

INDEX

- Aborigines, 209, 223, 235
- abrade, 252
- abrading, 12, 208
- abrasion, 171
- adze, 202, 208, 252
- Africa, 220
- agglomerative approaches, 68, *see also* classification
- Ahler, S., 6, 9, 102, 114, 132, 135, 137, 226
- alternate flaking, 252, *see also* flaking pattern
- Amick, D., 10, 38, 98, 196
- Ammerman, A., 98, 119, 127, 132, 216
- andesite, 24, *see also* rock types
- Andrefsky, W., 9, 10, 15, 22, 23, 28, 39, 62, 74, 90, 102, 109, 114, 119, 124, 132, 139, 153, 185, 207, 224, 236, 239
- angular shatter, 84
- antibody, 199, 252
- antigen, 199, 252
- antler, 12
- anvil, 252
- application load, 13–14
- Archaic, 191
- argillite, 58, *see also* rock types
- arris, 106, 252
- arrow point, 22
- artifact, 252
- association, 72
- Atlatl, 74, 252
- attribute, 63, 65
- attribute scale, 65–6
- interval, 65, 66
- nominal, 65, 66, 75
- ordinal, 65, 66
- ratio, 65, 66
- Aubry, T., 178
- Austin, R., 10, 126
- Australia, 209, 223, 235
- backing, 144, 168
- blades, 81, 219
- Bamforth, D., 7, 175, 192, 203, 235
- barb, 32, 38, 207
- basal grinding, 253
- basalt, 24, 48, *see also* rock types
- base camp, 212, 214
- Batak, 225
- Baumler, M., 107, 129, 136, 148, 166
- bedding plane, 24
- bending, 28, 118, *see also* flake types
- beveled, 253
- biface, 12, 22, 70, 77, 143, 178–95
- functions, 31
- hafted, 31, 77
- nonhafted, 180, 181
- stages, 187, 188
- biface thinning flake, 123, 230, 237
- bifacial core, 16, 146, 157, 229, *see also* core types
- billet, 12
- Binford, L., 31, 185, 202, 210, 218, 226, 248
- bipolar technology, 25–8, 234, 241, *see also* core, bipolar
- blade, 12, 16, 71, 85, 165
- blade element, 23
- Blades, B., 175, 224
- blank, 82, 104, 144, 151, 162, 165, 167, 171
- Bleed, P., 16, 165, 175, 207, 224
- Boeda, E., 149
- Bordes, F., 4, 8, 149, 202
- Bosnia, 155
- Bradbury, A. P., 10, 140
- Bradley, B., 8, 187
- bulbar scar, 253
- bulb of force, 20, 26, 28, 118
- bulb of percussion, *see* bulb of force
- burin, 161, 208
- burin spall, 254

