

381

## Index

Age of Copper, 48-49 SRAP in, 228 Akha peoples, 191 topography of, 12-13 Akurgal, E., 227 weaving tools in, 246-248 alcohol animals, domestication of, 33. during funeral feasts, 107, 292-293 See also milk production production of, 262 breeding and, 277 Alişar paradigm, 233-239 in grasslands regions, 145-147 İkiztepe settlement and, 229–230, herding practices, 146, 298 in lower Kuban valley, 68-72, 283 234-237 Alkım, U. B., 230 in Maikop culture, for transport, alloys 103-104 with arsenic, 90-92, 289 tool development for, 34-35, 277 copper, 90-94, 214-215 transhumance pastoralism and, 70 with lead, 92-93 in western coastal region, 194-195 in metallurgy, 90-94 animal depictions, on artifacts, 110-113, with nickel, 286 114-115, 293 with silver, 93-94 animal transport in western coastal region, 214-215 development of, 266-268 Anatolian coastal region, 12-14 with hitches, 267 See also Dündartepe settlement; in Maikop culture, 103-104 İkiztepe settlement with shaft draught system, 267 in wheeled vehicles, 103-104, 291-292 Alişar paradigm, 233–239 archaeological fieldwork in, 227-232 architecture, domestic in Anatolian coastal region, 240-241 cereal grains in, 244 at Dündartepe settlement, 240-241 during chalcolithic period, 233-234 climate of, 12, 243-244 in grasslands regions, 160–161 domestic architecture in, 240-241 at İkiztepe settlement, 240-241 European influences on, 253-256 in Majaki settlement, 212 farming practices, 41-42, 244 pit houses, 160–161, 300 food gathering in, 243-245 in Usatovo culture, 179–180, 211–212 food storage in, 245-246 wagons as, 300 grave sites in, 241-243 in western coastal region, 178, 211-212 hunting practices in, 245 arsenic copper, 90-92, 289, 308-309 Kolkheti lowlands, 14 Asia, southwest region metallurgy in, 250-253 farming technology in, 31-35 food technology in, 35-37 millet use, 244 pottery in, 237-238, 248, 255-256 lithic technology in, 37-38 pyrotechnology in, 38-40 precipitation levels on, 12, 13-14 radiocarbon dating for, 238-239 technological developments in, 31-41 textile development, 37 settlement patterns in, 239–243 smelting in, 250-251, 315 axes. See specific axes



Azov, Sea of, 8

382

INDEX

Azov steppes, habitation sites in, 55-60 Balkan coastal region copper archaeology in, 43, 278 farming along, 42-43 Bauer, A., 229 beads. See faience beneficiation, of copper, 87-90 biodiversity in Black Sea, 16-17 in grasslands regions, 9-10 human impact on, 274 in western coastal region, 11 Black Sea. See also Anatolian coastal region; Balkan coastal region; grasslands regions; Kuban valley, lower; sea level changes; western coastal region Age of Copper for, 48-49 biodiversity in, 16-17 maritime trading routes for, 48 Mediterranean water in, 15 during Neoeuxinian stage, 14 New Black Sea stage, 15 Old Black Sea stage, 14–15 Boltenko, M. F., 170 Budde, L., 227 burial mounds. See grave sites Burney, C., 227, 229, 230 Bzhania, V. V., 232 carnelian, 295 casting of metal, 94 in western coastal region, 214-215 cattle. See animals, domestication of Caucasian coast. See also Kuban valley, lower aceramic period on, 47-48 farming technology on, 46-48 grave sites along, 65-66 Great Khorasan Road and, 121-129 lithic technology on, 46-47 Shulaveri-Shomutepe culture and, 46 cemeteries. See also funerals; funeral feasts, in Maikop culture; grave along Caucasian coast, 65-66 ceramics in, 63-65 funeral feasts in, 62-63, 67-68, in lower Kuban valley, 60-66 for Maikop culture, 53-55, 65, 66-67, 108 at Majaki site, 191 stone grave architecture, in north Black Sea region, 162-164 in Usatovo culture, 191 ceramics. See also pottery

