platform but they made no preparation, so crushing, Extremes of pressure all together by percussion heavy cones, in this sort of

just on here they would strike these. They lack a great deal of control and it seems a very unusual arrary of material.

force comefrom this they had a little utilization on that edge , this direction are it apparently

collapsed flat flake not a burin style but you'll find very deep thick , endescrement

variety of everything it shows almost nothing in the way of technique. It's a little en the lower, scale than what we find in the pit in that case there.

group on here it seems like in needed a very durable point for whatever purpose,

don't know,

don't know,

Never quite thick there is very little diagnotic, on the surface of these flakes

the extreme thickness, to find out that they did appareciate the Clovis point of here They brought bring this one in here from an outside source and they at least admired nice work.

This one here has refinement. The thinning on here does show step thinning " bring this in as a thinner group edgi

Deing servations on here on the one side and then the other ...

They didn't use this too much other than to produce the little projections on the side on bere. Shows very little refinement , one single flake on this side here Then a crushing then on the other side, which is quite different. An unusual piece of palm wood which is quite distinctive in the array of fessil wood being used with that. With these, I didn't see these very well, so I think Dr. Bordes.

Crabtree:

app. T. A. T. On the other side which is quite different on unusual piece of palm wood which is quite distinct in this array of fossil wood. I can't see on the end of the table very well, and I think Dr. Bordes can see them better and tell a little more about them. This is a little out of my catagory, so I would like to turn this over to Dr. Bordes.

Bordes:

Well, these tools which are just to my right, looks as though they could all pass for a medium grade of Mousterian. Almost all of these there are a kind of crude scrapers, choppers, and better scrapers. Kind of six nosed scrapers or something like that, bad cores, and here are chopping tools rather than choppers. Chopping tools worked on two edges, an occasional blade which is retouched on two sides, and that's an end scraper with very flat retouch, That's a bit of a bifacial tool and not very good. Scrapers, very, very flat. scrapers are everywhere. End and side scrapers, big flake. They hit a hard blow on this one. Not much else to say except that they seem to have done a lot of retouch on the flat face of this one too. This one also. Bit of bifacial tools, broken. This doesn't belong to this thing. Well, but scraper. Oh, I should say a flake with a badly faceted striking platform not too well defined on bifacial face by several scars and soon, and then some retouch with step retouch from one side which is perhaps due to the nature of the material rather than the technique of the typology. That's, all right but it takes five or six lines. I would call that, you know ascina scraper and I think that they are the same. As for this obsidian debitage, well, I am not too well today, 75.1.4. but I think I could do better. It's not a very good job. Well, these poor people, they had no real culture yet.

Irwin Williams: Yes, they probably did.

Bordes:

It is hard to explain. That's a peasant culture. Peasants culture, yes. they didn't do much with obsidian. And, for the points, they look not so bad

considerably farther up the point than the Cascade stuff. Here it is essentially at the base.

Bordes:

Finished?

Irwin
Williams:

Well, the only other comment that I have is that I think that both Gerry's and to a somewhat lesser extent my stuff from the Southwest, indicates at least the possibility, and in my case the probability, of the association of relatively well made points and these extraordinarily crude things. And, I think, it is interesting to think about the problem, anyway, of the many comments that have been made on our early cultures. The cultures that have no context, surface materials, etc., which are sometimes considered to be very early just on the basis of pure typology. The point is that it is perfectly possible for people to make stuff like this or like the Cochise, San Jose choppers and scrapers, planes, etc. and at the same time be producing exterior functional bifacial projectile points for spears or whatever.

Daugherty:

That's all. Daugherly Collection Over at the left to the Astation of the was without heat treatment and I'm sure it is older than that.

Geological studies have suggested that it is probably a couple of thousands

years older than that. But we have, I didn't bring the whole assemblage, there are a lot of bone tools with this, long bone shafts like you find with Clovis, serrated bone point, a variety of scrapers. They are flake scrapers as well as these heavy steep angle scrapers. Projectile points you'll notice are of considerable variety, different materials involved. There is one of these crescents, actually two were found. These have a very wide spread distribution throughout the intermountain west and down into Mexico I think that I'll stop at that point and let you look at those.

Bordes:

What's the date did you say? What date?

Daugherty:

The radiocarbon was 8500 B.P. and 9500 B.P.

Bordes:

What?

difficult to tell their original length. Not having an assemblage, but just one flake, it is difficult to tell but it does show that they had the refinement of a pressure technique. The rest of these flakes required more than pressure and this one indicates a sort of a percussion thinning flake, yet still following the outward ridge. Back to Gerry's problem. These are quite interesting preforms made by simply roughing out with the flake technique to avoid transporting a lot of material back to the campsite. There is no refinement in this preform and it is not a tool, but the work was done merely to remove surplus stone. Another percussion type of a little preform that could be later shaped into an artifact. Now with this one, I don't know. Because you find many of these sort of thick objects that do not appear to be preforms, but used as tools as they are. So to sharply define the difference between this tool and this tool is a little difficult because the edges on this one right here show they haven't created a platform to thin it down and make a better artifact. So, this, no doubt, was the artifact itself. And the functional scars on this artifact indicate it has been drug toward the person. Wouldn't you agree, Dr. Bordes?

Bordes:

Yes, I think so.

Crabtree:

This is not a preform, but looks like a sort of little gouging, digging tool because it has been abraded back from this edge and it is not designed particularly for a preform. Each artifact must be appraised and one must determine the difference between a tool and a preform. This, of course, is a little difficult. This one certainly looks like a preformed object with no retouching. No apparent abrasism of the edges, This one is a blow will give you this type of break which are appeared by the accedental. Because it shows a appeared area pick is one spot

Bordes.

This one shows beautiful reference of pressure work. Lenguescallant