some nineteen persons in order to bring about illegal ends and thus obviously qualifies as a "conspiracy theory". When critics of the government offer an alternative account that implicates key figures of the government in 9/11, that obviously qualifies as a "conspiracy theory", too. But what matters now is that *we are confronted by alternative accounts of what happened on 9/11, both of which qualify as "conspiracy theories". It is therefore no longer rational to dismiss one of them as a "conspiracy theory" in favor of the other. The question becomes, Which of two "conspiracy theories" is more defensible?*

There is a certain ingenuity in combining "conspiracy" with "theory", because the word "theory" can be used in the weak sense of a speculation, conjecture, or guess to denigrate one account or another for political or ideological reasons without acknowledging that "theory" can also be used in the stronger sense of an empirically testable, explanatory hypothesis. Consider Newton's theory of gravitation or Einstein's theory of relativity as instances. The psychological ploy is to speak as though all "theories" were guesses, none of which ought to be taken seriously. Various different cases, however, can present very different problems. Evidence can be scarce, for example, or alternatives might be difficult to imagine.

Moreover, there are several reasons why different persons might arrive at very different conclusions in a given case. These include that they are not considering the same set of alternative explanations or that they are not employing the same rules of reasoning. The objectivity of science derives, not from transcending our human frailties, but from its intersubjectivity.² Different scientists confronting the same alternatives, the same evidence, and the same rules of reasoning

should arrive at all and only the same conclusions about which hypotheses are acceptable, which are rejectable, and which should be held in suspense. And, in the search for truth, scientific reasoning must be based upon all the available relevant evidence, a condition called *the requirement of total evidence*, and is otherwise fallacious.³

2. Scientific Reasoning

Scientific reasoning characterizes a systematic pattern of thought involving four stages or steps, namely: puzzlement, speculation, adaptation, and explanation.⁴ Something occurs that does not fit comfortably into our background knowledge and expectations and thus becomes a source of puzzlement. Alternative theories that might possibly explain that occurrence are advanced for consideration. The available relevant evidence is brought to bear upon those hypotheses and their measures of evidential support are ascertained, where additional evidence may be obtained on the basis of observation, measurement, and experiment. The weight of the evidence is assessed, where the hypothesis with the strongest support is the preferable hypothesis. When sufficient evidence becomes available, the preferable hypothesis also becomes acceptable in the tentative and fallible fashion of science.⁵

Among the most important distinctions that need to be drawn in reasoning about alternative scenarios for historical events of the kind that matter here are those between different kinds of necessity, possibility and impossibility.⁶ Our language imposes some constraints upon the possible as functions of grammar and meaning. In ordinary English, for example, a freshman is a student, necessarily, because to be a freshman is to be a student in the first year of a four-year curriculum. By the same token, it is impossible to be a freshman and not be a student. The first is a logical necessity, the second a logical impossibility. Since a conspiracy requires at least two conspirators, if there were not at least two conspirators, it is not logically possible that a conspiracy was involved; if there were, then necessarily there was.

More interesting than logical necessities, possibilities and impossibilities, however, are physical necessities, possibilities and impossibilities.⁷ These are determined in relation to the laws of nature, which, unlike laws of society, cannot be violated, cannot be changed, and require no enforcement.⁸ If (pure) water freezes at 32° F at sea level atmospheric pressure, for example, then it is physically necessary for a sample of (pure) water to freeze when its temperature falls below 32° F at that pressure. Analogously, under those same conditions, that a sample of (pure) water would not freeze when its temperature falls below 32° F is physically impossible. And when a sample of (pure) water is not frozen at that pressure, it is justifiable to infer that it is therefore not at a temperature below its freezing point of 32° F.

Laws of nature are the core of science and provide the principles on the basis of which the occurrence of events can be systematically explained, predicted, and retrodicted.⁹ They therefore have an important role to play in reasoning about specific cases in which those principles make a difference. In legal reasoning, for example, the phrase, "beyond a reasonable doubt", means a standard of proof that requires subjective conviction that is equal to "moral certainty".¹⁰ In the context of scientific reasoning, the meaning of that same phrase is better captured by the objective standard that an explanation is "beyond reasonable doubt" when there is no reasonable alternative. Notice that the falsity of hypotheses that describe the occurrence of events that are physically impossible is beyond reasonable doubt.¹¹

3. Probabilities and Likelihoods

An appropriate measure of the weight of the evidence is provided by likelihoods, where the likelihood of an hypothesis h , given evidence e , is determined by the probability of evidence e , if that hypothesis were true.¹² Hypotheses should be tested in pairs, h_1 and h_2 , where the relationship between the hypotheses and the evidence may be regarded as that between possible causes and effects. Thus, suppose in a game of chance, you were confronted with a long series of

outcomes that would have been highly improbable if the coin were symmetrical (if the dice were fair, or if the deck was normal). If such a run would be far more probable if the coin were bent (if the dice were loaded, if the deck was stacked), then the likelihood that the coin is bent (the dice are loaded, the deck is stacked) is much higher than the likelihood the coin is symmetrical (dice are fair, deck is normal).

A better grasp of probabilistic reasoning follows from distinguishing between two kinds of probabilities as properties of the world. The first is *relative frequencies*, which simply represent "how often" things of one kind occur in relation to things of another kind. This includes averages of many different varieties, such as the average grade on a philosophy exam in a course on critical thinking. The second is *causal propensities*, which reflect "how strong" the tendencies are for outcomes of a certain kind to be brought about under specific conditions.¹³ Frequencies are brought about by propensities, which may differ from one case to another. When the class averages 85 on the first exam, that does not mean every student scored 85 on the exam. It might even be the case that no student actually had that score. But each student's own score was an effect of his propensity to score on that exam.

It can be easy to confuse "how often" with "how strong", but some examples help to bring their difference home. Canoeing on the Brule River in Wisconsin is not a hazardous pastime, but a 76-year old woman was killed on 15 July 1993 when a tree that had been gnawed by a beaver fell and landed on her. The tree fell and hit the woman on the head, as she and her daughter paddled past it.¹⁴ The tree was about 18 inches in diameter and 30 to 40 feet tall and stood about 10 to 20 feet up the river bank. So while hundreds and hundreds of canoers had paddled down the Brule River before and escaped completely unscathed, this woman had the misfortune to be killed during "a freak accident". It was improbable in terms of its relative frequency of occurrence yet, given those particular conditions, the causal propensity for death to result as an effect of that specific event was great.

When the same causally relevant conditions are subject to replication, then the relative frequencies that result tend to be reliable evidence of the strength of the causal propensity that produced them. But when those conditions can vary, how often an outcome occurs may not indicate the strength of that tendency on any specific trial. We commonly assume smoking diminishes lifespans, which is usually true. But a 21-year old man was confronted by three thugs who, when he failed to respond quickly enough, shot him. He might have been killed, but a metal cigarette lighter deflected the .25-caliber bullet and he lived.¹⁵ Once you appreciate the difference, three principles that relate probabilities of these kinds become apparent, namely: that propensities cause frequencies; that frequencies are evidence for propensities; and that propensities can explain frequencies. But it depends on the constancy of the relevant conditions from one trial to another.¹⁶

4. The Case of JFK

Conspiracy theories have to be assessed using principles of scientific reasoning. In the case of JFK, the difficulty has not been a dearth of evidence but sorting through the superabundance of conflicting and even contradictory physical, medical, witness, and photographic "evidence" to ascertain which is authentic and which is not. Something qualifies as evidence in relation to a hypothesis just in case its presence or absence or its truth or falsity makes a difference to the truth or falsity of that hypothesis. But "evidence" can be planted, faked, or fabricated to provide a false foundation for reasoning.¹⁷ That has proven to be true here. Once the task of sorting things out has been performed, it becomes relatively simple to draw appropriate inferences about the general character of the assassination on the basis of what we have learned about the cover-up,

Early studies by Harold Weisberg, Mark Lane, and Sylvia Meagher, for example, were instrumental in establishing that *The Warren Report* (1964) could not be sustained on the basis of evidence available even then (Weisberg 1965, Lane 1966, Meagher 1967). According to the official account, a lone assassin fired three shots from the sixth floor of the Texas School Book Depositor Building, scoring two hits. One of those hits is supposed to have entered at the base of the President's neck, passed through without hitting any bony structures and exited just above his tie. It then entered the back of Governor John Connally, who was seated in front of him, shattered a rib, exited his chest and injured his right wrist before being deflected into his left thigh. The bullet alleged to have followed this trajectory was later "found" in virtually pristine condition.

