CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

INDEX

Aalto, S. K., 815n34
Abbot, Sarah, 792
Abgar Tibir of Tokat, 657
Académie des Sciences (Paris): and chemistry, 379; establishment of, 88–9, 512; and image of virtuous scientist, 164–5; and mathematical astronomy, 352; as model of scientific academy, 87, 92, 93; and navigation, 827; and Newtonianism, 299–300; and observatories, 99; and physics, 355–7; printing and publication, 542; proceedings of, 93; and prosopography, 224; and science education in universities, 61, 83–4, 85, 98; and scientific expeditions, 332, 333, 362, 621; and scientific experiments, 104; and scientific journals, 95, 96; and state, 104, 107–8; and technology, 104, 114–16; and women, 187, 196
Academy of Mathematics (China), 690
Accademia del Cimento (Florence), 88, 512
Accademia dei Lincei (Rome), 88
Adams, Dudley, 529, 530f
Adams, George, 505, 529
Adams, John Couch, 347
Adams, Will, 866
Adanson, Michel, 409, 568, 835
Addison, Joseph, 8–9, 172
Adorno, Theodor T., 1n2, 436n3
advertising, and medicine, 547
Aepinus, Franz, 370–1, 373
aesthetics, and landscape art, 601
affinities and affinity tables, 384–9
Africa: trade and imperialism, 836; and voyages of discovery, 639
Age of Reason, 742, 824
Agnesi, Maria Gaetana, 103, 185
agriculture: and China, 873, 875, 879; and government patronage of science, 117; and India, 683–4, 879; and Japan, 868, 870, 879; natural knowledge and economic interests, 139–46. *See also* gardening; horticulture
Ahmed III, Sultan, 650, 657
Akenside, Mark, 767, 783–4
Alaska, and voyages of discovery, 634
'Alavī Khān, Mirza, 662, 663, 682
Albin, Eleazar, 574–5
Albinus, Bernard, 71, 578
alchemy: art and literature, 787; and chemistry, 378; and marginalized practices, 485, 499–503, 506–7; and natural knowledge, 136n15
Alcock, Michael, 849
Aldrovandi, Ulisse, 168
Alembert, Jean Le Rond d': and astronomy, 331, 335, 336, 338–42; and Baconianism, 282; and Cartesianism, 301, 302, 344; and classification of sciences, 254–6; and the *Encyclopédie*, 248n16–17, 250–1, 260–3, 264, 400, 667; and evaluation of scientific explanatory systems, 439n12; and Locke, 930n45; and materialism, 415; and mathematics, 4, 281, 305, 314; and mechanics, 361, 362; and probability theory, 815; and reform of education, 53–4; and skeptical critique of natural philosophy, 32
D'Alembert's Principle, 339, 362
Algarotti, Francesco, 137–8, 157, 188n9, 300, 546
algebra and algebraic analysis, 321, 323, 324, 325–6, 703–4
algorithms, 315, 334
Alkon, Paul, 895, 896
allegory: and gendered representations of science, 194f; and images of nature, 591–2
alphabetic arrangement, of encyclopedias, 249–50, 252, 255
Alzate, José Antonio de, 788, 789
amateurs, and scientific communities, 221, 222–4

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

American Academy of Arts and Sciences, 100
American colonies: and navigational expeditions, 842; and scientific academies, 100; and textile industry, 846–7, 857–8; and trade in scientific instruments, 534; and universities, 44, 53, 64, 100, 517–18, 523, 527, 534. *See also* Alaska; Franklin, Benjamin; Native Americans
American Philosophical Society (APS), 100, 755
Ampère, André-Marie, 246
analogical reasoning, and vitalism, 38
analysis: and human sciences, 439; mathematics and theorems of, 317–18; and specimens from voyages of discovery, 644
analytical philosophy, and mathematics, 318–20
anatomy: and Japan, 712–13; and medical education, 50, 51, 71n49, 85, 466; of mind, 817–18; and representations of body, 778; and scientific illustration, 576, 577–8; and sexual difference, 198, 200. *See also* medicine; physiology
al-Andalusi, Said, 669–60
Anderson, John, 79
Anderson, William, 633
Andrew, John, 192n18
Anglesea, Martyn, 606n57
Anglican Church, 134–5, 277, 505. *See also* Protestantism
animal magnetism, 491–5, 506–7
animism, and life sciences, 404–6
Annals of Agriculture, The (journal), 143
Anne, Queen of England, 132
Ansari, S. M. R., 677n30
Anson, George, 620, 624, 827, 829–30
al-Antākī, Dā'ūd, 662
anthropology: and human nature, 776; and professionalization in nineteenth century, 461–2; race and background of physical, 450–1; use of term, 437; and voyages of discovery, 644. *See also* human sciences
anti-Newtonianism, 503–4, 764–6, 796
apprenticeship, and medicine in Japan, 714. *See also* guilds
Arabian peninsula, and European contact, 650
Arabic script, and printing, 658–9
Arago, François, 350
Aramata, Hiroshi, 574
Arbuthnot, John, 447
Archimedes, 83
Arconville, Marie-Geneviève-Charlotte Thiroux de, 199f
Arduino, Giovanni, 425–6, 428, 432, 585n7
Aristotle: and classification of sciences, 244, 246, 254; and natural philosophy, 268, 269, 271, 285, 288; and physics, 46, 48, 67, 80, 83, 297, 354; and physiognomy, 496; and political theory, 447–8; and scientific method, 511
Arkwright, Richard, 854, 855
Armstrong, John, 767
Arnold, John, 636
art: and dualistic view of science, 617; *écoles de dessin* and decorative, 73–4; geological sections and diagrams, 609–17; history painting and cosmogonies, 587–92; impact of science on, 775, 781, 782–5; and natural history, 585–7, 592–609. *See also* illustration, scientific
Arteaga, Ignacio, 642
artisanal workshops, and women, 189–90
Arzani, Akbar, 681
Asada Goryu, 706, 707
associationist psychology, 457–61
astrology, 491–2, 497–9, 506–7
astronomy: and China, 689–90, 693; cosmology and nebular hypothesis, 348–50; and figure of the Earth, 332–3; and Halley's comet, 342–3; and India, 670, 672–3, 674–8; and Islamic world, 659–60; and Japan, 699, 700–1, 704, 706–10, 716, 717; and Laplacian synthesis, 351–3; and lunar orbit problem, 386–9; and nebular hypothesis, 348–50; and organization of science, 98–9; and perturbational problem, 334–7; and scientific instruments, 521, 523–5; and secular inequalities, 344–8; of solar system in 1700, 329–32; star positions and physical theory, 338–9; status of in eighteenth century, 328; and universities, 82; and women, 190. *See also* cosmography; cosmology; observatories; Venus
atheism, 759–60
attraction: and chemistry, 382–3, 384–6; and electricity, 369
Aubriet, Claude, 565
Australia, and voyages of discovery, 639, 640
Austria and Austro-Hungarian Empire: and government support for mining, 120; and Ottoman Empire, 651–2, 655; and prosopographic studies, 227–8, 230; and universities, 55, 230
authorship, and print culture, 555–60
autopsy, and pathology, 479, 481
Avicenna, 466, 468, 662, 663
Aymand, Claudius, 853
Ayurveda, and medicine in India, 681
al-'Azīz, Subhī-zāde 'Abd, 662
Aztecs, 718, 729

Baader, Franz Xaver von, 36
Bacon, Francis: and classification of sciences, 245, 246, 252, 253–4, 258, 259, 261f, 262, 264; and concepts of fire and heat, 367; and experimental method, 86, 512, 800, 802; and gendered concepts of nature, 193, 195; on human

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

nature, 802–4; influence of on development of science, 35; and methodology, 281; and philosophy of science, 271; and religion, 741; and vitalism, 38
Baier, Johann Jacob, 419–20
Baildon, John, 850
Baily, Francis, 13
Baird, Charles, 863
Baker, Henry, 410, 517, 522–3, 532, 573, 579
Bakewell, Robert, 144, 145, 157, 853–4
Bandinus, Domenicus, 249
Banks, Joseph: and alchemy, 485; and botany, 152, 571; and class, 166; and Kew Gardens, 627; and Royal Society, 128, 282; and scientist as civic expert, 180, 181–2; trade and imperialism, 830, 836, 840; and voyages of discovery, 619–20, 623–4, 627, 629, 639–40
Banneker, Benjamin, 534
Barber, G., 538n3
Baret, Jeanne, 625
Barham, Henry, 834
Barker, Robert, 601
Barloeuf, Charles-Ariège, 60
Baroque polymaths, and Spanish America, 721, 722, 738
Barrett, Francis, 499, 502–3
Barrington, Daines, 631
Barrow, Isaac, 308–9
Barthes, Roland, 249
Barthez, Paul-Joseph, 341n35, 37, 72, 405–6, 475
Bartholinus, Caspar, 61
Bartin, François-Xavier, 492
Bartmann, Sarah. *See* Hottentot Venus
Bartram, John, 163, 181
Bartram, William, 566–7
basalt controversy, 426–8, 606–9
Bassi, Laura, 77, 103, 185, 186f, 187
Baudin, Nicolas, 619, 639
Bauer, Ferdinand & Franz, 571
Baugh, Daniel, 182
Bayezīd II, Sultan, 656
Bayle, Pierre, 195, 284, 487, 552
Bayly, William, 624, 629, 630–1
Beattie, James, 812
Beaumont, Juan Blas, 731n42
beauty, and landscape art, 587–8, 601
Beccaria, Caesar, 455, 460
Becher, Johann, 452, 456
Beddoes, Thomas, 175–6, 506, 837
Beethoven, Ludwig von, 780, 798
Behmenism, 504
Behn, Aphra, 773
Bell, Charles, 578
Bell, John, 494
Bella, Giovanni Antonio della, 519
belles-lettres and literary associations, 92
Benard, Robert, 260
Benedict XIV, Pope, 185
Benoit, Michel, 684, 690
Bentham, Jeremy, 64–5, 143, 459, 801
Bentley, Richard, 135, 291, 348, 742, 747
Berch, Andre, 457
Bergman, Torbern, 36, 118, 384, 585n7
Bering, Vitus, 863
Berkeley, George, 284, 322, 503, 816
Berlin Academy, 94, 109, 229, 362. *See also* *Societas regia scientiarum*
Bernier, François, 671, 682
Bernoulli, Daniel, 287, 305, 362
Bernoulli, Jakob, 305, 308, 309, 362
Bernoulli, Jean, 527
Bernoulli, Johann, 305, 308, 313, 315–16, 321, 334, 361
Berthaut, Henry Marie Auguste, 126n61
Berthollet, Claude-Louis, 85, 115–16, 393
Berthollet, Guyton, 393
Berthoud, Ferdinand, 636
Bertin, Henri L.-J.-B., 126n62
Besoigne, Jerome, 48
Betancourt, Agustín de, 123, 124n52
Beuer, Johann Ambrosius, 570
Bézout, Etienne, 167
Bhava Misra, 682
Bhuwah, Mian, 670, 681
Bichat, Marie-François-Xavier, 72, 416, 484
al-Bihari, Mushibullah, 686
Bildt, Jan van der, 532
Biographia Britannica (1747–66), 251
biology, use of term, 416. *See also* life sciences; physiology; reproduction
Biran, Maine de, 760
Birch, Thomas, 557
Bird, John, 524f, 528
Bitterli, Urs, 443n19
Black, Joseph, 36, 68, 97, 180, 367–8, 390, 475, 507, 525
Blaeu, Joan, 654
Blagden, Charles, 485
Blake, William, 7, 496, 502, 507, 559, 767, 778, 784, 794–5
Blakey, Nicholas, 590, 591f
Bligh, William, 640
Bliss, Nathaniel, 64–5
Bloch, Marcus Elieser, 574
Blondel, James, 150
Bloom, Harold, 784–5
Blumenbach, Johann Friedrich, 33–4, 37, 38, 40, 57, 207, 236, 236n55, 404, 406, 416, 432, 434, 451
Blunt, Thomas, 529

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Boccone, Paolo, 419
Bodega y Quadra, Juan Francisco de la, 642
Bodin, Jean, 447
body: analogy between mind and, 817–18; science and representations of, 777–82. *See also* breasts; dualism
Boerhaave, Herman: and biography of Swammerdam, 579; and chemistry, 258, 378, 389, 525; and electricity, 369; and mechanistic preformation, 408; and medicine, 465–6, 468–70, 475–6, 477, 483, 666; and Newtonianism, 296, 401; and physics, 367; and physiology, 402; and print culture, 550; as professor of botany, 51; and textbooks, 531
Boisguilbert, Pierre de, 453
Boissier de Sauvages, François, 474
Bolingbroke, Viscount (Henry St. John), 743–4
Bolognese Academy of Sciences, 98
Bonet, Théophile, 479
Bonnet, Charles, 409, 413, 414, 423
Bonnier de la Masson, 516–17
Bonpland, Aimée, 737
Book of Hours, 563
Boot, Adrián, 724f
Bordeu, Théophile de, 405, 474–5
Borelli, Giovanni, 398
Boscovich, Roger, 61, 180, 278, 361
Bossut, Charles, 121
botany: and botanical gardens, 101–2, 108, 732; and medical education, 50, 51, 69, 467; and natural knowledge, 151–6; and scientist as civic expert, 181–2; and sexual reproduction in plants, 201–5; and Spanish America, 730–1; and taxonomic system of Linnaeus, 5–6, 78; trade and imperialism, 833–40; and voyages of discovery, 626–7, 644; and women, 196, 791–3. *See also* life sciences; reproduction
Bottoni, Federico, 731n42
Boucher, François, 797
Boudier, Claude, 675
Bougainville, Louis Antoine, comte de, 125, 620, 625, 825, 832, 835, 836–7, 842, 843
Bouguer, Pierre, 333, 364, 735
Boulliau, Ismael, 348
Boulton, Matthew, 124, 176, 180, 754
Bourguet, Louis, 421
Bourrit, Marc Théodore, 599, 601, 602f
Bowditch, Nathaniel, 352
Boyer, Carl, 311n9
Boyle, Robert: and chemistry, 381–2; and endowment of lectures, 134; and experimental method, 86, 358, 512; and gendering of science, 195; influence of on Locke, 807; and natural philosophy, 27, 291, 469; and philosophy of science, 270, 271, 272; and print culture, 556–7, 558; and religion, 742, 747, 751; and Royal Society of London, 172; and writing of science, 18n66
Bradley, James, 65, 328, 338–9, 635, 866
Brahe, Tycho, 98, 348, 694
Bramah, Joseph, 854
Brander, Georg Friedrich, 519, 520f, 532
Brandt, Georg, 118
Braudel, Fernand, 849, 875
breasts: and allegorical representations of nature, 591–2; and gender politics of science, 205, 206–7, 208f. *See also* body; gender
Breithaupt, Johann Christian, 532
Bret, Patrice, 116n29
Brewer, John, 790
Brewster, David, 521
Brissot, Jacques-Pierre, 174–5
Broc, Numa, 125
Brock, William H., 5n17
Brockliss, Laurence W. B., 2, 8, 60n25, 86n78, 96, 216, 222, 467n8
Bronginiart, Alexandre, 432n39
Brooke, Henry, 506
Brooke, John H., 12, 435n48
Brooks, G. P., 815n34
Brougham, Henry, 375
Brown, John, 484
Brown, Sylvanus, 846
Brown, Theodore, 401
Bucareli y Ursúa, Antonio María, 642
Buchan, Alexander, 628
Buchan, William, 146, 148–9, 151
Buck, Peter, 457n39
Buffon, Comte de (Georges-Louis Le Clerc): and astronomy, 340; and class, 166; and classification of sciences, 246, 263; on concept of species, 451; and earth sciences, 421–3, 427, 599, 752; imperialism and scientific knowledge, 834–5; and materialism, 414; and natural history, 417; and natural philosophy, 29–30, 31; and probability theory, 815; representations of nature in works of, 588–91; and theory of reproduction, 411–12; and vitalism, 39, 40, 73
Bugge, Thomas, 529
Bulkeley, Richard, 606
Buonanni, Filippo, 419
Burdach, Karl Friedrich, 416
Burke, Edmund, 12, 175, 461, 547–8, 602–3
Burke, Peter, 247–8
Bürmann, Johannes, 566
Burnet, Thomas, 418–19, 544, 588, 589f, 745–6, 751
Burney, Charles, 185
Burney, Fanny, 791

