

## Index

---

- Abu Hureyra, Syria, activity-induced stress, 83, 105
- acclimatisation, 71
- actions  
   ergonomic study of, 80  
   objects and, 80, 81, 138
- adaptation, 6, 38, 71–6
- adults  
   as an age category, 121  
   cultural variability in, 124, 126  
   in interpretative archaeology, 124  
   osteologically determined, 121–4, 125  
   paradox of age categories, 126–7
- age  
   ageing and, 59, 128  
   artefacts associated with bodies in  
     age-related patterns, 118, 124, 128, 129  
   chronological, 119  
   definition, 118, 119  
   hybrids and, 138–43  
   methods for determining, 17, 20, 119–24  
     dental development, 36, 70, 74, 123  
     osteological, 2, 24, 36, 37, 121–4, 129  
   physiological, 117–19, 129  
   as a process, 134  
   social, 119, 129  
   tensions between method and theory, 117, 125–9  
     resolution of, 129  
   theories of, 120
- age categories  
   cultural variability in, 124, 126  
   as essential or intrinsic, 127  
   in interpretative archaeology, 124  
   osteologically determined, 121–4, 125  
   paradox of, 126–7
- ageing, 59  
   age and, 59, 128
- agents/agency, 18, 43, 48, 79  
   social identity and, 125
- ancestors, 43
- Ancient History of Wiltshire* (Hoare), 13
- anthropology  
   biological (physical), 5  
   forensic, 46
- Arber, S., 119
- archaeologists, as synthesisers of data, 17
- archaeology  
   bioarchaeology, 6, 23–4, 25–7  
   Boasian fourfold perspective, xiv, 5–6  
   British approach, 6–7  
   of death, 16  
   of gender, xiii, 97–101  
   knowledge production within, 10  
   New Archaeology, 14–18, 38  
   *See also* interpretative archaeology;  
   osteoarchaeology
- archers, 72
- artefacts  
   associated with bodies, 2, 50, 143  
   age-related patterns, 118, 124, 128, 129  
   gender-related patterns, 90, 101  
   copper arm rings, 67  
   creating identity, 47, 118, 136–8  
   Ingold on, 87  
   regional studies, 14  
   *See also* objects
- Astuti, R., 60
- atheoretical approaches, 32–4
- Atlas of Occupational Markers on Human Remains* (Capasso, Kennedy and Wilczak), 73
- Aztecs, gender construction in children, 66
- ballet dancers, ageing studies, 59
- Barrett, J., 20
- Barthes, R., 19
- Battersby, C., 44
- Bauman, Z., 124