- Callahan, E., 8, 22, 187
 Carr, P., 10
chaîne opératoire, 38, 254
 chalcedony, 24, 53, *see also* rock types
 Chatters, J., 214–16
 chert, 24, *see also* rock types
 chip, 12, 16, *see also* flake
 Christenson, A. L., 22, 62
 Clark, J. E., 8, 16
 classification, 41, 61–2, 145, 181, 246
 agglomerative, 68
 association, 72
 disassociation, 72
 dissection, 68
 divisive approaches, 68
 modal approaches, 69
 monothetic approaches, 67
 morphological typology, 30, 75, 82–4
 numerical, 185
 polythetic, 67
 clastic rock, 51
 cleavage plane, 254
 Close, A., 202
 collateral flaking, 254, *see also* flaking
 pattern
 collector, 210, 212
 Colorado, 229
 compression flake, 25, *see also* flake types
 compression rings, 125, *see also* ripple marks
 conchoidal, 25–6
 flake, 16, 20
 fracture, 16, 119
 cone, 26, *see also* Hertzian cone
 Conkey, M., 202
 core, 12, 14, 81, 143, 144–59, 181, 219
 bifacial, 16, 146, 150, 157, 229
 bipolar, 16, 25–8, 153
 centripetal, 155, 234
 definition, 81
 Hokoru, 146
 Levallois, 16, 145, 147, 149, 152
 microblade, 16
 multidirectional, 16, 82, 145
 polyhedral, 16
 Shirataki, 15, 145
 tool, 81
 unidirectional, 15, 82, 145, 151
 wedge-shaped, 147
 Yubetsu, 15, 146
 cortex, 103–6, 104
 Cotterell, B., 9, 22, 25, 89, 118
 Crabtree, D., 4, 8, 16, 28, 88, 118
 crazing, 254, *see also* heat treatment
 cryptocrystalline, 24, 53, 239
 curated, 192
 curation, 254
 Dalton, 34, 205
 debitage, 16, 22, 82, 143
 attributes, 113, 165, 229
 condition, 87
 cortex, 103–6
 curvature, 109–11
 dorsal scars, 106–9
 length, 99, 132
 size, 98, 102, 132
 termination, 20, 87
 thickness, 104
 width, 99
 debitage analysis, 113–14
 aggregate, 114, 131, 134
 application load, 118
 attribute, 114
 free standing, 127, 129
 individual, 113
 mass analysis, 140
 technological, 120–7
 triple cortex, 116, 118, 223
 typological, 114
 debris, 16, 128, *see also* debitage
 decortication flake, 254
 denticulate, 255
 detached piece, 12, 144
 diagonal parallel flaking, 255, *see also* flaking pattern
 diatom, 54
 Dibble, H. L., 38, 89, 140, 175, 220
 dissection, 68
 distal end of flake, 20, 78, 170
 diversity, 201, 216
 divisive approaches, 68
 dorsal ridge, 86, 106, 169
 dorsal surface of flake, 16, 20, 78, 82, 160
 drill, 34, 208
 edge angle, 160, 255
 effort, 226
 elasticity, 255
 elastic limit, 255
 endscraper, 34, 81, 205, 206
 end shock, 255
 England, 208
 errillure, 20, *see also* flake types
 expedient tool, 31
 exterior platform angle, 255
 facet, 18, *see also* flake type
 feathered termination, 20, *see also* flake termination
 fissures, 24

- flake, 12, 16, 82
flake scar, 106–9
flake termination, 20
 feathered, 20, 29, 87
 hinged, 20, 29, 87
 plunging, 20, 29, 87
 stepped, 20, 29, 88
flake tool, 22, 78, 85, 160–75
flake types, 25–8, 29
 bending, 25–8, 29
 bipolar, 25–8, 113, 123
 conchoidal, 16, 20, 29
 erraillure, 20
 shatter, 28, 82, *see also* biface thinning flake
flaking pattern,
 alternate, 252
 collateral, 254
 diagonal parallel, 255
 oblique, 258
 parallel, 259
Flenniken, J. J., 8, 38, 86, 120, 197, 224
flint, 24, *see also* rock types
flintknapping, 7, 24, 25
flute, 256
forager, 211
force, 12, 256
foreshaft, 31, 77
formal tools, 31, 162
fracture mechanics, 11, 24, 25
fracture types, 25–8, *see also* flake types
Frere, J., 3
Frison, G., 4, 9, 22, 74, 179
Fullagar, R. L. K., 196, 198, 199
function, 195–8, 202–9, 220

gabbro, 48, *see also* rock types
geochemical technique, 43–6
 atomic absorption spectroscopy, 45
 electron microprobe, 44
 inductively coupled plasma emission, 45
 instrumental neutron activation, 45
 particle induced X-ray emission, 44
 X-ray fluorescence, 44
glass, 24
Goodyear, A., 4, 22, 34, 123, 153, 205, 224
Gould, R., 39, 203, 209, 235
Grace, R., 7, 203
granite, 42, *see also* rock types
grinding, 75, 169
ground stone tools, 256
gun flint, 8

hackle marks, 24, 256, *see also* fissures
haft, 171
haft element, 23, 77, 168, 182
hafted biface, 22, 77, 179, 181, 203
hammerstone, 12
handaxe, 31
hard-hammer percussion, 26
Hardy, B. C., 198, 199
Hayden, B., 6, 39, 143, 203, 205, 223
heat treatment, 256
 crazing, 254
 pot lip fracture, 260
Hertzian cone, 26, 28, 124
Hester, T. R., 22, 165, 206
hinge fracture, 20, 29
hinged termination, 20, *see also* flake terminations
Hiscock, P., 165, 175
Hofman, J., 9
Holmes, W., 3
homogeneous, 14, 24
hornfel, 59, *see also* rock types

igneous rock, 48–50, *see also* rock
inclusion, 256
index of invasiveness, 175
indirect percussion, 12
informal tools, 31, 162
in situ, 256
interval data, 65
Italy, 231