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Burtin, François-Xavier, 432
Bute, Earl of, 166
Butler, Joseph, 743, 819
Butterfield, Herbert, 5, 375, 381
Byrom, John, 504
Byron, Lord George Gordon, 762, 780
Byron, John, 624

Cabanis, Pierre-Jean-Georges, 37, 39, 439, 460, 483, 805
Calancha, Antonio, 728
calculus: and analytical functions, 322; and analytical philosophy, 318–20; and Berkeley's critique of Newton, 284; and graphical methods, 308–12; and Japan, 703, 704; Leibniz's notation for, 287, 351–2; and theorems of analysis, 317–18
Caldas, Francisco José de, 729
calendar, Japanese, 709
calorimetry, 372
Cambridge University, 49, 60, 65–6, 68, 85, 215, 216, 289, 290, 291, 333
Camden, Lord, 556
Campbell, Archibald, 815n34
Camper, Peter, 451
Canada, and voyages of discovery, 627, 640–1
canals, and industrialization, 855, 856, 857
Cannon, John, 498
Cannon, Susan, 15
Cantillon, Richard, 454
Caramuel, Juan, 721
Cardero, José, 643
Carl, Ernst Ludwig, 453–4
Carlisle, Richard, 755
Carlos III, King of Spain, 117, 641–2
Carlos IV, King of Spain, 643
Carmichael, Gershom, 441
Carnot, Lazare, 73, 122
Caroline, Princess of Wales, 292
Carozzi, Albert V. & Marguerite, 428n28
Carter, Elizabeth, 133
Carteret, Philip, 625
Cartesianism: and dualism, 27, 913; and life sciences, 402; and natural philosophy, 286; and Newtonianism, 287–8, 299, 300, 359–60. *See also* Descartes, René
cartography: and China, 690; and government support for science, 126–7; Islamic world and Western techniques of, 653–5; and voyages of discovery, 645. *See also* geography; navigation
Cartwright, Edmund, 854
case histories, and pathology, 480
Cassini, Gian Domenico, 332, 621, 651
Cassini, Jacques, 332, 337, 651
Cassini de Thury, César-François, 126
Cassirer, Ernst, 801
caste system, in India, 686
Castel, Louis Bertrand, 49
Castle, Terry, 772n28
catastrophism, 433–4
Catcott, Alexander, 277
Catesby, Mark, 565–6
Catherine the Great, Tsarina of Russia, 623, 632–3, 860, 862–3
Catholic Church: and natural religion, 743; and *philosophes*, 754–5; Reformation and German universities, 230; and relations between science and religion, 742, 754–5; and science education in universities, 53, 81; and scholarship in Spanish America, 724–7. *See also* Jesuits; religion
Catrou, François, 442
Cauchy, Augustin, 324
causality and causation: in nature and religion, 759; philosophy of science and critiques of, 276; and skepticism, 29, 30–2
Cavazza, Marta, 185n6
Cavendish, Henry, 166, 373, 390, 393
Cavendish, Margaret (Duchess of Newcastle), 187
Celsius, Anders, 82, 430–1
Ceranski, Beate, 187
Cessart, Louis-Alexandre, 122
Chambers, Ephraim, 248, 250, 252, 254–6, 256–60, 264
Channing, John, 665
Chappe d'Auteroche, Jean-Baptiste, 623, 624, 642
Chaptel, Jean-Antoine-Claude, 72, 83, 115
characterology, and images of scientists, 160
Charaka, 681n44
Charles II, King of England, 107, 538, 852
Charles III, King of Spain, 61, 730
Charles XII, King of Sweden, 110
Charlevoix, Pierre-François Xavier de, 443, 837
Charpentier, Johann Friedrich Wilhelm, 609, 611f, 612
Chateaubriand, Vicomte de, 760
Châtelet, Madame du (Gabrielle-Émilie le Tonnelier de Breteuil), 103, 170, 187, 188, 301
Chelsea Physic Garden, 627
chemical revolution, 35, 36–7, 392–6
Chemintz, J. H., 576
chemistry: affinities and composition, 384–8; and chemical revolution, 35, 36–7, 392–6; and classification of sciences, 256, 258, 259–60, 262–3; economic development and government support for, 118–19; and Enlightenment, 375, 377–80; and gases, 388–91; and German scientific community, 229–31; and history of

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

chemistry (*cont.*): science, 375–7; and matter, 381–4; and medical education, 50, 68, 70–2, 84, 467; and natural philosophy, 286; and scientific illustration, 582–3; and scientific instruments, 525; and scientist as civic expert, 180; and technical schools, 75; and textile industry, 115–16
Chen Yuanyao, 693
Chéseaux, J.-P. L. de, 349
Cheselden, William, 578
Chesterfield, Earl of, 171n21, 172, 173
Cheyne, George, 147, 401, 402, 466, 837
chi'i, and medicine in Japan, 711–13
children: and Newtonianism, 138–9; and reading, 555. *See also* education; family; motherhood
China: and agriculture, 873, 875, 879; and astronomy, 689–90, 693; and evidential scholarship, 691–5; and Jesuits, 688–91; and medicine, 695–7, 716; and navigational instruments, 843; and technological development, 871–7, 879–81; and voyages of discovery, 639
Chirikov, Aleksei Il'ich, 632
Christina, Queen of Sweden, 188
chronology, and geological history, 616
chronometers, 342, 635–6, 827, 843
Church of England. *See* Anglican Church
Churchill, Awnsham, 541, 556
Cigala, Francisco Ignacio, 734n52
civil service, and science as occupation in Japan, 699–700
Clairaut, Alexis-Claude, 121, 300, 305, 333, 336, 339–42, 362
Clark, George, 250
Clark, J. C. D., 10
Clark, William, 19, 181, 463n1
Clarke, Edward, 200
Clarke, John, 291
Clarke, Samuel, 135, 274, 276, 277, 291, 292, 357, 361, 742, 744–5, 748–9
class, socioeconomic: and education in India, 680; gardening and horticulture in England, 153, 154–5; and image of scientist as moral philosopher, 166–7; and industrial development in Russia, 860; and natural knowledge, 158; science and technology in Japan, 699, 867; and scientific academies, 226; and scientific community, 234; and Spanish America, 720; and university students, 215–18; and women in science, 188–9. *See also* caste system; working class
classification, of sciences: and Baconian division, 253–4; and earth sciences, 426; and encyclopedias, 249–52, 254–66; and history of science, 241–5; practice of, 245–8
Clement V, Pope, 464n2
clergy, and natural history, 163–4. *See also* Anglican Church; Catholic Church
Clerke, Charles, 631
Clerq, Peter de, 531
Clifford, George, 570
Cochin, Charles-Nicolas, 260
coffeehouses, and print culture, 553
Coke, Thomas William, 143
Colbert, Jean-Baptiste, 107–8, 122, 540
Cole, Christopher, 606, 607
Colegio de Minería (Mexico), 733
Coleridge, Samuel Taylor, 763, 765, 797
Collection Académique (journal), 95–6
collective biographies, 212
Collège de Navarre, 66
Collège Royal (France), 66, 97, 98, 108
Collège du Sorbonne-Plessis, 48
College of William and Mary, 44, 53, 100
colléges de plein exercice, 53, 62
Collins, Anthony, 276, 746, 775, 807
Collinson, Peter, 626
Colnett, James, 642
colonialism: and botanical transport, 839; gender politics of science and racism, 207–10; and scientist as civic expert, 181, 182; and Spanish America, 718–19, 730–5. *See also* imperialism; voyages of discovery
Columbia University, 100
comets, and astronomy, 342–3, 590
commerce. *See* mercantilism; trade
Commerson, Philibert, 625, 626
commodification, and botany, 151, 153, 155, 157–8
comparative analysis, and vitalism, 38
Complete Library of the Four Treasuries (China), 693
Comte, Auguste, 246, 461
Comtian Positivism, 461
Condamine, Charles-Marie de La, 735
Condamine Expedition (1740s), 735, 842
Condillac, Étienne Bonnet de, 18, 282, 319, 394, 438, 439, 455, 459, 483, 807, 812n26
Condorcet, Marquis de, 6, 13, 32, 94, 165, 167, 440, 457–8, 460, 486, 551–2, 558, 815
Condorcet, Mme., 460
Confucianism, 688, 691, 692, 699, 710. *See also* neo-Confucianism
Congreve, William, 685
Conservatoire des Arts et Métiers, 79
consumer culture: imagination and cultural change, 790–9; and natural knowledge, 157, 158
contraceptives and abortifacients, and botany, 208–10
Cook, James, 125, 136, 443, 523, 620, 626–36

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Cooper, Anthony Ashley. *See* Shaftesbury, Earl of
Cooter, Roger, 9, 17, 486
Copernican revolution and Copernicanism, 666, 709–10
copyrights, 539, 557–8
Cort, Henry, 854
cosmogonies, and landscape art, 587–92
cosmography, and China, 694. *See also* star catalogs and maps
cosmology: and astrology, 499; and Japan, 700; and Kant on metaphysics, 280
cosmopolitanism, and scientific community, 234
Costa, E. Mendes da, 491
Cosway, Richard, 502
Cotes, Roger, 86, 291, 335, 810
Coulomb, Charles-Augustin, 122, 167, 180, 371–2, 373
Cousin, Victor, 801
Cowles, Henry Chandler, 566
Cowper, William, 775
craft tradition, and women in science, 233
Crell, Lorenz, 57, 229, 234, 235
Creoles, and scholarship in Spanish America, 722–5, 727, 729, 735, 737–8
Crocker, Lester G., 1n2, 436n3, 801
Croll, Oswald, 661
Crompton, Samuel, 854, 877
Cudworth, Ralph, 275
Cuff, John, 527, 533
Cullen, William, 68, 142, 144, 145, 378, 379–80, 389–90, 479, 481, 754
Culpeper, Edmund, 526
Culpeper, Nicholas, 146
culture: and doctrines of optimism and doubt, 764–71; and forms of representation, 777–82; gendering of scientific, 196; and history of science, 237; and imaginations of consumers, 790–9; and impact of science on art, 782–5; and impact of science on literature, 771–7; and progress, 785–90; and scientific illustration, 562; and social roles of scientists, 159–83; travelers and change in Spanish America, 735–8. *See also* art; literature; music; popular culture; society
Cumberland, Richard, 808–9
Cunningham, Andrew, 14
Curie, Marie, 187
Curll, Edmund, 544
Curtis, William, 152
Cuthbertson, John, 529–31
Cuvier, Georges, 165n11, 200, 431, 432n39, 433, 619, 752
Cyclopaedia (Chambers, 1728), 248, 250, 252, 256–60, 264
Cyril Lucaris, Patriarch, 657
Dabney, John, 534
Dagoumer, Guillaume, 356
Dai Zhen, 693
Dalle Donne, Maria, 185n6
Dalrymple, Alexander, 627
Dalton, John, 166, 176, 395
Dampier, William, 619
Daniel, William, 782
Danishmand Khan, 671
Darby, Abraham, 853
Darnton, Robert, 262, 492, 493, 545, 549, 754n35, 789n60
Darwin, Charles, 760–1
Darwin, Erasmus, 153, 177, 603–4, 752, 767, 774, 792, 793, 794
Das, Govind, 681
Davy, Humphry, 78, 86, 396, 489, 760, 830
Dazille, J.-B., 838
Dedekind, Richard, 320
Defoe, Daniel, 490, 547, 831, 838, 839, 841
Degérando, Joseph-Marie, 619
Deijl, Jan & Harmanus van, 532
deism, 276, 620, 748
Delambre, Jean-Baptiste Joseph, 352
Delisle, Joseph-Nicolas, 332, 344, 622, 632
Deluc, Jean-André, 433, 434
Demainbray, Stephen, 77, 124–5, 513
Demidov, Sergei, 312n10, 319–20
democratization, of science in nineteenth century, 306
demography, and China, 695, 873, 879–80
de Moivre, Abraham, 305, 457
Denmark, and observatories, 98
Derby Philosophical Society, 177
Derham, William, 742
Desaguiliers, John Theophilus, 63–4, 135, 157, 252, 281, 290, 357, 513, 550, 749, 857
Descartes, René: and dualism, 751, 804; and earth sciences, 418, 589n17; and mechanical philosophy, 27, 46; and mechanical physiology, 398, 406–7; and medicine, 72; and natural philosophy, 269–70, 286, 469, 800, 804–5; and Newton's critique of vortex theory, 47; and physics, 359, 361, 364, 367; Queen Christina of Sweden as patron of, 188; and religion, 671n17, 741; and scientific revolution, 23. *See also* Cartesianism
Description des arts et métiers (Paris Academy of Sciences), 104
Deslon, Charles, 493
Desmarest, Nicolas, 423, 424, 425n20, 427, 428, 582, 606, 609
Destutt de Tracy, Antoine-Louis-Claude, 242, 245–6, 278, 460
determinism, and human sciences, 440

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Deutsche Encyclopädie (1778), 263–4
Deutsches Museum (Munich, Germany), 519, 520f
Dezallier d'Argenteville, Antoine-Joseph, 417–18, 431, 491, 575
Dezhnev, Semon, 632
Dharampal, A., 673, 683
dictionaries, of arts and sciences, 248, 251–2
Dictionnaire historique et critique (Bayle, 1697), 251
Diderot, Denis: and classification of sciences, 254–6, 264; and the *Encyclopédie*, 248n16–17, 250, 260–3, 400, 677; and human sciences, 439; Industrial Revolution and optimism, 775; and materialism, 414–15; natural history and study of the mind, 819; and Newtonianism, 282; and philosophical method, 824; and religion, 748, 752; and Rousseau on human nature, 819, 822n52; trade and imperialism, 840
differentiation, and mathematics, 312–15
diffraction, mathematical theory of, 365–6
diluvialism, and fossils, 419–21, 480. *See also* flood
al-Din Muhammad, Diya, 674
Dissenters, English, 176–7
Dixon, Jeremiah, 623, 624, 842
Dobbs, Arthur, 622
Dobbs, Betty Jo, 36
doctrine of signatures, and medicinal plants, 147
Dollond, John, 364, 372, 523
Dolland, Peter, 524
Dolomieu, Déodat, 418, 424, 429n30, 434
Dombey, Joseph, 642
Donaldson, Alexander, 545
Donati, Vitaliano, 418
Donovan, Edward, 575
Doody, Margaret A., 770n25
Dortous de Mairan, Jean-Jacques, 422n15, 429
doubt, and cultural change, 774–7
Douthwaite, Julia, 206n51
Drury, Dru, 575
Drury, Susanna, 609, 610f
Dryander, Jonas, 831
Dryden, John, 780, 785, 798
dualism: and mind-body relationship, 804; and natural religion, 751; and Newtonianism, 292, 294; and relationship between art and science, 617. *See also* Cartesianism
Duchesnau, François, 400n7
Duchet, Michelle, 443n20
Dufay, Charles-François, 368–9, 370, 514
Dumont, Etienne, 459
Dundas, Henry, 830
Dunnell, Jack, 527
Du Pont de Nemours, Pierre Samuel, 455
Dürer, Albrecht, 561, 562
Du Yu, 693

