

Cambridge University Press

978-0-521-10288-9 - Thoughtful Foragers: A Study of Prehistoric Decision Making

Steven J. Mithen

Index

[More information](#)***INDEX***

- Abri Morin, 248  
 Abri Pataud, 201–2  
 Áche, 15, 55, 58, 59, 61, 63, 104  
 adaptation, 4–9, 12, 13, 17, 85–6, 182  
     and co-operation, 13  
     and creativity, 7, 12, 191, 227, 250  
     as a process, 8–9, 12, 32, 96, 255, 263  
 Ageröd I, 94, 156–62  
     I:D, 158–9, 169, 178, 188–9  
     I:B, 114, 161–2, 169, 188–9  
     I:HC, 114–15, 161–2, 169, 188–9  
 Ageröd V, 100, 162–5, 169, 178  
 Aggersund, 94, 162  
 aggregation,  
     of humans, 69, 87  
     of ungulates, 116–18  
 agriculture, 17, 95–6, 102, 191–3  
 Agta, 55, 62, 104  
 Ainu, 55, 57, 69, 70  
 Aka, 55, 71–2  
 Altamira, 205, 219, 222, 230, 231, 232, 235, 236,  
     240, 244, 245, 248, 250, 254  
 Altxerri, 240  
 Alyawara, 15, 33, 55, 153  
 anthropomorphism, 76–7  
 antler, 114, 223, 237  
 Arudy, 231  
 Asqiquimut, 215  
 attention  
     selective, 47, 246  
     to past experience, 127, 133  
 Balmori, 248  
 bandit problems, 33–4, 42–4  
 Bari, 33, 55, 56, 58, 63  
 Bédeilhac, 231, 239, 251, 252  
 behavioural flexibility, 1, 7, 31  
 Bevis, 243  
 body gesture, 70  
 Bredasten, 165–6, 169, 178  
 butchery, 107, 111, 112, 121–2  
 Buxu, El, 233, 235  
 calender plants, 65  
 Cantabrian Spain, 204–7, 221  
 Casares, 240  
 Castillo, 229, 230, 232  
 cemeteries, 100–2, 168–9, 182  
 Chipewyan, 55, 68  
 Chiricahua Apache, 55, 58, 64, 70, 77  
 choice shift, 49  
 coastal resources, 94, 95, 97, 101, 102, 181  
 coefficient of variation, 213, 228  
 cognition, 25–7, *see also* mind  
 Comarque, 229, 248  
 Combarelles, Les, 231  
 computer simulation, 91, 104, 109–151  
     as methodology, 17, 91, 104, 109, 123, 198,  
     207  
     of decision making, 122–31  
     of encounter foraging, 109–12  
     of post-glacial environment, 112–22  
     of red deer population, 215–19  
     of reindeer population, 208–15, 238  
     *see also* MESO-SIM.  
 consciousness, 10, 11, 22–3, 29, 85  
 consensus, 83, 129  
 consequences, intended and unintended, 8, 9,  
     50, 87, 224–5, 263  
 co-operation, 13, 25  
     in hunting, 25, 222, 225, 249, 252  
 costs, 58, 119, 122, 125, 223, 225  
 Covalanus, 249  
 creative thought, 7, 12, 13, 41, 191, 227, 250–1,  
     262, 263  
 Cree, 33, 55, 59, 68, 77, 81, 246, 255  
 cues, 36–8, 59–66, 87–8, 122, 222, 224, 227, 262  
     animal and plant, 63–6  
     audible, 63  
     excretions, 60–1  
     olfactory, 63  
     terrain, 61  
     tracks and hoofprints, 59–60, 122  
 utilisation, 37, 224  
 validity, 31, 37, 46, 85, 224  
 vegetation, 61–2  
 weather, 66  
 cultural selectionism, 6–8
- decision making  
     and culture, 1, 52, 256  
     decision goals, *see* hunting goals  
     decision rules, 14–15, 28, 31, 34, 41–5  
     evolution of, 1–2, 7, 9, 27–9  
     group decision making, 48–50, 83, 222, 225  
     model for, 21–51  
     *see also* learning, information
- Denmark, 94  
 diet breadth, *see* optimal foraging  
 diversification, 202, 203, 205, 247

