

see over

Posner squares this astonishing statement with his presumed acceptance of the film he does not bother to explain.

The head snap was spontaneously described neither by the Dealey Plaza witnesses nor by early viewers of the film. In the recent past, moreover, the jet effect as an explanation for the head snap has been fully discredited in independent experiments performed by Arthur Snyder, Ph.D. and Doug DeSalles, M.D. It can no longer be offered as a viable explanation for the head snap. In addition, a long list of arguments against that particular explanation has been previously recounted (*Assassination Science* 1998, pp. 279-284). The other explanation offered by Warren Commission supporters—the neuromuscular reaction—has never received any credible support from appropriate experts in the neurosciences. The many arguments against it are also recounted in *Assassination Science* (1998, pp. 279-284). Nothing new has emerged to resuscitate this idea. Jackie's simultaneous head snap (originally noted by Itek; see *Assassination Science* 1998, p. 283) remains a mystery as well—unless film alteration is accepted. In summary, none of the traditional explanations can account for the head snap. By itself, this argument alone requires that film alteration be taken seriously.

The traditional Warren Commission critic, for years, has taken the head snap as an obvious proof of a frontal shot. Itek originally pointed out, however, that this simply could not work, mainly because it is not a simple matter of transferring energy from the bullet to the motion of the head. The problem is that JFK's head (and upper torso, too) must be lifted substantially against gravity. This requires a great deal of energy—energy that is no longer available for the kinetic energy of the head. These calculations demonstrate that the energy left over cannot reproduce the head snap of the Zapruder film.

whole body

I found this to be true even after I revised some of Itek's anatomic values. [Editor's note: This is one of many manifestations of the importance of the author's expertise in both medicine and physics.] Unfortunately, no one else, to my knowledge, has corroborated these calculations, even after all of these years. In summary, then, these arguments about the head snap leave believers of film authenticity in a very difficult position. They are left with no explanation for the most remarkable feature of the film—the head snap. 39c-7?

Many witnesses describe an erect posture at the instant of the final headshot, after which JFK is commonly described as slumping forward. Such witnesses, mostly Secret Service agents in the follow-up car, are Swartz, Ault, Hargis, Hickey, Kinney, Landis (*Assassination Science* 1998, pp. 289-290). These descriptions of erect posture are totally inconsistent with the Zapruder film, in which the (single) headshot occurs when JFK is slumped forward and to the left. But when the question is raised (as it rarely is) about what posture the witnesses saw at the moment of the headshot, none of them describe JFK as slumped over. This issue—so striking when it is considered—has received almost no discussion whatsoever.

Those witnesses who do describe JFK's position at the moment of the headshot describe him as sitting erect. And most of these then go on to describe how JFK next slumped forward (probably for a second time). How is it possible for such a simple—and memorable—event to be remembered so incorrectly (if authenticity devotees are correct) by so many relevant witnesses, especially in view of Marshall's research? This simple recollection should not tax the abilities of hu-

man memory, nor is it so inconsequential that it would be forgotten. In fact, it is just the kind of incident—one with simple actions and salient events according to Marshall—that witnesses would recall. In fact witnesses do recall these events with remarkable consistency. If there were no Zapruder film, how would the assassination be described in history books? It is likely that the Zapruder version would be unknown.

The early reenactments. I will say rather little here about the first two reenactments, for which I previously cited (*Assassination Science* 1998, pp. 305-308) the meticulous articles by Daryll Weatherly (*The Investigator*, Winter 1994-95, p. 6) and Chuck Marler (*Assassination Science* 1998, pp. 249-261). Their work has, unfortunately, received little attention—but also little criticism. The point is simple—these reenactments as well as associated documents and eyewitness statements—place the final head shot (the second, in my view) about 30 to 40 feet further down Elm Street than Z-313. Warren Commission data tables actually place the final shot at 294 ft from the “sniper’s” window, not the 265 ft that corresponds to Z-313. This greater distance of about 294 ft was actually identified in a photograph (Figure 1) printed in *Newsweek* (pp. 74-75) as recently as 22 November 1993. In summary, the data tables, documents, and figures from these early reenactments remain powerful corroboration for the alteration of the film. The evidence is so powerful, in fact, that proponents of authenticity usually ignore it. There is little else for them to do.

Inconsistencies with other photographic evidence. This substantial area can be addressed only briefly here. Jack White has discovered new—and astonishingly robust—evidence, based on a simple reenactment he performed in Dealey Plaza. In the famous Moorman Polaroid, taken immediately after a headshot, Jack noticed the geometric pattern in the background arcade over JFK’s head. He also noticed Zapruder’s pedestal in the foreground and he recognized that, by lining up both of these features, it was possible to locate Moorman (actually Moorman’s eye) very precisely at the moment she took her picture. Although her distance from the arcade remained uncertain, her lateral and vertical position could be determined quite exactly. [Editor’s note: White’s newer discoveries, some quite astonishing, appear elsewhere in this volume.]

When I attempted to reproduce this I was astonished. As I lined up one corner of the pedestal with a chosen point on the background arcade, I could immediately see that this technique was exquisitely sensitive to even slight head movements. The smallest movement of my head put it out of alignment. So I lined it up precisely and then placed a knife in the ground to mark the exact lateral position. Then I moved a short distance away, and without looking at the ground, attempted to reproduce what I had just done. To my amazement, I could do this repeatedly to within an inch, just as Jack had implied. Next I looked at the vertical location. It was immediately obvious that I had to crouch far down in the grass in order to reproduce the image seen in the Moorman photo. I stepped onto the street immediately adjacent to the curb—and discovered that I still had to crouch quite a lot.

On a subsequent visit, I was able to use as a model a young woman who was only slightly taller than Moorman. When standing on the grass south of Elm St. (Figure 2), she had to crouch a good deal in order for her eye to reproduce the background alignment of the Moorman photo. Next she stepped onto the street;

Mantik insists that eye-witness testimony is superior to photographs. He cites an authority (second hand), Mi Went Chan, as saying this is a matter of law. But when it serves what he is making up, he insists on the exact opposite, that eye-witness testimony cannot be believed. (Marked on pp 343-4).

He also displays ignorance of both other films and other, official evidence.

How does he know enough about the actual official evidence on the 2^d film to say, what is "the most remarkable feature of the film."