Earnshaw, Thomas, 636
Earth, and astronomy, 332–3, 343
earthquakes: and earth sciences, 422, 427; and landscape art, 602–3; and lightning rods, 755; and natural religion, 748
earth sciences: and Buffon's synthesis, 421–3; fossils and the flood, 419–21; fossils and time scales, 431–5; and new approaches in mid-eighteenth century, 423–6; roles of fire and water in, 426–31; and science curriculum in universities, 70, 72. *See also* geology
East India Company, 182, 658, 829, 830, 831, 833, 843, 877
ecofeminism, 193
écoles de dessin, 73–4
Écoles des Ponts et Chaussées, 121–3
economics: and botany, 102, 151, 153, 154, 155, 157–8; and government patronage of science, 111–28; and natural knowledge, 139–46, 178; and voyages of discovery, 620. *See also* agriculture; industrialization; labor; political economy; technology; trade
Eden, Frederick Morton, 143
education, scientific: and expansion in provision of instruction, 73–9; and India, 678–80; and reforms in eighteenth century, 53. *See also* lectures; textbooks; universities
Edwards, George, 566
Edwards, Jonathan, 753
Eguiara y Eguren, Juan José, 734
Egypt: and Islamic world, 650; and Napoleonic Expedition of 1798, 649, 664, 650; and printing press, 658
Ehrenvärd, Ulla, 612n70
Ehret, Georg Dionysius, 568, 569–71
Eisenstein, E. L., 538n2
electricity: and experimental physics, 368–71; Franklin's theory of, 373; and medicine, 147; Newtonianism and study of, 277–8, 280; and quantification, 372; and scientific instruments, 523
Eliot, R. J., 848
Elizabeth, Czarina of Russia, 110
Eller, J. T., 392
Ellicott, Andrew, 534
Ellis, John, 575, 626
Encyclopedia Britannica (1768–71), 248, 252, 263, 264–6, 285, 769
encyclopedias: and China, 696–7; and classification of knowledge, 248, 249–52; and maps of knowledge, 263–6. *See also Encyclopedia Britannica; Encyclopédie*

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Encyclopédie (1751), 248, 250–1, 252, 260–3, 264, 486, 554, 667
Encyclopédie Methodique (1782), 265
engineering, 121–3, 654–5. *See also* military; technology
England: and animal magnetism, 493–4; and astrology, 497–9; and botanical gardens, 102; government and longitude, 341–2; government and technological innovations, 116; Huguenots and technology transfer, 851–3; imperialism and trade, 836; and mathematical physics, 86; and Newtonianism, 289–95; and private courses in sciences, 77–9; prosopography and universities, 227; and relationship between science and technology, 104–5; science and polite society, 171–3; and scientific academies, 91; and scientific instruments, 527–31; and state regulation of print, 537, 538–40; technology and industrialization, 853–8; theology and Newtonian philosophy, 276–7, 284; and transits of Venus, 344; and voyages of discovery, 619, 621–2, 623–5, 626–31, 633–8, 639–41. *See also* American colonies; Royal Society of London
Enlightenment: authorship and end of, 555–60; and chemistry, 375, 377–80; cultures of print at onset of, 536–40; historiography of, 1, 799; and human nature, 776–7; marginalized practices and rhetoric of, 482–92; and mathematics, 305; and medical education, 71; and modernization of sciences, 243; and prosopography, 235–7; and relationship between science and philosophy, 800–2, 817; and relationship between science and religion, 741–3, 758–61; and scientific revolution, 23–43
Entrecasteaux, Bruni de, 639
entymology, and scientific illustration, 574, 575
environmentalism, and human sciences, 444–50
epigenesis, and reproduction, 416
epistemology, and mechanical philosophy, 27
Erdman, David, 795
Erskine, Charles, 47
Escuela de Caminos y Canales, 123
ether: and chemistry, 389; and experimental physics, 366
ethics, and study of natural sciences in universities, 45
ethnography, and travel accounts, 443
ethnology, and voyages of discovery, 644
Euclid, 49, 83, 704
Eulenburg, Franz, 214, 217
Euler, Leonhard: and astronomy, 334–7, 338–42, 345–8; and mathematics, 305, 307–20, 321; and physics, 277–8, 283, 361, 364, 365–6, 373; and science for women, 188n9; and scientific academies, 94, 108, 109; and theory of light, 288
Europe: and botanical gardens, 101; development of science compared to non-Western traditions, 17; differences between England and, 149–50; and diffusion of Newtonianism, 295–302; human sciences and non-European cultures, 442–4; impact of science on literature and art, 767–9; and Islamic world, 649–53, 665, 666–81; and Japan, 698, 700–3; and legal systems, 445; scientific institutions and expansion of, 100–1; and state regulation of print, 536–7, 540–1, 558–9; technology and industrialization, 846–53. *See also specific countries*
Eustachio, Bartolommeo, 572, 577
evolution, theories of, 5–6
examination system, and science as occupation in Japan, 699–700
expeditions, scientific: and China, 691; and Islamic world, 665, 649, 650, 664; and scientific academies, 93, 300, 332, 333, 362, 621, 623, 624; and Spanish America, 729, 730–1, 735, 737. *See also* navigation; voyages of discovery
experimental philosophy: and classification of sciences, 258; and natural philosophy, 303; and science education, 48, 51, 59, 83
experimental physics: and Boerhaave's research on fire, 418–19; and frictional electricity, 419–22; and Newton's research on light, 363–7; and public lectures, 358; and rational mechanics, 374; and science curriculum in universities, 64, 81
experimental science: and Bacon, 86, 512, 800, 802; emergence of in seventeenth century, 511–12. *See also* experimental philosophy; methodology; scientific method
extinction, and fossils, 432
Eyles, Victor A., 419n4
Eze, Emmanuel Chukwudi, 823n53

Fabris, Pietro, 604, 605f
Fagnano, C. G., 308
Fahrenheit, Daniel, 367
Falck, Chaim Schmul, 501–2
family, and privatization, 192, 235. *See also* children; motherhood
Fang Yizhi, 692
Fara, Patricia, 13
Faraday, Michael, 86
Farías, Manuel Ignacio, 727
Farris, Nancy, 718
Fattori, Marta, 253n29
Faujas de St.-Fondq, Barthélemy, 433

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Fazl, Abul, 670–1, 687
Fechner's law, 349
Feder, Johann Georg Heinrich, 39
Felipe V, King of Spain, 116
feminism: and critiques of Enlightenment, 24; and human sciences, 461. *See also* ecofeminism
Ferber, Johann Jakob, 426, 428
Ferguson, Adam, 43, 438, 442, 444, 448
Ferguson, James, 78, 521
Ferrone, Vincenzo, 300
Feuillée, Louis, 737n57
Feyerabend, Paul, 281
Fielding, Henry, 542, 771, 772
Fielding, Sarah, 773
Figuerado, Emmanuel de, 675
Filipo, Jacopo, 562
Findlen, Paula, 10n31, 187, 192n20
fire: and chemistry, 387–8, 389; and earth sciences, 426–31; and physics, 420. *See also* heat
firearms, and military technology, 653
Fisher, J. C., 851
Fissell, Mary, 9, 17, 486
Flamsteed, John, 330, 331, 338, 343, 541, 556
Flemyng, Malcolm, 767
Flinders, Matthew, 619, 639
flood: and diluvialism, 419–21; and fossils, 433; and landscape art, 594, 599
Foley, Samuel, 606–7
Fontaine des Bertins, Alexis, 333
Fontenelle, Bernard de: and *Academie des Sciences*, 8; and astronomy, 173; and chemistry, 384–6; and forms of knowledge, 137, 138; and humanism, 7; and mechanistic preformation, 406, 408; and moral philosophy, 167; and Newtonianism, 299; and physics, 356, 361; and prosopography, 235–6; and scientific academies, 90n6; and scientific revolution, 1n3; and women in science, 187–8
force, and physics, 360–1. *See also* gravity; inertia; motion
Ford, Brian, 18
Fores, Michael, 2n3
Forster, Georg, 443, 629, 630, 829, 831
Forster, Johann, 629, 630
Fortin, Nicolas, 533
Fortis, Alberto, 425, 428, 434
fossils, and earth sciences, 419–21, 431–5
Foucault, Michel, 12, 24, 399, 400, 436n3–4, 478n35, 777
Fouguier, Pierre, 850
Fourcroy, Antoine François de, 393
Fox, Robert, 6, 8
Foxe, Luke, 621–2
France: and animal magnetism, 493; and astrology, 499; and astronomy, 352; and botanical gardens, 101–2; and emigration of Huguenots, 851–2; and government patronage of science, 121–3, 126; and medical education, 71–2; and Middle East, 649, 650, 658; mining and geology, 424; natural knowledge and court culture, 133; and Newtonianism, 299–300, 301–2; and novel, 770–1; and observatories, 99; and philosophical history, 449; and physics, 405; and political economy, 454–5; and private courses in sciences, 86; prosopography and universities of, 222–5; and reform of science education, 55, 56; and science curriculum in universities, 66–7, 96–7; and scientific academies, 91, 127–8, 512; and scientific expeditions to Spanish America, 735, 737; and scientific instruments, 533; scientists and polite society, 171; and state regulation of print, 536, 540, 541; and technical schools, 74–5, 121–3; and textile industry, 850; and transits of Venus, 344; and voyages of discovery, 619–20, 621, 622–3, 625–6, 638–9. *See also Académie des Sciences;* Europe; French Revolution
Francisco de Torres, Cayetano, 728
Francke, August Hermann, 56
Franklin, Benjamin, 100, 161, 165, 179, 181, 277, 278, 369, 373, 493, 523, 550, 754, 773
Fraser, Craig, 4, 319n23, 324n28
Fraunhofer, Joseph von, 532–3
Frederick II (the Great), King of Prussia, 108, 109, 259, 850
Frederick William I, King of Prussia, 120–1, 851–2
Freemasonry, 136n15, 283, 491, 493
Freind, John, 260n41, 382–3, 665
French Revolution: and philosophical history, 461; and print culture, 558; and reform of science education, 56, 84–5; and religion, 760; and social role of scientist, 174–5, 176; and women's rights, 207. *See also* France
Fresnel, Augustin, 365
Frijhoff, Willem, 52n12, 215, 217
Füßli, Melchior, 593, 595f, 596f, 597, 598f
Fuchs, Georg, 665
functions, and mathematics, 308–12, 335
Furneaux, Tobias, 625
Furtado, Francisco, 700
Fuseli, Henry, 496, 782
Fyfe, Andrew, 778n39

Gabled, Christophe, 66
Gagnier, John, 665
Galen and Galenism, 197–8, 468, 671
Galiani, Ferdinando, 440, 455–6
Galileo, Galilei, 23, 88, 191, 270–1, 272–3, 308
Galvani, Luigi, 475

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

García Fernández, Domingo, 118
gardening, and natural knowledge, 153, 154, 158. *See also* agriculture
Garrison, Fielding H., 2
Garth, Samuel, 767
Gascoigne, John, 14, 28, 97n17, 216, 220–1, 222, 226
gases, and chemistry, 388–91
Gassendi, Pierre, 27, 47, 458, 469
Gassendist atomism, 47
Gaub, Hieronymus David, 478–9, 481, 483
Gay, John, 791
Gay, Peter, 1n2, 801
Gellert, Christlieb Ehregott, 119, 864
Gemini, Thomas, 526
gender: and concepts of nature, 193, 195; and images of science and scientists, 159n1, 194f; literature and influence of science, 793–4; and medicine, 149; and science of woman, 197–201; and scientific culture, 222; and scientific knowledge, 201–7. *See also* breasts; sexual difference; women
General Enclosure Act (1801), 855
Gennin, Wilhelm de, 864, 865
Geoffrey, Etienne François, 384
Geoffroy, Claude-Joseph, 202
geography: France and mapping, 126; and industrialization in Japan, 879–80; and print cultures, 545; and scientist as civic expert, 181. *See also* cartography; longitude
Geological Society of London, 105
geology: landscape art and scientific illustration, 582, 584–617, 781; and natural religion, 751–2; and scientist as civic expert, 180; use of term, 5, 418–19, 586n10. *See also* basalt controversy; earthquakes; earth sciences; mining industry and mining schools; mountains; volcanoes
geometry, and analytical philosophy, 319–20
George III, King of England, 124, 144
Gerard, Alexander, 820
Gerard, Philip, 792
Germany: and chemistry, 379; government and manufacturing, 116; and higher education for women, 186; and Newtonianism, 282–3; and printing houses, 545; and prosopography, 258–62; and scientific academies, 94; and state regulation of print, 540; universities and science education, 56, 57–9, 84, 228–31; and women in science, 190. *See also* Europe
Geyer-Kordesch, Johanna, 480n43
Ghiyasuddin, Abul-Khair, 677–8
Giant's Causeway (Ireland), 429, 606–9
Gibbon, Edward, 749
Gill, Joseph, 865
Gillispie, Charles, 13–14, 122
Glacken, Clarence J., 823n54
Glick, Thomas F., 737–8
Gobelins textile factory, 114, 115–16
Godfrey, Thomas, 635
Godwin, William, 459, 773
Goethe, Johann Wolfgang von, 7, 40, 167, 180, 282, 363, 385–6n16, 585, 587, 601–2, 759, 762
Gohau, Gabriel, 601n38
Golinski, Jan, 5, 13
González, Pedro María, 643
González Laguna, Francisco, 729
Goodman, Dena, 232–3
Goto Gonzan, 711
Goudin, Antoine, 63
Gough, J. B., 36
Gould, Stephen Jay, 435
government: botanical research and pronatalist policies, 237–8; and patronage of science, 107–28; and scientist as civic expert, 179, 182–3. *See also* state; *specific countries*
Grabianka, Tadeusz, 502
Grabiner, Judith V., 324n28
Graham, George, 528, 842
graphical methods: and mathematics, 308–12; and scientific illustration, 562–3
Grattan-Guinness, Ivor, 312n10
Graunt, John, 456
Gravesande, Willem Jacob 's, 63, 65, 81, 97, 281, 289, 297–8, 299, 340, 357–8, 361, 513–14
gravity, and Newtonianism, 275, 366, 472
Gray, Henry, 578
Gray, John, 842
Gray, Stephen, 166, 368
Gray, Thomas, 775, 784
Gray's Anatomy (Henry Gray), 578
Great Historical, Geographical and Poetical Dictionary, The (Moreri, 1694), 251
Green, Charles, 624, 628
Greene, John C., 426n21
Greene, Robert, 277, 293
Greenwich Observatory. *See* Royal Observatory
Gregory, David, 65, 86, 289–90, 349, 401
Gregory, Dominic, 681
Gregory, James, 348
Gregory, John, 820
Grew, Nehemiah, 202, 408
Groethuysen, Bernard, 247
Grotius, Hugo, 808, 809
Gruzinski, Serge, 719n2
Gualtieri, Niccolo, 575
Guerlac, Henry, 288, 801–2
Guerrini, Anita, 401, 402
Guettard, Jean-Étienne, 126, 420n7, 427, 582, 604, 606, 612