on Caucasian coast, 47-48 for Cernavoda III culture, 209 coiling in production of, 78 development of, 264-265 in grasslands regions, 150-153 at grave sites, 63-65 in lower Kuban valley, 78-86 in Maikop culture, 51-53, 54 in northern lowlands, 44-45 pyrotechnology for, 40 social practices through, 220 in Usatovo culture, 203–208 ceramic ecology, 275 cereal grains in Anatolian coastal region, 244 components of, 35 cultivation of, 32-33 food storage for, 71-72 in grasslands regions, 144-145 ground stone technology for, 35, 72 LAB fermentation and, 261–262, 316 in lower Kuban valley, 69 maize, 244 at Majaki site, 192-193 milk consumption and, 36-37 millet, 244 in northern lowlands, 44 thermal treatment of, 36 Usatovo culture and, 192-193 Cernavoda III culture discovery of, 171-173, 175-176 pottery of, 209 radiocarbon dating for, 177 resource exploitation by, 305 social practices in, 220-223 chaff-faced pottery, 118-121 chaine operatoire approach, to technology, 22-23, 276 chalcolithic period, 131-133 Alişar paradigm and, 233-234 Anatolian coastal region during, 233-234 Chernykh, E. N., 87-88, 153 Childe, V. G., 20 clay cones, 72 clay ovens, 246 climate of Anatolian coast, 12, 243–244 of Crimean peninsula, 9 grasslands regions, 143-144 for western coastal region, 11 coastal formation, 14-16 coiling, 78 communication networks, 268-271 Maikop culture as, 269-271 for technological developments, 268-269 copper. See also Age of Copper alloys, 90-94 on Anatolian coast, 42

on Anatolian coast, 42



arsenic alloys, 90-92, 289, 308-309 Doonan, O., 228 in Balkan coastal region, 43, 278 Dündartepe settlement beneficiation of, 87-90 clay ovens in, 246 flat axes, 96-97 domestic architecture at, 240-241 in grasslands regions, 154-158 food storage at, 245-246 lead alloys, 92-93 pottery at, 237-238, 248 for Maikop culture, 87-88 weaving technology at, 246-248 mining of, 87-90 nickel alloys, 286 Earle, T., 68 in northern Black Sea region, 157–158 economics, technology influenced pickaxes, 290 by, 24 pyrotechnology for, 40, 278 Eurasia farming development in, 31-35, 41-48 as resource, 10, 265-266 shaft-hole axes, 98 Neolithic package and, 31 silver alloys, 93-94 silvering of, 96 Anatolian coastal region contact, 226 smelting of, 87-90, 278 western coastal region contact, 226 types of, 87-88 Evdokimov, G. L., 131 in western coastal region, metallurgy faience with, 212-220 copper silvering, 96 in lower Kuban valley, 86-87 cotton, in lower Kuban valley, 74, 283 in Mesopotamia, 86-87 cows. See animals, domestication of in Tripolie culture, 210 craftspeople, technology for, 29–30 in Usatovo culture, 209-210 Crimean peninsula families, grave sites for, 66 climate of, 9 farming practices. See also food grasslands along, 8 gathering; food production along Anatolian coast, 41-42, 244 pottery evidence in, 152 precipitation levels on, 8 along Balkan coast, 42-43 crops, domestication of, 33 on Caucasian coast, 46-48 in lower Kuban valley, 68-72 through controlled breeding, 32 stages of, 277 cultivation of cereals, 32-33 crucibles, in smelting technologies, development of, 260-261 domestication of animals, 33 89-90, 308 domestication of crops, 33 cultural ecology ceramic ecology in, 275 in grasslands regions, 10, 143-148, 274 technology and, 21, 275 ground stone technology for, 35 Korenevskij on, in lower Kuban culture definition of, 275 valley, 68-69 feedback process in, 275 in lower Kuban valley, 68-72 innovation influenced by, 24 in northern Black Sea region, technology and, 19 143-148 cupellation, 287-288, 310 in northern lowlands, of Black Sea, cylinder seals, 293 43–46 during PPNA period, 32-33 during PPNB period, 32-33 daggers manufacture of, 218-220 in southwest Asia, technological violence with, 221–222 advancements in, 31-35 Danilenko, V. M., 131 throughout Eurasia, development of, Danube delta, 171, 274 31-35, 41-48 Dnestr-Danube Rescue Expedition, tool development, 277 171 for Usatovo culture, 192-196 grave sites in, 190 in western coastal region, 192-196, settlement sites, 180-181 197-198 Dietler, M., 106 farming tools, archaeological Dneprovskij, K., 55-56 evidence of Dnestr-Danube Rescue Expedition, 171 development of, 34-35, 277 in grasslands regions, 144 domestic architecture. See architecture, domestic in lower Kuban valley, 69-70 Dönmez, Ş., 230 in western coastal region, 193-194