This sequence of events appears so improbable that the missile that caused all of this damage has come to be known as the "magic bullet".¹⁸ The jacket and the shirt JFK was wearing both have holes about 5 1/2 inches below the collar. An autopsy diagram verified by the President's personal physician shows a wound at that same location. A second diagram prepared by an FBI observer shows the wound to the back below the wound to the throat. The death certificate executed by the President's personal physician also places that wound at the level of the third thoracic vertebra, about 5 1/2 inches below the collar. Even photographs taken during re-enactments of the shooting show patches on stand-ins for the President at that location.¹⁹

Although *The Warren Report* tries to imply that the "magic bullet" theory is not indispensable to its conclusions, that is a gross misrepresentation. No less an authority than Michael Baden, M.D., who chaired the forensic panel that reviewed the medical evidence when the case was reinvestigated by the House Select Committee on Assassinations in 1977-78, has remarked that, if the "magic bullet" theory is false, then there had to have been at least six shots from three different directions.²⁰ An especially disturbing aspect of this situation is that all the evidence described here was not only available to the HSCA in 1977-78 but had been discussed quite extensively in those early books by Weisberg, Lane, and Meagher (Weisberg 1965, Lane 1966, Meagher 1967). The government has simply ignored their discoveries.²¹

5. Recent Scientific Studies

Since the release of Oliver Stone's film, "JFK", in 1992, research on the medical evidence (conducted by the best qualified persons who have ever studied the case)²² has revealed that the autopsy X-rays have been altered in several ways, that another brain was substituted for that of JFK during its examination, and that the home movie ostensibly taken by a spectator named Abraham Zapruder has not only been extensively edited but actually recreated by reshooting each of its frames (Fetzer 1998, 2002, 2003).²³ The film was redone using techniques of optical printing and special effects, which allow combining any background with any foreground to create any impression that one desires, which included removing series of frames that would have given the plot away, such as that the driver pulled the limousine to the left and stopped after shots began to be fired.²⁴

The alterations of the medical evidence include "patching" a massive defect in the back of the head caused by a shot from in front, in the case of the lateral cranial X-ray, and adding a 6.5 mm metallic slice to the anterior/posterior X-ray, in an evident attempt to implicate a 6.5 mm weapon in the assassination, which have been exposed by means of optical density studies.²⁵ Adapting a simple technique from physics, David W. Mantik, M.D., Ph.D., on the basis of objective measurements and repeatable experiments, has been able to prove that the JFK autopsy X-rays are not authentic. And, by even simpler comparisons between descriptions from experienced and professional physicians at Parkland Hospital describing extensive damage to the brain of JFK, Robert Livingston, M.D., a world authority on the human brain, has

concluded that the diagrams and photographs of a brain that are stored in the National Archives must be of a brain other than that of John Fitzgerald Kennedy.²⁶

The evidence establishing the recreation of the Zapruder film comes from diverse sources, including that frame 232 was published in LIFE with physically impossible features; that a mistake was made in introducing the Stemmons Freeway sign into the recreated version; that the "blob" and blood spray was added on to frame 313; that the driver's head turns occur too rapidly to even be humanly possible; that the Governor's left turn has been edited out of the film; that Erwin Swartz, an associate of Abraham Zapruder, reported having observed blood and brains blown out to the back and left when he viewed the original film; that several Secret Service agents observed brains and blood on the trunk of the limousine; that others have viewed another and more complete version of the film; and that Homer McMahon, an expert at the National Photographic Interpretation Center, studied a very different film on that very night.²⁷

Other evidence that has long been available to serious students of the death of JFK includes multiple indications of Secret Service complicity in setting him up for the hit.²⁸ There was no welding of the manhole covers; no coverage of open windows; the motorcycles were placed in a non-protective formation; agents did not ride on the limousine; an improper route, including a turn of more than 90°, was utilized; the vehicles were in an improper sequence; the limousine slowed nearly to a halt at Houston and Elm; the limousine was actually brought to a stop after bullets began to be fired; the agents were non-responsive; brains and blood were washed from the limousine at Parkland before the President was even pronounced dead; the autopsy X-rays and photographs were taken from the morgue; and the limousine was sent to Ford Motor Company, stripped down and completely rebuilt, on 25 September 1963.²⁹

6. Patterns of Reasoning

Records released by the ARRB have shown that Gerald Ford (R-MI), a member of the commission, had the description of the wound changed from "his uppermost back", which was already an exaggeration, to "the base of the back of his neck" to make the "magic bullet" theory more plausible (Fetzer 1998, p. 177). And Mantik has now proven that no bullet could have taken the trajectory ascribed to the "magic bullet" because cervical vertebrae intervene (Fetzer 2000, pp. 3-4). So the vastly influential accounts of the death of JFK that take it for granted as their foundation—*The Warren Report*, *The House Select Committee on Assassinations Report*, and Gerald Posner's *Case Closed*—are not only false but provably false and not even anatomically possible. The wound to his throat and the wounds to Connally have to be explained on the basis of other shots and other shooters. We now know that JFK was hit four times—in the throat from in front; in the back from behind; and twice in the head: in the back of the head from behind and then in the right temple from in front.³⁰ We know Connally was hit at least once and another shot missed and injured a bystander. It thus turns out that Michael Baden, M.D., was correct when he observed that, if the "magic bullet" theory is false, then there had to have been at least six shots from at least three different directions. The theory is not even anatomically possible and, with at least one to Connally and one miss, there had to have been at least six shots.³¹

Anatomical impossibility, of course, is one kind of physical impossibility, insofar as human are vertebrates with vertebrae, including those of the cervical variety. The wound observations of the attending physicians at Parkland and at Bethesda were cleverly concealed by Arlen Specter, now a United States Senator from Pennsylvania, but then a junior counsel to the Warren Commission. Specter did not ask the doctors what they had observed or what they had inferred from what they had observed, but instead posed a hypothetical question: "If we assume that the bullet entered the base of the back of the neck, traversed the neck without impacting any bony structures, and came out just above the level of the tie", he asked, "would that be consistent with describing the neck wound as a wound of exit?" In response to this trivial question, they dutifully replied that it would be, but Malcolm Perry, M.D., who had performed a tracheostomy through the wound and had described it three times as a wound of entry during a press conference, added that he was not in the position to vouch for or to verify the assumptions he had been asked to make, which of course was true.³²

The discoveries about the X-rays, the brain, and the Zapruder film are also powerful. What makes these discoveries so significant as evidence is that none of these things could possibly have been done by Lee Harvey Oswald, the alleged assassin, who was either incarcerated or already dead. Other theories, moreover, can be rejected on similar grounds. The Mafia, for example, could not have extended its reach into the Bethesda Naval Hospital to alter X-rays under the control of agents of the Secret Service, medical officers of the United States Navy, and the President's personal physician. Neither pro nor anti-Castro Cubans could have substituted one brain for another. Nor could the KGB, which probably had the same ability as Hollywood and the CIA to fabricate movies, have been able to gain possession of the Zapruder film to subject it to alteration. Which raises the question, Who had the power to make these things happen? Given what we know now, the answer is no longer difficult to discern. It required involvement at the highest levels of the American government.

Insofar as the "magic bullet" theory describes the occurrence of events that are not only provably false but actually physically impossible, that it cannot possibly be true is beyond reasonable doubt. Moreover, the discovery that the autopsy X-rays have been altered, that another brain has been substituted, and that the Zapruder film has been recreated imply a very meticulous and carefully planned cover-up in which the alleged assassin could not have been involved. The identification of more than a dozen indications of Secret Service complicity means that the evidence has "settled down".³³ The probability of the evidence on the lone-assassin hypothesis is even less than zero, since it posits a physically impossible sequence, whose value is better set at null.³⁴ The probability of the evidence on a conspiracy scenario, by comparison, is extremely high, depending upon the competence and the power of those who carried it out. There is in fact no reasonable alternative to a fairly large-scale conspiracy in the death of our 35th President, which means that it has been established beyond a reasonable doubt.³⁵

7. The Case of 9/11

It has taken nearly 40 years for the deception to have been decisively settled on the basis of objective scientific evidence. In the case of 9/11, however, we are vastly more fortunate. As a consequence of inquiries by Nafeez Ahmed (2002), Thierry Meyssan (2002), Paul Thompson (2004), Michael Ruppert (2004), and David Ray Griffin (2004, 2005), among others, we already know that the official account of 9/11 cannot possibly be correct. That account contends that 19 Arabs, with feeble ability to pilot aircraft, hijacked four airliners and then executed demanding maneuvers in order to impact the World Trade Center and the Pentagon;³⁶ that the damage created by their impact combined with the heat from burning jet fuel brought down WTC1 and WTC2; that WTC7 was the first building in history to be brought down by fire alone; and that the Pentagon was struck by United Flight 77, which was a Boeing 757.³⁷ The basic problem with this "conspiracy theory", as in the case of JFK, is that its truth would violate laws of physics and engineering that cannot be transgressed.

