

## GLOSSARY

Amorphous	Denoting an irregular shape. Of no determinate form.
Angle of Force	The angle created as a result of applying force either by percussion, indirect percussion, pressure or the combination of pressure and percussion. Usually a vector of force representing a straight line having both magnitude and direction. An exception is the curved or arc-like path of flight when using a special percussion technique.
Artifact	Any type of object made by human hands. This text is concerned primarily with artifacts produced by flaking stone.
Attribute of form	Characteristics and peculiarities of shape which show an indication of traits.
Attribute of Technology	Techniques which have diagnostic value showing modes of manufacture, characteristic traits and patterns of human behavior.
Basal grinding	Intention <sup>al</sup> smoothing of the ( <sup>basal</sup> proximal) end of an artifact to prevent cutting the serving. Used in hafting.
Basal thinning.	A technique accomplished by removing one or more longitudinal flakes from the ( <sup>basal</sup> proximal) edge, either unilaterally or bifacially. Usually done to facilitate hafting.
Basal portion	(The proximal end. See Proximal end.)
Bending flakes	Usually detached by pressure retouch. These flakes have pronounced curves on the plane of fracture. They leave scars on the artifact which extend from one lateral margin toward the opposite edge and past the median line. They are commonly diagonal.
Biface	Artifact bearing flake scars on both surfaces.
Billet	A club-like rod of material other than stone used to detach flakes from flintlike material. usually of wood or antler.
Blade	Specialized flake with <sup>1 more or less</sup> parallel lateral edges, the length being equal to or more than twice the width. Cross-sections are plano-convex, triangulate, sub-triangulate, rectangular, trapezoidal and those with more than two (crests or) ridges. The more typical is trapezoidal.
Blank	A usable piece of lithic material of adequate size and form for making an artifact - such as unmodified flakes of a size larger than the proposed artifact.

- Burin Core Thin tabular flakes, blades or artifacts from which one or more burin spalls have been removed. May serve as tools or a source of burin blades, or both.
- Burin Spall Specialized flake or blade removed from a burin core. Because of the nature of the core, the burin blade must be thick in relation to its length and is usually triangulate or rectangular in section. Such a blade has important functional value because its form supplies strength without bulk. Made by both the pressure and percussion techniques.
- Bulb of applied force. The bulbar part on the ventral side at the proximal end of a flake. It is the remnant of a cone part. Commonly called the bulb of percussion which indicates a group of specialized techniques. The bulb of force is produced by both pressure and percussion techniques.
- Bulb of percussion See bulb of applied force
- Bulb of pressure See bulb of applied force
- Burin break Scar on flake or blade from which a burin spall was removed.
- Chalcedonic Of, or pertaining to chalcedony. Impure chalcedony adulterated with, mixed, or impregnated with foreign matter. Opaque and of any color.
- Chalcedony. A cryptocrystalline variety of quartz, predominately silica and having the near luster of paraffin wax. Transparent or translucent and of various tints. Chalcedony having different colors arranged in strips or layers is called agate. If the stripes or layers are horizontal, it is called onyx. Chrysoprase is green chalcedony. Carnelian is flesh-red and sard is greyish-red or of a brown variety.
- Chip See Flake
- Chopper Core tool often made on a cobble by bifacially flaking one end. If unifacially flaked, it could play a dual role, being a chopper or could serve as a core from which flakes were derived.
- Collateral flaking Expanding flakes removed from the lateral edges at right angles to the longitudinal axis of the artifact. No crests or ridges are used to guide the flakes and technique is varied. Can be produced by percussion, indirect percussion or pressure, depending on the size of the flakes.

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- Bulbar scar The negative scar found on a core or core tool that results from the bulb of force - either percussion or pressure. It is a mould of the cone part resulting from flake detachment.