383 INDEX



> 384 INDEX

Fedorov, P. V., 14-15 gender, technology and, 18-19 feedback process, 275 gold, metallurgy with, 90 females. See women grasslands regions, 8-10 along Crimean peninsula, 8 fishing practices tools for, 197 archaeological fieldwork in, 130-131 for Usatovo culture, 197 biodiversity in, 9-10 in western coastal region, 196-197 ceramics in, 150-153 flat axes, 96-97 cereal grains as crop in, 144-145 during chalcolithic period, 131-133 chronology of development in, in grasslands regions, 148-149 in lower Kuban valley, 75 133-134 as resource, 10 climate, 143-144 in Usatovo culture, 202 copper artifacts in, 154-158 dispersed communities in, 134-143 flora and fauna. See biodiversity food gathering domestic architecture in, 160-161 domestication of animals in, 145-147 in Anatolian coastal region, 243-245 storage techniques, 35 farming in, 10, 143-148, 274 food preparation flint use in, 148-149 in clay ovens, 246 food storage in, 145 development of, 261-262 funeral feasts in, 143 at grave sites, 62-63, 67-68, 104-108 grave sites in, 131, 134-135 in lower Kuban valley, 71–72 herding practices in, 146, 298 in Maikop culture, 72 human figurative stonework in, at Majaki, 199 161-165 technology for, 30 hunting practices in, 146-147 in Usatovo culture, 198–199 lithic technology in, 148-150 food production. See also cereal grains manufacturing technology in, 148-161 development of, 261-262 metallurgy in, 153-159 milk consumption and, 36-37 metalwork in, 158-159 in southwest Asia, 35-37 Mikhajlovka site, 135–138 technology for, 29, 35-37 milk production in, 146 mineral resources in, 10 food storage in Anatolian coastal region, 245-246 nomadic pastoralism in, 133, 297 for cereal grains, 71-72 ornamental stone use in, 150 pottery evidence in, 150-152 in grasslands regions, 145 at İkiztepe settlement, 245–246 precipitation levels in, 8 in lower Kuban valley, 59, 71–72 radiocarbon dating for, 134 in Maikop culture, 59 resource exploitation in, 147-148 at Majaki, 199 smelting technologies in, 154 for milk products, 314 stone grave architecture in, 162-164 in seranders, 245-246 transport in, 159-160 Zhivotilovo type graves in, 165-167 techniques, 35 in Usatovo culture, 198-199 grave sites. See also funerals; funeral forest-steppe region, technology in, feasts, in Maikop culture 224-226 along Caucasian coast, 65-66 funerals in Anatolian coastal region, 241-243 preparation of body for, 221, 292 animal skeletons at, in western coastal symbolism of, social standing and, 67 region, 186 in Usatovo culture, 184 bovine skulls at, 141 funeral feasts ceramics at, 63-65 among Akha, 191 in Danube delta, 190 alcohol consumption at, 107, 292-293 displays of wealth at, 66, 67 fabrics at, 75 exceptional practices during, 107 food ceremonies at, 62-63, 67-68, in Maikop culture, 62-63, 67-68, 104-108 in north Black Sea regions, 143 in grasslands regions, 131, 134-135 social importance of, 106-107 at İkiztepe settlement, 241-242, 243 in Usatovo culture, 223 kurgans, 63 in western coastal region, 191 in lower Kuban valley, 51, 60-66