## 182 Index

- Becker, A., 49  
 Benthien, C., 47  
 bilateral asymmetry, 105  
 binary oppositions in the study of  
   archaeological bodies, 31–2  
   atheoretical : theoretical, 32–4  
   dead : living, 40–1  
     accessing the living from the dead,  
       68–9  
     continuity between, 41–5, 52, 58, 62,  
       68  
     as objects : subjects, 69, 103  
   inside : outside, 45–8  
     reconfiguring boundaries, 48–51  
   male : female, 91–6  
   nature : culture, 32, 51–5, 69, 104, 120  
   resolution of oppositions, 60, 84–5, 86,  
     105–16, 129  
   *See also* paradoxes  
 Binford, L. R., 14–15  
 bioarchaeology, 6, 23–4, 25–7  
 biographies, 131, 134–8  
   role of objects in constructing, 128  
 biological anthropology, 5  
 biological determinism, 105  
 biologism, 4, 26–7  
 biology, 69  
   conflation with genetics, 27, 53, 56  
   relationship with culture, 2  
 Birke, L., 23, 55, 56, 58, 59, 60, 69, 120  
 birth  
   isotope ratios indicating place of, 132  
 Boas, F., xiv, 5–6  
 bodies  
   as archaeological resources, 3, 20, 23,  
     24–5, 50  
   associated with artefacts, 2, 50, 143  
   age-related patterns, 118, 124, 128,  
     129  
   gender-related patterns, 90, 101  
 boundaries of  
   individual, 47, 48–9  
   interpretative, 3  
   reconfiguring, 48–51  
 as constructed, 54  
 as culturally constructed, 1–2, 17, 59,  
   60–1, 129–34  
   paradox of, 23, 26  
 deformed, 73  
 experiential understanding of, 21–3, 47,  
   76, 88  
   as heuristic tools, 18  
   historicity of, 78, 131, 134–8  
   as hybrids, 84, 138–43  
   as material culture, xv, 86–8, 113  
   materiality of, 62–3, 64–70, 71, 76–9,  
     117, 142  
     composition of, 70–6  
     methodological implications,  
       85–6  
   as non-binary, 61  
   as objects, 62, 63–4, 68, 69, 85  
   paradox of rejection of the body, 15  
   paradox of the nexus between nature  
     and culture, 6, 9, 52, 55–60,  
     125  
   scientific approach to, xiii, 1–3, 17,  
     34–8  
   symbolic representation of, 19  
   as technomorphic, 50–1  
   *See also* binary oppositions in the study  
     of archaeological bodies;  
     osteoarchaeology; skeletal  
     modifications  
 body: mind  
   as inseparable, 85, 132  
   split, 42–3, 52, 58, 66, 104  
 Boivin, N., 65, 67  
 bone, 70  
   degenerative joint changes, 45, 72–3,  
     121, 141  
   acromion, 140  
   metatarsal-phalangeal, 105  
   spine, 83, 108, 110–12  
   ulnarcarpal and radioulnar, 106  
 properties of, 75  
 remodelling, 71–2, 110  
 sex in non-adults, 91  
 use of, 64  
 boundaries, disciplinary  
   interpretative, 3  
   reconfiguring, 48–51  
   specialisation and, 8–10  
 boundaries of bodies, 47, 48–51  
   interpretative, 3  
   reconfiguring, 48–51  
 Bridges, P. S., 105  
 Bronfen, E., 44–5  
 burials. *See* mortuary practices  
 Butler, J., 65, 66, 94–5, 98  
  
 Capasso, L., Kennedy, K. A. R. and  
   Wilczak, C., *Atlas of Occupational  
   Markers on Human Remains*, 73  
 carrying methods, 82  
   skeletal implications of, 80–3, 107,  
     106–10, 111, 112  
 Cartesian dualism, 42–3, 52, 58, 66,  
   104  
 challenges to, 85, 132

- cartilage degeneration, 121, 131  
 cementum, 70  
 children  
   as a category, 124  
   paradox of, 126–7  
   cultural variability in, 66, 124, 126  
   osteologically determined, 121–4  
   sex in non-adult teeth and bones, 91  
   weaning of, 130  
 cholera, 74  
 chronological age, 119  
 Clark, N., 57  
 Clark, S. R. L., 4  
 Clarke, D., 14–15  
   *Loss of Innocence*, 15  
 clay, physical properties of, 67  
 clothing. *See* dress  
 collagen, 70  
 commodification of the body, 63–4  
 complementarity approach, 43  
 Connerton, P., 67  
 constructionism, 21, 26–7, 29–30  
   rejection of, 27–9  
   *See also* cultural construction  
 Copper Age, 67  
 Cox, M., 37, 91  
 cradleboarding, 73, 133  
 cranium, 14, 37  
   dimorphic sexual features, 37, 91, 92,  
     93, 94  
   occipital flattening, 73, 133  
   creel, 83, 106–7, 110, 140  
 cultural construction, 50  
   approach to bodies, 1–2, 17, 60–1,  
     129–34  
   paradox of, 23, 26  
   of gender, 66, 98–9  
   of sex, 95–6, 101  
   *See also* constructionism  
 culture  
   additive model, 55  
   in binary opposition to nature, 32, 51–5,  
     69, 104, 120  
   resolution of oppositions, 60, 85  
   paradox of the nexus with nature, 6, 9,  
     52, 125  
   relationship with biology, 2  
 culture history, 13  
 cyborgs, 49  
 Darwinism, 53  
 data, interpretation of, 8  
 dead : living, 40–1  
   accessing the living from the dead, 68–9  
   continuity between, 41–5, 52, 58, 62, 68  
   as objects : subjects, 69, 103  
   *See also* life cycles  
 death, 128  
   archaeology of, 16  
   bone isotope ratios indicating place of,  
     132  
   boundary with life, 44–5  
 dentine, 70  
 dentition  
   dental development, 37, 70, 74, 123  
   dental enamel, 70  
   hypoplasia, 74  
   isotope ratios, 132  
   sex in non-adults and, 91  
   tooth removal, 131  
   tooth wear, 74, 121  
 Descartes, R., 52, 58  
 development, contextual view of, 77  
 dichotomies. *See* binary oppositions in the  
   study of archaeological bodies  
 diet and nutrition  
   dental development and, 37  
   gender differences, 110  
   growth and, 71, 130  
   skeletal modifications and, 74  
 discriminant function analysis, 91  
 disease, 74, 128, 130, 131  
 dividual self, 22  
 DNA analysis, 91  
 Douglas, M., 87  
 dress  
   as a communication system, 19  
   creating identity, 47, 66, 95  
   Victorian, 67  
 Dublenko, A., 106  
 Durkheim, E., 51  
 Elias, N., 48  
 embodiment, 2, 22–3, 43, 47, 66, 79  
 Ensay, Outer Hebrides, 83, 106, 108,  
   110–12, 140–1  
   degenerative joint changes, 141  
   skeletal expression of gender, 80,  
     106–10, 140–1  
 environment vs. heredity, 5  
 epiphyseal fusion, 57, 72, 121, 122  
 ergonomic study of muscle actions, 80  
 Eshed, V., 110  
 essentialism, 26–7, 64  
 ethnicity, 6  
 ethnoarchaeology, 14  
 ethnography, 14, 17  
   paediatric ward study, 50  
 eugenics, 6  
 evolution, 71

