

ANALYSIS OF FLAKES RELATIVE TO FLINTWORKING TECHNIQUES

Primary step in the study of flintworking and surface character of stone artifacts
Outline does not deal with form.

MATERIALS:

TYPE OF STONE

Flint and Flint-like Materials (silica forms)

Obsidian

Ignumbrite

Rhyolite (basalt

Lava

Opal

Chalcedony

Hornstone

Jasper

Agate

Petrified Wood

Quartzite

Silicified Sediments

Quartz Crystal

GRADE

Desirable

Undesirable

Clevage Plane

Inclusions

Vesicles

Crystal Pockets

Under Stress and Strain

Cracks

Checks

SOURCE

Quarries

Cobbles

Veins

Ledges

Surface, etc.

Ca. 31.3.1.(5)

TEXTURE

Luster
Granular

Fine
Medium
Course

COLOR

FLAKES

CHIPS

SPALLS

Portions of material detached by percussive or pressure, or both, from a core or a larger piece of material than the original flake

DETACHED BY:

MAN

HOOVED ANIMALS

ELEMENTS

Natural expansion, contraction & diastrophism

INTERNAL PRESSURE

Exfoliation

EXTERNAL

TIDES

Dehydration SHRINKAGE

EARTH MOVEMENT

TALUS

Expansion & Contraction

ICE MOVEMENT

WATERWAYS

THERMAL FRACTURES

Forrest Fires

Range Fires

Overheated in Household Fires

FLAKES

PERCUSSION, PRESSURE OR BOTH

Fine retouching, notching & serrating

Micro Flakes

Small

micro flakes

Blades (Prismatic) (MICRO)

Medium

Specialized Flakes

Parallel Sides

Large

One Dorsal Ridge

Two Dorsal Ridges

Short

Length = Width

Micro Blades

Medium

2 x Length = Width

Burin Blades

Long

3 x Length = Width

Sidestruck Flakes

Uniface, European

Channel Flakes

Extra Long

4 or More x Length = Width

HINGE

REVERSE KING

ERRATA

Thin

Normal

Thick - Tabular

Right angular sides

Sections of cleaved flakes

Sections of pebbles

Sections of cobbles

Sections of nodules

Straight

Percussion

~~Sections of cobbles~~

~~Sections of nodules~~

Curved

Dorsal

Spiral

SOURCE
SHAPE OF FLAKE

One Dorsal Ridge

Ventral

Blow Technique

Two or More Dorsal Ridges

POSSIBLE Heat Treatment

Proximal End

Size of Platform

Preparation of Platform

Character of bulb or pressure or percussion (FAILURE)

Direction of Force Scars (Striations)

Presence of bulbar scar

Angle of Platform

Polished

Abraided

Order of Flaking

Distal End

Feather Edge

Hinge Fracture

Step Flake

REVERSE HINGE

Undulations

Shock Fracture

End Character

Planned Thermal Treatment
(Quartz Family)

Heated

Color change (Cortex) for identification

Unheated

Overheated

Crazed

Checked, potlids, exfoliation,
No bulbs of force

Cores

All flaked stone artifacts are cores if the surface of one or more sides are covered with flake scars.
~~Cores will produce flakes and blades~~

Conical

Cylindrical

Rectangular

Uniface

Turtle back, not European

Biface

Multiface

Utilized Cores

SHAPE will
Help indicate
TECHNIQUES

METHOD TYPOLOGY

SURFACE

Dorsal
Ventral

Irregular - Random (Preform)
Regular

*Precussion and
undetermined pressure*

Relative to length →

Wide
Medium
Narrow

Number of flakes per inch →

Parallel (Right Angle)
Oblique
Double oblique
Chipped from one edge only
Order of Flake Removal

Radial Scars indicate
direction of force

Angle
Thinning
Hinge Fractures
Ripple
Released at Center
Depth of flutes
No Flutes
Bulbs of Force
Unflaked Surfaces

*flats
flint*
With flats, indicative
of Thermal Treatment

Edges:

Can indicate function

Irregular
Regular

shearing

Beveled
Sharp
Dull
Sinuuous
Alternating
Ground
Polished
Serrated

Deep
Shallow
Medium
Manner of Removal

Crushed
One Side
Both Sides
Alternate
Serrated as tool is
retouched

BASAL ASPECTS

Thinning

Fluting

Grinding

Polishing

Hafting Technique or Notching

side

corner

basal

← Narrow
Wide

Concave

Convex

Straight

Recurved

Preparation

Single Flakes on both sides

Multiple Flakes on Both Sides

Widening of Notch after narrow opening

Specialized Hafting

Cross section

Convex

Double convex

Diamond

Strength may indicate function

TIPS

SHARPENING METHODS

DIRECTION OF FLAKES