The extremely high melting point of structural steel (about 2,800° F) is far above the maximum (around 1,500° F) that could have been produced by jet fuel under optimal conditions. Underwriters Laboratory had certified the steel used in the World Trade Center to 2,000° F for up to six hours.³⁸ Even lower maximum temperatures result after factoring in insulation, such as asbestos, and the availability of oxygen.³⁹ Since steel is a good conductor, any heat applied to one part of the structure would have been dissipated to other parts. WTC1, the North Tower, was hit first at 8:46 AM/ET and collapsed at 10:28 AM/ET, whereas the South Tower, hit second at 9:03 AM/ET, collapsed at 9:59 AM/ET. They were exposed to fires for roughly an hour and a half and an hour, respectively. Insofar as most of the fuel was burned off in the gigantic fireballs that accompanied the initial impacts, that these towers were brought down by fuel fires that melted the steel is not just improbable but physically impossible.⁴⁰

Most Americans may not realize that no steel-structure high-rise building has ever collapsed from fire in the history of civil engineering, either before or after 9/11. If we assume that those fires have occurred in a wide variety of buildings under a broad range of conditions, that evidence suggests that these buildings do not have a propensity to collapse as an effect of fire. That makes an alternative explanation, especially the use of powerful explosives in a controlled demolition, a hypothesis that must be taken seriously. Indeed, there appear to be at least ten features of the collapse of the Twin Towers that are expectable effects of controlled demolitions but not from fires following aircraft impacts.⁴¹ They include that the buildings fell about the rate of free fall; that they both collapsed virtually straight down (and into their own "footprints"); that almost all the concrete was turned into very fine dust; that the collapses were complete, leaving virtually no steel support columns standing; that photographic records of their collapse reflect "demolition waves" occurring just ahead of the collapsing floors; that most of the beams and columns fell in sections of 30' to 40' in length; that firemen reported hearing sequences of explosions as they took place; that seismological events were recorded immediately prior to collapse; and that pools of molten metal were observed in the subbasements for weeks after.⁴²

The situation here is analogous to what we encountered with multiple indications of Secret Service complicity in setting up JFK for the hit. Suppose, as before, we adopt a value of 1 time in 10 for any one of these features to occur as a causal consequence of an aircraft impact and ensuing fire. We know that is a fantastically high number, since this has never occurred before or since. But, for the sake of argument, let us assume it. Then if we treat these features as having propensities that are independent and equal, for those ten features to have occurred on any single event of this kind would have a propensity equal to 1 over 1 followed by ten zeros, that is, 1/10,000,000,000, which is one chance in ten billion! Of course, since there were two such events—given TWC1 and TWC2—the probability that they would both display these same ten features on the very same occasion is equal to the product of one in ten billion times one in ten billion, which is 1 over 1 followed by twenty zeros, or 1/100,000,000,000,000,000. This is a very small number. And these calculations assume values that are far too high.⁴³

8. 9/11: The Pentagon

The Pentagon case should be the most accessible to study, since it only depends upon observations and measurements, which are the most basic elements available for any scientific investigation. Indeed, photos taken prior to the collapse of the Pentagon's upper floors supply evidence that, whatever hit the Pentagon, it cannot possibly have been a Boeing 757.⁴⁴ The plane was 155' long, with a wing span of 125' and stood 36' high with its wheels retracted. The initial point of impact (prior to the collapse of the floors above) was only about 10' high and 16' wide, about the size of the double-doors on a mansion. A meticulous engineering study with careful measurements has been conducted that offers powerful evidence that the official story cannot possibly be correct. The damage done appears to have been inflicted by a smaller aircraft, such as an F-16, or by the impact of a cruise missile, as an alternative possibility.⁴⁵ The amount of damage is simply not consistent with what would have occurred had the building been hit by a plane with the mass and the dimensions of a Boeing 757.

Unofficial variations on the official account include that the Boeing 757 first hit the ground and then bounced into the building, that the plane's engines plowed across the lawn before it entered the building, or that its right wing-tip hit and caused it to "cartwheel" into the Pentagon.⁴⁶ None of these accounts is remotely consistent with the smooth, green, and unblemished lawn. It is all the more remarkable, therefore, that the Secretary of Defense had the lawn resurfaced as though it had been damaged during the attack. Photographs of the lawn were taken immediately after the attack that demonstrate it was not damaged at all.⁴⁷ Anyone who only viewed the lawn after its reconstruction, however, would be more likely to accept the official account. And it is of more than passing interest that far more damage could have been caused by less demanding maneuvers if the plane had been crashed through the roof of the building as opposed to hitting

a newly reconstructed wing that was largely bereft of personnel and records—as though the "terrorists" wanted to inflict minimal damage.

Had a Boeing 757 hit the Pentagon, it would have left massive debris from the wings, the fuselage, the engines, the seats, the luggage, the bodies, and the tail. Take a look at photographs taken shortly after the impact before the upper floors fell, however, and you will observe none of the above: no wings, no engines, no seats, no luggage, no bodies, no tail. It does not require rocket science—or even the calculation of any probabilities—to recognize that something that large cannot possibly have fit through an opening that small and left no remnants in the form of wings sheered off, debris scattered about, and so on. One piece of fuselage alleged to have come from the plane appears to have been planted evidence, which was moved around and photographed in more than one location.⁴⁸ But if massive debris from the fuselage, wings, engines, seats, luggage, bodies, and tail were not present at the scene, the scene cannot have been of the crash of a 757. The argument involved is about as simple as they come.

The principle of logic involved is known as *modus tollens*, which states that, if p then q, but not q, then not p. If q must be true when p is true, but q is not true, then p is not true, either. This is an elementary rule of deductive reasoning, employment of which is fundamental to scientific investigations. If you want to test an hypothesis, deduce what must be true if that hypothesis is true and attempt to ascertain whether those consequences are true. If they are not true, then the hypothesis is false. Q.E.D. If a Boeing 757 had hit the Pentagon, as the government has alleged, it would have left debris of specific kinds and quantities. Photographs and measurements show no debris of those kinds and quantities. As long as these photographs are authentic and those measurements are correct—which concerns the quality of the evidence for not q and appears to be rather difficult to dispute—then no Boeing 757 hit the Pentagon.⁴⁹

9. What really happened?

The remnants of the single engine found inside offer clues as to what actually hit the Pentagon. Boeing 757s are powered by two Pratt & Whitney turbofan engines, with front-rotor elements about 42" in diameter and high-pressure rear stages that are less than 21" in diameter. The part found was less than 24" in diameter and, it turns out, actually matches, not the turbofan engine, but the front-hub assembly of the front compressor for the JT8D turbojet engine used in the A-3 Sky Warrior jet fighter.⁵⁰ Since cruise missiles have a 20" diameter, moreover, they appear to be too small to accommodate this component. It follows that the Pentagon was not hit by a Boeing 757 or by a cruise missile but, given this evidence, was probably struck by an A-3 Sky Warrior instead. The available relevant evidence is not even consistent with the government's official account, which deserves to be rejected. Its likelihood given the evidence is actually null, while the alternative A-3 hypothesis makes the relevant evidence highly probable and has high likelihood as a clearly preferable explanation.

This conjecture, which the evidence suggests, receives additional support from other sources. Two civilian defense contract employees, for example, have reported that A-3 Sky Warriors were covertly retrofitted with remote control systems and missile-firing systems at the Ft. Collins-Loveland Municipal Airport, a small civilian airport in Colorado, during the months prior to 9/11. According to information they supplied, "separate military contractors—working independently at different times—retrofitted Douglas A-3 Sky Warriors with updated missiles, Raytheon's Global Hawk unmanned aerial vehicle (UAV) remote control systems, new engines and fire control systems, transponders, and radio-radar-navigation systems—a total makeover—seemingly for an operation more important than their use as a simple missile testing platform for defense contractor Hughes-Raytheon."⁵¹ These reports substantiate the alternative.

