Dear Paul,

Oct. 10, 1970

Thanks for your letter of Sept. 25. It has taken me so long to reply because of a weekend conference in which I played a major role in organization last weekend.

When you say that there is "no persuasive other evidence of a shot from the front," I cannot agree and furthermore would like to ask what persusive evidence there is for a shot from the rear if one takes "into account the contra dictions in the medical evidence, the generally low value of eyewitness testimony, etc."? If you disregard all that evidence, then we have no evidence of a shot from either direction. In brief, some evidence which suggests to me a shot from the front is the following: 1. the debris which went so far to the rear to hit Hargis -- especially the piece of substance he felt through # his uniform 2. the fragment which went off into the grass (which Brehm seems to have seen in flight and which went some distance 3. the apparent swiveling of the president's head to the left. As for the fragment found in the grass, if it is the one Brehan thinks he saw, it is important to note which part of the skull it was. It came from the juncture of the pareital and occipital bones which is just the part which should have gone the furthest if the shot came from the knoll. Another point of interest here is that according to all the availabl evidence concerning the metal distribution in the head, it could not have been one of the alleged assassination bullets which do not fragment in that pattern. One of those bullets could have caused the channel which runs ascross the top of the hemisphere and caused the wound behind the left eye which Boswell told Tink about (which explains the marking in that area on the autopsy face sheet). It is important to note that the damage in that area matches up with the position of fragments found and the track from back to front, and now with the new pesition of the alleged rear head entry hole (according to the 1968 panel review with the general area of the TSBD in at least a rough manner. But what about the massive injury to the right cerebral hemisphere. Rather than a piercing indury, the entire side seems to have been obliterated down to the white matter. This together with the damage to the skull is consistent with, although not indicative of, a shot from the right front. Adding to it the identification of the bone which flew the furthest, plus the two dispersions of metal, one being small dustlike fragments, why not a shot from the front with a charge inside. This would explain the massiveness of the damage, the gunsmoke Clint Hill and others smelled when they passed that spot, etc. (Bear in mind that such a smell was not expected to be there by the witnesses, unlike the case of JM Smith who waelled it on the knoll but also may have expected to smell it there.) Also interesting is Clint's description of the sound of this shot. So, while the evidence is scareely solid or complete. I do feel that there is quite a bit which could pertain to a shot from the front, and also feel that more could be gained from legal attempts to get the autopsy photos and X-rays, the brain, and other medical evidence than attempting to reconstruct the head movement. something which will always be inconclusive to a disturbing degree. (I mean, here by the way, that even if the double-head-hit hypothesis holds up better on experiment than does the rear head shot one, that the experiments will still be too divorced from reality to yeild a conclusive finding as to what happened in Dealy Plaza.)

It is not true as you state that "evidence against an argument against the Commission's case 'tends to support' its conclusion#." Such evidence, if found, only weakens the alternative hyppthesis. This is the most frequent error in behavioral sciences research. It is a misuse of the Null Hypothesis testing procedure, and ironically one which RA Fisher, the father of the idea, warned against. It is not a question of whether you are making a weak or strong statement--that question is a political one which I have not raised. I am questionin the validity of drawing any conslusion whatsoever with regard to the commission' hypothesis. And furthermore, it would do well to worry about the lone #### assassin hypothesis itself, without going on to the LHO guilt question. If one is really interested in what actually happened as I know you are, why just consider two possibilities. ### one critic view vs. the commission's LHO-SBT-single assassin theory? For instance, why couldn't some other single person have been the one firing from the TSBD? Once we get rid of the LHO question, another rifle could have been used with other bullets. It might be able to fire faster (the loophole in Lifton's "Case for 3 Assassins") or have used different bullets (i.e. cor lacks, mercury fulminate, dum dums) which would have had radically different effects.

Again, your reply to my comments about the conclusion on page 24 in regard to the commission's hypothesis do not reply to mine. Perhaps I was not clear enough. To hell with politics fors the time being. If you can find proof that the commission was right on something, even though only by accident, by all means let the critics know. The question of publication is the political issue. But I am questioning your basic hypothesis testing procedures, not just your experiment itself. I'm sure others will do a better job in analyzing your experiment than I did, whether they feel it was a good or bad one. I question the logic in your conclusions. Your point about the commas on line 9, page 23, does not change my argument. The commas are needed, but that doesn't alter what follows after the colon which is not justifiable.

Given how hasty my memo of 9-20 was done, when you suggested that I reread your article in your letter of 9-25. I did so. I still feel that you make different conclusions in terms of the safe conclusiveness they imply. Again I return to your own statement about the proposed slaughterhous e experiment which you decided not to do because "such an experiment would not allow us to make a conclusive statement about the assassination" versus your utilization of the word "correct" and your conclusions at the end. The latter, for instance, involves making definite statements about having found "support" for a hypothesis, although you have already acknowledged that such an experiment is not conclusive, or would not enable you to make conclusive statements. It would then seem that you have "inconclusive" findings, which if conclusive, would tend to support a hypothesis. And we are still left with your basic hypothesis testing prodecure which, ironically, after all your criticism of Thompson and focus on him, does not deal with his theory of the <u>double</u> headhit, but rather with the old single head hit.

Well, again a glance over this letter reveals that it is scarcely polished. but I still feel that my basic points remain unchanged by your replies and an hoping that this second letter will make it clear that I am not concerned, at present, about the political implications of your article, but rather as to whether your conclusions and theory testing procedures are in any way valid. If they are not, then we have no need to discuss the politics of publishing such work for people outside the critics.

I hope that this letter finds you in good help and spirits. I can imagine that you are getting all sorts of replies from people to the article and that you are snowed under. I hope that the PhD work is going OK. I should be taking ay oral in about a month. I hope that Alvarez is not either your boss or on your **State** committee given his difficulty (judging from CBS) in separating political and scientific concerns. Ef people have written you and accused you of selling out to Alvarez. AEC, or academia in general. I suspect that it is a reaction to your article which is so different in style from much of your other work. It is not conservative and understated, and does not fein from reaching big conclusions, but is near the opposite end of the spectrum. Further more. It have much political-type stuff in it, some of which is largely off the issue given how little dame you spent developing your hypothesis and describing your experiment. Furthermore, I think that it is patronizing towards Alvarez, no matter how much you like him, given his CBS performance. I don't feel you have sold out, but I am perplexed by receiving such an atypical piece of work

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From way Noll Tive out to on. Take it pass.