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

guilds: and printing houses, 540; and women in sciences, 190, 192. *See also* apprenticeship
Gutío, José, 643
Gundelscheimer, Andreas, 565
Gustav III, King of Sweden, 111
Gustav IV, King of Sweden, 111
Gu Yanwu, 692
Gwosdev, Mikhail, 632

Haas, Jacob Bernhard, 531
Habermas, Jürgen, 9, 482n46, 551n30
Habib, Irfan, 674, 872, 876
Hackaert, Jan, 596
Hacket, Jakob Philipp, 604
Hadley, John, 635
Haënke, Tadeo, 643
Hahn, Roger, 167n15, 223, 224
Haiti, and scientific society, 100–1
Hakki, Erzurumlu İbrahim, 654
Hales, Stephen, 163, 383–4, 387–8
Halévy, Elie, 801
Hall, A. R., 16n57
Hall, Daniel, 850
Hall, James, 166, 434n45
Hall, Rupert, 2, 16
Haller, Albrecht von, 57, 77, 180, 203, 402–3, 413–14, 464, 466, 472–4, 475, 483, 753
Halley, Edmond, 183n54, 331–2, 342, 343–4, 346, 349, 456–7, 556, 619, 827
Halley's comet, 342–3
Hamilton, William, 427–30, 603–4
Hampson, Norman, 243, 801
Hamy, E. T., 737n57
Hanbury, William, 155, 157
Hancock, David, 840
Hankins, Thomas, 16, 243, 397–8
Hannaway, Owen, 378
Hans, Nicholas, 213
Haq, Nurul, 682
Hargreaves, James, 854
Harilal, 678
Harriot, Thomas, 321
Harris, John, 248, 254–6, 769
Harris, Moses, 575
Harris, Steven, 218, 219–20
Harrison, John, 125, 341, 523, 635–6
Hartley, David, 173–4, 278, 438, 459, 555, 751, 784, 805, 814, 816, 819
Harvard University, 44, 53, 64, 100, 517–18, 523, 527, 534
Harvey, William, 452, 469, 661, 666
Hattí Efendi, Mustafa, 651–2
Hauch, Adam Wilhelm, 519
Hauksbee, Francis, 357, 368, 513, 522, 749
Hawaii, and voyages of discovery, 633
Hawkesworth, John, 628
Hayashi Shihei, 879
Hayat Khan, Muhammad, 680
Haydon, Robert, 763
Hayes, Walter, 526
Hays, Mary, 773
Haywood, Eliza, 773
heat: and chemistry, 390, 392; and earth sciences, 422–3, 430; Newtonianism and study of, 277–8. *See also* fire
Hegel, Georg, 196, 761
Heilbron, John, 219–20, 306–7
Heister, Lorenz, 71
Helfot, Jean, 114–15
Helvétius, Claude Adrien, 439, 441, 449, 460, 807
Henckel, Johann Friedrich, 423n16
Henderson, John, 695
Henry, John, 3n7, 4
herbals, and scientific illustration, 563
Herbart, Johann Friedrich, 816
Herder, Johann Gottfried, 40, 440, 441, 446, 462, 630, 823
Hermann, Jakob, 305, 334
Hernández, Francisco, 729
Herschel, William, 350, 691
Hertz, Deborah, 232
Hertz, Markus, 229
Hess, Volker, 478n35
Hevelius, Elisabetha and Johannes, 191f
Hiärne, Urban, 118
Hill, John, 431, 548, 773
Hills, Henry, Jr., 544
Hindenburg, Karl Friedrich, 57
Hippocrates, 35, 36, 468
Hire, Philippe de la, 675–6
history: and classification of sciences, 253; and Enlightenment, 799; and human sciences, 442–4; natural philosophy and hierarchy of knowledge, 31; and Newtonianism, 812–13; of philosophy of science, 303–4. *See also* history of science
history of science: and chemistry, 375–7; and China, 688; and classification of sciences, 241–5; and colonial Latin America, 719; and cultural history, 237; England as focus of studies on, 132–3; Enlightenment rhetoric and marginalized practices, 486–92; and geology, 586n8; and historiography, 1–20; and image of scientist, 162n6; and Islamic world, 649; and life sciences, 397–400; and prosopography, 213–14; and struggle between Cartesianism and Newtonianism, 359–60; and studies of Newtonianism, 134–9; and Whiggism, 264, 375–7, 388, 396, 488, 489. *See also* history

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

History of Science (journal), 242
Hobbes, Thomas, 246, 355, 437, 458
Hobsbawm, Eric, 1n2
Hodges, William, 629, 630
Hodgson, James, 357
Hoffman, Friedrich, 402, 465, 468, 469–70, 475, 477–8, 483
Hoftijzer, P. G., 539n4
Hogarth, William, 150–1
Holbach, Paul-Henri Thiry baron de, 414, 415, 429, 441, 747
Holker, John, 849–50
Holmes, Frederic L., 386
Holwarda, J. P., 348
Holwell, J. Z., 682
Homberg, Wilhelm, 386
Home, Rod, 5
Homo sapiens: introduction of term, 206; and physical anthropology, 450
Hong Liangji, 695
Hooke, Robert, 130, 131, 338, 419, 420, 512, 575
Hooker, Richard, 786
Hooykaas, R., 423n16
Horkheimer, Max, 1n2, 23–4, 25, 33, 41, 436n3
Hornblower, Jonathan, 854
Horne, George, 277, 505, 750
Hornsby, Thomas, 524f
Horrocks, Jeremiah, 329
horse, and anatomy, 576, 577f
horticulture, and natural knowledge, 153. *See also* agriculture
Hoskin, Michael, 348n37
Hottentot Venus, 200
Houston, William, 834
Houstoun, James, 831, 836
Hsu Kuang-ch'i, 706–7
Huang Yuanyu, 697
Hudson Bay Company, 621
Huerta, Alonso, 729
Hufbauer, Karl, 229–30
Hufeland, Christoph Wilhelm, 466
Huff, Toby, 695
Hugh of St. Victor, 248
Hughes, Griffith, 566
Hugo, Gustav, 446
Huguenots, emigration and technology transfer, 851–2
human nature: human sciences and theories of, 440–1, 447, 776–7, 818; and natural history, 819–23; and relationship between science and philosophy, 802–4, 809
human sciences: attempts to establish, 436–7; history and travel literature, 442–4; and notions of "human," 440–1; and notions of science, 437–40; psychology, utility, and political science, 457–61; and quantification, 456–7; race and physical anthropology, 450–1; schools of thought and theories of social change, 444–50; state and political economy, 451–6; subject matter of in nineteenth century, 461–2. *See also* anthropology; sociology
Humboldt, Alexander von, 475, 644, 737
Humboldt, Wilhelm von, 39, 58, 74, 180, 181, 182–3
Hume, David: and anatomy of mind, 818; and Bacon, 282; and Cartesian system, 811; and China, 874–5, 881; on commerce, 856; and culture of optimism, 775; and human sciences, 436, 437, 444, 458–9; influence of Newton on, 12, 281–2; and natural history, 164, 418, 820–1; and religion, 742, 749, 756–8, 759; and skepticism, 29, 30–2, 317, 770
Hume, Robert, 779
Hungary, and scientific academies, 228
Hunt, Lynn, 549
Hunter, John, 37, 404, 406, 578
Hunter, Michael, 226
Hunter, William, 77, 151, 578, 678
Huntsman, Benjamin, 853
Hurter, Johann Heinrich, 531
Hutcheson, Francis, 448, 801, 810, 815, 818
Hutchinson, John, 277, 293–4, 489, 504, 765
Hutchinsonianism, 503–5, 506–7, 765
Hutton, James, 180, 263, 294, 396, 421, 430, 434, 751
Hutton, William, 856
Huxley, Thomas Henry, 760–1
Huygens, Christiaan, 308–9, 321, 332, 364–5
Hyder, Ali, 685
hypnosis. *See* animal magnetism

Iazzaro, Anton, 479
Ibarra Salazán, Andrés, 734–5
İbraham Paşa, 650–1
ichthyology, and scientific illustration, 574
ideology: and connection between science and technology, 104; cosmopolitanism and Republic of Letters, 234; and influence of science on culture, 11–12; and scientific academies and societies, 94; and sexual science, 226
Iliffe, Robert, 6, 9–10
illustration, scientific: acknowledged and unacknowledged reuse of, 572–4; and anatomy, 576–8; and early technical problems, 572; and geology, 582, 584–617; physics and chemistry, 582–3; and realism, 639, 641–6, 652–6; traditions of before eighteenth century, 563–4; and transition from woodcuts to metal engraving, 568–72; and zoology, 574–7. *See also* art
imagination, and cultural change, 780–1, 790–9

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

immigration, and technology transfer, 850, 851–2
Imperial Astonomical Bureau (China), 689–90
imperialism: and navigation, 827–8, 841–2; and scientist as civic expert, 181, 182; and technological development in China, India, and Japan, 877; and trade, 828–38; and voyages of discovery, 620, 624–6. *See also* colonialism
imponderable fluids, and study of gases, 388–91
Inca, 718, 728–9
Inchbald, Elizabeth, 773
index, and Harris's *Lexicon*, 255–6
India: and agriculture, 683–4, 879; and astronomy, 670, 672–3, 674–8; and education, 678–80; and Islamic world, 650; and medicine, 670, 680–3; philosophical and scientific traditions of, 669–71; and print culture, 658; and status of science in eighteenth century, 671–4, 685–7; technology and industrial development, 683–5, 871–7, 879–81
Indonesia. *See* Java
industrialization: and China, 871–7, 879–81; England and technological development, 853–8; Europe and transfer of technology, 846–53; and India, 879–81; institutional and technological features of, 845; and Japan, 866–71, 879–81; and Russia, 858–66; and scientific knowledge, 878. *See also* manufacturing; metallurgy; mining industry and mining schools; textile industry
Industrial Revolution: and ideology of science, 104; and literature, 775; scientific academies and technological innovations, 128; and scientist as civic expert, 179–80
inertia, and mechanical philosophy, 26
information revolution, 247
inoculations, and medicine, 192, 682, 838
insanity. *See* madness
Institute of Bologna, 97–8
institutions, scientific: and botanical gardens, 101–2; and consolidation of science, 7–8; and European expansion, 100–1; and industrialization, 858; and organizational revolution of seventeenth century, 87–90, 119–20; and Spanish America, 719–22; women and gender in science, 184–92. *See also* organization; scientific academies; universities
Instituto delle Scienze (Bologna), 185
instruments, scientific: and astronomy, 660; and chemistry, 394, 396; and imperialism, 841–2; and lecture demonstrations, 516–17, 521–2; and longitude, 634–6; methods, materials, and makers of, 525–31; and scientific research, 522–5; survival of eighteenth-century examples of, 517–18, 520f; and trade in Europe and North America, 531–4. *See also* chronometers; navigation
Iraq, and Islamic world, 650
Ireland: and Giant's Causeway, 606–9; and printing houses, 544; and science fiction, 788
Irvine, William, 390
Isfahani, Mir Hussain, 686
Islam and Islamic world: and astronomy, 659–60; clocks and watches, 655–6; and Europe, 649–53, 665–8; and India, 650, 670; and medicine, 661–5; military technology and cartography, 653–5; and printing culture, 656–9
Italy: and Newtonianism, 300–1; and political economy, 455–6; Renaissance and science, 511–12; and science curriculum in universities, 64; and scientific academies, 512; women and universities, 185. *See also* Europe
Ivan III, Tsar of Russia, 631
Ives, Edward, 682n53
al-İzniki, Ömer Sinan, 662

Jackson, Marie, 792
Jacob, François, 399–400
Jacob, Margaret C., 4–5, 9n30, 11n34, 28, 134, 290–1
Jacobins, 176, 352, 540. *See also* French Revolution
Jacquin, Nicholas, 120
Jagannath Samrat, 678
Jago, Richard, 780–1
Jai Singh, Sawai, 675–8, 685, 686
James II, King of England, 290, 538
Japan: and agriculture, 868, 870, 879; and astronomy, 699, 700–1, 704, 706–10, 716, 717; banning of Westerners and Western scientific knowledge, 700–2; industrialization and technological development, 866–71, 878, 879–81; and mathematics, 703–6; and medicine, 710–16; and science as occupation, 699–700, 705, 708; and translations of Western literature, 702–3; and zoological illustrations, 574
Jardine, Nicholas, 418n1
Jardin des Plantes (Paris), 835
Jardin du Roi (Paris), 101–2, 108, 379
Jars, Gabriel, 124
Jaunpuri, Mulla Mahmud, 677
Java, and scientific society, 101
Jefferson, Thomas, 181, 761, 842
Jesuits: and China, 688–91, 692–3, 694; and cosmopolitanism, 234; and Japan, 698, 700–1, 710; and observatories, 99; and prosopographic studies, 218–20; and science education, 49, 54–5, 60, 74; and Spanish America, 720, 731. *See also* Catholic Church
Jews and Judaism: and scientific academies in

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Germany, 229; and university students, 216–17; women and salons, 232
Jiang Yong, 694
Joblot, Louis, 410
Johns, Adrian, 18
Johnson, Samuel, 172n23, 245, 258, 786
Johnson, William, 750
Jones, Colin, 467n8
Jones, Peter, 225–6
Jones, William, 505, 678n34
José I, king of Portugal, 127
Journal des Sçavans, 90
journals, scientific: and agriculture, 143; and chemistry in Germany, 229; and classification of sciences, 247, 252; development of in seventeenth century, 102; and organizational revolution of seventeenth century, 90; and print culture, 522–3; and scientific societies, 95–6; and transfer of technology, 848
Juan, Jorge, 641
Julia, Dominique, 215, 217
Jurin, James, 192n18, 284
Jussieu, Antoine de, 421, 422n13
Justi, Johann Heinrich Gottlob von, 454

Kachka, Simon, 864, 865
Kaestner, Abraham-Gotthelf, 57
Kahler, Erich, 773n31
Kalm, Pehr, 831
Kamchatka, and voyages of discovery, 632
Kames, Lord (Henry Home), 141–2, 144, 449, 451, 823
Kangxi, emperor of China, 689–90
Kant, Immanuel: and astronomy, 349; and classification of sciences, 246, 263; and cosmopolitanism, 234; and definition of "schemata," 40; and Enlightenment, 1, 29; and mathematics, 322; and Newtonianism, 813–14; and philosophical history, 375–6; and philosophy of science, 279–80, 284; on reading, 554; religion and science, 164, 756, 758, 759; and teaching of physics, 57–8; and vitalism, 37n49; on women and science, 184
Karstens, W. J. C., 32n29
Kay, John, 853, 854
Keene, Henry, 524f
Keill, John, 63, 73, 290, 357, 382–3, 401, 513, 710
Keir, James, 17–18, 176, 511, 848
Keller, Evelyn Fox, 192
Kelley, Donald, 444
Kendall, Larcum, 125, 636
Kepler, Johannes, 23, 274, 320, 329, 348, 694
Kevalverma, 678
Kew Gardens. *See* Royal Gardens
Keynes, John Maynard, 507
Khairullah Khan, Mirza, 677
Kielmeyer, Carl Friedrich, 38
Kiernan, Colm, 10n32
King, James, 633, 639
King's College (Aberdeen), 53
Kino, Eusebio Francisco, 721
Kircher, Athanasius, 168, 603, 721–2, 788–9
Kirilov, Ivan, 632
Klein, Ursula, 386
Klonk, Charlotte, 18
Klose, Carl, 198n35
Knight, Gowin, 372, 842
Knight, James, 622
knowledge: ban on Western in Japan, 700–2; classification of scientific, 241, 243, 251, 257, 260, 261f, 263–6; criticisms of social forms, 168; and gender politics of science, 201–7, 210; natural philosophy and hierarchy of, 34; print cultures and commerce, 544; religion and Locke's theory of, 806–7; and scientific revolution, 242. *See also* natural knowledge
Koenig, Johann, 830
Koerner, Lisbet, 197n28
Kögler, Ignatius, 694
Korea, and civil service examination system, 699
Körner, Stephen, 58n22
Kovalevskaia, Sofia, 186
Koyré, Alexandre, 375
Krüger, Johann Gottlob, 816
Kuhn, Thomas S., 23n1, 244–5, 259, 327
Kulmus, J. A., 870
Kurushima Yoshihiro, 704

