

Rt. 1  
Kimberly, Idaho

April 24, 1966

Dr. Junius B. Bird  
American Museum of Natural History  
Central Park West at 79th Street  
New York, New York

Dear Dr. Bird:

Thank you so very much for sending me your publication, The Concept of a "pre-projectile point" Cultural Stage in Chile and Peru. It is so kind of you to send this paper, for I have enjoyed reading it and it is a nice addition to my library.

I am more than pleased to note that some of your conclusions are based on the relationship of technology to materials. Because of the inherent physical properties of a coarse-textured material, the expected resulting artifacts, debitage, and core material made from inferior stone (such as basalt) will be inferior and lack technological refinements. No degree of skill by the worker can overcome these deficiencies and he cannot obtain results comparable to those which result from the use of materials with a vitreous lustre. Your keen observation of the nature of materials certainly agrees with the results of my experiments in relating technological results to materials. You are projecting an important criteria for lithic material appraisal that has much significance before a final judgement and qualification may be made in analyzing the lithic properties of man's artifacts. Your noteworthy observation of the change from basalt to quartzite in the Chicama Valley is most interesting to me for a material study. I am now making experiments on quartzite material from the Spanish Diggins near Hell Gap and find that this material can be pressure flaked with much precision after it has been thermal-treated. Just finished a replica of the El Jobo with diagonal parallel pressure flaking. After the same quartzites have been altered, they are easier to work than some of the more granular basalts.

I haven't forgotten your asking me about using wood as a pressure tool. I have made numerous experiments using the wooden tool, but am hampered by having a limited source of such material for detailed experiments. So far, ebony has proven best for pressure retouch. There are, no doubt, many woods of equal texture and hardness. I have also tried nutshell as well as marine shell and find them more satisfactory than the wood. Wood becomes fibrous with a minimum of usage, yet it is possible to use it for certain types of retouch. I wish it had been possible to have seen the material from the sites described in your paper to further study, in detail, the working techniques on the artifacts.

Please let me apologize again for disrupting your wonderful Christmas party in 1964 and thanks again for the paper. Hope to see you at the meeting in Reno.

Sincerely,

Don E. Crabtree