If a small fighter jet rather than a Boeing 757 had hit the Pentagon, that would tend to explain the small impact point, the lack of massive external debris, and a hole in the inner ring of the building, which the fragile nose of a Boeing 757 could not have created. It would also suggest why parts of a plane were carried off by servicemen, since they might have

made the identification of the aircraft by type apparent and falsified the official account.⁵² A small fighter also accommodates the report from Danielle O'Brien, an air traffic controller, who said of the aircraft that hit, "Its speed, maneuverability, the way that it turned, we all thought in the radar room—all of us experienced air traffic controllers—that it was a military plane".⁵³ Nothing moves or maneuvers more like a military plane, such as a jet fighter, than a military plane or a jet fighter, which could also explain how it was able to penetrate some of the most strongly defended air space in the world—by emitting a friendly transponder signal.

Another line of argument suggests that the evidence has "settled down". Confirming that the engine found at the Pentagon was indeed a JT8D, Jon Carlson has proposed that the plane used in the attack must have been a Boeing 737, which also uses them. (a) That contradicts the use of a 757, of course, but it would also be vulnerable to a parallel argument about the absence of debris of the right kinds and quantities. Interestingly, both are incompatible with the smooth and unblemished landscape, which should have been massively disrupted by the wake turbulence that would have been generated by any plane of those dimensions at that low height, a phenomenon even known to rip tiles off roofs at ordinary altitudes. (b) Whatever hit the Pentagon, it cannot have been a Boeing 757 (or a 737). It may be that controversy over this point has been so strenuous because it is such a clear and obvious indication of the government's complicity.

10. Preferability vs. Acceptability

New York events require only slightly more sophisticated analysis. We know that the government's account posits a physically impossible sequence of events whose probability is null. So a probability of zero is merely a close approximation to null. If the buildings were brought down by controlled demolition, by contrast, then the steel would not have had to have melted or to be significantly weakened from heat, but would have been blown apart by the precise placement of explosives. And the propensity that the building would have collapsed at about the rate of free fall and that there would have been enough energy to pulverize concrete would have been very high. Since the buildings did fall at approximately the rate of free fall and there was enough energy to convert concrete into fine dust, the evidential support for this alternative is very high. It would have been quite easily confirmed by metallurgical study of what remained of the structural steel, but it was rapidly removed and sent to China by an extremely efficient company that's named "Controlled Demolition, Inc."

The measure of evidential support here can be captured more precisely by the use of likelihoods. The likelihood of an hypothesis (h1), the official account, on the basis of the available evidence e, is equal to the probability of e, if that hypothesis were true. The probability of the evidence as an effect of the official account of the cause, we have found, is approximately zero. The likelihood of the alternative, (h2), the demolition hypothesis, on the available evidence e, by contrast, is extremely high. One hypothesis is preferable to another when the likelihood of that hypothesis on the available evidence is higher than the likelihood of its alternative. Insofar as the likelihood of (h1) on e is very low, while the likelihood of (h2) on e is very high, the demolition hypothesis (h2) is obviously preferable to alternative (h1), based upon e.

A preferable hypothesis is not acceptable until sufficient evidence becomes available, which occurs when the evidence "settles down" or points in the same direction. Any concerns on this score are resolvable by adding that there were vast pools of molten metal in the sub-basements of WTC1 and WTC2 for weeks after their collapse.⁵⁴ This would be inexplicable on (h1) but highly probable on (h2). If any more proof were necessary, we know that Larry Silverstein, who leased the WTC, said that WTC7 was "pulled", which means it was brought down using explosives.⁵⁵ This occurred hours after the other buildings came down. No plane ever hit WTC7 and its collapse was perfectly symmetrical and again occurred at virtually free-fall speed. The building could not have been "pulled" without prior

placement of explosives. The collapses of WTC1 and of WTC2 were very similar and equally suggestive of controlled demolition.

A new documentary, "Loose Change", includes a photographic record that offers very powerful substantiation of the controlled demolition of WTC1 and WTC2 by providing additional evidence that explosives were used to bring them down. The videotape includes eyewitness reports of firemen and other first responders, who heard what they reported to be the sounds of sequences of explosions in rapid sequence ("Boom! Boom! Boom!").⁵⁶ It displays the effects of massive explosions that occurred at the subbasement level, moreover, which appear to have been captured on seismological recordings from Columbia University, which reflected concurrent earthquake-style events of magnitudes of 2.1 and 2.3 on the Richter scale.⁵⁷ And it also explores a remarkable, odd series of "security related" interruptions of security cameras and other safeguards, which involved vacating large portions of WTC1 and of WTC2 for intervals that would have allowed for the placement of explosives to have occurred. This remarkable documentary dramatically contradicts the government's account.

11. "Beyond a Reasonable Doubt"

A conclusion may be described as having been established "beyond a reasonable doubt" when no alternative conclusion is reasonable. In this case, hypothesis (h2), controlled demolition, can explain the available evidence with high probability and consequently possesses a corresponding high likelihood.⁵⁸ But hypothesis (h1), the government's account, can explain virtually none of the available evidence and has an extremely low likelihood. Indeed, strictly speaking, given that it even requires violations of laws of physics and engineering, the likelihood of (h1) is actually null. When seismic, molten metal, and eyewitness evidence—and especially the collapse of WTC7, which was never hit by any plane—are taken into account, the evidence also appears to have "settled down". *Thus, a scientific analysis of the alternatives on the basis of the available evidence demonstrates that the government's account of the collapse due to heat from fires cannot be sustained and that the alternative of a controlled demolition has been objectively established beyond a reasonable doubt.*

This conclusion receives support from other directions, moreover, since the project manager who was responsible for supervising the construction of these buildings has observed that they were constructed to withstand the impact from the largest commercial airplanes then available—namely, Boeing 707s—and that the structural design was so sophisticated airplane crashes would have been analogous to sticking pencils through mosquito netting.⁵⁹ It's not as though the possibility of events of this kind had never been given consideration in the construction of 110 story buildings! This observation reinforces the conclusion that the government's account is not just "less defensible" than the alternative. The likelihood of the demolition hypothesis is very high, while the likelihood of the government's account is actually null, which is a value that is less than zero. This means that the official story cannot possibly be true.

It follows that, when these "theories" are subject to the kinds of systematic appraisal appropriate to empirically testable alternative explanations, one of them turns out to be overwhelmingly preferable to the other. Since they are both "conspiracy theories", however, we have discovered that at least some "conspiracy theories" are subject to empirical test and that, based upon likelihood measures of evidential support, one of them is strongly confirmed while the other is decisively disproven. Indeed, strictly speaking, the inconsistency of the government's account with natural laws makes it physically impossible, a nice example of the falsification of a theory on the basis of its incompatibility with scientific knowledge. So some "conspiracy theories" are not only subject to empirical test but have actually been falsified by the available evidence.⁶⁰

The fact that the government's "conspiracy theory" cannot be sustained needs to be widely disseminated to the American people. Not all "theories" are mere guesses and many of them are empirically testable. In this case, elementary

considerations have proven that one "conspiracy theory" is false (indeed, as we have discovered, it cannot possibly be true), while the alternative appears to be true (on the basis of measures of probability and likelihood). Since the (h1) alternative to (h2) is unreasonable and no other alternative appears remotely plausible, the demolition hypothesis (h2) has actually been established beyond a reasonable doubt. That, I believe, is something that the American people need to understand. With only slight exaggeration, this government makes a practice of lying to us all the time. It has lied about tax cuts, minimized the threat of global warming, offered a series of lies about the reasons for going to war in Iraq, and on dozens of other major issues. Some lies are bigger than others. This one—about the causes and the effects of 9/11—counts as a monstrosity!