## 184 Index

- evolutionary psychology, 53  
 evolutionism, 13  
 experiences  
   bodies as lived experience, 21–3, 47, 76, 88  
   shared, 21, 77
- facial reconstruction, 46
- females  
   artefacts associated with, 90, 101  
   classification, 91–6  
   dimorphic sexual features, 37, 91, 92, 93, 94  
   myths about, 19
- Fiji, rules of hierarchy, 77
- foot-binding, 105
- forensic anthropology, 46
- Fort Edmonton, Canada, 106
- Foucault, M., 19, 22, 65  
   *The History of Sexuality*, 54
- Franklin, A., 60
- Gatens, M., 87
- Gell, A., 44
- gender  
   archaeology of, xiii, 97–101  
   artefacts associated with bodies in  
     gender-related patterns, 90, 101  
   conflated with sex, 102  
   as a cultural construction, 66, 98–9  
   definition, 97, 114  
   differences in diet and nutrition, 110  
   gender roles, 5  
     division of labour, 105–10, 135  
     skeletal modifications from gendered activities, 80–3, 107, 106–10, 111, 112, 113  
   material culture and, 103–4  
   relationship with sex, 89–90, 99, 101, 113  
   skeletal expression of, 106–10, 114–15, 140–1  
   stability of, 100  
   tensions between method and theory, 101–5, 113  
     resolution of, 105–16
- generalisations  
   cross-cultural, 15  
   osteoarchaeological, 39
- genotype, 56
- Gero, J. M., 18
- gestures. *See* actions
- Giddens, A., 18
- Ginn, J., 119
- Goodwin, S. W., 44–5
- Gopher, A., 110
- Grauer, A. L., 84
- Grosz, E., 62
- growth, 127, 128  
   comparisons between groups, 130  
   continuum with senescence, 57, 59, 117, 127, 132  
   diet and nutrition and, 71, 130
- habits, definition, 134
- Hallam, E., 43, 47, 68
- Hallstatt graves, 13
- Haraway, D. J., 5, 49
- Harding, S., 61
- Harré, R., 43, 85, 120
- Hastorf, C., 110
- Hayes, W. C. (Jones *et al.*), 72
- head-binding, 73, 133
- health, 84, 131
- Heidegger, M., 21
- heredity vs. environment, 5
- Hershkovitz, I., 110
- hexis, definition, 113
- hierarchy, rules of, 77
- The History of Sexuality* (Foucault), 54
- Hoare, C., *Ancient History of Wiltshire*, 13
- Hockey, J., 43, 47, 68
- Hodder, I., 19, 38
- Homo sapiens*, xiv, 75, 92
- Howarth, G., 43, 47, 68
- human ecology, 53–4
- human history, 5–8
- humanism vs. science, 3–5, 9, 10–11, 25, 30, 86, 125
- humans nature, 134
- humans, anatomically modern. *See* *Homo sapiens*
- hybrids, bodies as, 84, 138–43
- hydroxyapatite, 70
- identity  
   artefacts creating, 47, 118, 136–8  
   dividual self, 22  
   formation of, 48–9  
   sexual, 93  
   social, 16, 43, 118, 125
- individualism, 87
- individuals  
   boundaries, 47, 48–9  
   definition, 22  
   as meaningful, 58
- Ingold, T.  
   on artefacts, 87  
   on biology, 27  
   the complementarity approach, 43  
   contextual view of development, 77  
   on embodied cultural life-ways, 76, 79

