

Route 1, Box 39  
Kimberly, Idaho 83341

March 15, 1971

Dr. Julian D. Hayden  
4239 Bellevue Avenue  
Tucson, Arizona 85721

Dear Julian:

Thank you so much for your letter of March 10th. I really appreciate your consideration in editing the paper on pressure flaking. You need not send me the edited copy. If Dr. Haury approves it then it can go direct to Ed Wilmsen. I hope Ed will accept it as it is the first paper I have done on pressure flaking. Any changes that you make will be for the best. Writing is not one of my strong points and I find it most difficult to describe manual manipulation. Demonstrations are much more informative than a quantity of text.

You may be right about the definition of hypothesis and theory. My references were from an old book on Lessons in Logic It states that the word hypothesis is synonymous with the latin word supposito - supposition. And that theory is derived from the Greek meaning contemplation, reflection or speculation and is sometimes used as equivalent to hypothesis. I might also suggest that this part of the paper could be deleted and submit it as just a technology paper on the details of pressure flaking. Please feel free to make any changes you may deem necessary in your definition of words.

Dr. Junius Bird as described the Patagonian discoidals in his usual meticulous and detailed manner, examining all features that will have bearing on the objects. The discoidal (a), (b), and (c), Fig. 1, Page 206, American Antiquity 1970 appears to have been misused and served as some kind of a percussor, receiving impact from the perimeter at six and ten o'clock. The illustration also denotes delivery of another blow at nine o'clock which did not remove a flake, but did cause fracture exposed by the removal of the flake at six o'clock or may be a natural plane of weakness. The size of the flake scars show that the discoidal was projected with considerable force in the same direction and similar amount of force but at different places on the perimeter. There are no bulbs of percussion showing that the cone of force was sheared or split which indicates that the force was applied vertical to the perimeter. Junius has already described these flake scars and there is little that I can add except that the finished artifact was misused as a percussor and there is no explaining the blow on the face on Fig. 1 (c). There are, however, four indentations at three o'clock made by a percussor with a convex surface similar to that of a ball peen hammer - that is, if I interpret the photo correctly. The perimeter lacks the

scaring and indentations characteristic to a discoidal percussor. Also, in order to hold a discoidal percussor between the thumb and fingers an indentation or concavity insures a better grip. A discoidal percussor will usually develop facets unless rotated after each blow. Vesicular basalt is unsatisfactory as a percussor because its resistance to shock is not dependable and it develops irregular surfaces. It would only be used as a last resort. The other materials appear to be of a texture that would lend themselves to percussion work but are without the characteristic wear pattern. The weights and sizes of the discoidals are ideal for a percussor. I can conceive only one possible use for these objects and that is when they are covered with leather or padded they could serve as a support for pressure flaking. I have used flat pieces of stone for certain techniques when I desire the flake to terminate by feathering, however my hand anvils are not as sophisticated as these. I had to use this type of support for the needle-like Hohokam points.

One can only imply function and the puzzling Patigonian discoidals will be an enigma for a long time as Junius said. I am afraid I did not add much to Dr. Bird's thoughtful comments.

Please accept my thanks again for the difficult task of editing the paper.

With kindest regards,

Don E. Crabtree

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