Labillardière, Jacques Julian de, 639
labor: political economy and division of, 237; science and sexual divisions of, 193; and technological development in Japan, 868
La Breton, Restif de, 789
Labrière Lapaute, Nicole-Reine Etable de, 342
Lacaille, Nicolas-Louis de, 338
L'Admiral, Jacob, 575
Laënnec, Guillaume-François, 79
La Fayette, Mme. de, 770
Lafitau, Joseph-François, 443
Lafuente, Antonio, 732
Lagrange, Joseph-Louis, 32, 94, 283, 302, 305, 307, 320–5, 337, 345–8, 362
La Hontan, Louis Armond de Lom d'Arce, Baron de, 443
Lalande, Joseph-Jérôme Lefrançais de, 342, 344
Lamarck, Jean-Baptiste, 416, 752
Lamb, Anthony, 534
Lamb, Charles, 7, 11, 763–4, 799
Lambert, Aylmer Bourke, 571

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Lambert, Johann Heinrich, 305, 321, 346, 349n41, 364
La Mettrie, Julian Offray de, 202, 404, 439, 473, 753, 808, 819
landscape. *See* art
Langlois, Claude & Canivet, 533
Langthorne, John, 839
language: and physical anthropology, 450–1; and scientific journals, 95–6; and Spanish America, 728–9; and voyages of discovery, 628–9. *See also* Nahua; Quechua
Lanning, John Tate, 731–2n43
La Pérouse, Jean-François Galoup de, 638–41
La Peyrère, Isaac, 746
Laplace, Pierre-Simon de: and astronomy, 302, 333, 336–7, 345–8, 350, 351–3, 745; and Lavoisier, 393; and mathematics, 305; and mechanics, 362; and Newtonianism, 85, and physics, 66, 86, 279; and probability theory, 815; on religion and natural laws, 756; and skepticism, 32
Laquer, Thomas, 197
La Roche, Sophie V., 515
Latin America. *See* Spanish America
Laudan, Rachel, 429n29, 586n7
Lavater, Johann Caspar, 495–7, 507
Lavoisier, Antoine-Louis: and chemistry, 35, 375, 376, 390, 391, 392–3, 395, 396, 525; and earth sciences, 430, 612; and French Revolution, 13; and government support for science, 126, 180; and physics, 366, 367–8; and physiology, 475; scientific career of, 83, 167; and scientific discourse, 20; and scientific illustrations, 580
Law, John, 454
Law, William, 504
law and legal systems, and human sciences, 445, 808
Lawrence, Jenny, 792
Lawrence, Susan C., 465n3
Lazcano, Francisco X., 734n52
Lear, Edward, 566
Le Clerc, Georges-Louis. *See* Buffon, Comte de
Leclerc, Thomas, 850
lectures: and agriculture, 142, 144; and experimental science, 514; and physics, 356–7, 358; and popularization of science, 516; and public presentations of Newtonianism, 134–5; and scientific instruments, 516–17, 521–2
Ledran, Henri-François, 77
Lee, James, 152
Leeuwenhoek, Anton van, 97, 163, 172, 409, 410, 579
Lefanu, William, 2
legal localism, and human sciences, 444–50
Legaut, François, 561
Legendre, Adrien Marie, 305, 333
Le Gentil de la Galaisière, Guillaume-Hyacinthe-Jean-Baptiste, 623, 624
Lehmann, Johann Gottlob, 425–6, 585, 599, 613, 614f
Leibniz, Gottfried Wilhelm: and astronomy, 334, 351–2; and Cartesian duality, 27; and causation, 276; and classification of sciences, 243, 247; and earth sciences, 427; and government service, 167, 180; and human sciences, 437; influence on science of eighteenth century, 3; and life sciences, 408; and mathematics, 309, 316; and mechanical philosophy of nature, 26, 47; and natural philosophy, 286–7; and Newton, 273–4, 275, 292; and physics, 361; and physiology, 471; and relationship of religion and science, 164, 744–5, 748–9; and role of man of science, 161; and scientific academies, 89, 108; and Scientific Revolution, 23
Leibniz's rule, 360
Leith, James A., 54n15
Lemaire, Jacques & Pierre, 533
Lemery, Nicholas, 381, 422n15
Le Monnier, Pierre-Charles, 331, 335
Lennox, Charlotte, 773
Lenoir, Etienne, 533
Leopold, Prince of Tuscany, 512
LeRoy, Pierre, 636
Lewis, Meriwether, 181
Lexicon Technicum (Harris, 1704 and 1710), 248, 254–6
L'Héritier de Brutelle, Charles Louis, 571–2
L'Hôpital, Marquis de, 313–14
Lhwyd, Edward, 419
Libavius, Andreas, 378, 379
liberty, European concept of, 444
libraries: and China, 690, 693, 782; and classification of sciences, 248; and Japan, 709; and scientific academies and societies, 95n15
Lichtenberg, Georg, 57, 497
life sciences: and animism, vitalism, and mechanism, 404–6; and history of science, 397–400; and materialism, 414–16; and medical education, 70; and Newtonianism, 400–4, 411–13; and theories of reproduction, 406–14. *See also* botany; zoology
light: and chemistry, 392; Newtonianism and study of, 277–8, 280, 288, 294, 363–7
lightning rods, 370, 754, 755
Ligozzi, Giacomo, 562
Lind, James, 629
Lindroth, Sten, 110n8
Lindsay, George, 527

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Linnaeus, Carl: and image of godly naturalist, 163–4; and religion, 743; and scientific expeditions, 626, 629, 665; and scientific illustration, 567–8, 570, 592; and sexual reproduction of plants, 202, 203–5; and taxonomy, 5, 69, 152, 197n28, 246, 417, 431, 450, 773; on wet-nursing, 206–7; on women and science, 184
Lister, Joseph Jackson, 525
Lister, Martin, 419
Literary and Philosophical Society, 91
literature: and impact of science on culture, 766–77, 784–5; and marginalized practices, 506–7. *See also* poetry; printing and print culture; travel and travel literature
lithographic printing, 583, 659
Liu Zhi, 696
Lizars, D., 580
Llano y Zapata, José Eusebio de, 729n29
Locke, John: and alchemy, 787; and classification of sciences, 243, 246; and education in natural sciences, 171n21; and human sciences, 438, 439, 458; and influence of science on art, 769–70; and Newton, 284; and physiology, 472; and print culture, 539, 555, 557; and relationship between religion and science, 741–2; theology and matter theory, 275–6
Loescher, M. G., 48
Lofling, Pehr, 831
logic, and scientific education, 45, 48. *See also* reason
London Mechanics' Institute, 79
longitude, and scientific expeditions, 341–2, 634–6, 827. *See also* navigation
Lonsdale, Kathleen, 187n8
Lorrain, Claude, 587, 601, 602, 604n51
Louis XIV, King of France, 28–9, 512, 748
Louis XV, King of France, 357
Loutherbourg, Philippe de, 136, 573
Luc, Jean André de, 523
lunar orbit, 339–42
Lunar Society of Birmingham, 91, 176
Lutheranism, and science education in German universities, 56. *See also* Protestantism
Luxborough, Lady, 792
Lyell, Charles, 760

Macadam, John, 854
Macartney, George, 843
Macartney expedition (China, 1797), 691, 843
Macaulay, Catherine, 461
Machiavelli, Niccolò, 448
Maclaurin, Colin, 86, 291, 305, 361, 810
McClellan, James E., III, 8, 111n12, 127, 221, 730n25
McCloskey, D., 858
McCosh, James, 801
Macquer, Pierre Joseph, 114, 115, 388
McRae, Robert, 319n23
Madan, Martin, 793
Madden, Samuel, 788
Madhava, 681
madness, and representations of body, 778–81
magnetism, 277–8, 280, 370–1, 521. *See also* animal magnetism
Mahadeva, Pandit, 682
Mahdī, Muhammad, 659
Mailler, Benoît de, 431n34, 589n17
Mainauduc, John de, 494, 507
Maistre, Joseph de, 760
Maitland, Charles, 192
Malaspina, Alejandro, 643–4, 730n36
Malebranche, Nicolas, 276, 299, 319, 365, 407–8, 805
Malpighi, Marcello, 408
Malthus, Thomas, 11
Mammalia, and gender in Linnaeus's taxonomy, 207
Manchester Literary and Philosophical Society (England), 177, 178, 227
Mandeville, Bernard, 784, 818n41, 822n52
Manifesto of 1702 (Russia), 861, 862
Manucci, Niocolao, 682
manufacturing, science and technological innovations in, 116–18. *See also* industrialization; Industrial Revolution; metallurgy; textile industry
mapping. *See* cartography
Maqul, and education in India, 678–80
marginalized practices: and alchemy, 499–503; and animal magnetism, 492–5; and astrology, 497–9; and Hutchinsonianism, 503–5; impact of on science and literature, 506–7; and physiognomy, 495–7; and rhetoric of Enlightenment, 486–92
Maria Theresa, Empress of Austria, 55, 227, 228
Marshall, John, 806n12
Marshall, P. J., 443n20
Marsigli, Luigi Ferdinando, 659
Martin, Benjamin, 168–9, 244n6, 252, 516, 517, 527, 534
Martín, Luis, 720
Martínez, Esteban José, 642
Martini, F. H. W., 576
Martyn, Thomas, 575–6
Maskelyne, Nevil, 341, 623, 635, 636, 842
Mason, Charles, 623, 624, 842
Mason, Stephen, 2
Mason-Dixon line (U.S.), 842

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

materialism: and human sciences, 502; and life sciences, 399, 414–16; and Newtonianism, 402; and secularization of science, 753
mathematical mechanism, and natural philosophy, 25
mathematics: and China, 693; development of, 4–5; and Japan, 703–6; and natural philosophy, 29, 269, 289, 296, 339; and physics, 63, 65–6, 85, 371–4; and practitioners of analytical, 307–27; and state-funded specialist schools, 74; and summary of activity, 305–7; and teaching in colleges and universities, 49–50. *See also* algebra and algebraic analysis; algorithms; calculus; geometry; quantification
matter: and activity in life sciences, 398–9; and chemistry, 381–4; definition of and mechanical philosophy of nature, 25–7; and experimental physics, 369–70; Newton's theory of, 293–4; philosophy of science and theories of, 275–80
Mattioli, Pietro-Andrea, 661
Maudsley, Henry, 854
Maupertuis, Pierre-Louis, 108, 300, 362, 402, 411, 752–3
Mauritius, and voyages of discovery, 626
Mavrocordato, Alexander, 661
Mawer, John, 762
Maya, 718
Mayer, Tobias, 337, 338, 339–42, 635
Mead, Richard, 401, 499
mechanical philosophy: and chemistry, 381, 382; and Islamic world, 666; and pathology, 477; and physics, 359; and physiology, 470–1, 475–6; and scientific revolution, 27–31; skepticism and critiques of, 31–5; and Spanish America, 734; universities and science education, 46–7; and vitalism, 35–48. *See also* mechanics
mechanical physiology, and life sciences, 397–8
mechanics: and analytical philosophy, 319–20; astronomy and Newtonian, 334; and chemistry, 387; and life sciences, 404–6; and mathematics, 305; and physics, 360–3; and scientific instruments, 521, 522. *See also* mechanical philosophy; mechanical physiology
Mechanics' Institutes, 79
mechanistic preformation, and life sciences, 462–8
medicine: and advertising, 547; and cameral science, 452; and China, 695–7, 716; imperialism and trade, 837–8; and India, 670, 680–3; and Islamic world, 661–5; and Japan, 699–700, 710–16, 870–1; and natural knowledge, 146–51; and natural philosophy, 463; and Newtonianism in Continental Europe, 296; and pathology, 476–81; and physiology, 468–76; and science education, 50–1, 68, 69–72, 84; and scientist as civic expert, 179–80; scurvy and voyages of discovery, 636–8, 837–8; and Spanish America, 728, 738; status of in 1790s, 481–4; and universities, 465–8; and women as midwives, 190. *See also* anatomy; inoculations; physiology
Meek, Ronald, 448n29
Megharatna, 674
Mehmed Efendi, Yirmisekiz Çelebi, 651
Meidinger, Carl von, 574
Mei Wending, 693, 702
Mendelssohn, Moses, 39, 229
Mendes da Costa, E., 431
Menonville, J.-N. Thierry de, 839
Menzies, Archibald, 641
mercantilism: and gender politics, 237; and Spanish America, 733. *See also* trade
Mercator, Gerard, 526, 659
Mercator, Nicholas, 329, 331
Merchant, Carolyn, 26n5, 193, 195
Mercier, Louis-Sébastien, 789
Merian, Joanna, 564
Merian, Maria Sibylla, 190, 209, 564, 566
meritocracy, and Jesuit universities, 218, 234
Mersenne, Marin, 27
Merton, Robert, 213–14
Meslier, Jean, 742
Mesmer, Franz Anton, 169, 492–5, 507
mesmerism. *See* animal magnetism
Messerschmidt, Daniel G., 863
Messier, Charles, 343, 390
metal engraving, and scientific illustration, 568, 570–2, 583
metallurgy: in China and Japan, 880; and India, 684–5, 880; and Prussia, 850; and Russia, 861–2, 863–6. *See also* mining industry and mining schools
metaphysics: and classification of sciences, 253; and philosophy of science, 275–80, 283; and university study of natural sciences, 45
Metaxas, Nicodemus, 657
Meteorological Society of Mannheim, 93
methodology: and philosophy of science, 280–3; and universal method, 803–5. *See also* experimental science; scientific method
Metzger, Hélène, 381, 471n21
Mexico: and botanical gardens, 102; universities and science education, 78–9. *See also* Aztecs; Maya; Spanish America
Meyer, Felix, 596–7
Michelangelo, 590
Michell, John, 277, 278, 350
microscope and microscopy: and microscopic organisms, 410; and scientific instruments, 525, 526, 579–80, 581f