12. Who had the Power?

The observation that the government's official account cannot be sustained and that the alternative has been established beyond a reasonable doubt is not tantamount to an assertion of omniscience. Scientific reasoning in the form of inference to the best explanation applied to the available relevant evidence yields the result that, in the case of JFK, the official account of Lee Harvey Oswald as a lone assassin is not even physically possible, which means that it has null probability. It cannot possibly be true. And, in the case of 9/11, the same principles applied to the available relevant evidence yields the result that the official account of the events of that day are not even physically possible, which means that they have null probabilities, too. These conclusions are objective discoveries that anyone using the same rules of reasoning applied to the same evidence and considering the same alternatives would reach.⁶¹

Conclusions in science are always tentative and fallible, which means the discovery of new evidence or new alternatives may require reconsideration of the inferential situation. The suggestion could be made, for example, that the South Tower fell first because it was hit on a lower floor and to one side of the building, where the lack of symmetry caused it to fall. But that ignores the load-redistribution capabilities built into the towers, which would have precluded that outcome. The claim has also been advanced that the steel only had to weaken, not melt. But the heat generated by the fuel fires never reached temperatures that would weaken the steel and, if it had, the buildings would have sagged asymmetrically, not completely collapsed all at once, as in fact was the case. The buildings both fell abruptly, completely, and symmetrically into their own footprints, which is explicable on the controlled demolition hypothesis but not on the official account. Similar considerations apply to the Pentagon hit. Even if the wings had been shorn off, a Boeing 757—which weighed 100 tons!—cannot have entered the building through that tiny opening and not have left massive debris. Both the government's "explanations" violate laws of nature. They cannot possibly be true.

Which raises the question, Who had the power to make these things happen and to cover it up? Once the evidence has been sorted out and appropriately appraised, the answer is no longer very difficult to find. Like the assassination of JFK, the events of 9/11 required involvement at the highest levels of the American government. This conclusion, moreover, receives confirmation from the conduct of our highest elected officials, who took extraordinary steps to prevent any formal investigation of 9/11 and, when it was forced upon them by tremendous political pressure, especially from the survivors of victims of these crimes, they did whatever they could to subvert them. There are good reasons for viewing *The 9/11 Commission Report* (2004) as the historical successor to and functional equivalent of *The Warren Report* (1964).⁶²

I therefore believe that those of us who care about the truth and the restoration of responsible government in the United States have an obligation to make use of every possible media venue from talk radio and the internet to newspapers and television whenever possible. The American people can act wisely only when they know the truth. So, while the truth is said to "make us free", the truth only matters when the American people are able to discover what is true. Obstacles here that are posed by the government-dominated mass media, including the use of stooge "reporters" and of prepackaged "news releases", only make matters that much more difficult. As John Dean asks in *Worse than*

Watergate (2004), If there has ever been an administration more prone to deceiving the American people in our history, which one could it be?

13. Ubiquitous Conspiracies

Moreover, we must overcome the inhibition to talk openly about conspiracies. That the United States is now engaged in a conspiracy to control the world's oil in relation to Afghanistan, Iraq, Iran, and Venezuela comes as no surprise.⁶³ Read John Perkins' *Confessions of an Economic Hitman* (2004) or Robert Barnett's *The Pentagon's New Map* (2004) for modern extensions of the predominant attitudes of the recent past elaborated by Peter Dale Scott in *Deep Politics and the Death of JFK* (1993). But not all conspiracies are global in character and many are more limited in scope, such as the effort to keep an Italian journalist from returning to Italy from her captivity in Iraq, which seems to have been deliberately contrived to contain information about war crimes committed by American forces in Falluja.⁶⁴

If anyone doubts the ubiquitous presence of conspiracies, let them take a look at any newspaper of substance and evaluate the stories that are reported there. During an appearance on Black Op Radio, for example, I went through a single issue of *The New York Times* (Wednesday, 18 March 2005), which I chose as suitable for a case study. Multiple conspiracies are addressed throughout, including the WorldCom scandal, atrocities in Iraq and in Afghanistan (involving the murder of at least twenty-six inmates), the assassination of Refik Hariri in Lebanon, the use of counterfeit news by our own government, an SEC suit against Qwest for fraud, the 125 bank accounts of Augusto Pinochet, on and on.⁶⁵

Efforts to promote the view that "conspiracy theories" must never be taken seriously continue unabated. A recent example of my acquaintance appears in the December 2004 issue of *Scientific American Mind* (December 2004), its "premiere issue". This issue features an article, "Secret Powers Everywhere", whose author is identified as Thomas Gruter of the University of Munster in Germany. A google search suggests a faculty member by this name studies prosopagnosia (face blindness), which appears far removed from the subject of this essay. Its theme is that, while "most individuals who revel in tales of conspiracies are sane", they "border on delusion". This is a very unscientific article for a publication that, like its sibling, *Scientific American*, focuses on science. It is only the latest in an ongoing propagandistic assault upon rationality.⁶⁶

Although it ought to go without saying, no "conspiracy theory" should be accepted or rejected without research. Each case of a possible conspiracy has to be evaluated independently based on the principles of logic and the available relevant evidence. Conspiracies flourish and time is fleeting. We lack the resources to confront them all. But we need the intelligence and the courage to promote truth in matters of the highest importance to our country and to the world at large. We must do whatever we can to uncover and publish the truth and to expose the techniques so skillfully deployed to defeat us. History cannot be understood—even remotely!—without grasping the prevalence of conspiracies. And American history is no exception.

NOTES

¹ The recent indictment of former Speaker of the House Tom DeLay for money laundering and the investigation of Senate Majority Leader Bill Frist for insider trading are even being referred to as "conspiracies". See "Big money, big influence, big trouble", *Duluth News Tribune* (4 December 2005). See also Section 13 below.

² Properties whose presence or absence depends upon and varies with different observers or thinkers are said to be "subjective" (Fetzer and Almeder 1993, p. 99). Beliefs are "rational" when they satisfy suitable standards of evidential support with regard to acceptance, rejection, and suspension (Fetzer and Almeder 1993, pp. 13-14).

- 3 Some relevant evidence may not be available and some available evidence may not be relevant (Fetzer and Almeder 1993, p. 133). The fallacy that results from picking and choosing your evidence (call it "selection and elimination") is known as "special pleading", a common practice by editorial writers, politicians, and used-car salesmen.
- 4 Some alternative models of science include Inductivism, Deductivism, Hypothetico-Deductivism, Bayesianism (which comes in many different kinds), and Abductivism, whose alternative strengths and weaknesses are assessed in Fetzer (1981), (1993), and (2002). The most defensible appears to be Abductivism, which is adopted here.
- 5 Acceptance within scientific contexts is "tentative and fallible" because new evidence or new hypotheses may require reconsideration of inferential situations. Conclusions that were once accepted as true may have to be rejected as false and conclusions once rejected as false may have to be accepted as true, as the history of science progresses.
- 6 In philosophical discourse, differences like these are known as "modal" distinctions.
- 7 And an event is historically possible (relative to time t) when its occurrence does not violate the history of the world (relative to t). Historical possibility implies both physical and logical, and physical implies logical, but not conversely. See Fetzer and Almeder (1993). For a detailed technical elaboration, see Fetzer (1981), pp. 54-55.
- 8 Some natural laws are causal and others are non-causal, while causal laws can be deterministic or indeterministic (or probabilistic). On the differences between kinds of laws, see Fetzer (1981), (1993), and (2002). Laws of society, such as speed limits on highways, of course, can be violated, can be changed, and require enforcement.
- 9 Scientific explanations of specific events explain why those events occur through their subsumption by means of covering laws. Predictions and retrodictions offer a basis for inferring that an event will occur or has occurred but, depending upon their specific form, may or may not explain why. See Fetzer (1981), (1993), and (2002).
- 10 The term "proof" sometimes simply refers to specific evidence or an illustration of a principle or theorem, as in the case of a laboratory experiment. For a discussion of the meaning of "proof" in legal contexts, abstract contexts, and scientific contexts, see James H. Fetzer, "Assassination Science and the Language of Proof", in Fetzer (1998).
- 11 Thus, the stage of adaptation (of hypotheses to evidence) entails the exclusion of hypotheses that are inconsistent with the evidence. Like acceptance, rejection in science is also tentative and fallible, since the discovery of new alternatives or new evidence may require rejecting previously accepted alternatives, and conversely.
- 12 Formally, $L(h/e) = P(e/h)$, that is, the likelihood of h , given e , is equal to the probability of e , given h . For propensities as opposed to frequencies, the formula may be expressed as $NL(h/e) = NP(e/h)$, that is, the nomic likelihood of h , given e , equals the nomic probability of e , given h . See Fetzer (1981), (1993), and (2002).
- 13 Strictly speaking, relative frequencies are collective properties that do not belong to its individual members, while propensities are distributive properties that belong to each of its members, but may not be the same for every member in the collective. Under constant conditions, relative frequencies are evidence for causal propensities.
- 14 "Woman canoeing Brule River is killed in freak accident", *Duluth News Tribune* (16 July 1993), p. 1A. If those same unusual conditions were to be replicated over and over, of course, the relative frequency for death while canoeing would become extremely high. Enthusiasm for paddling the Brule River would no doubt diminish.