*Index*

287

- divination, 77–9, *see also* scapulimancy  
 dreams, 70  
 Duvensee, 5, 154
- Ebbou, 239  
 education, 71–3  
*Eglises, Les*, 248, 251, 252, 254  
*Ekain*, 248  
 emotions, 28, 86  
 encounter foraging, 104, 105–7  
 encounter probabilities, 106, 112, 116–19  
 encyclopaedic memory, 40  
 environmental variability  
     global, 94, 131  
     local, 94, 131, 133, 173  
 equifinality, 152  
*Ertebølle*, 94, 99, 165, 192  
*Escabasser*, 243  
 exchange, 69, 193  
 explanation, 3, 5, 17, 102, 152, 256  
*Eyzies, Les*, 238, 241
- Falkenstein*, 169, 170, 171  
 faunal assemblages  
     body part frequencies, 105, 252  
     formation, 94–5, 210–11  
 Mesolithic, 93–7, 102, 104, 105, 107–54, 156  
 Palaeolithic, 197, 200–7, 247–55  
     simulated, 112, 131, 152–3, 171–8  
     *see also* mortality profiles  
 fish traps, 99, 113, 181  
*Fodor, J.*, 22, 26, 27, 29, 47  
*Font de Gaume*, 228, 231, 238, 239, 240  
*Fontanet*, 219, 251, 252  
 food sharing, 25, 104, 107  
 foraging efficiency, 5, 16, 32, 34–5, 122, 125, 134, 182–3, 187–8  
 foraging goals, *see* hunting goals  
 foraging problems  
     patch choice, 24, 41–4, 80  
     prey choice, 24, 50  
 forward planning, 22, 47, 82  
 free will, 10, 11–12
- goals, *see* hunting goals  
*Gabilou*, 231, 239, 240  
*Ganties-Montespan*, 243  
*Gare de Couze*, 252  
*Gargas*, 243, 248, 249  
*Gidjingali*, 55, 58, 62, 66, 70, 76  
*Gonnersdorf*, 248  
*Gourdan*, 204, 230, 232, 243  
 grave goods, 101–2  
*Grèze, La*, 239  
*Groot Eylandt Islanders*, 55, 65  
*Grotte des Eyzies*, 248  
*Grotte des Fieux*, 98  
 group polarisation 49  
 group size  
     of humans, 107, 109, 133, 153, 154, 169, 171, 174–5  
     of ungulates, 117  
 group think, 49
- G/wi*, 55, 58, 68, 70, 71, 73–6, 81, 82, 104  
 heuristics, 45–6  
 hides, 114  
*Hienheim*, 192  
*Hodder, I.*, 3, 4, 9, 13, 263–4, 265  
*Holmegaard IV*, 154  
*Horteaux, Les*, 233, 235  
*Humphrey, N.*, 9, 21, 25, 29  
 hunting  
     ability, 184–7, 190  
     failure, 106, 120–1, 182–3, 186, 190  
     luck, 151, 172, 184–7, 190  
 hunting goals, 14–15, 222  
     goal choice, 31–2, 104, 111, 123, 183  
     null, 123, 133, 134, 176–8, 262  
     risk reducing (RR), 32, 123, 124, 129, 151, 186, 222–4  
     utility increasing (UI), 32, 123, 124, 125  
     utility increasing and satisficing (UIS), 123, 125, 133, 134, 151, 178–87, 191, 192–3  
     utility increasing, satisficing and risk reducing (UISR), 123, 125, 133, 134, 151, 178–9, 182–4, 191–2, 262
- influence, 128, 151, 184  
 information  
     acquired, 73, 123, 125, 189–90, 262  
     acquisition, 16, 32–41  
     exchange, 38–9, 58–9, 67–73, 107, 112, 122, 123, 128  
     flows, 16  
     gathering, 16, 35, 74, 112  
     potential, 85, 222  
     processing, 16–17, 28–9, 41–7, 79–83  
     retrieval, 75, 79, 246–7  
     stored, 73, 74, 122, 125, 262  
     *see also* cues, past experience  
*Ingold, T.*, 10–11, 91  
 innovation, *see* microlithic technology  
 intensification, 202, 204–5, 213–14, 218, 224, 247  
*Inzigkofen*, 169, 170, 171
- Jagerhaus*, 169, 170, 171  
*Jochim, M.*, 14, 114, 117, 198, 215  
*Juyo, El*, 205
- Kaurareg*, 55, 57, 81, 82  
*Kesslerloch*, 233, 234, 244, 250  
*Kongemose*, 99, 166  
*Kongumuvuk*, 105, 112  
*Koyukon*, 55, 57, 61, 64, 65, 66, 74  
*!Kung*, 55, 58, 60, 61, 63, 64, 67, 68, 70, 71, 72, 74, 77, 78, 80, 153, 246  
*Kutchin*, 55, 61, 63, 83, 238, 244
- Labastide*, 243  
 language, 70–1  
*Lascaux*, 228, 230–4, 237, 239, 245, 248  
*Laugeerie-Basse*, 230, 231, 232, 240  
*Lautereck*, 169, 170, 171  
 learning, 1, 10, 13, 17, 22, 28, 85–6, 127, 246, 256, *see also* decision making, information