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Middleton, Christopher, 622
Mikami Yoshio, 703
military: and engineering schools, 122–3; Islamic world and Western technology, 653–5, 671; and Jesuits in China, 690; and scientific development in Spanish America, 732; and scientist as civic expert, 179; and technology in India, 671, 685. *See also* war
Mill, James, 459
Mill, John Stuart, 459
Millar, Andrew, 545
Millar, John, 443–4, 448–9
Millar, Robert, 831–2
Miller, David Philip, 177n44, 181n51
Miller, Philip, 570, 627
Millington, Thomas, 512
Milne, John, 849
Milton, John, 786
Minggantu, 694
mining industry and mining schools: and government patronage of science, 118–20, 424; and India, 684; and Russia, 863–4; and science education, 74, 75; and Spanish America, 100, 733. *See also* metallurgy
Mitchell, Timothy F., 586n11
modernity and modernization: and Enlightenment, 243; and German universities, 231; and medical sciences, 481; and printing in Islamic world, 656; and scientific developments, 3
Molière, Jean-Baptiste, 189
Molière, Jean-Pierre de, 299
Molyneux, Thomas, 606–7
Monboddo, James Burnett, Lord, 130, 444, 450–1
Monceau, H. L. Duhamel de, 568
Monge, Gaspard, 122
Monnet, Antoine, 126, 612
Montagu, Lady Mary Wortley, 192, 666
Montchretien, Antoine de, 451
Montesquieu, Baron de (Charles-Louis Secondat), 438, 446–8, 462, 746, 821
morality: and human nature, 818; and human sciences, 441; and literature, 771–4; and medicine, 148–9; and philosophical empiricism, 806; and quantification, 815–16; and relationship between religion and science, 748, 770; and scientific community, 235
moral philosophy: and human sciences, 441, 444–50; and image of scientist, 164–7, 202; and natural philosophy, 285
Morandi Manzolini, Anna, 185
Moravia, Sergio, 438n7
More, Hannah, 497
Moreau de Maupertuis, P. L., 333
Moreri, Louis, 251
Morgan, John, 527
Morgani, Giovanni Battista, 479, 480, 481, 483
Moro, Anton Lazzaro, 421, 427
Morrell, Jack, 214, 225
Morris, James, 850
Morveau, Louis Bernard Guyton de, 392
motherhood: and science education for women, 189; and sexual division of labor, 193. *See also* children; women
motion: and mechanical natural philosophy, 26; Newton and planetary, 311; and physics, 360–1. *See also* force; inertia
Motoki Ryoei, 709
mountains: and geology, 585–7; and landscape art, 599
Mozart, Wolfgang, 780
Mulla Nizamuddin Sahalwi, 679
Müller, Benjamin, 863
Müller, John, 857
Murad III, Sultan, 656, 659
Muratori, Lodovico Antonio, 767
Murdock, William, 854
Musawi, Walih, 686
Museo di Storia della Scienza (Florence), 519
Museum of the History of Science (Oxford), 524f
music, and influence of science on art, 780
Musschenbroek, Jan van, 514, 531
Musschenbroek, Johan & Samuel van, 531
Musschenbroek, Pieter van, 64, 281, 289, 297–8, 358, 369, 371–2, 514
Mustafa III, Sultan, 652, 662
Müteferrika, İbrahim, 657–8, 660

Nabatov, R. F., 864
Nādir Shāh, 662–3
Nahua language, 728–9
Nairne, Edward, 529
Nakane Genkei, 701–2
Namier, Lewis, 159
Nantes, Treaty of (1685), 851
Naonobu, Ajima, 704
Napoleonic Expedition of 1798 (Egypt), 649, 650, 664
Narborough expedition (1669–71), 621
Narsimha, 674–5
nationalism: and human sciences, 445; and India, 673–4; and scientific community, 234; universities and science education, 85–6. *See also* imperialism; patriotism
National Museums of Scotland, 525
Native Americans, 442, 443–4, 643. *See also* Aztecs; Inca; Maya
natural disasters, and natural theology, 748. *See also* earthquakes; volcanoes

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

natural history: and classification of sciences, 254, 256, 258, 262–3, 265–6; definition of, 417; development of, 324–8; gender politics and racism, 236; and human nature, 819–23; and materia medica, 716; and medical education, 69, 70–2; religion and image of scientist, 162–4; and Royal Society, 282; and Spanish America, 738; and universal method, 803–5; and voyages of discovery, 627; and women, 217. *See also* nature
natural knowledge: and agriculture, 139–46; and botany, 151–6; contemporary model of, 129–30; forms, sites, and social meanings of, 131–2, 156–8; and medicine, 146–51. *See also* knowledge
natural philosophy: approaches to in seventeenth century, 268–72; and Aristotle, 244; and astrology, 499; authors and authorship, 556; and classification of sciences, 254, 256, 258–9, 262–3, 266; definition of, 14; development of, 285–91; and Enlightenment, 25–8; and medical sciences, 463, 476–7; and Newton, 14, 27–8, 244, 272–3, 287; and philosophy, 344–5; and physics, 354–5; and practice of reading, 554; and religion, 744; and skepticism, 28–41; and vitalism, 41–3. *See also* nature; Newtonianism
natural religion, 743–4. *See also* theology
nature: allegory and representations of, 591–2; Galileo and mathematical concept of, 270–1; gender and concepts of, 191–2, 193, 195, 208f; and landscape art, 592–609; and natural philosophy, 285; Spanish America and emblematic readings of, 727–8; and trade, 838–40. *See also* natural history; natural philosophy
navigation: and imperialism, 827, 841–4; and Islamic world, 654. *See also* cartography; chronometers; longitude; shipbuilding
Nayansukha, 678
nebular hypothesis, 348–50
Née, Luis, 643
Needham, John Turberville, 410–11, 412–13, 415, 753
Needham, Joseph, 688, 876
Negri, Salomon, 665
Nelson, David, 640
neo-Confucianism, 692, 694, 710. *See also* Confucianism
neo-mechanical philosophy, 33
neoplatonism, and Spanish America, 722–9
neptunism, 424, 428, 430
Netherlands: and botanical gardens, 102; and Japan, 702–3, 716, 870; and Newtonianism, 298–9, 302; and physics, 357–8; and printing houses, 540–1, 545; and reform of science education, 55; and scientific instruments, 531; and state regulation of print, 540; trade and imperialism, 822–3; and voyages of discovery, 621. *See also* Europe
Newbery, John, 546
Newcomen, Thomas, 853, 854
Newton, Isaac: and alchemy, 499–500; and astronomy, 334–7, 342–3, 348–50, 351, 621; on Cartesianism, 287–8; and chemistry, 382; as cultural icon, 766; and graphical methods in calculus, 309; and human sciences, 499; influence of on culture, 10, 11–12, 762–3; influence of on science, 3–4; and mechanical physiology, 398, 472; and methodology, 281–3; and natural philosophy, 14, 27–8, 244; 287; and nature of matter, 28; and philosophy of Enlightenment, 800, 801, 809–14, 824; and philosophy of science, 267, 272–5, 283, 284; and physics, 359, 360–7; and print culture, 545, 555–6, 559–60; and religion, 741, 744–6, 748; and science education, 47, 60, 61, 62, 68, 80, 85, 86; and scientific revolution, 23; and social role of scientist, 161; and university posts, 49. *See also* Newtonianism
Newtonianism: and Cartesianism, 287–8, 359–60; and chemistry, 384; diffusion of in Europe, 295–302; history of science and studies of, 134–9; and Japan, 709–10; and natural philosophy in England, 289–95; and physiology, 400–4; and reproduction, 411–13; and Spanish America, 734, 738; and university culture, 97. *See also* anti-Newtonianism; natural philosophy; Newton, Isaac
New Zealand, and voyages of discovery, 628, 630
Nicolson, Marjorie Hope, 598n33
Niebuhr, Carsten, 650, 665
Niebuhr, Hermann, 231
Nieto-Galan, Agustí, 117n32
Nishikawa Masayasu, 706
Nixon, Robert, 547
Noble, David, 195
noble savage, image of, 442–3, 620
Nollet, Jean Antoine, 169, 170, 302, 358, 359, 369, 371, 514, 515f, 522, 754
nomenclature, and chemistry, 394
normal science, and dynamics of scientific revolution, 23n1
North Africa: and Islamic world, 650; and medicine, 663
Northern Wars of 1700–1721, 861, 863
Northwest Passage, and voyages of discovery, 618, 621–2, 629, 631–4, 643
Norton, John F., 783n45

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Nouvelles de la République des Lettres (journal), 552

obscurantism, and scientific illustration, 563–4
Observatoire Royal (Paris), 99, 108, 352
observatories, astronomical: and India, 675; and Islamic world, 652; and organization of science, 98–9; and scientific instruments, 523–5; and universities, 82; and women, 190
obstetrics, and scientific illustration, 578
occult powers, and vitalism, 34, 38
oceans, and sea levels, 430–1. *See also* neptunism
Oersted, Hans, 280, 323
Ogiu Sorai, 707
Oken, Lorenz, 42–3
Oldenburg, Henry, 89
Olson, Richard, 11
optics: and experimental physics, 363–7; and scientific instruments, 522. *See also* microscope and microscopy; telescope
optimism, and cultural change, 764–77
organization, of science: and organizational revolution of seventeenth century, 87–90; and second organizational revolution in early nineteenth century, 105–6; in society, 103–5; and universities, 96–8. *See also* institutions
Orientalism, and Western imagination, 781
ornithology, and scientific illustration, 574–5
Orrio, Xavier, 734
Orta, Garcia da, 191–2, 682
Ortega, Casimiro Gómez, 731
Ortolengi, G., 857–8
Ortous de Mairan, Jean-Jacques de, 299, 411, 481n15
Osasunasco, Desiderio de, 734
Osorio Romero, Ignacio, 722n11–12
Oswald, James, 812
Otsuki Gentaku, 715, 870–1
Ottoman Empire: and contacts with Europe, 650–3; and Islamic civil and religious timekeeping, 655–6; and medicine, 662, 663–4; and military technology, 653–4; and print culture, 656–7; and Russia, 861. *See also* Islam and Islamic world
Ovington, John, 682
Owen, Robert, 459
Oxford University, 49, 60, 82, 215, 216, 289–90
oxygen, and chemistry, 391, 393–4, 580, 582f

Paauw, Jan, 532
Padel, Ruth, 782n44
Padmanabha, 674
Paley, William, 163, 760
Palitzsch, J. G., 343, 390
Pallas, Peter Simon, 428, 586, 633
Palmer, Samuel, 841
Pannini, Giovanni Paolo, 782
Paracelsus, 35, 378, 379, 452, 661
paradigm: and dynamics of scientific revolution, 23n1; and mathematics in Japan, 704
Parennin, Dominique, 695
Paris, Claude, 533
Paris Academy. *See Académie des Sciences*
Paris Observatory. *See Observatoire Royal*
Park, Mungo, 639
Parkinson, Sydney, 628
Pascal, Blaise, 161, 271
Passemant, Claude Siméon, 533
passions, and human sciences, 441, 523
patents, and industrialization, 858
pathognomy, 496, 497
pathology, and medical sciences, 476–81
patriotism, and scholarship in Spanish America, 722–5, 727, 737–8. *See also* nationalism
Paul, Lewis, 853
Paulze, Marie-Anne, 580
Pavón, José Antonio, 642
Payen, Jacques, 124n52
Peace of Paris (1763), 825
Peacock, George, 325–7
Pemberton, Henry, 291
Pennant, Thomas, 628, 633
Pereira, Andrea, 694
Peréz, Juan, 642
perfection, and concept of progress, 785–90
periodicals. *See* journals
Perrault, Claude, 107
Perronet, Jean-Rodolphe, 121, 122
Persia: and astronomy, 660; and Islamic world, 650; and medicine, 662–3; and military technology, 653–4, 655; and printing press, 658
Peru. *See* Inca; Spanish America
Peset, José Luis, 732
Peter the Great, Czar of Russia, 123, 632, 855, 859–62
Petiver, James, 833
Petty, William, 452, 456
Pfaff, Johann Friedrich, 57
Pfeffel, Johann Andreas, 593
Philip II, King of Spain, 729
Philip III, King of Spain, 720
philosophes: and Catholic Church, 754–5; and classification of sciences, 247; and method of modern philosophy, 800; and natural theology, 164
Philosophical Transactions (Royal Society of London), 90, 95, 289, 542, 549, 553
philosophy: and analogy between mind and body, 817–18; and classification of sciences, 253; and evidential scholarship in

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

philosophy (*cont.*): China, 691–5; human sciences and history of, 444–50, 456; and natural history of human nature, 819–23; and Newtonianism, 809–14; and quantification, 814–17; and reform of science education, 56; relationship of to natural philosophy, 43, 303–4; relationship between science and, 801–2; and science in seventeenth century, 802–9. *See also* analytical philosophy; experimental philosophy; mechanical philosophy; moral philosophy; natural philosophy; philosophy of science
philosophy of science: history of, 267–8; metaphysics, theology, and matter theory, 275–80; and methodology, 280–3; and natural philosophy in seventeenth century, 268–72; and Newton's legacy, 267
Phipps, Constantine, 628, 629
phlogiston, and chemistry, 387, 389, 391, 392, 396
phrenology, 497
physical anthropology, 450–1
physics: advances in eighteenth century, 5; and classification of sciences, 253, 262; and mathematics, 371–4; and mechanics, 360–3; and natural philosophy, 286, 295, 297, 354–5; Newtonianism and Cartesianism, 359–60; and private courses, 77–8; and public lectures, 356–7; and quantification, 422–6; and science education in universities, 45–9, 50, 60–8, 79–80, 83–4, 354–5, 357–8; and scientific academies, 355–7; and scientific illustration, 582–3; Wolff and definition of, 336. *See also* experimental physics
physiognomy, 495–7, 506–7
physiology: and classification of sciences, 265–6; and mechanism, vitalism, and materialism, 399; and medicine, 468–76; and Newtonianism, 400–4; and reading, 555; status of in 1790s, 481–4; and study of reproduction, 454, 455. *See also* anatomy; medicine
Piarists, and science education, 61
Picard, Jean, 332, 621
Picon, Antoine, 121n43
Pictet, Marc Auguste, 528
Pietism, and science education in German universities, 56
Pietsch, Theodore W., 573
Pine, Robert, 779f
Pineda y Ramírez, Antonio, 643
Pingré, Alexandre-Gui, 622–3, 624
piracy, and production of print, 540, 541–2, 556, 557–8
Piscopia, Elena Cornaro, 185
Pitcairne, Archibald, 401
Pizan, Christine de, 189–90
plagiarism, and scientific illustration, 573
planetary motion, 274, 336–7, 343
Plato, 206n49
Pledge, H. T., 2
Pliny, 35, 201
Plot, Robert, 417
Pluche, Noel Antoine, 163
Plumer, Charles, 566
Pocock, Richard, 607
poetry, and classification of sciences, 253. *See also* literature
Poggendorff, J. C., 213, 236
Poisson, Siméon-Denis, 373
Poivre, Pierre, 626
Poland, and modernization of science education, 54
Poleni, Giovanni, 64, 332
Polhem, Christopher, 119
Polinière, Pierre, 63, 168–9, 356–7, 359, 514
political economy, and human sciences, 449, 451–6, 462
political science, and human sciences, 457–61
Pombal, Marques de, 67, 127, 518–19
Pons, Francis, 676
Pontedera, Giulio, 202n43
Pope, Alexander, 7, 136, 548, 762–3, 766–7, 775, 781, 785, 800, 817
Pope, Joseph, 534
popular culture: natural knowledge and reform of, 153, 156; and reading in Japan, 700
population. *See* demography; immigration
porcelain manufacturing, 114–15
pornography, and printing industry, 549
Porset, Charles, 249–50
Porter, Roy, 166n14, 242n2
Portugal: and government patronage of science, 127; and science curriculum in universities, 61. *See also* Europe
Positivism, and human sciences, 461
Postlethwayt, Malachy, 828, 857
postmodernism, and critiques of Enlightenment, 24, 43
Potsdam decree (1685), 851–2
Potter, Elizabeth, 195
Pound, James, 841
Pourchot, Edmond, 660
Poussin, Nicolas, 587, 602, 756
Pratt, Mary Louise, 644
precision, in physics, 371, 394, 396. *See also* quantification
preexistence theories, and life sciences, 413–14
preformation, and life sciences, 406–9
Preißler, Johann Daniel, 593, 595f
Press Act (1662), 538, 539

