Response to Sean Kane letter from Malcolm Gladwell

I am not surprised that Sean Kane was unhappy with the "Blame Game" episode of Revisionist History. Kane runs a firm called Safety Research & Strategies, Inc., which the *Wall Street Journal* said at the time of the Toyota scare "is in business to make money, often by working with attorneys who file suits against the auto makers that it investigates." I think his views have done a grave disservice to our understanding of this issue. Nothing in the letter of complaint he sent to my editors and me changes my mind.

1. Mr. Kane disputes my suggestion that at the time of the 911 call—when Mark Saylor's Lexus was speeding uncontrollably down the highway—Saylor's foot was likely on the throttle and not the brake. He cites as evidence the conclusions of the San Diego County Sheriff and NHTSA reports on the accident, which stated that the Lexus's brakes showed signs of "endured braking." This much is true. But why is Kane so sure that the condition of the brakes tells us something about how Saylor behaved on the day of the crash? Remember, the car involved in the Saylor crash was a loaner from a San Diego-area Lexus dealership. Just four days earlier, while being driven by a different customer named Frank Bernard, the same car [referred to in the Sheriff's report as "V1"] had been involved in a very similar incident, where the non-standard extra floor mat impeded the throttle.

It is worth quoting from the section of the San Diego County Sheriff's report [p. 24] on that previous incident:

Witness Bernard stepped on the brakes and tried to lift up on the accelerator with his right foot. He was attempting to access the shoulder of the freeway, and still applying the brakes, was able to slow V1 to about 50 - 60 MPH…

Witness Bernard kept on the brakes, slowing V1 to 25 - 30 MPH and pulled over to the shoulder. He was able to then place V1 into neutral with the gear shift. When he did this, the engine made a very loud whining, racing sound. Witness Bernard was able to stop V1.

Bernard did some version of what drivers are supposed to do under these circumstances. Faced with a stuck throttle, he applied the brakes—and was able to bring his car to a stop. That same car was then handed over to Saylor a few days later. Is it any surprise that the Lexus showed signs of "endured braking"? Just a few days before, it had been through an almost textbook incident of "endured braking."

In "Blame Game," I argued that Saylor's behavior, in contrast to Bernard's, sounds a lot more like an unintended acceleration case in which driver error played a role: If a car is speeding uncontrollably and the driver fails to stop the car by applying the brakes, *the most plausible explanation is that the driver's foot is not in fact on the brake.* That is what subsequent investigations have concluded in an overwhelming number of unintended acceleration cases. Since Kane seems to have the Sheriff's report in the Saylor case handy, I would refer him to page 14, where the investigating officer interviews a woman named Cheryl Allen, who was driving on the highway at the same time as Saylor and saw his Lexus pass her at high speed:

I asked Witness Allen what she noticed about V1 [the Saylor vehicle] while it was on the freeway. She did not notice it swerving or weaving. She did not notice brake lights but said the emergency flashers were on. She did not notice any the screeching, engine acceleration noise, nor did she notice any lunging or bucking while in motion.

Allen was paying attention to the lights on the back of Saylor's car—in fact, she saw V1 on at least two separate occasions within a minute, and both times she specifically mentioned noticing the emergency flashers. *But she told police she "did not*

notice brake lights." Another witness also remarked on seeing the emergency flashers but made no mention of brake lights.

2. Sean Kane's second complaint centers around the discussion in "Blame Game" of the effectiveness of brakes. My colleague Jacob Smith and I took a 10-year-old Camry out on a race track, reaching speeds of up to 100 miles per hour, and repeatedly brought the car to an uneventful, immediate stop—*even as the accelerator was pressed all the way to the floor.* That's how good brakes are. They will stop a car even when the throttle is wide open.

It is worth briefly digressing, I think, to understand just how much Sean Kane is threatened by the straightforward observation about the efficacy of modern braking systems. Kane contends that unintended acceleration is very likely the result of a software defect in the control of the throttle: in other words, for unexplained reasons, the car's computer occasionally causes it to accelerate uncontrollably. The problem with that argument, of course, is that under those circumstances all the driver has to do is apply the brakes: even if there is such a thing as a gremlin in the software, it is of little account if all the driver has to do is brake to stop the car. This creates a predicament for Kane. In order for his primary theory--the gremlin in the software--to be plausible, he needs a second theory, which explains why, when the gremlin attacks, the brakes don't work.

