Route 1, Box 39 Kimberly, Idaho 83341 May 29, 1972

Miss Ruthann Knudson Dept. of Anthropology Washington State University Pullman, Washington 99163

Dear Ruthann:

Thanks for sending the copy of your lecture at Miami on the Parallel-Collateral Falking Technique. Your letter indicates that you sent me a paper on Plainview which will soon be published. However, I have never received this paper so can make no comments.

However, regarding the Parallel-Collateral Flaking paper there are many points which I take exception to and, as a matter of fact, I disagree with most of the paper. I realize that this was a slide lecture and without the slides and material I am at a disadvantage, but I find many of the statements ambiguous and the points of comparison or delineation rather obscure. Further, I find many "pat" statements and no explanation as to "how" and "why" you reached certain conclusions.

The present interest in analysis of lithic technology is relatively recent and few are well versed in this field. For this reason, the writer must be very precise in composition and give detailed explanation and definitions in the proper terminology. I assure you that it is not by chance that my writings resember the style of McGuffie's First Reader but rather an attempt to convey clearly the manufacturing sequence of implements to those who have no knowledge of stone tool fabrication - and, further, to base my theories and conclusions on experiment. This type of writing is tedious - but any writing on the manipulative arts is time-consuming and trying. To emphasize the importance of clarity, proper terminology and basis of conclusions. I cite a current controversy. I am now attempting to referee a clash between Australian and American anthropologist over the small technicality of the American writing a technological paper and using the words "flake termination" without designating whether the termination was by feather, step or hinge fracture. A small point, but we now have a real "battle of the bones" going at full blast.

I do not have time to give you all the comments I would like to make, so will just point out a few and you can take it from there.

Page 1: I emphatically disagree with your statement that parallel-collateral flaking is not a manufacturing technique but rather is a "stylistic marker".

Parallel-collateral flaking is a definite technique and I might add a very difficult one to master. The final stage of parallel-collateral flaking requires several prior stages of preparation - not

only of the two faces of the artifact but also the margins. This is to establish platforms to withstand the necessary pressure without crushing or collapsing and to make a uniform surface which will be receptive to the parallel-collateral flake removal. This technique also requires a special holding method with a rigid support, otherwise the flake will not terminate by feathering at the median line but will curve beyond this point. Also, the worker must have acquired sufficient skill to control, guide and terminate the flakes at apredetermined point. If this isn't a technique - then I don't know what a technique is. This technique was devised by workers for specific functional purposes. We can only imply function, but some suggestions are - to make a strong point with a thick midsection and sharp edges; make the surface uniform for even penetration; to attain good balance; or many other reasons for the parallel-collateral flaking.

The word "style" is misleading. "Style" will indicate to your reader - as it did to me - that parallel-collateral flaking is a peculiar choice of form and mode of construction determined according to the worker's fancy and the stage of development of the artifact. "Style" indicates an artistic whim of a particular person or group of people. How can we have a "style" pertinent to one person or one small group of people and then mention stylistic distribution - as you have on Page 2 - from Plainview site in Texas to the MacHaffie site in Montana. If the art of removing parallel-collateral flakes extended from Plainview to MacHaffie - then it was a technique distributed in time and space.

Page 2: You state that there is NO debitage at Plainview. Yet on Page 3 you say "small cobbles or pebbles were broken open using a bipolar technique, and the resultant flakes used directly". How do you know they were cobbles or pebbles and what does "small" mean - in relation to what? How did you conclude that they were broken by the bipolar technique? There are many ways to sever cobbles other than by the bipolar technique and each may leave diagnostic features. If the bipolar technique is executed correctly there should be no resultant flake - so where do you obtain the resultant flakes?

Page 3: You state that a soft hammer percussion is indicated and say this was probably with a very weather hammerstone or a heavy antler billet. "Weathered hammerstone" means nothing. In fact, if the weather caused a build up of lime or silica, the stone could be even harder. Most readers would imagine that a heavy antler billet is anything but soft - yet you do not explain this. You have not related the size of the billet to the size of the material being worked, or, as a matter of fact, to the kind of material being worked. If the billet is large and the material small, the artifact would be projected right out of the worker's hands. If the word "yielding" is substituted for "soft" it might be more definitative. Have you considered the use of a wood billet or do you agree with Semenov that stone can not be worked with wood. All of these points need clarification.

Page 4: You tell of the knapper removing a series of flakes to thin the original flake preform, but you don't specify whether this is by percussion or pressure and then give the basis for such an assumption.

Page 5: You refer to "soft percussion" but do not tell how you arrive at this conclusion. What do you mean by "soft percussion"? Is this a dampening of the blow; a change of velocity, a slight tapping; an arc or straight line blow - or what?

Page 6: You emphasize the word "styles" in relation to projectile points. Does this refer to a technique or morphology?

Page 8: You describe a technique and mention a "strengthening flake". What is a "strengthening flake"? What is the worker strengthening? Or is this merely the method of removing material between the bulb scars to give a sharper edge?

Page 9: You mention removal of considerable facial mass and reduction of thickness but very little edge area. It is a little difficult - if not impossible - to remove the median mass without changing the edge.

Page 10: You state "The MacHaffie System has strong similarities to the technology of the Simon site". The trained eye would realize that these two are not similar. The Simon site material is unique and, as yet, the technique hasnot been defined. Experiments by myself and other have, so far, not resulted in replicas. Since there was no debitage found at the Simon site and the technique is still undefined. I do not think we can correlate the Simon material with MacHaffie.

In summary: You refer to a blank and preform as being the same. We had quite a discussion about this at the school last summer and if you remember they are quite different. In specific instances you have not related your material and techniques. There is little mention of pressure work which would lead the reader to belive that parallel-collateral flaking is an afterthought and of little or no significance.

I agree that we must consider all the stages of manufacture when we are defining a technique, but let's realize that these people were making tools other than just parallel-collateral projectile points and be sure that we are not co-mingling the manufacturing debris of several artifacts. This paper points out the value of basing analysis and conclusions on experiment and replication. There is nothing as potent as experiment. So I hope you will do further research and experimenting before you include this in your thesis.

Congratulations on your job with Scotty. I am sure you will enjoy working at this site. However, again, I caution you not to make snap and pat judgements for this is a very important site and needs careful considered analysis.

Yours very truly.

Don E. Crabtree