- 15 "Cigarette lighter saves man from a bullet", *National Enquirer* (6 July 1993), p. 21. In another case, a man who walked away unharmed after his truck hit a utility pole was killed as he left the crash scene, stepped on two downed power lines, and was electrocuted. His luck had run out. *Duluth News Tribune* (11 October 1993), p. 2D.
- 16 The sequences of cases that make up collectives are properly envisioned as sets of single cases, where the cause of each single case is the propensity that was present on that occasion. Laws of nature describe what would happen for any single case of the kind to which it applies up to the values of its propensities (Fetzer 1982, 1991, 2002).
- 17 The discovery that the autopsy X-rays have been altered, that someone else's brain was substituted for that of JFK, and that the Zapruder film has been recreated thus afford striking examples of the tentative and fallible status of scientific knowledge, where conclusions previously regarded as true must be rejected as false. See below.
- 18 Rather like the beaver on the Brule River, it seems to have been responsible for what would otherwise have appeared to have been a most improbable outcome. The difference, however, is that the Brule River incident actually occurred, while the "magic bullet" phenomenon cannot have occurred. It is not physically possible.
- 19 Warren Commission drawings of the alleged path of the "magic bullet" along with photographs of the holes in the jacket and shirt, the autopsy diagram, the death certificate, and some re-enactment photographs may be found in Galanor (1998), which presents available and relevant evidence contradicting *The Warren Report*.
- 20 Baden no doubt meant to imply that, since it would be absurd to suppose there had been as many as six shots from three directions, the "magic bullet" theory must be true. Recent scientific research has not only established that the "magic bullet" theory is physically impossible but that there had to have been at least six shots.
- 21 When the available relevant evidence proves that *The Warren Report*, which is the official government account of the assassination of JFK, the 35th President of United States, is false, yet the government refuses to revise its phony "explanation" of the cause of his death, it is abusive to demean the serious investigators as "buffs".
- 22 These include Robert B. Livingston, M.D., a world authority on the human brain, who was also an expert on wound ballistics; David W. Mantik, M.D., Ph.D., a Ph.D. in physics who is also an M.D. and board-certified in radiation oncology; and John P. Costella, Ph.D., an expert in electromagnetism and the physics of moving objects.
- 23 The authenticity of the Zapruder film has dedicated proponents, such as Josiah Thompson, the author of an early study (Thompson 1967), and David Wrone, the author of a recent study (Wrone 2003). For a critique of the critics' arguments, go to "The Great Zapruder Film Hoax Debate", <http://www.assassinationscience.com>. Some of their arguments were already refuted by the "Preface" to Fetzer (2003).
- 24 The witnesses to the limousine stop range from Roy Truly, Oswald's supervisor in the Texas School Book Depository, to Richard DellaRosa, who has viewed another and more complete film that includes the limo stop. See, for example, David W. Mantik, M.D., Ph.D., "How the Film of the Century was Edited", in Fetzer (1998), pp. 274-275; Vince Palamara, "59 Witnesses: Delay on Elm Street", in Fetzer (2000), pp. 119-128; and Richard DellaRosa, "The DellaRosa Report", in Fetzer (2003), Appendix E. This was such an obvious indication of Secret Service complicity that it had to be taken out.
- 25 With respect to the medical evidence, see David W. Mantik, M.D., Ph.D., "The JFK Assassination: Cause for Doubt", with its "Postscript: The President John F. Kennedy Skull X-Rays", in Fetzer (1998), pp. 93-139; and

Robert Livingston, M.D., "Statement 18 November 1993", in Fetzer (1998), pp. 161-166. See also Fetzer (2000), (2003). Blunders were committed along the way. For example, while the 6.5 mm metallic slice was intended to implicate an obscure 6.5 mm weapon, the weapon itself only has a muzzle velocity of 2,000 fps and is not a high-velocity weapon. So if JFK was killed by the impact of high-velocity bullets, as his death certificates, the Warren Commission and the HSCA supposed, then he was not killed by Lee Harvey Oswald. See Weisberg (1965), Model and Groden (1976), and Groden and Livingstone (1989).

- 26 Livingston's conclusion has now been reinforced by the recent discovery that two supplemental brain examinations were conducted, one with the real brain, the other with the substitute. See Douglas Horne, "Evidence of a Government Cover-Up: Two Different Brain Specimens in President Kennedy's Autopsy", Fetzer (2000), pp. 299-310.
- 27 A summary of evidence for alteration may be found in James H. Fetzer, "Fraud and Fabrication in the Death of JFK", in Fetzer (2003), pp. 1-28. See especially John P. Costella, Ph.D., "A Scientist's Verdict: The Film is a Fabrication", in Fetzer (2003), pp. 145-238. It had to be recreated by reshooting the frames for technical reasons related to sprocket hole images that have the effect of linking one frame to another. That the cinematic techniques for recreating the film were available in 1963 has been established by David Healy, "Technical Aspects of Film Alteration", in Fetzer (2003), pp. 113-144. The film, "Mary Poppins", for example, was completed in 1963 and released in 1964. For easy access to the evidence, see John P. Costella, "The JFK Assassination Film Hoax: An Introduction", at <http://www.assassinationscience.com>.
- 28 See, for example, Vincent Palamara, "Secret Service Agents who believed there was a conspiracy", <http://www.geocities.com/zzzmail/palamara.htm?20054>; Vincent Palamara, "The Secret Service: On the Job in Dallas", in Fetzer (2000); and Vincent Palamara, *Survivor's Guilt: The Secret Service and the Failure to Protect the President* (1995); Lifton (1980); Marrs (1989); Livingstone (1992); and Fetzer (1998, 2003).
- 29 When the Assassination Records Review Board (ARRB), which was established by Congress to declassify documents and records held by the CIA, the FBI, the NSA, and other agencies in the wake of the surge of interest generated by Oliver Stone's "JFK", was drafting requests for copies of its presidential protection reports for some of his trips during 1963, the Secret Service destroyed them. See Fetzer (2000), pp. 12-13.
- 30 Even the mortician observed that the deceased had a massive defect to the back of his head, a small entry wound to the right temple, several small puncture wounds to the face, and a wound to the back about five to six inches below the collar. (See, for example, Fetzer (2003), pp. 8-9.) This information should have been easily available. Even *The Warren Report* describes the holes in the shirt and jacket he was wearing as "5 3/8 inches below the top of the collar" in the jacket and as "5 3/4 inches below the top of the collar" in the shirt, contradicting its own conclusions (Warren 1964, p. 92). David W. Mantik, M.D., Ph.D., believes that the small puncture wounds were caused by shards of glass when the bullet that hit his throat passed through the windshield.
- 31 There appear to have been eight, nine, or ten shots from six locations. See, for example, Richard F. Sprague, "The Assassination of President John F. Kennedy", *Computers and Automation* (May 1970), pp. 29-60; James H. Fetzer, "Assassination Science and the Language of Proof", in Fetzer (1998), pp. 349-372; and David W. Mantik, M.D., Ph.D., "Paradoxes of the JFK Assassination: The Medical Evidence Decoded", in Fetzer (2000), pp. 219-297.
- 32 Lane already noticed this deceptive performance (Lane 1966, "The Hypothetical Medical Questions", Appendix II). Perry, who had performed the tracheostomy, was not in the position to vouch for or to verify the assumptions that he had been asked to make, because he knew they were false! The press conference transcript, where he described

the wound three times as a wound of entry, was not provided to the Warren Commission, but has been published in Fetzer (1998) as Appendix C.