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Preston, John, 606n57
Price, James, 485–6, 502
Price, Richard, 757, 806
Priestley, Joseph: and chemistry, 389, 390–1, 392, 394; and egalitarianism, 175; and foundations of modern science, 489; and Hartley on social reform, 459; and human nature, 806, 808; and image of godly naturalist, 164; and materialist philosophy, 278, 812; and natural knowledge, 143; and Newtonianism, 294, 812; and print culture, 555; science and future of society, 6; on science and religion, 742, 744, 749, 751, 754, 757, 760, 761; scientific education and class, 171n21; and scientific illustrations, 580, 582f; and vitalism, 36; and voyages of discovery, 629
Primus, Alexander Munro, 71
Prince, Thomas, 755
Princeton University, 52, 64, 100
printing and print culture: authorship and end of Enlightenment, 555–60; cultures of at onset of Enlightenment, 536–40; and Islamic world, 656–9; and Japan, 700, 702–3, 705–6, 709; and medicine in China, 696–7; property and piracy in production of, 540–50; reading and redefinition of reason, 550–5. *See also* illustration, scientific; libraries; literature; textbooks
private courses, and science education, 76–9
probability theory: and philosophy, 815–16; and religion, 756
professionalization, of science, 162, 192, 234–5
progress: cultural change and concepts of, 782n42, 785–90, 796; and Rousseau on human nature, 821, 822
Prony, Gaspard Riche de, 138
property, and production of print, 540–50, 557
prosopography: characteristics of studies, 212–13; definition of, 212; and Enlightenment, 235–7; and history of science, 213–14, 266–9; and Jesuits, 218–20; and science in Austro-German lands, 227–31; and science communities, 220–2, 233–5; and universities, 214–18, 222–7; and women, 232–3
Protestantism: and differences between England and Continental countries in eighteenth century, 132; nonconforming sects and science in England, 200–1; and universities in Germany, 260–1. *See also* Anglican Church; Dissenters; Lutheranism; religion
Proust, Joseph-Louis, 117
Prussia, and technological transfer, 850. *See also* Germany
psychology: and human sciences, 457–61; and philosophy, 804–5; and reading, 554–5. *See also* madness
Ptolemy, 269, 339, 348
public sphere: and culture of print, 538, 550–1; and medical sciences, 482; and Spanish America, 732, 733–4
Puerto Sarmiento, Francisco, 733
Pufendorf, Samuel, 444, 808, 822n51
Putter, J. S., 446
Pyenson, Lewis, 212, 213

Qaim Khan, 680
Qian Daxin, 693, 694
quantification: and human sciences, 456–7; and philosophy, 814–17; and physics, 422–6
Quechua language, 728–9
Quesnay, François, 454–5
Quli Shah, 681
Qur'ān, 659, 667

race and racism: and gender politics of science, 207–10; and human sciences, 450–1; and "sexual science," 200–1; and Spanish America, 720; and voyages of discovery, 644
Radcliffe, Anne, 773, 781
Radcliffe Observatory (Oxford University), 82, 524f
Rahman, A., 673, 677
Rainford, Charles, 502
Ramazzini, Bernardino, 776
Ramchandrapant, 685
Ramchandra Vajpeyin, 674
Ramsay, Allan, 775
Ramsden, Jesse, 528, 854
Ramus, Petrus, 253
Rappaport, Rhoda, 5, 422n14
Raspe, Rudolf Erich, 418, 606
rationality, and reevaluation of Enlightenment, 488. *See also* reason
rational mechanics, 374, 439
Ray, John, 163, 230, 398–9, 417, 565, 742, 752
Ray, P. C., 686
Rayner, William, 546
al-Rāzī, Muhammad ibn Zakarīyā (Albucasis), 665
reading, and print cultures, 550–5, 697, 700
realism and reality: and scientific illustration, 562, 564–8; social action and image, 159–60; and vitalism, 41
reason: and human sciences, 441, 523; print cultures and redefinition of, 550–5; and religion, 755–8. *See also* Age of Reason; analogical reasoning; rationality
Réaumur, René-Antoine de, 408, 421, 514
Redouté, Pierre-Joseph, 571–2
reductionism, and mechanical physiology, 455
Rees, Graham, 253n29

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Reeve, Clara, 773, 787
refraction, sine law of, 414–15
Reid, Thomas, 264, 281–2, 808, 810–12, 815, 816–17, 820
Reiger, Christian, 720n7
Reill, Johann Christian, 11, 483
religion: and Dissenters, 176–7; diversity of natural, 743–4; Enlightenment critiques of, 758–61; and human sciences, 441; and image of scientist as godly naturalist, 162–4; and limitations of reason, 755–8; and Locke's theory of knowledge, 806–7; providence and utility of science, 753–5; relationship between science and, 741–3, 744–9, 770; and secularization of science, 753–5. *See also* Anglican Church; atheism; Catholic Church; clergy; deism; Islam and Islamic world; Jesuits; Jews and Judaism; Lutheranism; Protestantism; theology
Renaissance: and experimental science, 511–12; and landscape art, 587; and legal humanism, 444–5; and scientific academies, 88
Renard, Louis, 573
Renaudot, Théophraste, 89
representation, culture and forms of, 777–82
reproduction: mechanism and preformation, 406–11; and Newtonianism, 411–13; physiology and studies of, 399–400; and preexistence theories, 413–14
repulsion, and electricity, 368, 370
research: and organizational revolution in nineteenth-century German universities, 106; and science teaching in universities, 83; and scientific instruments, 522–5
Revel, Jacques, 215, 217
Reynolds, Joshua, 587–8, 594, 601
Ricardo, David, 440
Ricci, Matteo, 700
Richards, Graham, 436–7n4
Richardson, Samuel, 771, 772
Richarz, Monika, 216–17
Richer, Jean, 332, 621
Riera, J., 731n42
Rinssen, Anthony, 531
Riolan, Jean, II, 51
Rittenhouse, Benjamin & David, 534
Ritter, Johann Wilhelm, 280
Rivière, Mercier de la, 440
roads, and industrialization, 855, 856, 857
Robertson, William, 827–8
Robinet, Jean Baptiste, 40
Robinson, Tancred, 621
Robison, John, 265, 281
Roche, Daniel, 90n6, 222–4, 235–6, 418n1
Rodríguez, Diego, 725–7, 728
Rodríguez de Mendoza, Toribio, 61
Roe, Shirley, 5, 13, 472n24, 475
Roebuck, John, 180, 848, 853
Roger, Jacques, 402, 408, 416
Rohault, Jacques, 63, 355, 357
Rolle, Michel, 167
Romanticism: and critique of Enlightenment, 237; and natural philosophy, 41–3; and notion of genius, 764
Romé de l'Isle, J.-B., 429
Rosa, Salvator, 587
Rosenberg, Charles, 148
Rosenhof, Roesel von, 575
Rouelle, Guillaume-François, 387, 425–6, 432
Rousseau, George S., 7, 242n2
Rousseau, Jean-Jacques, 196, 438, 443, 449–50, 620, 783, 821–3
Roussel, Pierre, 37, 198
Rouyer, Pierre-Charles, 664–5
Rowbottom, Margaret, 491n13
Rowden, Frances Arabella, 153
Royal Academy of History (Spain), 732
Royal Academy of Sciences (Sweden), 542
Royal Academy of Turin, 111–13
Royal Astronomical Society, 105
Royal Botanical Garden (Mexico), 102, 732
Royal Gardens (Kew), 101–2, 627, 835
Royal Observatory (Greenwich), 99, 124, 330
Royal Society of Edinburgh (RSE), 226–7
Royal Society of London: and class, 226; establishment of, 88–9; and experimental science, 512; and fossils, 420; and marginalized practices, 485, 490–1, 502; as model of scientific academy, 87, 92–3; and natural history, 282; and natural knowledge, 131; and physics, 355, 357, 406–7; printing and publication, 541–2, 549, 553; and relationship between science and technology, 104–5, 128; and Royal Observatory, 113; and scientific expeditions, 621, 623, 624; and scientific journals, 90, 95; and state, 104; trade and imperialism, 833, 834; and women, 187–8, 218
Rozier, François, 96
Rozier's Journal, 96
Ruan Yuan, 693, 694
Rubens, Peter Paul, 587
Rudwick, Martin J. S., 419n5, 586–7n11, 593n26, 612
Ruestow, Edward G., 60n25, 164n9
Ruini, Carlo, 562
Ruiz, Hipólito, 642
Rumpf, Georg Eberhardt, 568
Rush, Benjamin, 459, 484
Russell, Alexander, 663–4
Russell, Colin A., 118n36

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Russia: government and scientific academies, 109–10; industrial and technological development, 851, 858–66; and transits of Venus, 344; and voyages of discovery, 631–3, 642–3
Russian Imperial Academy of Sciences, 123, 523. *See also* St. Petersburg Academy
Rutherford, Thomas, 66
Rutherford, William, 762, 766, 790
Ruysch, Frederick, 711149

Sabean, David, 211
Sade, Marquis de, 770, 783
St. André, Nathanael, 149
Saint-Fond, Barthélemie Faujas de, 606
Saint-Germain, Comte de, 501
St. Petersburg Academy, 76, 94, 111, 109, 340, 432n39, 597
Saldaña, Juan José, 733
Sallūm, Ibn, 666
salons, women and scientific, 232–3, 235
Sánchez, Miguel, 724–5
Sandby, Paul, 612n70
Sandifort, Eduard, 578
Sandys, Edwin, 607, 608f
Ṣānizāde, 'Atā'ullāh, 667
Sano Antei, 713
Sarkar, B. K., 673
Sarma, S. R., 674n23
Sarton, George, 672n17
Saunderson, Nicholas, 65, 291
Saussure, Horace-Bénédict de, 418, 599–602
Saussure, Théodore, 600
Sauvages, François Boissier de, 405
Say, Jean-Baptiste, 460
Schaffer, Simon, 3, 4, 14, 136, 175, 807n15, 838
Scheele, Carl Wilhelm, 36, 118, 391
Schelling, Friedrich, 42, 279, 280, 283, 284
schemata, Kant's concept of, 40–1n58
Schemnitz Academy (Austria), 120
Scheuchzer, Johann Jacob, 593–7
Schiebinger, Londa, 6, 19, 232, 233, 235
Schiller, Friedrich, 40
Schott, Gaspar, 721
Schubert, Franz, 780
Schwab, Richard, 439n12
science. *See* astronomy; biology; botany; chemistry; classification, of sciences; earth sciences; education, scientific; geology; history of science; human sciences; institutions; journals; life sciences; medicine; philosophy of science; physics; scientific academies; Scientific Revolution; scientists; zoology
science fiction, 788, 789
Science Museum (London), 519
scientia: and classification of sciences, 245; gendered representations of, 194f
scientific academies: creation of in seventeenth century, 88; development of, 90–4; French provincial, 222–4; governments and patronage of science, 107–28; influence of on science, 8; and lecture courses, 75–6; and mathematics, 306; and medicine, 464; and physics, 355–7; scientific societies compared to, 221; technology and industrial development, 111–28; and women, 187–8. *See also Académie des Sciences;* Royal Society of London; scientific societies
scientific communities, and prosopographic studies, 220–2, 233–5
scientific method, in India, 675. *See also* experimental science; methodology
Scientific Revolution: and Enlightenment, 23–43; and explosion of knowledge, 242; and natural philosophy, 27–31, 286; and polite society, 171; and science education, 80–1; science in seventeenth century compared to, 1–3; and scientific sexism, 210. *See also* chemical revolution; Copernican revolution and Copernicanism
scientific societies: and botanical gardens, 102; in colonial America, 100; in early nineteenth century, 105; and ideology, 94, 235; influence on science in eighteenth century, 8–9; in provincial England, 177; and scientific academies, 92–3, 221; and scientific journals, 95–6. *See also* scientific academies
scientists: culture and social roles of, 159–83; and image of civic expert, 178–83; and image of godly naturalist, 162–4, 178; and image of moral philosopher, 164–7, 178; and image of polite philosopher of nature, 167–78; origins of term, 106
Scilla, Agostino, 419
Scopoli, J. A., 120
Scotland: agriculture and Scottish Enlightenment, 141–2; and chemistry, 379–80, 388–90; and Newtonianism, 291–2, 810–12; philosophical history and political economy, 456; and printing houses, 544; and prosopography, 225–7; religion and Scottish Enlightenment, 760–1; and social concern about scientific specialization, 173–4
scurvy, 477–8, 636–8, 837–8
Secord, Anne, 155
Secord, James, 138–9
secularization, of science, 749–53
Seki Takakazu, 703–4, 705
Selīm I, Sultan, 656
Selkirk, Alexander, 827

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

semiotics, and pathology, 478n35
Semler, Johann, 501
Senefelder, Alois, 583, 659
Sennert, Daniel, 468–9, 661
sensationalist psychology, 457–61
sensibility, and physiology, 473
Sepp, J. C., 575
Sessé, Martin de, 643, 729
Sève, Jacques de, 590–1, 592f
Seven Years' War, 827
sexual difference: and botany, 202–4; and "sexual science," 197–201, 793. *See also* gender
Shaftesbury, Earl of (Anthony Ashley Cooper), 173, 817
Shao Yong, 694
Shapin, Steven, 2n3, 3n9, 4, 13, 17, 18n66, 19, 35, 161n3, 183n55, 195, 212, 214, 225, 225–6, 227, 807n15
Sharif Khan, Hakim, 682
Shaw, Peter, 78, 379, 557
Shelley, Mary, 507, 794
Shelley, Percy Bysshe, 507
Sheng Bai'er, 694
Shiba Kokan, 709
Shibukawa Harumi, 701, 707
shipbuilding, in India, 872
al-Shīrāzī, Qutb al-Dīn, 661–2
Shizuki Tadao, 709–10, 871
Short, James, 524–5, 527–8
Siberia, and voyages of discovery, 632
Sibley, Ebenezer, 494, 503
Sibthorp, Humphrey, 571
Siegfried, Robert, 36
Şifai, Ömer, 662
Sigorgne, Pierre, 62
Sigüenza y Góngora, Carlos, 721, 722
Sinclair, John, 144n26
sine and cosine functions, 312, 335
Siraisi, Nancy G., 464n2, 466
Sirhindi, Ahmed, 671n10
Sisson, Jonathan, 528
Skene, David, 820
skepticism, and mechanical natural philosophy, 28–41
Slater, Samuel, 846
Sloane, Hans, 282, 548, 626, 834, 837
smallpox, and inoculations, 192
Smart, Christopher, 775, 783
Smellie, William, 203, 506–7
Smith, Adam, 165n12, 211, 237, 439, 440, 444, 448, 452, 456, 462, 812, 874, 881
Smith, Cyril Stanley, 429n29
Smith, Eugene, 703
Smith, James Edward, 571, 575
Smith, Robert, 816
Smith, Roger, 436–7n4
Smith, Samuel, 543
Smith, William, 166, 180, 582–3
Smollett, Tobias, 771–2, 781
Snell, Bruno, 782n44
Sobirov, G., 676
social sciences. *See* human sciences
Societas regia litteraria et scientiarum Sueciae (Sweden), 110–11
Societas regia scientiarum (Berlin), 89, 108, 187
Société Typographique de Neuchâtel (Switzerland), 541
society: and Newtonianism in Augustan England, 139; and organization of science, 103–5; and stadial theory of social change, 444–50. *See also* class; culture; government; sociology
Society of the Incognito (Austria), 227
sociology, 461–2. *See also* human sciences
Solander, Daniel, 626, 629, 831
solar system and solar theory, 329–32, 343–4
Sonnenfels, Joseph von, 55, 454
Soroe Academy (Denmark), 519
Sorrenson, Richard, 177n44
Soulavie, Jean-Louis Giraud, 432, 613, 615–16
South America, and scientific academies, 100. *See also* Spanish America
Southey, Robert, 495
Sowerby, James, 152
space, Kant and concept of, 279
Spain: and engineering schools, 123; and science curriculum in universities, 61, 62; and scientific and technical support for manufacturing, 116–17; and voyages of discovery, 641–4, 730–1. *See also* Europe; Spanish America
Spalding Gentlemen's Society, 135, 156–7
Spallanzani, Lazaro, 68, 180, 413, 414
Spanish America: and botanical gardens, 117; colonialism and precontact social structures of, 718–19; and influences on scholarly traditions, 722–9; and institutions, 719–22; and trade, 730–5; travelers and cultural change in, 735–8; and universities, 100, 720, 731. *See also* Mexico
Sparrman, Anders, 626, 629, 839
specialization: and classification of sciences, 266; and scientific community, 234–5; and university students, 217, 219, 220–1, 226
species, and physical anthropology, 451. *See also* *Homo sapiens*
Spectator, The (magazine), 179
Spellman, W. M., 806n14
Spence, Jonathan, 689
Spencer, Herbert, 246
Spencer, Mary, 576