*Index*

288

- Leslie matrix, 207, 213, 215–16  
 Levanzo, 230, 231  
 Limeuil, 233, 234  
 Linearbandkeramik culture, 191–2  
 lithic assemblages, 97–100, 187  
     variability in, 99  
     *see also* microlithic technology  
 Lortet, 240, 241, 242  
 Lourdes, 240, 242, 243  
 Lower Palaeolithic, 261
- Madeleine, La, 202, 231, 249, 252  
 Maglemosian, 97, 99, 154, 187  
 Marié à Teyjat, La, 231, 233, 237  
 Mas d'Azil, 204, 231, 233, 235, 238  
 Massat, 233, 234  
 mathematical modelling, *see* computer simulation  
 maximum sustainable yields, 213  
 meat weights, 114, 209  
 Mekranti, 55, 58  
 meliorising, 32, 123, 127  
 memory, 47–8, 75  
     encyclopaedic memory, 40, 246, 250  
     *see also* past experience, information  
 mental maps, 40, 183  
 MESO-SIM, 130–71  
 meta-decision making, 30–2, 42, 83, 85, 87, 123, 183, 260  
 methodological individualism, 2  
 microlithic technology, 25, 97–9, 105–6, 187–91  
     assemblage diversity, 188–90  
     broad blades, 97, 190  
     innovation, 97, 99, 102, 187, 190–1  
     regional variability, 99  
     time stress, 97  
 Middle Palaeolithic, 202, 204, 261  
 mind  
     as simulation device, 27–9  
     central systems, 26–7  
     input systems, 26–7, 47  
     modularity model, 26–7  
     relevance model, 26–7, 47  
 mnemonic aids, 76, *see also* information retrieval  
 Modoc, 55  
 Montagnais-Naskapi, 55  
 Montgaudier baton, 241, 242  
 mortality profiles  
     age structure, 218, 221  
     attritional, 208  
     catastrophic, 201–2, 207–15, 224  
     Star Carr, 186–7  
 Mount Sandel, 99
- natural selection, 4, 7, 8, 15, 28, 32  
 Niaux, 198–9, 240, 251–4  
 non-food value (NFV), 114  
 Nunamiut, 57, 58, 61, 62, 63, 65, 66, 70, 72, 74, 75, 80, 82, 105, 153  
 Nymölla III, 192–3
- occupation  
     duration, 11, 133, 153–4, 155, 169, 187–8
- repeated, 154, 158, 162, 169  
 Oleneostrovski Mogilnik, 101, 102, 184  
 optimal foraging, 6, 8, 14–17, 22, 32, 44, 105  
     diet breadth model, 15, 16, 50, 105, 125  
     patch use model, 16, 41, 56  
     prey choice model, *see* optimal foraging, diet breadth
- palaeoeconomy, 6  
 Palaeolithic art  
     ambiguity, 245, 250–1  
     audible cues, 233, 235  
     body cues, 233, 238, 239  
     distortion, 233, 238, 245  
     distribution, 198  
     education, 246, 252  
     excretion cues, 233, 238, 245  
     functional interpretation, 198  
     hoofprints, 228–30  
     imagery, 200  
     information gathering theme, 227–47, 254  
     information required theme, 247, 250, 254  
     omission, 233, 238, 245  
     quantitative studies, 200, 247  
     raised tail posture, 230, 231  
     seasonal imagery, 241–4, 245  
     species frequency, 247–250  
     style, 198, 243  
     terrain cues, 230, 232  
     twisted perspective, 228, 233  
     vegetation cues, 233, 234  
 Pasiega, La, 229, 231, 249  
 past experience, 39–41, 73–9, 125–7  
 patch switching, 225  
 patch use model, *see* optimal foraging  
 Pech Merle, 229–33, 237  
 Pendo, El, 238  
 perception, 25–7, *see* mind, input systems  
 Perigord, 200–2, 209  
 Pileta, La, 228, 239  
 Pincevent, 202  
 Pindal, 238, 239  
 ‘poor’ environment, 131, 184–7  
 population density  
     human, 213  
     ungulates, 116–18  
     wolf, 211  
 Portel, Le, 202, 204, 231, 233, 237  
 prestige, 97, 184, 186  
 primitive thought, 4  
 problem recognition, 29–30  
 processing time, *see* butchery  
 psychological decision theory, 39, 44–5  
 psychological propensities, 7, 9, 18, 53, 263  
 pursuit times, 111, 112, 119–20  
 Puy de Lacan, 241  
 Pyrenees, 202–4
- Raymonden, 233, 234, 241  
 reality monitoring, 30, 76  
 red deer, 93, 94, 102, 105, 107, 112, 114, 116–21, 175–81, 204–7, 215–18, 224  
 redundancy argument, 9–10  
 reindeer, 200–2, 207, 208–15, 224