for Maikop culture, 53-55, 65, 66-67, 108 in northern Black Sea regions, 131, 134-135, 143 personal ornamentation in, 164-165 physical construction of, 60-62 ritual pits, 184 sacrificial pits, 186 as site for social gathering, 66-67 skeletal positioning in, 138-141, 181, 243, 282 special construction at, in western coastal region, 187-189 stone grave architecture, in north Black Sea region, 162–164 for Syro-Anatolian culture, 119, 128-129 Usatovo culture and, 171 in western coastal region, 170-171, 176-177, 181-183 for women, 66 Zhivotilovo type, 165-167 Great Khorasan Road, 121-129 Green Revolution, 26-27 ground stone technology for cereal grains, 35, 72 lithic technology and, 37-38 in lower Kuban valley, 76-78 mining practices and, 88

hamlets, in Usatovo culture, 190–191 Hamon, C., 88 herding practices, 146 disadvantages of, 298 hitches, 267 homes. See architecture, domestic horses. See animals, domestication of houses. See architecture, domestic hunting practices in Anatolian coastal region, 245 in grasslands regions, 146–147

in lower Kuban valley, 70–71 for Usatovo culture, 195–196

Iessen, A. A., 51, 53 İkiztepe settlement, 229–230 Alişar paradigm, 234–237 clay ovens in, 246 domestic architecture at, 240-241 food storage at, 245-246 grave sites at, 241-242, 243 jewelry at, 251–252, 315 metalwork in, 251 pottery at, 237-238, 248 settlement patterns at, 239-240 weaving technology at, 246-248 Ingold, T., 29, 276 innovation contemporary technology as influence on, 24-25

cultural influences on, 24 dispersion of, through opinion, 26 economic influences on, 24 Green Revolution and, 26-27 in prehistorical era, 25 reinvention and, 24 replication compared to, 24 technical factors as influence on adoption of, 26-27 in technology, 23-25 unintentional, 24 variables in development of, 23 wealth as influence on adoption of, 26 worldview as influence on adoption of, 27-28 Iran, Syro-Anatolian culture influenced, 122-129 iron reduction technique, 205, 306

jewelry, at İkiztepe settlement, 251–252, 315

Kienlin, T., 215 kin networks, diffusion of technology within, 25-26 Kökten, N., 229–230 Kolkheti lowlands, 14 Korenevskij, S., 51–52, 54, 55, 67–68 on farming practices, in lower Kuban valley, 68–69 on pottery production, 78 Kuban valley, lower. See also Maikop culture; Syro-Anatolian culture animal transport in, 103-104 archaeological fieldwork in, 50-51 ceramic production in, 78-86 cereal production in, 69 clay cones in, 72 cotton textile in, 74, 283 crop production in, 68-72 cylinder seals in, 293 domestic animals in, 68-72, 283 dwelling construction style in, 56-59 environmental conditions, 7 faience technology in, 86-87 farming practices in, 68-72 farming tools in, 69-70 flint resources in, 75 food preparation in, 71-72 food storage in, 59, 71-72 grave sites in, 51, 60-66 Great Khorasan Road and, 121-129 ground stone technology in, 76-78 habitation sites in, 55-60 hunting practices in, 70-71 Leilatepe culture, 295 linen in, 74 lithic technology in, 75-78 major crossing routes through, 296