Jacobi, R., 207
jasper, 53, *see also* rock types
Jelinek, A., 8, 38, 202
Johnson, J., 16, 103, 193

Kammaing, J., 20, 22, 25, 118
Keeley, L., 6, 22, 79, 171, 203
Kelly, R., 22, 31, 124, 126, 143, 157, 216, 225, 227, 229
knife, 34, 77, 181
Kooyman, B. P., 7, 143, 173, 197, 199
Kuhn, S., 16, 39, 155, 175, 178, 231, 233

lanceolate, 77
lateral margins, 20, 165
Late Stone Age, 220
lava, 46
Levallois, 234, *see also* core type
lip, 18, 118
lithic, 1–3, 11, 42
lithic technological organization, 175
lithic technology, 38, 226
load, 13–14
Luedtke, B., 41, 54

- macrocrystalline quartz, 53
 mafic rock, 47, *see also* rock
 magma, 46
 Magne, M., 86, 89, 106, 147
 maintenance tools, 222, 239
 mass, 257
 mass analysis, 140, 257, *see also*debitage
 analysis
 maximum linear dimension (MLD), 145
 mean, 257
 median, 257
 Mellars, P., 22, 148, 164
 Mesolithic, 89, 218
 metamorphic, 56–9
 metamorphosed, 57, *see also* rock
 metaquartzite, 56, *see also* quartzite
 microcrystalline quartz, 49, 50, 53
 microdebitage, 136
 microlith, 32, 81, 85, 165, 207
 microblade, 16, 145, 146, 165, 207
 microburin, 258
 microchipping, 196
 microscopy, 6, 173, 195
 high powered, 7
 low powered, 7
 microwear, 5–7
 Middle Stone Age, 22, 23, 29
 minimal analytical nodule analysis, 141
 mobility, 155, 175, 210, 224
 modal approaches, 69, *see also* classification
 mode, 258
 monothetic approaches, 67, *see also* classification
 Montet-White, A., 155, 168, 220
 morphological dynamics, 30–40
 morphological typology, 30, 82–4, 85, 86, 246,
 see also classification
 morphology, 4, 16, 38
 Mousterian, 155, 202, 231, 234
 multidirectional core, 82, *see also* core type
- Netherlands, 208, 218
 Newcomer, M., 7, 197, 203
 nodule, 12, 82
 nominal data, 65, *see also* attribute scale
 notching, 31, 77, 126, 168, 171
- objective piece, 12, 14, 22, 29, 76, 81, 144
 oblique flaking, 258, *see also* flaking pattern
 obsidian, 24, 48, *see also* rock types
 Odell, G., 6, 22, 61, 74, 90, 92, 102, 168, 195,
 203, 207
 opal, 53, *see also* quartz
 ordinal data, 65, *see also* attribute scale
 orthoquartzite, 52, *see also* quartzite
- outrepassé, 20, *see also* flake termination
 overshot, 20, 87, *see also* flake termination
- Paleoindian, 34, 178, 191
 parallel flaking, 259, *see also* flaking pattern
 Parry, W. J., 124, 126, 158, 174, 224, 227, 229
 patina, 259
 patination, 42
 Patterson, L., 9, 22, 102, 135
 pecking, 259
 percussion flake, 12
 percussion flaking, 12, 75
 percussor, 259
 Perkiomen, 36
 perverse fracture, 259
 petrography, 259
 phenocryst, 49
 phytoliths, 198
 plano-convex, 259
 platform, 15, *see also* striking platform
 platform thickness, 94
 plunging termination, 20, *see also* flake
 termination
 point of applied force, 12, 18, 28, 83, *see also* striking
 platform
 polarized light, 259
 polish, 76, 169, 171, 183, 196
 polyhedral core, 16
 polythetic approaches, 67, *see also* classification
 porphyry, 259
 pot lid fracture, 260, *see also* heat treatment
 preform, 77
 prehension, 167–71
 hand, 168
 handle, 168, 179
 pressure flake, 118
 pressure flaker, 260
 pressure flaking, 12, 75
 primary lithic source, 160, *see also* quarry
 production process, 30, 31–4
 projectile point, 22, 34, 179, 203
 provenance, 260
 provenience, 260
 proximal end of flake, 20, 78
 proximal flake, 89, 170
- quarry, 31, 135, 191
 primary lithic source, 160
 secondary lithic source, 261
 quartz, 24, 53
 macrocrystalline, 53
 microcrystalline, 53
 opal, 53
 quartz crystal, 50