Commingle	To mix or mingle material from two or more sources.
Compression rings	Ripples radiating from the point of force. Can be compared to ripples formed in a pool of still water after dropping a pebble. These are more prominent with percussion than with pressure.
Conchoidal	A diagnostic fracture resembling and having the characteristics and form of half of a bivalve shell. This is the result of definite striking patterns.
Cone of force	The formation of a cone is the result of force applied to materials which have the property of isotrophism. When force is applied vertically to a flat surface, the force will spread causing a cone to form. The apex of the cone will be truncated in proportion to the surface contacted by the agent transferring the force. Each flake is a cone part - or part of the bulb of force.
Core	A piece of isotrophic material bearing <sup>a</sup> negative flake scar or scars. All flaked tool industries are represented by either flakes or cores.
Core type	A core which has a consistency of form and technological traits. Showing elements of culture.
Crest	The raised portion on the marginal parts of a flake or blade scar. Edges of the concave plane of fracture.
Crutch	A wooden staff of varying demensions with a chest rest cross piece at the upper end and a pressure tip inserted at the working end. The shoulder crutch is a smaller varsion of the chest crutch. Their size and construction depends on the type of work to be accomplished. Usually used as pressure tools, but can be used in a combination of pressure and percussion.
Cryptocrystalline	A fine-grained crystalline rock but having distinct particles which are unrecognizable without the aid of magnification. The size of the microcrystals determins the texture.
Denticulation	Prominences resembling teeth - like those on a saw.
Diagonal parallel flaking	Similar to parallel flaking. except the pressure is directed at an angle from right to left. This is the technique of right-handed persons, but a left-handed worker would direct the pressure at an angle from left to right. The preform is held in the palm of the left hand with a right-handed worker and in the right hand when the knapper is left-handed. When a right-handed person holds the preform <del>bn</del> on the fingers of the left hand and

the pressure is directed away from the knapper, the results will emulate a left-handed person.

- Diffused bulb  
A bulb of force which lacks the definition of the cone part. The bulb is disseminated, indicating a broad contact with the pressure or percussion tool. Common to billet technique.
- Direct free-hand  
A method of holding the material to be flaked in one hand without the aid of a rest and directing the percussion or pressure implement with the other hand to detach flakes.
- Direct Rest  
A method whereby the objective piece is supported on an anvil-like object during the flaking process.
- Double diagonal flaking  
Parallel diagonal flakes directed toward the base of the artifact. A herring-bone or Christmas tree pattern results. A most difficult technique because one must be either ambidexterous or must completely reverse both the platform preparation and the direction of force.
- Downward and outward pressure  
Method of coordination of muscle motor habits that cause a blade or flake to be released from the core at the proximal end and then followed to the point of release.
- Eraillure flake  
An enigmatic flake formed between the bulb of force and the bulbar scar. Usually adheres to the core in the bulbar scar. The eraillure flake, itself, leaves no scar on the core. The dorsal side of the eraillure flake bears no compression rings but the ventral side of the eraillure flake does bear compression rings that match the scar left on the bulb of force. The eraillure flake is convex, concave - example: Mendel lenz. (Menicus)
- Exhausted tools  
Artifacts that have been rendered useless because of resharpening or cores consumed from flake and blade removal.
- Feathering  
A technique which produces a flake to terminate in an edge without margin. Produces blades or flakes with keen edges and distal ends.
- Fire checks  
Distinctive minute cracks usually rectangular in shape. Appears in chalcedonic rocks which have been either heated or cooled too rapidly. May be associated with planned thermal treatment or merely the result of accidental heat contact. Excessive heat will cause rocks to become granular and scaly and will usually change the color to a porcelain white.