385 INDEX



386

INDEX

Kuban valley, lower (cont.) metallurgy in, 87–102 milk processing in, 70 mobile households in, 59-60 obsidian use in, 75-76 precipitation levels in, 7 resource allocation in, 68-72 semi-sedentary settlements in, 59-60 strategic resources, 8 textile production in, 73-75 topographic boundaries within, 7 village structure in, 56 Kubyshev, A. I., 131 kurgans, 63 in western coastal region, 181-183, 304 lactic acid bacteria (LAB) fermentation, 261-262, 316 Lagodovskaja, E. F., 199 lapis lazuli, 115-116 lead in copper, 92-93 metallurgy with, 90 Leilatepe culture, 295 Lemonnier, P., 23 Leshtakov, K., 308 lime plaster, 38-40 linen, in lower Kuban valley, 74 lithic technology on Caucasian coast, 46-47 with flint, 10, 75 in grasslands regions, 148-150 ground stone technology and, 37-38 in lower Kuban valley, 75–78 within Maikop culture, 76-78 naviform cores, 38 in northern Black Sea region, 148-150 with obsidian, 75-76 in southwest Asia, 37-38 in Usatovo culture, 200–203

Maikop culture. See also funeral feasts, in Maikop culture animal transport in, 103-104 chronology of, 51-53, 54 as communication network, 269-271 copper trade in, 87-88 definition of, 279 dwelling construction style in, 56-59 food preparation in, 72 food storage in, 59 funeral feasts in, 67-68, 104-108 grave sites for, 53–55, 65, 66–67, 108 lithic technology within, 76-78 long-distance trading for, 108-118 in lower Kuban valley, 51-53 Mesopotamian influence on, 53-54 metal sheet work in, 95 metalwork in, 94-95 mobile households in, 59-60

pottery within, 78-83 power structure in, wealth as influence on, 68 radiocarbon dating for, 54-55 semi-sedentary lifestyle in, 59-60 social valuables in, 104-108 during Uruk expansion, 52-53 village structure for, 56 violence in, 67-68 wire work in, 95 Majaki settlement, 180 cemetery at, 191 cereal grain use, 192-193 discovery of, 170 domestic architecture in, 212 domestication of animals in, 194-195 farming tools at, 193-194 food storage and preparation at, 199 kurgans at, 181-183 violence in, 221-222, 311 manganese black technique, 205 Maran, J., 211 maritime trading routes, 48 Mesopotamia faience artifacts in, 86-87 Maikop culture influenced by, 53-54 reserved-slip pottery, 81, 285 metallurgy. See also copper; metalwork; smelting technologies alloying, 90-94 in Anatolian coastal region, 250-253 beneficiation and, 87-90 casting and, 94 cupellation and, 287-288, 310 development of, 265-266 with gold, 90 in grasslands regions, 153-159 with lead, 90 in lower Kuban valley, 87-102 mining and, 87-90 in northern Black Sea region, 153-159 with silver, 90 smelting of ores and, 87-90 in western coastal region, with copper, 212–220 metalwork copper silvering, 96 in grasslands region, 158-159 in İkiztepe settlement, 251 in Maikop culture, 94-95 manufacturing methods for, 95-96 metal sheet work, 95 in Syro-Anatolian culture, 120 in Tripolie culture, 216 in Usatovo culture, 214–215, 216–218 in western coastal region, 215–218 with wire, 95 migration, of Syro-Anatolian culture,

Mikhajlovka site, 135-138



domestic architecture at, 160-161 flint use at, 148-149 milch pastoralism, 299 milk production consumption and, archaeology for, 36-37 food storage and, 314 in grasslands regions, 146 LAB fermentation and, 261-262, 316 in lower Kuban valley, 70 in western coastal region, 305 millet, 244 mineral resources. See resources mining practices for copper, 87-90 ground stone technology and, 88 metallurgy and, 87-90 in western coastal region, 212-214 mobile households, in Maikop culture, 59–60 Moche pottery, 285 Munchaev, R. M., 51 myth of subsistence, 28-29 Passek, T. S., 173 Nahal Hemar, textiles in, 37 naviform cores, 38 Neoeuxinian stage, of Black Sea, 14 Neolithic package, 31 networks. See kin networks, diffusion of technology within New Black Sea stage, 15 nickel copper alloys, 286 nomadic pastoralists, 133 archaeological evidence of, 297 northern regions, of Black Sea See also grasslands regions; Kuban valley, lower; Tripolie culture archaeological fieldwork in, 130-131 cereals in, 44 during chalcolithic period, 131-133 chronology of development in, 133-134 copper artifacts in, 157-158 dispersed communities in, 134–143 domestic architecture in, 160–161 farming in, 143-148 farming technology in, 43-46 funeral feasts in, 143 grave sites in, 131, 134-135, 143 human figurative stonework in, 161-165