- on genetics, 56
- on nature and culture, 32, 52, 54, 55
- injuries. *See* traumas
- inside : outside, 45–8
  - reconfiguring boundaries, 48–51
- interpretative archaeology
  - age categories, 124
  - definition, xvi
  - disciplinary boundaries, 3
  - linked to osteoarchaeology, 90, 104, 117, 129, 143
  - vs osteoarchaeology, xiv, 32–4, 85, 89, 124
- Inuits
  - carrying injuries, 80
  - osteoarthritis, 106
- James, A., 51, 118
- Jenks, C., 51, 118
- joints
  - degenerative changes, 45, 72–3, 121, 141
    - acromion, 140
    - metatarsal-phalangeal, 105
    - spine, 83, 108, 110–12
    - ulnarcarpal and radioulnar, 106
- Jones, A., 20, 21, 28, 30, 34, 35, 58, 62, 63, 88, 140
- Jones, H. H., 72
- Joyce, R., 22, 23, 66, 102, 129
- Kennedy, K. A. R., 73
- Klinefelter syndrome, 27, 92
- knowledge production within archaeology, 10
- Kossinna, G., 14
- labour, gendered division of, 105–10, 135
- Latour, B., 34, 49, 84, 142
- Lerner, R. M., 71
- Leroi-Gourhan, A., 18, 80
- Levy, L. F., 83
- Lewis, M., 133
- life, boundary with death, 44–5
- life course, 23, 56–7, 67, 72, 77, 87, 95, 98, 100, 102, 115, 117, 118, 120, 127, 128, 130–1, 133, 136, 138, 139, 140
- life cycles
  - biological, 78, 120, 131, 132, 133
  - as heuristic devices, 128
  - personal, 120
  - social, 120
- life history. *See* life cycles
- lifestyle
  - differences reflected in military records, 130
- osteoarchaeological studies and, 75
- linguistic models, 19
- Loss of Innocence* (Clarke), 15
- Lovell, N., 106
- MacGregor, A. A., 141
- Macnaghten, P., 52
- McNamara, E., 84
- males
  - artefacts associated with, 90, 101
  - classification, 91–6
  - dimorphic sexual features, 37, 91, 92, 93, 94
  - myths about, 19
  - pre-pubertal castrates, 95
- The Man in the Ice* (Spindler), 1
- material culture
  - bodies as, xv, 86–8, 113
  - disciplinary divide with osteoarchaeology, 3–5, 7
  - gender and, 103–4
- materiality of bodies, 62–3, 64–70, 76–9, 117, 142
  - composition, 70–6
  - definition, 66
  - methodological implications, 85–6
  - objects and, 79–85, 135
  - shaped by social practices, 129–34
- materials, physical properties of, 67
- Mauss, M., *The Techniques of the Body*, 76
- meaning, fluidity of, 104
- Meet the Ancestors* (television series), 1
- Merbs, C. F., 80, 106
- Merleau-Ponty, M., 134
- Meskill, L., 13, 23, 40, 47, 54, 64, 66, 88, 95, 98, 100
- metal, physical properties of, 67
- metatarsals, 105
- methodology
  - comparative, for study of human variation, 35–8, 88, 130
  - for determining age, 17, 20, 119–24
    - artefacts associated with bodies, 118, 124, 128, 129
    - dental development, 36, 70, 74, 123
    - osteological, 2, 24, 36, 37, 121–4, 129
  - for determining age categories, 121–4, 125
  - new analytical approach, 141
  - osteoarchaeological, xiii, 1–3, 34–8, 129
  - tensions with theory, xiii, 32, 89, 101–5, 117, 125–9
  - resolution of tensions, 105–16, 129