Fissures	Lines of radii usually originating at the margins of the flakes and directed toward the point of force. Fissures are not cracks, but are crests and troughs. The appearance of fissures on the bulb of force usually indicates that a percussion technique was used. Fissures are also known as hackles.
Flake	A portion of isotropic material bearing a bulb of force and a platform at the proximal end. The flake may be of any size or dimension, depending on which technique was used for removal.
Flake type	Groups of flakes which bear technological attributes showing rhythms and prototypes of their mode of removal from a core.
Flint	A silicious material ideally suited for flaked implement manufacture. It responds well to the application of force (percussion or pressure). Occurs as nodules or nodules in limestones and chalks as rounded and irregular masses.
Flint-like	Any lithic material which reacts like flint when subjected to force. Having the properties of isotrophism and somewhat vitreous in nature. Usually cryptocrystalline and homogeneous.
Flute	A negative flake scar with parallel sides, semi-concave, resulting from force applied to the objective piece which has previously had special preparation of the surface and platform. A concave trough on the artifact from the proximal toward the distal end. Generally related to blade making and basal thinning of projectile points. Produced to provide specialized hafting.
Hackles	See Fissures
Hinge fracture	A fracture at the distal end of a blade or flake which prevents detachment of the flake to its proposed terminal point. A hinge fracture terminates the flake at right angles to the longitudinal axis and the break is usually rounded or blunt. Not to be confused with a step fracture.
Homogeneous	Of the same structure, nature, kind. Of like substance.
Inclusion.	An impurity or foreign body which deters the homogeneity of the lithic material.
Indirect free-hand	A percussion technique that involves striking a punch-like tool with a percussor while the objective piece is held in the unsupported hand. Normally requires the services of a second person.

In situ	Natural position of an object or material. Where first formed or deposited.
Intermediate tool	A punch-like object of antler, bone, wood, stone or metal used to impart force to a pre-determined area on either a core or artifact. Worker strikes the base of the punch with a percussor.
Isotropic	Having the same properties in all directions. Typical of amorphous substances and of crystals of the isometric system. In an isotropic elastic medium, the velocities of propagation of elastic waves are independent of direction.
Leading edge	Working part of artifact or core nearest the knapper.
Lip	Projection found on core or artifact which results from the bulbar scar. A concavity causing an overhang usually found on the leading edge.
Lithic	Pertaining to stone. Greek "lithos" - stone.
Mass	A quantity of matter forming a body.
Mechanics of fracture	The science of motion and force applied to materials which are isotropic by nature.
Meniscus	Concave on one side and convex on the other. See erailure flake.
Microblades	Diminutive blades generally made by pressure technique. Common to some Arctic cultures. See blades.
Micro burin	Not to be confused with either a diminutive burin spall or burin core. They serve a similar function but are made by a special technique of severing prismatic blades.
Microliths	Very small tools of geometric forms commonly used in composite tools. Formed from prismatic blades using the sharp unmodified lateral edges as the cutting part of the tool.
Mingle	To mix or mingle material from one source.
Notching.	Technique of indenting the base of a projectile point or knife to facilitate hafting. Several traits may be identified.

Non-undulated	Flakes and flake scars showing the absence of compression rings on the plane of fracture. Related to materials and special techniques.
Objective piece	Flake core or artifact being formed by various flaking techniques.
Oblique flaking	Parallel flaking directed diagonally across the surface of the artifact. Direction is usually from the upper right to the lower left.
Overhang	See lip
Parallel flaking	The last stage of several stages of pressure retouch. Artifact surface must be regular and uniform before precision parallel flaking may be done. Micro bladelets are removed in sequence and at right angles from the lateral edges.
Patina	An alteration of the surface by molecular or chemical change and not to be confused with sand blasted.
Percussion flaking	A method of striking with a percussor to detach flakes or blades from a core. Percussion flaking includes various techniques used to remove flakes by either impact, collision or concussion.
Percussor	An implement used for striking. Includes hammers, hammerstones or billets.
Plane of cleavage	The splitting, or tendency to split, along planes determined by crystal structure, or by bedding planes in sedimentary rocks. Parallel planes of weakness within the structure which destroy the homogeneity of the material.
Plane of fracture	The surface on the ventral side of the flake bearing the bulb of force and the negative scar bearing the bulbar scar.
Plano convex	Flat on ventral surface - curved on dorsal surface. Common to unifacial artifacts.
Platform	The table or surface area receiving the force to remove the flake. Can be either natural or prepared. The truncation of the cone part.
Platform angle	The angle of the platform from the dorsal to the ventral side. At right angles or less to the longitudinal axis