smelting technologies in, 154 steppes, grave sites in, 143 stone grave architecture in, 162–164 Tripolie culture in, 134 Zhivotilovo type graves in, 165–167

 $\frac{387}{\text{INDEX}}$ 

obsidian, in lower Kuban valley, 75-76 Odessa Archaeological Museum, 171 Old Black Sea stage, 14-15 opinion leaders, adoption of innovation influenced by, 26 ornamental stone carnelian, 295 in grasslands region, 150 lapis lazuli, 115-116 in Syro-Anatolian culture, 123-124 trading of, 114-118 turquoise beads, 114-115 Orthmann, W., 234 Özdoğan, M., 234, 255 Özgüç, N., 229–230 Özgüç, T., 229–230

pastoralists. See also farming in grasslands regions, 133 in lower Kuban valley, 68-72 milch, 299 nomadic, 133, 297 in northern Black Sea region, 133 transhumance and, 70, 305-306 Patokova, E. F., 170 Peterenko, V. G., 170 Pfaffenberger, B., 20, 21, 276 on technology in sociotechnical system, 22 pickaxes, 290 pit houses, 160-161 environmental conditions for, 300 pointed-bottom ceramics, 279 potter's marks, 82-83, 285 pottery in Anatolian coastal region, 237-238, 248, 255-256 for Cernavoda III culture, 209 coiling, 78 in Crimean peninsula, 152 decoration techniques for, 80-81 at Dündartepe settlement, 237-238, firing technology for, 81-82 in grasslands regions, 150-152 at İkiztepe settlement, 237-238, 248 iron reduction technique for, 205, Korenevskij on, 78 within Maikop culture, 78-83 manganese black technique for, 205 Moche, 285 potter's marks, 82-83, 285

kurgan discoveries in, 130 lithic technology in, 148–150

Mikhajlovka site, 135–138 mineral resources in, 10

radiocarbon dating for, 134

nomadic pastoralism in, 133, 297

pointed-bottom ceramics in, 279

resource exploitation in, 10, 147-148

metallurgy in, 153-159



388

INDEX

Cambridge University Press & Assessment 978-1-107-03219-4 — The Black Sea and the Early Civilizations of Europe, the Near East and Asia Mariya Ivanova Index More Information

