

Idaho State University POCATELLO, IDAHO

83201

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Museum

Don & Evelyn Crabtree Route I, Box 210 Kimberly, Idaho 83341

Dear Don and Evelyn:

A belated Happy New Year. I trust all is well with you folks. I heard from Earl that you were both under the weather around the holidays. Hope you are now feeling healthy.

I've been busy here in Pocatello with thesis and graduate work and all. I hope to break away sometime and come down to visit and go over my thesis, as far as it is.

I am enclosing the two pictures of the Flintworking School. Thanks very much for loaning them to me. The copies turned out fine, and they will be a nice addition to my photo collection.

My thesis is coming along a little faster all the time. There is so much written by persons not adequately familiar with the principles of flintworking that I have become bogged down by some of their ideas. In writing a thesis like this I must read all the literature I can obtain; but it now appears to me)not suprisingly though), that the people who know what is important and useful are only those who know flintworking.

Are sent me his paper from the Calgary conference. I really have a high opinion of his work. He seems to have a clear view of the subject and a good mind for approaching the problems.

I have been working on the organization of the Technological Traits paper, while Earl has been going over the text. I have a number of suggestions about the organization of the paper. This type of organization occurred to me while I was doing some of my thesis reading. It seemed to be the most efficient way of approaching it for me, but I don't know if it is the approach you had planned for the paper. If it isn't, then we can work on a better one. Whatever the case, I want you to see it now so that you will have some time to think about it. Earl won't be through with the text for two weeks or so.

The following is my suggestion: The paper appears to fall into two main areas, techniques and technological traits. I think it might be useful to

separate the paper into two distinct papers. One would involve a study of the major techniques used in flintworking, while the other would study the technological traits on stone. I realize that it is most difficult to separate the two; however, I think if the student could first read and understand the basic techniques in flintworking, they could better understand the reasons for and the mechanisms involved in looking at technological traits. You should be able to get them published at the same time and that would help the reader.

The first paper on Flintworking Techniques might be organized as follows:

Section I An Introduction to Techniques

A lot of this is already in the introduction to the Technological Traits paper now.

Section II The Basic Techniques

This is almost complete in the text as we have it. It could be presented in three parts: percussion, indirect and pressure.

Percussion

- 1. Throwing on anvil
- 2. Striking on anvil
- 3. Hammerstone free hand
- 4. Hammerstone with rest
- 5. Hammerstone with rest and clamp
- 6. Hammerstone with rest, bipolar
- 7. Hafted hammers free hand
- 8. Hafted hammers with rest
- 9. Billets or rods free hand
- 10. Billets or rods with rest (this last one is not written yet)

Indirect Percussion

- 1. Billet with punch
- 2. Billet with punch and rest
- 3. Billet with punch, rest and clamp
- 4. Hammerstone with punch, free hand
- 5. Hammerstone with punch, and rest
- 6. Hammerstone with punch, rest and clamp
- 7. Indirect hammer, free hand
- 8. Indirect hammer and rest
- 9. Indirect with fixed punch

Pressure

- 1. Free hand unhafted
- 2. Free hand hafted
- 3. With rest
- 4. Finger held, reverse
- 5. With rest and clamp
- 6. Short crutch
- 7. Long crutch

- 8. Notched tool
- 9. Leaver and fulcrum
- 10. With fixed pressure tool
- 11. On anvil

Section III Specific Techniques

In this section you might want to give a brief description of some of the specific techniques that you are aware of. This might not only include the specific techniques but also might include a discussion of the importance of stages of manufacture. This has not been written yet and I'll mention later how we might make it easier to do.

The second paper on The Technological Traits Associated with Stone Tool Manufacture might be organized as follows:

Section I An Introduction - This is already written in the text we have.

Section II Techniques and Their Relation to Technological Traits. This might discuss the complex nature of how the trait and the technique are so closely dependent on each other. This is not written per se.

Section III The Technological Traits. This section is partly written. You said there are some additions to be made and that should be easy to do. My suggested organization for their presentation follows very closely what you said in the introduction of the text and also in the Introduction to Flintworking. I have added a few traits to the ones in the text that we have. They come from some of your other papers and from the outline in the Introduction to Flintworking (Figure 5). They seem to me to be worth adding. There is a total of 72 purely technological traits. As of now, 36 are in the text and 36 are to be written. You may not want that many. I am eager to hear your feelings. My suggested organization is as follows: An asterix (*) indicates the ones not yet written.

Traits on the Platform

- 1. angle
- 2. width
- 3. thickness
- 4. size *
- 5. natural
- 6. isolated
- 7. ground
- 8. polished
- 9. no platform
- 10. crushed
- 11. orientation to flake
- 12. truncated cone
- 13. no truncated cone
- 14. prepared facet

Traits on the Ventral Face

- 1. undulations
- 2. no undulations
- 3. accentuated bulb (salient)
- 4. diffuse bulb
- 5. lip
- 6. no lip
- 7. erraillure
- 8. no erraillure
- 9. fissures on bulb
- 10. no fissures on bulb
- 11. fissures on margin
- 12. no fissures on margin *
- 13. lateral termination
- 14. compression rings *

Traits on the Dorsal Face

- 1. overhang
- 2. no overhang
- 3. Chapeau de Gandarme
- 4. character of flake scars *
- 5. direction of flake scars *
- 6. one ridge *
- 7. more than one ridge *

Traits on the Lateral Margins

- 1. dull *
- 2. abraided *
- 3. parallel *
- 4. sub-parallel *
- 5. ovate *
- 6. irregular *
- 7. sharp *

Traits on the Distal End

- 1. feather termination *
- 2. flexing termination *
- 3. snapping termination *
- 4. hinge termination * *
- 5. step termination *
- 6. notched termination *
- 7. reverse hinge *
- 8. outre passe *
- 9. greater distal mass * (rapidly expanding)

Overall Technological Traits

- 1. size of flake
- 2. weight of flake
- 3. primary flake
- 4. secondary flake
- 5. thinning flake *
- 6. pressure flake *
- 7. length
- 8. width *
- 9. thickness *
- 10. flake uniformity *
- 11. flake expansion *
- 12. flake concentration *
- 13. straightness *
- 14. curvature *
- 15. flatness *
- 16. spiral *
- 17. patterned flakes *
- 18. flake direction *
- 19. material
- 20. material texture
- 21. heat treated character

Section IV Conclusion You might want to re-emphasize the importance of technological traits.

I personally feel that this work could be your most important contribution to the field. It should show all archaeologists the real need and importance of the technological approach to lithic technology.

There seems to be a good deal which may need to be added to the paper. I want to help make this just as easy as possible. May I suggest something? We have a good dictaphone here in the Museum. Would you consider using it to write the paper, rather than long hours with the typewriter? I am willing and eager to bring it down and operate it while you and I talk. I feel that by talking about the traits and areas which are yet unwritten, you could write them by conversation. Each time we are finished I could bring it back to the Museum and Mae could type them out. It could save a lot of time and energy. It would also give me a chance to visit you folks more often. If you think this could be arranged, please let me know.

Excuse me for going on so, but I wanted to give you folks the opportunity to see what I have been doing, and give you some time to think it over. Please remember these are only suggestions. If you want it to go a different direction, please let me know.

Best of health to all and I hope to see or hear from you soon.

Your student,

William P. Statham

WPS:mj