- ³³ There were others, including that the crowd was allowed to spill into the street, the 112th Military Intelligence Group was ordered to "stand down", and a flatbed truck that would normally precede the limo for cameramen to film was cancelled. Even on the unreasonable assumption that, say, one time in ten, the Secret Service "forgets" to weld the manhole covers, to cover the open windows, and such, then the probability that there would be a dozen independent events of this kind is equal to 1 over 1 followed by a dozen zeros, 1/1,000,000,000,000, or one in a trillion. Even if we arbitrarily discount half of them, the probability that there would be a half-dozen independent events of this kind is equal to 1 over 1 followed by a half-dozen zeros, 1/1,000,000, or one in a million. Since hypotheses in science are rejected when they have improbabilities of 1 in twenty or more, these alternatives must be rejected.
- ³⁴ The difference is that between events that, while extremely rare, can in fact occur and those that are impossible because their occurrence would violate laws of nature. The accidental death of the woman canoeing on the Brule River had a probability of zero, but it was not physically impossible or it could never have occurred. The prime numbers occur with diminishing relative frequency among the natural numbers and have a limiting frequency of zero, but there are infinitely many of them, nonetheless. It is therefore important, as a point of logic, to distinguish between "zero" and "null".
- ³⁵ Those who make a last-ditch stand on behalf of the government's position often insist that, if there had been a large-scale conspiracy, then some of those involved would have talked—and no one has talked! Proof that they don't know what they are talking about may be found in many places, including Noel Twyman's *Bloody Treason* (1997), where on a single page he lists eight prominent figures who talked (page 285)! None of this inhibits late night MSNBC-show hosts from fawning over Gerald Posners.
- ³⁶ The identity of the alleged hijackers remains very much in doubt. Nila Sagadevan, "9/11—The Real Report" (forthcoming), has observed that none of the names of the Arabs who are supposed to have committed these crimes are included in the flight manifests for any of the planes. Others, such as Griffin (2004, 2005), have observed that not only were fifteen of the nineteen from Saudi Arabia and none from Iraq, but five, six, or seven of those alleged to have been involved have turned up alive and well in Saudi Arabia. The FBI has not bothered to revise its list, but it should be apparent that the probability that they died in the crash, yet are still alive, is null.
- ³⁷ A French human-rights activist and an investigative journalist, Thierry Meyssan, was among the first to observe that the government's account of the attack upon the Pentagon did not comport with the evidence. He published two of the earliest books on 9/11, *Pentagate* (2002a) and *9/11: The Big Lie* (2002b). Meyssan has been the target of many attacks, including by James S. Robbins, "9/11 Denial" (2002), whose rebuttal consists of two assertions, "I was there. I saw it." Whatever he may have thought he saw does not affect the evidence Meyssan emphasizes. See, for example, the web site http://www.asile.org/citoyens/numero13/pentaone/erreurs_en.htm.
- ³⁸ Notice that the magnitude of the differences that are involved here is very large (<http://reopen911.org/Core.htm>). The melting point of iron is 2795° F, but steel as a mixture has a melting point dependent upon its composition. Typical structural steel has a melting point of about 2,750° F. The maximum temperature of air-aspirated, hydrocarbon fires without pre-heating or pressurization is around 1,520° F, as Jim Hoffman has advised me in personal correspondence. Underwriters Laboratory had in fact certified that the steel used in construction could withstand temperatures of 2,000° F several hours before even any significant softening would have occurred. (<http://www.prisonplanet.com/articles/november2004/121104.easilywithstood.htm>)

- ³⁹ It certainly would not have melted at the lower temperatures of around 500° F to which, UL estimated, they were exposed, given the conditions present in the towers.
(<http://www.prisonplanet.com/articles/november2004/121104.easilywithstood.htm>) Nor would they have melted at temperatures as high as 1,200° or 1,300° F, as other estimates suggest (Griffin 2004, p. 13). The hottest temperatures measured in the South Tower was about 1,375° F, far too low to cause the steel to melt. (See below.)
- ⁴⁰ In the case of 9/11, as in the case of JFK, physical impossibilities lie at the core of the cover-up. What is impossible cannot happen, but many people are able to believe impossible things, especially when they are unaware of the laws that are involved and the specific conditions that were present. Gullibility tends to be a function of ignorance.
- ⁴¹ Griffin (2004), pp. 26-27. Griffin's latest study, "The Destruction of the World Trade Center: A Christian Theologian's Analysis" (forthcoming), adds even more. As Frank A. DeMartini, who was project manager for the construction of World Trade Center 1, during an interview recorded in January 2001, explained, "The building was designed to have a fully loaded 707 crash into it—that was the largest plane at the time. I believe that the building could probably sustain multiple impacts of jet liners because this structure is like mosquito netting on your screen door—this intense grid—and the plane is just a pencil puncturing that screen netting. It really does nothing to the screen netting" (<http://www.prisonplanet.com/articles/november2004/121104designedtotake.htm>). Three other engineers involved in the project—Lee Robertson, Aaron Swirski, and Hyman Brown—offered similar opinions (<http://www.rense.com/general17/eyewitnessreportsersist.htm>). DeMartini died at the towers on 9/11.
- ⁴² Peter Tully, President of Tully Construction, who was involved in the process of clearing the site, reported seeing pools of "molten steel", an observation that was confirmed by Mark Loizeaux, President of Controlled Demolition, Inc., who said they had been found at the subbasement level as low as seven levels down. Moreover, those pools remained "three, four, and five weeks later, when the rubble was being removed"
(http://www.americanfreepress.net/09_03_02/NEW_SEISMIC_/new_seis-mic_.html). These extreme temperatures would not result from either burning fuel or collapse due to the "pancake effect", which would have propensities of zero or null, but would be expectable effects of the use of powerful explosives to bring them down.
- ⁴³ Indeed, most of these features would have a null propensity on the official account. Hufschmid (2002), for example, suggests that, if the collapse had involved a "pancake" effect of one floor falling and overwhelming the capacity of the lower floor to support it, that should have taken 1/2 second per floor. For all 110 of the floors to collapse—it would not matter which collapsed first or where the planes had hit—therefore, would have taken about 55 seconds. The buildings actually fell in approximately 14 seconds, around the speed of free fall through air for objects encountering no resistance at all. That this should occur on the official account is not even remotely physically possible.
- ⁴⁴ See, for example, <http://www.assassinationscience.com/911links.html>. This site includes many important studies of the Pentagon crash, such as a set of PowerPoint studies by Jack White. It also includes the links to many of the reports cited in this chapter, including "Hunt the Boeing!", which presents Meyssan's analysis in a series of photographs. I have found that links to evidence that contradicts the government's account do not always work normally, however, and sometimes just simply disappear. Similar photographs are found in Meyssan (2002a), color photo section, pp. VI-VII.
- ⁴⁵ A photograph is archived at <http://www.assassinationscience.com/911links.html>. The opening appears to be about 10 feet high and roughly 16 or 17 feet wide, or not much larger than the double-doors on a mansion. Notice several unbroken windows in the impact area and the lack of collateral damage. According to A. K. Dewdney and

G. W. Longspagh, the maximum diameter of the fuselage is about 12 feet, 4 inches, with a wingspan of 125 feet (<http://www.physics911.net/missingwings.htm>). They found, "*The initial (pre-collapse) hole made by the alleged impact on the ground floor of Wedge One of the building is too small to admit an entire Boeing 757*" and "*Wings that should have been sheered off by the impact are entirely absent. There is also substantial debris from a much smaller jet-powered aircraft inside the building.*" They conclude with a "high degree" of certainty that no Boeing 757 struck the Pentagon and with a "substantial degree" of certainty that it was struck by a small jet, like an F-16.