> pottery (cont.) sacrificial pits, 186 production techniques for, 78-80, 284, sapropel, 274 285 Schmidt, A. V., 53 red-black, in Anatolian coastal region, Schoop, U., 235-237, 265 scientific knowledge, technology and, 255-256 reserved-slip, 81, 285 276 Sé Girdan site, 129 in Syro-Anatolian culture, 118-121, sea level changes, 14–16 in Usatovo culture, 203-208 during Neoeuxinian stage, 14 PPNA period. See pre-pottery Neolithic during New Black Sea stage, 15 A period during Old Black Sea stage, 14-15 PPNB period. See pre-pottery Neolithic Quaternary oscillation schemes for, B period 14-15 precipitation levels Sea of Azov. See Azov, Sea of on Anatolian coast, 12, 13-14 seranders, 245-246 Serezlievka figurines, 134, 161–162 on Crimean peninsula, 8 settlements. See also İkiztepe settlement in grasslands region, 8 in Anatolian coastal region, 239-243 in lower Kuban valley, 7 in Danube delta, 180-181 in western coastal region, 11 domestic architecture in, 178 prehistorical era, innovation during, 25 pre-pottery Neolithic A (PPNA) period, locations of, 178 32-33 at Majaki, 180 in western coastal region, 177-181 domestication of animals during, 33 shaft draught system, 267 tool development during, 34-35, 277 shafthole axes, 98 pre-pottery Neolithic B (PPNB) period, sheep. See animals, domestication of 32-33 Sherratt, A., 28-29 domestication of animals during, 33 Shmaglij, N. M., 171 tool development during, 34-35, 277 Shulaveri-Shomutepe culture, 46 pyrotechnology, in southwest Asia, silver. See also copper silvering 38–40 in copper alloys, 93-94 for ceramics, 40 metallurgy with, 90 for copper, 40, 278 for lime plaster, 38-40 Sinop Regional Archaeological Project (SRAP), 228 radiocarbon dating skeletal positioning, in graves, 138-141, for Anatolian coastal region, 238–239 181, 282 for Cernavoda III culture, 177 smelting technologies of İkiztepe settlement, 234-237 in Anatolian coastal region, 250-251, for Maikop culture, 54-55 for northern Black Sea region, 134 archaeological dating of, 89 for Usatovo culture, 177 for copper, 87-90, 278 Rassamakin, J., 131-133 crucibles in, 89-90, 308 development of, 265 red-black pottery, in Anatolian coastal in grasslands regions, 154 region, 255-256 reinvention, innovation and, 24 in northern Black Sea region, 154 in western coastal region, 212–214, 308 religion, technology and, 21 replication, innovation compared to, 24 social practices. See also funerals; funeral reserved-slip pottery, 81, 285feasts through ceramic evidence, 220 for Cernavoda III culture, 305 for Cernavoda III culture, 220-223 copper, 10, 265-266 at grave sites, 66-67 in Usatovo culture, 220-223 flint, 10 in grasslands regions, 147-148 social valuables, in Maikop culture, in lower Kuban valley, 8, 68-72 104-108 in northern Black Sea region, 10, status from, 105-106

violence and, 105

Archaeological Project

Solovev, L. N., 232 SRAP. See Sinop Regional

147-148

ritual pits, 184 royal road, 268–269, 271

ritual, technology and, 21, 275



stibnite, 311 for cotton, 74, 283 stone grave architecture, in north Black for linen, in lower Kuban valley, 74 Sea region, 162-164 in lower Kuban valley, 73-75 in Nahal Hemar, 37 European influences on, 164 stone technology. See ground stone sources of, 37 in southwest Asia, 37 technology Syro-Anatolian culture, 118–129 weaving tools for, 73 chaff-faced pottery, 118-121 with wool, 263-264 domestic structures for, 118-119 Thissen, L., 235, 254-255 tools. See farming tools, archaeological grave sites for, 119, 128-129 evidence of, lithic technology, Great Khorasan Road and, 121-129 Iranian influences on, 122-129 weaving tools, archaeological metalwork in, 120 evidence of, specific axes, specific tools migration of, 120 trading ornamental stones as trade in, 123-124 archaeological evidence of, 110-113, pottery from, 123 114-115, 293 Sé Girdan site, 129 of lapis lazuli, 115-116 long-distance, for Maikop culture, Tallgren, A. M., 53 108-118 maritime routes, 48 tanged daggers, 97-98, 291 technology. See also ground stone of ornamental stone, 114-118, 123-124 technology; lithic technology; of turquoise beads, 114-115 pyrotechnology, in southwest Asia; for Usatovo culture, 225-226 smelting technologies transhumance pastoralism, 70, 305-306 adaptation through, 21 transportation. See also animal adoption of, 25-28 transport archaeological approaches to, 20-23 in grasslands regions, 159-160 chaine operatoire approach to, 22-23, for Tripolie culture, 210-211 in western coastal region, 210-211 Tripolie culture, 133-134 communication networks for, 268-269 for craftspeople, 29-30 faience in, 210 cultural ecology and, 21, 275 metalwork in, 216 culture and, 19, 24 Serezlievka figurines and, 134, definition of, 18-20 161-162 transport for, 210–211 development theories for, criticism Usatovo culture and, 173–175, 176–177 of, 21-22 economic influences on, 24 turquoise beads, 114-115 efficiency functions of, 19 farming, in southwest Asia, 31-35 Ukraine, grasslands regions in, long-term effects of farming, 274 for food preparation, 30 for food production, 29, 35-37 unintentional innovation, 24 Uruk culture, expansion of, 52–53, 120 gender ideology and, 18-19 in general line of progress, 20 Usatovo culture holistic view of, 19-20 archaeological discovery of, 170, innovation in, 23-25 173-176 within kin networks, diffusion of, cemeteries in, 191 25-26 ceramics in, 203-208 material products as result of, 19 cereal grains for, 192-193 myth of subsistence and, 28-29 daggers in, 218-220 from necessity, 20 Dnestr-Danube Rescue Expedition, religion and, 21 ritual and, 21, 275 domestic animals in, 194-195 science and, 276 domestic architecture for, 179-180, in sociotechnical system, 22 211-212 in southwest Asia, 31-41 faience in, 209-210 transmission of, 25–28 farming practices for, 192-196 for Usatovo culture, 224-226 farming tools in, 193-194 Telegin, D. Y., 131 fishing practices for, 197 textile development, 262-264 flint use in, 202