Cambridge University Press

978-0-521-10288-9 - Thoughtful Foragers: A Study of Prehistoric Decision Making

Steven J. Mithen

Index

[More information](#)*Index*

289

- migration, 201
- reproductive success, 4–5, 7, 24, 182
- return times, 212–14
- Rice and Paterson, 247–9
- ‘rich’ environment, 131, 184–7
- Riera, La, 204–6, 217–19, 221, 252
- Rindos, D., 7–8
- Ringkloster, 94
- risk, 120–1, 182
- Roc de Saint-Cirq, 243
- Roucadour, 229
- Rouffignac, 98
- rule of thumb (ROT), 31, 44–6, 81, 123, 129–31, 222
- sampling, 32–6, 55–9
- satisficing, 32, 45, 123, 129–30
- Scania, 104, 154, 156–69, 176–81
- scapulimancy, 77–9, 87, 246, 255
- scavenging, 204, 211, 261
- searching, 32–6, 55–9, 107–11, 122
- Segebro, 166–7, 169
- Shanks and Tilley, 6, 7, 9, 10, 92, 264–5
- Shannon-Weaver index, 189
- signatures, 153, 154, 169, 170, 171, 173, 175, 176
- Siona-Secoya, 55
- Sioux, 55, 76
- Skateholm, 167–9
- smoke signals, 71
- social differentiation, 100–2, 181–7
- social judgement theory, 37, 45
- south-west Germany, 104, 154, 169–71, 176–81, 182, 191–2
- specialisation, 202, 205, 251
- stalk probabilities, 111, 122, 123, 124, 129–31, 151
- Star Carr, 105, 106, 114, 186–7
- stochasticity, 16, 173, 175, 186, 209
- story telling, 68, 72, 122
- Svaerdborg, 154
- Tarascon basin, 251–4
- Taremiut, 55, 71
- technology, 24–5 *see also* microlithic technology
- T’ena, 55, 56, 59, 61, 68, 69, 82
- Tikiraqmiut, 215
- Tito Bustillo, 229
- Tiwi, 55, 58, 62, 72, 75, 81, 82, 87
- Torrence, R., 8, 25, 188, 190
- Trois Frères, Les, 228, 230
- Twana, 55
- universals, 263, 264
- utility, 112, 113–16
- Vache, La, 202, 219, 222, 233, 234, 248, 249, 251, 252
- Valley Bisa, 55, 58, 63, 64, 77, 79, 104, 106, 112–13, 116, 119, 120–1
- Vedbaek, 102, 103
- Villars, 248
- Walbiri, 55
- Waroni, 55, 61, 63, 72
- wildfowl, 66, 94, 181, 242–4
- wolf predation, 209–10, 238
- Yakutat-Tlingit, 55, 64, 66, 69, 74, 76
- yield fluctuations, 218–20, 222–5, 227, 247
- Yumon, 55, 60, 79
- Zvelebil, M., 99–100, 101, 188