

New World Archaeological Foundation



Brigham Young University

April 11, 1977

Mr. Don Crabtree
Route 1, Box 39
Kimberley, Idaho 83341
U.S.A.

Dear Mr. Crabtree:

I have just recently received a response from Dr. Thomas R. Hester in which he referred me to you for an answer of a specific question. In his Tres Zapotes report he mentions several possible core rejuvenation techniques which seem to be evidenced in the lithic debitage. He also emphatically mentions that replicative experiments should be carried out to check his hypothesis. I wrote to him and asked him if he has carried out any replicative experiments since the writing of his paper. In his response he said that he has not yet done so but that he has had several conversations with you in which the subject was discussed. He suggested that maybe you may have done some work along these lines. Have you tried replicating the truncation debitage?

I notice that
^ In rereading one of Heizer's Mesoamerican papers about the Papalhuapa obsidian cores he cites personal communication with you to the effect that a highly controlled thermal technique could have been employed in core preparation. Such a technique would be exciting to know about. Have you done any work on your tentative hypothesis? If so, what are the diagnostic characteristics of this technique?

Before I continue further perhaps it would be best if I introduce myself and tell you why I am interested in these specific questions. My name is John Clark and I am from Burley, Idaho. I am a graduate student in anthropology and archaeology at BYU. I am presently in Comitán, Chiapas, Mexico, working with the New World Archaeological Foundation. My main area of interest, besides Mesoamerica, is lithic replication. I have followed your work closely. I think I have read all of your articles (except your most recent) and seen all of your movies. I have tried to apply the step-by-step procedures that you describe in many of your papers in an effort to teach myself about lithic technology. As you are aware, BYU has no one that knows anything about lithic replication. Therefore, I have been struggling to teach myself. I have been practicing off and on now for about two years. I have gained some abilities in the soft hammerstone percussion manufacture of blades as well as antler baton techniques of biface manufacture. I am able to pressure flake and make notches without difficulty although I am a long way from having your mastery of parallel flaking, etc. One of my most recent attempts has been to try making prismatic blades by using a chest crutch. I am currently analyzing several collections containing these blades and associated debitage. Therefore, I want to manufacture some blades to be used in replication experiments of *edge wear*.

I have had previous unsuccessful attempts with the technique. Most of the problem has been with the vise. I wrote to one of your more successful students, Payson Sheets, and asked him about the technique. He permitted me

2a. Calle Norte Oriente No. 4 - Apartado Postal 89 - Comitán, Chiapas, Mexico

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to examine some photographs that were taken at your field school that were of a great help to me. I wanted to write ~~to~~ you and ~~ask~~ you about these matters but your address has been unavailable to me until Dr. Hester so graciously wrote and told me.

Using all the information that you provide in your monumental American Antiquity paper (1968) and that from Payson Sheets I attempted to make some blades. I preformed some cores using direct percussion. I secured this in a vise such as you illustrate in your paper. I then tried to make blades as you describe. My first attempts were frustrating. I stood over the core pressing down with the chest crutch--trying to build up sufficient pressure. I built up all I could and then pushed outward. The resultant blades were very small. I tried this until I had thoroughly ruined a core. With the next core I was more successful. Instead of trying to separate the two forces I combined them in a sudden thrust. The blades were all of a normal length and width. However, they are somewhat crude due to the original ridges. Unfortunately the obsidian that I am forced to use is of a low quality (very grainy). Therefore the blades from this material cannot be used in replicative experiments of edge damage. For the present time I am forced to wait until I can obtain some higher quality obsidian.

One problem that I have in these experiments is preforming the core. I know ~~about~~ ~~about~~ guiding ridges on the core. I haven't had an abundance of success with this technique. What has been your success ratio in preforming the "macro-cores" that are to be used later in prismatic blade making? Any suggestions?

I realize that this letter has been long and hope it has not been a bother to you. I greatly admire your work and try to incorporate your methods of tight experimental control and of the testing the alternate methods. I thank you for your time and would greatly appreciate hearing your response to some of my queries if it is possible for you to do so.

I would very much like to meet you and talk about some problems in lithic replication. It surprises me how close you live to me and yet that I had to go away from home to learn of your work!

Good luck in your work.

Sincerely,

John Clark

John Clark

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