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Dear Dr. Miller:

Dr. Earl Swanson has told me of your interest in lithic technology, experimental archaeology and functional experiments. It is, indeed, gratifying that you find this approach to be valuable for an interpretation of archaeology. There is yet much to be done in this field if one is to understand the technological traits expressed when reducing raw material to the finished artifact. I, too, feel that the detritus and waste flakes were used as tools.

I have recently encountered a problem which you may be able to help with and ultimately arrive at some implied solution. It is a matter of functional polish. I find that when a tool is used until the functional edge assumes a polish, that it is then only good for burnishing. Yet we find tools with functional polish on the edges. Why is an edge used to that stage when a new sharp edge can be exposed in seconds by the simple removal of one or more flakes?

Also, I have found that one can use the obtuse angles on lithic material to easily shape and form hard materials rapidly. For example, the obtuse angles on a polyhedral core of obsidian can be used to shape dry bone and it can be used for a long period of time without dulling if the angle of the tool and pressures are right. The dorsal ridge of a single-ridged blade is a superb planing tool. You will be amazed at how quickly a piece of soaked antler can be shaped - long spiral shavings being removed with little effort.

I have submitted a paper to Swanson on the results of using the obtuse angle and will have him send you a copy as soon as it is published. It will emphasize the necessity of closely examining any flaked lithic material for possible tool use.

I could go on at great lengths about experiments yet to be resolved, but have hopes that you will be able to visit us when you come to the States. Alan Bryan and Junius Bird have both told me of the wonderful sites in S.A. I almost envy you the great frontiers of archaeology yet to be evaluated.

Again, I am more than pleased to learn of your uninfluenced experiments and will be looking forward to hearing of your results.

Very sincerely yours,

Don E. Crabtree

ce. 7.2.94