So what does he say? Let me quote: "In braking systems with a vacuum-assist – such as a Camry – one can easily lose sufficient braking power to stop a wide-open throttle, if you depress the brakes more than once." In other words, if you pump the brakes at high speed, *more than once*, they'll stop working. To Kane, the braking systems of automobiles are afflicted with a

mechanical version of 19th century neurasthenia, such that under even the slightest stress they fall back onto the couch, sighing heavily, hand to forehead. This is nonsense.

Here's what the National Highway Transportation Safety Administration had to say in its report from February 2011, "Technical Assessment of Toyota Electronic Throttle Control (ETC) Systems" (italics mine):

Accordingly, in analyzing UA complaints, NHTSA finds claims of brake ineffectiveness credible only in situations involving medium to high initiation speeds and ***repeated pumping*** of the brakes (which can deplete the vacuum assist) and high speed, long duration events with repeated attempts to use the brakes (where brake fade can occur, particularly in high powered vehicles with stuck throttles).

To reiterate: brakes do not degrade if a driver pumps them once or twice in a braking episode. They degrade after repeated pumping over high-speed long duration events with multiple braking episodes.

3. Mr. Kane's most serious complaint with "Blame Game" is with the advice that we give about how best to handle incidents of unintended acceleration. He calls our recommendations "factually incorrect" and "dangerous," and suggests, in keeping with his own professional preoccupations, that with this episode of Revisionist History, Panoply "exposes itself to liability."

Once again, a short digression is in order. We have already seen how Kane's attachment to the gremlin theory ties him in knots: in order for the gremlin to result in harm, he also needs brakes to somehow, routinely, not function as brakes. But he has another problem. Kane is in the business of assisting in lawsuits against automakers over alleged defects in their products. He is, to put it more succinctly, pre-committed to

explanations of automotive malfunctions that exclude the driver. Thus does Kane only briefly (and dismissively) mention the contribution of human error to unintended acceleration. In his world-view, cars apparently misbehave willfully, arbitrarily and independently of their operators. They *have* to. Otherwise, where's the lawsuit?

So: what should a driver do when confronted with a suddenly accelerating vehicle? My advice follows from the conclusions of the clear majority of technical experts who have studied this issue. Cars accelerate "uncontrollably," in most cases, when drivers put their foot on the accelerator under the mistaken assumption that it is actually on the brake. It follows, then, that the first thing the driver should do if his car suddenly accelerates is lift his foot off whatever pedal it is on. He should check to make sure his foot is properly positioned, and then firmly apply the brakes. *Until the driver corrects his own misapprehension—his false belief that his foot is on the brake—the car will not stop.*

In response to this, Kane writes:

> If the driver is already braking, and takes his foot off the brake pedal – even once – and replaces it, he will seriously diminish the vacuum-assist, and – depending on the strength and stature of the driver – may not be able to physically exert enough force to stop the vehicle, leading to a crash, an injury or a death.

Here we have both elements of Kane's tortious theory of driving in spectacular combination. First: that brakes are such delicate creatures that even one extra application renders them helpless. And second: that if a driver believes himself to be applying the brakes then he must be applying the brakes—because, in Kane's universe, drivers do not make mistakes…only automotive software engineers do.

And what happens if drivers do as Kane suggests and continue to apply pressure to what they think is the brake without checking to make sure it *is* the brake? If they are in error—as the evidence shows many drivers often, tragically, are—their car will continue to accelerate. Lord help anyone who takes Kane or his advice seriously.

4. Mr. Kane does point out two facts "Blame Game" did indeed get wrong. First, he's correct about the airdate of the problematic ABC News segment that rigged a Toyota to malfunction (and initially involved faked footage until ABC was called on this fact and re-edited the story). The segment aired in February 2010, not March.

Also, we incorrectly stated that the rigged Toyota was a Prius. Kane in his letter to us says it was a Camry. He is also incorrect. It was in fact an Avalon.

Both of these facts will be corrected in the audio version of the episode, and we regret the errors.