- quartzite, 24, 46, 56
 - metaquartzite, 56
 - orthoquartzite, 52, 58
- Rasic, J. C., 10, 141, 224
- raw material, 28, 151, 155, 224
 - availability, 152, 242
 - quality, 155, 162, 224
 - shape, 241
 - size, 241
 - sources, 191, 235, 236
 - types, 239, 240
- reduction, 83, 90
 - sequence, 187
 - stage, 187
 - trajectory, 90, 133, 165, 193
- refitting, 9, 114, 141
- refuse, 16
- reject, 260
- rejuvenate, 260
- replication, 7–10
- resharpening, 23, 161
- residence, 212
- residue, 198, 199
- retouch, 79, 169, 171
 - index, 175
- reworking, 12
- rhyolite, 24, *see also* rock types
- ripple marks, 20
- rock, 41, 42
 - composition, 48
 - igneous, 46, 47–50
 - mafic, 47
 - metamorphic, 46, 47, 56–9
 - sedimentary, 46, 47, 50–6
 - sialic, 47
 - texture, 48
- rock types, 42–60
 - andesite, 24, 47, 48
 - argillite, 58
 - basalt, 24, 48
 - chalcedony, 24, 53
 - chert, 24, 53
 - flint, 24, 53
 - diorite, 48
 - gabbro, 48
 - granite, 42, 48
 - hornfel, 59
 - jasper, 53
 - obsidian, 24, 48
 - quartz, 24
 - quartzite, 24, 46, 52
 - rhyolite, 24, 48
 - sandstone, 46, 52
 - shale, 50, 58
 - siltstone, 52, 58
 - slate, 56
- roll-out, *see* hinge termination
- Rolland, N., 148, 164, 224
- Root, M. J., 102, 118, 123, 140, 191
- Sackett, J., 202
- sandstone, 46, *see also* rock types
- Santa Ynez, 192
- scraper, 74, 178, 181, 219
- secondary lithic source, 261, *see also* quarry
- sedentism, 39, 224, 226
- sedimentary rock, 50–6, *see also* rock
- Semenov, S., 4
- serrated edge, 81, 261
- shale, 50, 52, *see also* rock types
- shatter, 12, *see also*debitage types
- Shea, J. J., 6, 175
- Shott, M. J., 22, 34, 81, 90, 98, 107, 123, 140, 153, 174, 216–18
- sialic rocks, 47
- side scraper, 202
- silica, 24, 53, 196, 198
- silicified, 52
- silicon dioxide, 52
- siltstone, 52, *see also* shale
- sinuous, 261
- size grade, 134
- slate, 56, *see also* rock types
- soft-hammer percussion, 18, 29
- spall, 12, 16, *see also* flake
- Speth, J., 9, 25, 132
- spokeshave, 208
- spurred endscraper, 34
- step fracture, 20, *see also* flake termination
- stone, 41, 42, *see also* rock
- stone tool, 1, 262
- striations, 76, 196
- striking platform, 15, 18, 20, 78, 83, 91
 - abraded, 92, 96
 - angle, 91
 - complex, 96
 - facet, 18, 91, 92
 - flat, 18, 91, 95
 - thickness, 94
 - types, 94
 - width, 94
- Sullivan, A., 86, 104
- Swift Bar, 239, 241
- technology, 262
- tenacity, 262
- thermal treatment, *see* heat treatment
- thin section, 262

Cambridge University Press

0521849764 - Lithics: Macroscopic Approaches to Analysis, Second Edition

William Andrefsky

Index

[More information](#)

- Tomka, S. A., 39, 86, 90, 104
tool, 143
Torrence, R., 224
trace element, 9, 10, 12
trajectory, 90
tranchet blow, 262
transverse, 262
truncation, 170
type, 62
typology, 30, 62, 66, *see also* classification
- unidirectional core, 15, 82, *see also* core
uniface, 229
unimarginal, 79
- uselife, 34
use process, 30, 34–8
usewear, 143
- ventral surface of flake, 17, 20, 78, 82, 160
vitreous, 262
- Washington, 153, 238
waste flakes, 16, *see also* debitage
weight, 129, 262
weight increment analysis, 137
Whittaker, J., 9, 22, 132, 188
- Yerkes, R., 6, 203, 207