- ⁴⁶ Bloggers observed the proliferation of inconsistent stories about what happened at the Pentagon, where some were saying that the wing hit the grass and it "cartwheeled" into the Pentagon, others saying that it "nose dived" into the Pentagon, others saying that it flew "straight into" the Pentagon, others saying that it hit the helicopter pad and the wreckage flew into the Pentagon: "Why so many different stories? Are these people seeing different things?" (<http://www.abovetopsecret.com/forum/thread71124/pg11>). The Pentagon said the crew of a C-130 had watched the attack take place while circling Washington, D.C. (<http://www.ratical.org/ratville/CAH/linkscopy/C130sawF772P.html>).
- ⁴⁷ Go to http://www.asile.org/citoyens/numero13/pentagone/erreurs_en.htm for a photograph of the construction. Compare it with other photographs of the lawn, which can be found at <http://www.assassination-science.com/911links.html>, including in the PowerPoint studies of Jack White. The lawn seems to be as smooth as a putting green.
- ⁴⁸ Slide 20 of Jack White's PowerPoint studies displays two photographs of the same piece of "aircraft debris" with two different backgrounds (<http://www.assassination-science.com/911links.html>). Another study supporting the impossibility of a Boeing 757 having passed through that entry point includes photos not only of the same piece of alleged debris but others showing two men in suits carrying what appears to be the same or similar pieces and, interestingly, an enormous box being carried from the site by six or eight servicemen, who have covered it up completely by using blue and white plastic tarps (http://www.geocities.com/s911surprise3b/american_airlines_flight_77/).
- ⁴⁹ Arguments for the official government account tend to emphasize eyewitnesses who said that they saw a Boeing 757 hit the Pentagon. (See note 37 above.) But the physical evidence overwhelmingly outweighs the contrary eyewitness evidence, since it is not physically possible that an aircraft of those dimensions hit the building at that location and left no evidence. Think of driving a car through your front door for a comparison. The air controller's report, by contrast, was a group response by professional experts.
- ⁵⁰ See <http://www.simmeringfrogs.com/articles/jt8d.html>, which includes photos of a JT8D turbojet engine and the remnant found at the crash site. A similar conclusion is drawn by <http://www.physics911.net/missingwings.htm>, which concludes that this part cannot have come from a Boeing 757 but was probably from a small fighter jet, such as an F-16. The F-16 and the A-3 Sky Warrior are both small fighter jets. Both pages are also accessible from <http://www.assassination-science.com/911links.html>.
- ⁵¹ The workers' reports about these activities may be read at "Secret Global Hawk Refit for Sky Warrior!" (<http://portland.indymedia.org/en/2005/05/318250.shtml>).
- ⁵² See http://www.geocities.com/s911surprise3b/american_airlines_flight_77/.

- ⁵³ She is quoted by Meyssan (2002a) on p. I and on pp. 96-97. The original source is http://www.abcnews.go.com/sections/2020/2020/2020_011014_atc.feature.html.
- (a) Jon Carlson, "FBI Hides 85 Pentagon Videos and 9/11 Truth", <http://www.rense.com/general69/91185.htm>. This article also observes that "the Power Hour has found that Pentagon 9/11 'witnesses' were given prepared written statements to say that a commercial airliner hit the Pentagon." A link, <http://www.arcticbeacon.com/articles/article/1518131/39024.htm>, offered in support does not work. Why am I not surprised? As a former Marine Corps officer, I can confirm that it would have been effortless to acquire the testimony of any number of enlisted that they personally observed Bruce Wayne drive the Batmobile into the Pentagon that morning. AA Flight 77 left the radar screen in the vicinity of the Kentucky/Ohio border. One possible explanation for what became of it is that it went down there and the bodies were transported back to a make-shift morgue in Washington, D.C., an hypothesis that may merit further investigation.
- (b) Wake turbulence occurs as an unavoidable effect of aircraft operation and "is generated when the difference in air pressure above and below the wings of an aircraft causes the air to spiral at the aircraft's wing tips." They dissipate rapidly in windy conditions, but in still conditions, "the spirals sink toward the ground and degrade slowly" (<http://www.aeru.com/au/pages/page189.asp>). Pilots are offered instructions concerning avoiding the problem (see "FAA Advisory Circular, AC-90-23E: CAUTION WAKE TURBULANCE". (http://www.fcitraining.com/article14_fci_training_jul04.htm)). The effects can be substantial, which gives rise to the following dilemma: if a 757 was flying low enough to impact the hit point on the ground floor with the official trajectory, then it should have massively disrupted the grass and lawn; but the grass and law were not massively disrupted. And if it was not flying low enough to massively disrupt the grass and lawn, then it was not flying low enough on that trajectory to hit that point on the ground floor.
- ⁵⁴ See note 42 above and the discussion of this important point that may be found at http://www.americanfreepress.net/09_03_02/NEW_SEISMIC_/new_seis-mic_.html.
- ⁵⁵ During a PBS documentary, "America Rebuilds", broadcast 10 September 2002, Larry Silverstein remarks, "I remember getting a call from the, er, fire department commander, telling me that they were not sure they were gonna be able to contain the fire, and I said, 'We've had such terrible loss of life, maybe the smartest thing to do is pull it.' They made that decision to pull and we watched the building collapse." (<http://911research.wtc7.net/wtc/evidence/pullit.html>). That, however, could not have occurred unless the building contained prepositioned explosives. If WTC7 had prepositioned explosives, that strongly suggests WTC1 and WTC2 had them as well.
- ⁵⁶ In this respect, "Loose Change" corroborates earlier reports from eyewitnesses to explosions, such as <http://www.chiefengineer.org/article.cfm?seqnum1=1029> and <http://www.resne.com/general17/eyewitnessreortspersist.htm>. See also note 21.
- ⁵⁷ See, for example, http://www.americanfreepress.net/09_03_02/NEW_SEISMIC_/new_seismic_.html and http://www.democraticunderground.com/duforum/DC_ForumID43/5189.html, which include the seismic record of Columbia's observatory.
- ⁵⁸ For additional discussion, including many more links, see, for example, <http://www.propagandamatrix.com/articles/july2005/060705controlledledemolition.htm>.

- 59 See note 41. The properties of Boeing 707s and Boeing 767s are very similar.
- 60 United Flight 93, which went down in Pennsylvania, may be an easy case. Persons living in the area at the time have contacted me and told me they heard an explosion before the plane crashed, but the FBI would not record it. Others told me that they had been taken to an area far larger than the official crash scene to search for debris and body parts, but the Sheriff who accompanied them told them that, if they were to repeat this, he would deny he had said that. A former Inspector General who used to supervise air crashes for the Air Force told me that, if the plane had crashed as it was officially described, it should have occupied an area about the size of a city block; but the debris is actually scattered over an area of some eight square miles. There is also a report the plane was shot down by a "Happy Hooligans" Air National Guard officer, one Major Rick Gibney, at <http://www.letsroll911.org/articles/flight93shotdown.html>.
- 61 On the objectivity of scientific reasoning, see Fetzer (1981), (1993), and (2002).
- 62 For more discussion and evidence, see Ahmed (2002), Meyssan (2002), Griffin (2004), Thompson (2004), Ruppert (2004), and Griffin (2005) and (forthcoming).
- 63 See "Mission Accomplished: Big Oil's Occupation of Iraq", *BUZZFLASH.COM* (2 December 2005), <http://www.buzzflash.com/contributors/05/12/con05464.html>.
- 64 See "Hostage's shooting 'no accident'" (<http://news.bbc.co.uk/go/fr/-/2/hi/europe/4323361.stm>) and "Dead Messengers: How the U.S. Military Threatens Journalists" (http://www.truthout.org/docs_2005/030605.shtml). *The New York Times* has recently lost one of its own, "Reporter Working for Times Abducted and Slain in Iraq", *The New York Times* (20 September 2005), although *The Times* has not suggested that he was deliberately targeted by the American military. See, for example, "The Twilight World of the Iraqi News Stringer", *The New York Times* (25 September 2005). For another troubling report, see "US forces 'out of control', says Reuters chief", <http://www.guardian.co.uk/Iraq/Story/0,2763,1580244,00.html>.
- 65 The discussion is archived at <http://www.blackopradio.com/>. Go to "archived shows 2005" and scroll down to Part 2, Archived Show #213. Other examples of probable conspiracies making their way into the national media include financing propaganda in Iraqi ("U.S. Is Said to Pay to Plant Articles in Iraq Papers", *The New York Times*, 1 December 2005) and the DeLay-inspired G.O.P. redistricting of Texas ("Lawyer's Voting Rights Memo Overruled", *The New York Times*, 3 December 2005).
- 66 A distinction must be drawn between rationality of belief and rationality of action. Rationality of belief involves accepting, rejecting, and holding beliefs in suspense on the basis of the available relevant evidence and appropriate principles of reasoning. Rationality of action involves adopting means that are efficient, effective, or reliable to attain your aims, objective, or goals. Lying about tax cuts (global warming, Iraq) can be a rational act if it is an efficient, effective, or reliable means to attaining goals, which may be political, economic, or personal. And they can attain their aims even if they are ultimately discovered. Assessments of comparative rationality with respect to belief must take into account that persons are rational in their beliefs when they incorporate the principles that define it. Since the "community of scientists" can be littered with phonys, charlatans, and frauds, "scientists" are those who adhere to the principles of science. Analogously, "rational persons" are those who adhere to the principles of rationality. They tend to converge. See Fetzer (1981), (1993), (2002).

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