## 186 Index

- migration, reflected in teeth and bones, 132
- military records, reflecting lifestyle differences, 130
- mind : body  
 as inseparable, 85, 132  
 split, 42–3, 52, 58, 66, 104
- Mississippian culture, 105
- models  
 additive model of culture, 55  
 linguistic, 19  
 textual, 19, 65  
 of time and space, 15
- Molleson, T., 37, 83, 91, 105
- Montelian paradigm, 14
- Montserrat, D., 40
- Moore, H., 97, 114
- Morgan, D. H. J., 18
- Morton, J., 26–7, 28
- mortuary practices, 12, 13, 16, 17, 19
- mummification, 64
- myths about male and female principles, 19
- Nagel, D. A. (Jones *et al.*), 72
- Natufian hunter-gatherers, 110
- naturalism, 26–7
- nature  
 in binary opposition to culture, 32, 51–5, 69, 104, 120  
 resolution of opposition, 60, 85  
 paradox of the nexus with culture, 6, 9, 52, 125
- Neolithic, 1, 67, 110
- New Archaeology, 14–18, 38
- Numamiuts, men's hearth drop and toss zones, 15, 16
- nutrition. *See* diet and nutrition
- objects  
 actions and, 80, 81, 138  
 bodies as, 62, 63–4, 68, 69, 85  
 materiality and, 79–85, 135  
 role in constructing biographies, 128  
 subjects and, 69, 103  
 use of, 83  
*See also* artefacts
- occipital flattening, 73, 133
- osseous modifications. *See* skeletal modifications
- osteoarchaeology  
 categorisation of race, 14  
 critiques of, 25–7, 38–9  
 definition, xvi, 86  
 development of, 7  
 disciplinary divide with material culture, 3–5, 7
- lifestyle and, 75  
 linked to interpretative archaeology, 90, 104, 117, 129, 143  
 methodology, xiii, 1–3, 34–8, 129  
 methods for determining age, 2, 24, 36, 37, 121–4, 129  
 methods for determining age categories, 121–4, 125  
 methods for determining sex, 92  
 promotion of, 17  
 rejection of constructionism, 27–9  
 specialisation and, 8–10  
 tensions within generalisations, 39  
 vs. interpretative archaeology, xiv, 32–4, 85, 89, 124
- osteoarthritis, 72, 75, 83, 106, 131
- osteological paradox, 74
- osteopenia, 96
- osteophytosis, 72, 83, 109, 110, 140
- osteoporosis, 75, 96
- Ots, T., 40
- palaeodemography, 84
- palaeopathology, 7, 37, 46, 133
- paradoxes  
 of age categories, 126–7  
 cultural construction of bodies, 23, 26  
 of the nexus between nature and culture, 6, 9, 52, 125  
 osteological paradox, 74  
 of rejection of the body, 15
- pelvis, dimorphic sexual features, 37, 91, 92, 94
- Persistent Vegetative State (PVS), 68
- phalanges, 105
- phenomenology, 2, 21–3, 43
- phenotypes, 56, 75, 92
- physical anthropology, 5
- physiological age, 117–19, 129
- Pickering, R. B., 83
- Place, B., 50
- plasticity, 71, 74–5, 85, 105, 133  
 definition, 70  
 skeletal responses to disease, 74
- post-modernism, 22, 54
- post-processualism, 18–21
- post-structuralism, 54
- power, 54, 65
- Prendergast, S., 118
- Priest, J. D. (Jones *et al.*), 72
- processualism, 15, 38–9
- Prout, A., 51, 84, 118, 138, 139
- psychoanalysis, 48
- PVS (Persistent Vegetative State), 68