Precision thinning	A technique causing the flakes to meet at the median line of the artifact by either parallel or collateral flaking. The first series of flakes must terminate in a hinge or step fracture.
Preform	An unfinished, unused form of the proposed artifact. Larger than, and without the refinement of, the completed tool. Made by direct percussion. Thick, irregular edges, deep bulbar scars and no means of hafting.
Pressure flaking	A method of removing flakes by the pressure application of force which includes various individual techniques.
Prismatic blade	Long, narrow, specialized flake with parallel sides. Trapezoidal in section and generally bearing three prism-like facets on the dorsal side. Associated with blades removed from a polyhedral core.
Projectile point	Spear, dart or arrowpoint.
Random flaking	Multi-directional, multiform and without order for making the artifact regular in form. Used without further refinement; or a stage of primary retouch prior to precision flaking.
Residual core	The part of the core remaining after removal of blades or flakes. Amorphous and without definite form.
Retouching	A technique used to thin, straighten, sharpen, smooth and make the artifact more regular in form, generally involving the use of pressure in one or more stages. Retouching usually follows percussion preforming. Before precision pressure work may be accomplished, one must first remove all irregularities by a primary retouch and then do a secondary retouch.
Ridge	A projection. The intersection of two surfaces forming a salient angle. The median longitudinal lines of an artifact romboidal in section. Long crest or spine either natural or made by unifacial or bifacial flaking. Generally used to guide first blade from core.
Ripple	Waves appearing on the plane of fracture. Compression rings. Characteristic to solids which have the properties of a viscous liquid.

- Salient bulb** A bulb of force having good definition of the cone part. Indicating a confined contact of force.
- Serrating** Indenting the edges by alternating the removal of flakes or repeating notches at regular intervals.
- Silex** A term commonly used to define Old World rocks of a siliceous or chalcedonic nature. No doubt derived from the French word "silex", meaning flint. Not to be confused with a trade name of a manufactured glass.
- Sinuous** Snake-like, alternating, or wavy. Produced on the margins or lateral edges of artifacts by removing the flakes alternately.
- Spall** See flake.
- Step-fracture** A flake or flake scar that terminates abruptly in a right angle break at the point of truncation. Caused by a dissipation of force or the collapse of the flake.
- Stronger platform** A platform which has been strengthened by providing a greater area to receive the applied force. Or made stronger by polishing an isolated platform.
- Thermal treatment** Method of altering siliceous materials by exposure to controlled heat. This treatment makes the stone more vitreous
- Thinning flakes** Flakes removed from a preform either by pressure or percussion to thin the piece for artifact manufacture. Usually shows special platform preparation.
- Tiping** The technique of making a tip or point on the distal end of an artifact. Several methods may be ~~xxx~~ used to accomplish this.
- Tranchet blow** Technique of striking to sharpen or resharpen cleavers and handaxes. Blow is struck obliquely to the marginal edge to remove a flake crosswise and at right angles to the main axis of the tool, leaving a sharp transverse edge.

Transverse flaking	Parallel flaking directed horizontally to the long axis of the artifact and meeting at the median line.
Transverse projectile points	Old World points made from a section of blade with the lateral margin serving as the tip of the point. When employed, they cause profuse hemmoraging.
Trough	Channel scar left by flake or blade removal leaving a concavity from the proximal to the distal end of the plane of fracture. Single troughs are known as flutes.
Typology	The classification of artifacts by families and groups. Based on form and technological traits.
Undulations	Similar to compression rings and rippling. Common to blades when the downward and outward forces are not equalized.
Uniface	Artifact flaked on one surface only.
Unilateral parallel flaking	A type of diagonal flaking made by bending the bladelets from one edge to the other and terminating them by feathering before they reach the opposite edge. May be made by either palm or finger holding.
Vitreous	Having the near luster of glass.