also understand the critical interval of contact between the yield of the percussor and the objective piece, the angles of blows, velocities, proper support or inertia of the objective piece, direct or arc-like blows, condition of the surface receiving the impact and other factors too numerous to mention. The amount of force imparted with each blow must correspond with the velocity, collision, impact, dampening - all of which are factors in successful manufacture of stone implements. These are but a few pertinent factors necessary to replicate archaeological specimens. And replication can also contribute ~~pertinent~~ relevent information on the behavior of lithic materials when subjected to stress or force.

Another enigmatic part of experimental archaeology is the matter of function. Functional analysis based on experiment will eventually contribute much useful information about the effectiveness, manner of use, and the tasks the tools performed. The results of functionnal experiments will be many and varied and the results will depend largely on the skill, judgment and reason of the person conducting the experiment. Unsuccessful experiment may be just as significant as successful results and the overall appraisal of many individual experimenters doing the same task will yield better understanding of functional endeavors.

Today, our typeology uses functional names to identify many stone artifacts. For instance, such terms as scrapers, side scrapers, end scrapers, scrapers on flakes and blades, thumbnail scrapers, one hand scrapers, two hand scrapers, etc. Functional experiment will soon convince one that a thumbnail scraper would be somewhat inadequate to flesh the hide of a bull buffalo. Yet at the Lindenmeier site where the extinct large bison was a staple of the Folsom people we find an abundance of these objects. This poses an interesting problem of function. Don't forget that a so-called scraper is also a very useful cutting tool. Experiment may show that scraper-like objects could be used to perform a variety of tasks - some for definite purposes and others a multipurpose tools. Richard Gould and Norman Tindale have observed the Australian aborigine using tools similar to scrapers as hafted objects for hand adzes and they used these to work very hard wood with much skill and precision. Such observations give us the last of the factual

stages of fabrication and functional scars indicating cultural preference of manipulative use. Often a site yields quantities of lithic debris but a scarcity of the tools used to form the artifact. The stone tools manufactured by man, because of their enduring qualities, will naturally sustain the time span longer than the tool kits of antler, bone or wood. Little is known of billets and rod-like percussors. Pressure tools or compressors are seldom found in the workshop or site area except for those recovered in the Arctic and in a few dry caves. We have no idea about the tips of the pressure tools used for blade removal nor of the punches used to perforate flakes and blades. Prehistoric man was able to use these punches to achieve a hole of less than one millimeter in diameter on blades, erallieur flakes, flakes, etc.

Our knowledge of lithic technology is still in its infancy when one considers the time span of the stone age and the universal extinct societies - each contributing a vast array of techniques yet to be resolved by present day researchers. Technicians could spend several lifetimes in attempts to resolve some of the stoneworkings of the Egyptians. One can go on and on about the problems of lithic technology which confront the investigator. We must realize that the techniques were invented by prehistoric artisans and even though man the toolmaker left blueprint models and examples of his skills, it is highly unlikely that all of the prehistoric techniques will be resolved no matter how dedicated the reseachers. We will not get the answers from computers. We must look to ourselves for the solutions and thereby experience the joy of rediscovery. There is a need for continued exploration of the mechanics of flint-like materials when subjected to stress in order to induce fracture. Faulkner, Speth, Tsirk and many others have made major contributions by controlled laboratory experiments. It will be through this approach that we may learn the minimum and maximum amounts of force necessary to fracture areas of a predetermined size. Different materials require distinct amounts of force and only experiment can resolve this requirement. The toolmaker must