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Spinoza, Benedictus, 292, 437, 458
Spöring, Herman, 626
Stafford, Barbara Maria, 586n11
Stahl, Georg, 27n15, 35–7, 38, 39, 381, 386–7, 402, 405, 471–2, 475, 483
Stahlian revolution, in chemistry, 36–7
Stapleton, Michael, 117
star catalogs and maps, 328, 338–9, 348–9, 352–3. *See also* cosmography
state: human sciences and political economy, 451–6; Kant on university and, 58; and natural philosophy, 290; and regulation of print, 536–7, 540–1, 558–9; and science education, 53, 74, 81; and scientific societies, 92. *See also* government
Stationers' Company, 538
statistics and statistical studies: and human sciences, 456–7; and prosography, 212–13. *See also* quantification
steel industry, in India, 684. *See also* metallurgy
Steele, Richard, 172
Stein, Howard, 330n5
Steitz, Adam, 532
Steller, Georg, 632, 863
Steno, Nicolaus, 418–19
Stephenson, George, 79
Stephenson, Marjory, 187n8
Sterne, Laurence, 772–3, 782
Steuart, James, 451–2
Stewart, Larry, 9–10, 135, 139
Stewart (David M.) Museum (Montreal, Canada), 517–18
Stirling, James, 305
Stone, Lawrence, 212, 213, 215, 216
Strachey, John, 613
Strange, John, 424–5, 428
Streete, Thomas, 329, 331
Stuart, John, 516
Stubbs, George, 576–7
Stukeley, William, 498
Sturdy, David, 224
sublime, and landscape art, 592–609
Sugita Genpaku, 703, 712, 713
Süleyman I, Sultan (Ottoman Empire), 655
Suri, Mahendra, 670
Suría, Tomás de, 643
Susskind, Charles, 491n13
Sutton, Geoffrey V., 103n30, 170
Svanberg, Jons, 333
Swammerdam, Jan, 161, 408, 579
Sweden: and book trade, 542; economic development and government patronage of science, 118–19; government and scientific academies, 110–11; government and statistics, 457; and research on sea levels, 430–1; Russia and war with, 862; trade and imperialism, 831; universities and science education, 54, 68. *See also* Europe
Swedenborg, Emanuel, 502
Swift, Jonathan, 763–4, 772, 788, 789
Switzer, Stephen, 140–1, 144–5, 154
Sydenham, Thomas, 807
Symonds, John, 143
Sypher, Wylie, 797n78
Syria: and Islamic world, 650; and medicine, 663–4

Tafalla, Juan, 729
Tahiti, and voyages of discovery, 625, 843
Takahashi Yoshitoki, 708
Takebe Katahiro, 703
Talmon, J. L., 112
Taton, René, 16
Tavernier, Melchior, 659
Taylor, Brook, 305, 323
Taylor, Kenneth L., 418n2
technical schools, 74–5, 121–3
technology: and China, 871–7, 879–81; economics and government patronage of science, 111–28; and ideology of science, 104; and India, 671, 683–5, 879–81; and industrialization in England, 853–8; and industrialization in Europe, 846–53; Islamic world and Western, 653; and Japan, 866–71, 879–81; and print culture, 556; and Russia, 858–66; and scientific knowledge, 878. *See also* industrialization; Industrial Revolution
telescope, and scientific instruments, 523, 528, 676
Telford, Thomas, 79, 854
terra australis incognita, and voyages of discovery, 618, 619, 625, 626–31, 641
Terrall, Mary, 195
textbooks: and chemistry, 380, 394, 395; and classification of sciences, 252; and medicine, 465–6, 468; and physics, 358
textile industry: and government support for sciences, 112, 114, 115–16, 117; and India, 684, 872, 877; and industrialization, 846–7, 857–8; and Japan, 869
Teyler Museum (Netherlands), 519, 522, 525, 530
Thackray, Arnold, 27, 177–8, 212, 214, 225, 227
theater, and natural knowledge, 136–7
theology: concept of science and Islamic, 667; and encyclopedias, 249, 262; and life sciences, 398–9; and natural philosophy, 276–7, 290, 499; and Newtonianism, 276–7, 284, 292; and philosophy of science, 275–80, 284; and prosopographic studies of university students, 215, 216; and science education in universities, 56. *See also* religion

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Theophrastus, Philipus, 35, 160n2, 201
Thomas, Keith, 152
Thomasius, Christian, 815
Thompson, E. P., 10, 12
Thomson, James, 7, 767, 780, 782
Thomson, Thomas, 265
Thornton, Robert, 202, 203, 572
Thrale, Hester, 490
Thuillier, Denis, 623
Thunberg, Carl Peter, 568, 870
time scales, and earth sciences, 431–5
Tindal, Matthew, 747, 807
Tipu Sultan, 685
Tissot, Samuel, 466, 774, 776
Toft, Mary, 146, 149–51, 157
Tokugawa Yoshimune, 701–2
Toland, John, 276, 292, 746–7, 807
Tolozan, Jean-François, 114
Tompion, Thomas, 528
topographical art, 594, 601, 607, 609
Tott, Baron de, 652–3
Toulmin, Stephen, 24, 33
Tournefort, Joseph Pitton de, 203, 419, 565
Trabulse, Eliás, 725–7
trade: and botany, 833–8; and imperialism, 828–38; and scientific discoveries, 825–8; in scientific instruments, 531–4; and Spanish America, 730–5; and transport of nature, 838–40. *See also* economics; mercantilism
transportation. *See* canals; roads
travel and travel literature: and cultural change in Spanish America, 735–8; and human sciences, 442–4; and imagination, 781; national interests and technological development, 125; and scientist as civic expert, 179
Trembley, Abraham, 409, 412, 580, 753
Treviranus, Gottfried Reinhold, 416
Trevithick, Richard, 854
Trew, Christophe Jacob, 570, 571
trigonometry, 704
Troughton, Edward & John, 528–9
Trudaine, Daniel, 114
Tucker, Josiah, 452–3
Tughlaq, Sultan Muhammad, 670
Tull, Jethro, 140–1, 144, 145, 164, 854
Turgot, Anne-Robert-Jacques, 114, 392, 448, 455
Turnbull, George, 810, 817, 819
Turner, Gerard, 9, 17–18

Ulloa, Antonio de, 641, 842
Umar, Muhammad, 670n5
Unánué, José Hipólito, 75
United States. *See* Alaska; American colonies
universities: and chemistry, 230–1, 379; and libraries, 95n15; and medicine, 464, 465–8; and organization of science, 88, 96–8; and physics, 354–5; and prosopographic studies, 214–18, 218–27, 230–1; and reform of science education, 52–9, 79–86; and science curriculum, 59–73; in Spanish America, 100, 720, 731; and status of science education in 1700, 44–51; and women, 184–8. *See also* education
University of Berlin, 58
University of Bologna, 98, 185, 187
University of Castile, 62
University of Coimbra, 61, 67, 127, 518–19
University of Edinburgh, 226, 289–90
University of Göttingen, 52, 56–7, 98, 231
University of Halle, 47, 56, 120–1, 471
University of Königsberg, 57–8
University of Oxford. *see* Oxford University
University of Mexico, 70, 113
University of Paris, 46, 51, 216
University of Pavia, 68, 82
University of San Marcos, 100
Unzer, Johanna Charlotte, 188n9
Uranus, discovery of, 350
urbanization, and industrialization, 847–8
utilitarianism, and human sciences, 457–61

Vaez de Torres, Luis, 641
Vaillant, Sébastien, 202
Valentijn, François, 573
Valla, Joseph, 62
Vallisneri, Antonio, 421, 430
Valsalva, Antonio Maria, 479
Vancouver, George, 640–1
van Helmont, Franciscus Mercurius, 35
van Helmont, Jean Baptist, 35
van Marum, Martinus, 516, 522, 529
Vanpaemel, Geert, 60n25
van Rymsdyk, Jan, 578
Varignon, Pierre, 309, 311, 334
Vartanian, Aram, 28
Vaucanson, Jacques, 116, 853
Venegas, Juan Manuel, 734
Venel, Gabriel François, 83, 387
Venus, transits of, 343–4, 622–4, 842
Verbiest, Ferdinand, 690
Veri, Petro, 455
Vernet, Claude-Joseph, 603
Verron, M., 832–3
Vesalius, Andreas, 577, 661
Vesuvius, Mt., 427, 603, 604, 605f
Vico, Giambattista, 440, 441, 445–6, 447, 462
Vicq d'Azyr, Félix, 71, 72
Vietnam, and civil service examination system, 699
Virgil, 802
vitalism: and life sciences, 404–6; and mechanical

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

philosophy, 33–41; and medical sciences, 73, 84, 475–6; and romantic *naturphilosophie*, 41–3
Vivarès, François, 607
Voght, Casper, 851
Voigtlander, Johann Christoph, 532
Volaire, Pierre-Jacques, 603
volcanoes: and earth sciences, 422–3, 426, 486–9; and landscape art, 603–6, 616
Volder, Burchardus de, 512–13
Volta, Alessandro, 64, 82, 372
Voltaire, François-Marie, 8, 135, 300, 487, 656, 742, 743, 748, 807, 819, 824, 861
voluntarism, and theology, 748
von Eggesberg, Anton Reprecht, 120
von Herbert, Thomas, 662
von Petrasch, Josef, 227, 228
von Reden, G., 850
vortexes, Cartesian theory of, 334–5, 367
voyages of discovery: background to scientific aspects of, 621–2; and Cook's voyages, 626–36; in final years of eighteenth century, 638–41; and governmental support for science, 125; and impact on science, 618–20, 644–5; and imperialism, 624–6; and scientific illustration, 564; and Spain, 641–4; and transits of Venus, 622–4. *See also* expeditions, scientific

Wada, Yasushi, 704
Wagner, Monika, 598–9n34
Wagner, Peter, 793n74
Wakefield, Priscilla, 153
Walch, Johann Ernst Immanuel, 432
Walduck, Thomas, 834
Wales, William, 624, 629, 630–1
Waliullah, Shah, 679
Walker, Adam, 505, 516
Walker, John, 69, 163
Wallerius, Johann Gottschalk, 68
Wallis, John, 512
Wallis, Samuel, 624–5
Walpole, Horace, 497, 765
Wandelaar, Jan, 570
Wang Fuzhi, 692
Wang Mingsheng, 693
war, and technology transfer, 850, 851. *See also* military
War of the Austrian Succession, 842
wars of independence, and Spanish America, 737–8
War of the Spanish Succession, 831
water, and earth sciences, 426–31. *See also* diluvialism; flood; neptunism; oceans
Watt, James, 104–5, 124, 176, 180, 367, 516, 754, 854
Watts, Isaac, 251–2
Watts, John, 546
Webber, John, 633
Wedgwood, Josiah, 104, 105, 176
Wegmann, Peter, 597n29
Weinman, J. W., 570
Wellington, Duke of, Arthur Wellesley, 685
Werner, Abraham Gottlob, 74, 119, 180, 423–4, 424, 430, 599, 607
Wesley, John, 146–8, 757, 765
Wheatland, David, 517
Whewell, William, 373, 583
Whiggism, and history of science, 264, 375–7, 388, 396, 488, 489
Whiston, William, 150, 259, 277, 291, 421, 513, 514, 522, 553, 746
White, Andrew Dickson, 754, 755
White, Gilbert, 130, 163, 417, 752
Whitehurst, John, 426, 428, 434, 603–4
Whitney, Eli, 853
Whytt, Robert, 403–4, 478, 479, 483
Wilkes, Benjamin, 575
Wilkinson, William, 849, 850, 854
Williams, Glyndwr, 443n20
Williams, John, 418
Willis, Thomas, 777, 786
Willughby, Francis, 565
Wilson, Benjamin, 523
Wilson, Curtis, 4
Wilson, James, 534
Winkelmann, Maria Margaretha, 187, 190
Winslow, Jacques-Bénigne, 71
Winthrop, John, 517, 523, 755
Wise, Henry, 154
Withering, William, 152
Wolff, Caspar Friedrich, 414
Wolff, Christian, 31n25, 47, 56, 120–1, 246, 259, 264, 286–7, 295, 812–13, 816
Wollaston, William, 743
Wollstonecraft, Mary, 195, 441, 461, 773
Wolterstorff, Nicholas, 806n12
women: and botany, 152–3, 791–3; and French places of scientific conversation, entertainment, and instruction, 170; and gender in science, 133, 184–210; and medical knowledge, 168; natural knowledge and Newtonianism, 136–7; and Newtonianism in France and Italy, 301; and prosopography, 232–3, 235; and reading, 554, 697; and scientific education, 77; society and organized science, 103. *See also* gender
Wood, Paul, 14, 281
woodcut printing, and scientific illustration, 569f, 583, 700
Woodhouse, Robert, 325–7

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-57243-9 - The Cambridge History of Science, Volume 4: Eighteenth-Century Science
Edited by Roy Porter
Index
More information

Woodward, John, 259, 417, 420, 424
Woolf, Harry, 93n10, 181n48, 523
Wordsworth, William, 775, 797, 798
working class, and science education, 79, 80. *See also* class
Worm, Ole, 573
Woulfe, Peter, 502
Wright, Joseph, 500, 603
Wright, William, 349
Wu Qian, 696–7
Wundt, Wilhelm, 461
Wyatt, James, 524f

Xu Dachan, 697

Yale University, 44, 100
Yamawaki Toyo, 711
Yar Khan, Jafar, 681
Yeo, Richard, 11, 15, 165n11, 486
Yolton, John W., 805n11
Yoshimasu Todo, 710
Young, Arthur, 121, 142–5, 156–7
Young, Thomas, 78, 86, 365
Youschkevitch, A. P., 312n10

Zedler, Johann, 244
Zhang Xuecheng, 695
Zhao Xuemin, 696
Zhu Xi, 692
Zimmerman, Johann Georg, 768
zoology: and fossils, 432; and gender politics of science, 205–7; and scientific illustration, 574–7; and voyages of discovery, 644. *See also* life sciences; reproduction

© Cambridge University Press www.cambridge.org