389 INDEX



390

INDEX

Usatovo culture (cont.) food storage and preparation in, 198-199 funeral ceremonies in, 184 funeral feasts in, 223 grave sites and, 171, 187-189 hamlets, 190-191 hunting practices for, 195-196 kurgans in, 181-183 lithic technology in, 200-203 metalwork in, 214-215, 216-218 ornamentation of body for burial, 221 pottery in, 203-208 radiocarbon dating for, 177 ritual pits, 184 sacrificial pits, 186 social practices in, 220-223 technological development in, 224-226 trading for, 225-226 Tripolie culture and, 173-175, 176-177 violence in, 221-222, 311 weaving technology for, 200

vehicles. *See* wheeled vehicles Veselovskij, N. I., 50 violence with daggers, 221–222 in Maikop culture, 67–68 in Majaki settlement, 221–222, 311 in Usatovo culture, 221–222, 311 von der Osten, H., 234

wagons
development of, 268
as homes, 300
wealth
adoption of innovation and, 26
at grave sites, displays of, 66, 67
in Maikop culture, power structure
influenced by, 68
weaving tools, archaeological evidence
of, 73
in Anatolian coastal region, 246–248
at Dündartepe settlement, 246–248
at İkiztepe settlement, 246–248
for Usatovo culture, 200

western coastal region, 10-11

See also Cernavoda III culture; Danube delta; Majaki settlement; settlements, in western coastal region; Tripolie culture; Usatovo culture archaeological fieldwork in, 170-173, 176-177 biodiversity in, 11 burial customs in, 181-191 casting metal in, 214–215 climate for, 11 copper metallurgy in, 212-220 Danube delta, 180-181 Dnestr-Danube Rescue Expedition, domestic architecture in, 178, 179-180, 211-212 European contact and, 226 farming in, 192-196 farming tools in, 193-194 fishing practices in, 196-198 food storage and preparation in, funeral feasts in, 191 grave sites in, 170-171, 176-177, 181–183, 186, 187–189 kurgans in, 181-183, 304 major areas within, 11 metal alloy use in, 214-215 metalwork in, 215–218 milk production in, 305 mining in, 212-214 precipitation levels in, 11 sacrificial pits, 186 smelting technologies in, 212-214, 308 social practices in, 220-223 soil conditions in, 192 transport in, 210-211 wheeled vehicles animal transport with, 103-104, 291-292 development technology for, 268 wagons, 268, 300 women, technology and, 18-19 wool, textile development with, 263-264

Zbenovich, V. G., 170, 173–175 Zhivotilovo type graves, 165–167