- Queer Theory, 22
- race, 5, 6  
osteological categorisation of, 14
- racism, 6
- Renfrew, C., 66
- repetitive motions. *See* stress
- rituals, 20, 66, 129
- Robb, J., 18, 128, 129, 131
- Roberts, D. F., 71
- Sadlermiut, activity-induced stress, 83
- Scheper-Hughes, N., 64
- Scher, A. T., 83
- science  
osteoarchaeological practice of, xiii, 1–3, 17, 34–8  
scepticism regarding, 9  
vs. humanism, 3–5, 9, 10–11, 25, 30, 86, 125
- scientific method, 34–8, 88  
scepticism regarding, 25
- Scott, S., 18
- senescence, continuum with growth, 57, 59, 117, 127, 132
- sex  
archaeological practice and, 90–7, 100–1  
as biological, 96  
chromosomal sex indicators, 27, 90, 91  
conflated with gender, 102  
continuum of variation in, 92, 100  
as a cultural construction, 95–6, 101  
dimorphic features, 37, 91, 92, 93, 94  
methods of determining, 17, 20  
osteological, 2, 24, 36, 37, 90–1, 129  
relationship to gender, 59, 89–97, 99, 113  
stability of, 93–5
- sexuality, 22, 94–5
- Sharland, E., 131
- Shilling, C., 133
- skeletal modifications, 44, 75, 87  
from activities, 57, 131, 134  
gender-specific tasks, 80–3, 107, 106–10, 111, 112, 113  
squatting facets, 136  
stress markers, 72–3, 83, 105, 110
- database of, 114, 141
- diet and nutrition and, 74
- economic status and, 83
- foot-binding, 105
- head-binding, 73, 133  
as life-cycle histories, 78, 131
- tooth removal, 131
- skin, as a metaphor for separateness, 47
- skull, 14, 37
- sexually dimorphic features, 37, 91, 92, 93, 94
- occipital flattening, 73, 133
- smallpox, 74
- social age, 119, 129
- social meanings, 67
- solidarities, 48
- Sørensen, M. L. S.  
fluidity of meaning, 104  
on gender and sex, 98, 100  
on post-processualism, 20  
on sexual classification, 92, 96, 97
- space, 15
- specialisation, 32  
disciplinary boundaries and, 8–10
- Sperry, R. W., 76
- Spindler, K., *The Man in the Ice*, 1
- Spitalfields collection, 37, 91
- spongiform encephalopathy*, cross-species transmission, 53
- squatting facets, 135, 136, 137
- Steedman, C., 131
- Stirland, A., 72
- stress  
activity-induced stress markers, 72–3, 83, 105, 110  
comparison of levels between groups, 130
- structuralism, 18
- symbolism, 18–20, 66
- taphonomy, xv
- Tarlow, S., 43
- The Techniques of the Body* (Mauss), 76
- teeth. *See* dentition
- tennis players, 72
- tensions  
archaeological attitudes towards bodies, 3, 20, 24–5  
between biological and social, 7, 30  
between method and theory, xiii, 32, 89  
between method and theory on age, 117, 125–9  
resolution of, 129  
between method and theory on gender, 101–5, 113  
resolution of, 105–16  
*See also* binary oppositions in the study of archaeological bodies
- Testicular Feminisation syndrome, 92
- textual models, 19, 65
- theories, xv, 32–4  
of age, 120  
Boasian fourfold perspective, xiv, 5–6

Cambridge University Press

0521521467 - The Body as Material Culture: A Theoretical Osteoarchaeology

Joanna R. Sofaer

Index

[More information](#)

## 188 Index

theories (*cont.*)

- British approach, 6–7
- disciplinary divide between
  - osteoarchaeology and material culture, 3–5, 7
  - disciplinary divide between physiology and sociality, 6, 29
- tensions with method, xiii, 32, 89, 101–5, 117, 125–9
  - resolution of tensions, 105–16, 129
- Thomas, C., 65
- Tichenor, C. C. (Jones *et al.*), 72
- Tilley, C., 21
- time, 15
- tools, muscle actions and, 80, 81
- Toren, C., 77–8, 79, 84–5
- transcendental phenomenology, 21, 47
- transsexual changes, 95
- transvestites, 95
- traumas, 71, 110, 133
- Trigger, B. G., 15
- Turner, B. S., 59
- Turner syndrome, 27, 92
- uniqueness of humans, 4–5
- Urry, J., 52
- Urwin, K., 131
- variation, human
  - comparative methods for study of, 35–8, 88, 130
  - continuum of variation in sex, 92, 100
  - cultural variability in age categories, 124, 126
  - in phenotypes, 75, 92
- Vesalius, A., 48
- Wainwright, S. P., 59
- walking, 76
- Weiss, E., 72
- Wells, C., 7
- Wolff, J., 71