

Index

A

Abbas Vesim (d.1760), 121
Abdulhamid I, Sultan (r.1774-1789), 52
Abdulhamid II, Sultan (1842–1918),
128–129, 134–135
Abul Qasim (17th c.), 236
Accommodationism, 213–214, 219
Acupuncture, 210, 227–228, 255–257
Agricultural machinery, in China, 18
Agricultural revolution, in Britain, 18
Agriculture
in Britain, 15–16
in China, 18
Ainul-Hayat, 236
Ajā'ib al-makhlūqāt, 79
Akbar Arzani (17th–18th c.), 235
Akbar (r.1556–1605), 236
Al-Birjandi (d. after 1529), 121
Al-Biruni, Abu Rayhan (973–1048), 106
Alchemists, also *siddhas*, 19, 121, 234
Alchemy, India, 234, 236
Al-Dimashqī, Abū Bakr (d.1691), 81
Alemand, Louis Augustin (c.1653–1728), 211
Ali Pasha (d.1565), 126
Ali Rıza (d.1937), 188
Al-Kashi, Jamshid (1393–1449), 107
Al-Majusi, Ali Ibn Abbas (10th c.), 259
Al-Qazvīnī, Zakariyā' (d. 1283), 79
Al-Razi, Muhammed Ibn Zakariya
(865–925), 259
Al-Sajawandī, Sirāj al-Dīn (d. 1210), 79
al-Ṭūsī, Naṣīr al-Dīn (1201-1274), 79, 114
Al-Zahrawī, Abu al-Qasim (936–1013), 259
Anandakanda, 234
Animal electricity, 245–246, 248, 250
Anma massage, 255
Antikythera mechanism, 106
Apparatus-keeper, 180

Appropriation, 1, 8, 160, 169, 193–206,
261–262
Archery, 29
Aristotelianism, 197, 202–203
Aristotelian (tradition, philosophy), 159,
205, 264
Aristotle (384 BCE–322 BC), 262
Arka, concept of, 235
Armorers, Ottoman, also *cebecis*, 29
Armour, 19–20, 48, 57–58, 65, 68–70, 73
Artillery corps, quick-fire, Ottoman, 29, 42
Artillerymen, Ottoman, also *topçus*, 29,
35, 37
Artillery, Ottoman, 2, 37, 41–42, 44–45,
48, 55
Astangsarira, 242
Astrolabes, 107, 113, 115, 120, 122, 125
Atlas
Maior, 5, 81, 84, 86, 92, 94, 97, 100
Minor, 5, 84, 86, 93, 97, 100
Aurangzeb (r.1658–1707), 236
Axenfeld, Auguste (1825–1876), 178
Ayurveda, 234–235, 237, 241
Prakasha, 235
Sanjivani, 241
Ayurvedavijnana, 237
Ayurvedic herbs, 236
Ayurvedic texts (20th c.), 242

B

Bacon, Francis (1561–1626), 200
Balasides, Dimitraki, 179
Balkans, 2, 28–29, 35–36, 38–39, 44, 52,
194–195, 197, 205
Barmak (ca. 685–725), 261
Battle of Kartal (Kagul), 42, 170
Beard, George Miller (1839–1883), 252

- Bellani, Angelo (1776–1852), 189
 Benincasa, Grazioso (15th c.), 91
 Bernard, Ch. Ambroise (1808–1844), 183
 Bernier, François (1625–1688), 236
 Beşir Fuad (1852–1887), 178
Bhaisajya Ratnavali, 235
 Bhava Misra (16th c.), 237
 Binod Lal Sen (19th c.), 237
 Bion, Nicolas (1652–1733), 113
 Blaeu, Joan (1596–1673), 84
 Blaeu, Willem, J., (1571–1638), 84
 Blood letting, 237
 Bombardiers, Ottoman, also *humbaracıs*, 29,
 32, 36, 44, 48, 51, 55
Bombay Durpan, 240
 Bombshell factory, Ottoman,
humbarahane, 51
 Bonneval, Claude-Alexandre Comte de
 (1675–1747), also *Humbaracı Ahmed*
Pasha, 32
The Book of Documents, 157
 Boundaries, disciplinary, 175
 Boundaries, regional and national, 167
 Bows, composite, 65
 Bows, crossbow, 65, 67, 69
 Boym, Michael (1612–1659), 217
 Brain gain, 28, 34
Brahmighanturatakara, 237
 Brodie, Benjamin (1817–1880), 187
 Bruno, Jordano (1548–1600), 200
 Buddhist church, 14
 Busschoff, Herman (c.1620–1674), 209
 Byzantine, 27, 78, 261, 267
- C**
 Cabinet of curiosities, 111
 Calendar, Gregorian, 4, 122, 126
 Calendar, Islamic, 103–104, 121, 126
 Calendrical methods, Chinese, 151–161
 Calendrical methods, European, 6, 160
 Calendrical techniques, *bu dou*, 158
 Calendrical techniques, *fenye*, 158
 Calendrical techniques, *santong*, 158
 Campanella, Thommaso (1568–1639), 200
 Cannons, Ottoman, *Balyemez*, 42, 44–45
 Cannons, Ottoman, *Kolomborne*, 44
 Cannons, Ottoman, *Şahi*, 44, 46–47, 49
 Cardano, Girolamo (1501–1576), 200
 Carré, Ferdinand (1824–1894), 188
Centuria plantarum, 226
 Chakrapanidata (13th c.), 234
Charaka, 234
 Chariot burial (Lchashen), 59
ChinaIllustrata, 217
 Chuckerbutty, S. C. G (1826–1874), 239
Cihān-nūmā, 81, 83, 93, 95–97
 Civilizing mission, 170, 172
Clavis, 211–213, 219, 228–231
 Cleyer, Andreas (1634–1698), 221
 Clockmaker, 4, 125–136, 138, 140
 Clocks, mechanical, 1, 4, 125–128, 135,
 137–149
 Clüver, Philipp (1580–1622), 93
 Collado, Louis (16th c.), 31
Commentarii bellici, 32–33
 Concept of energy, 190
 Confucian astronomers, 152–153, 160–161
 Confucius (551 BCE–479 BCE), 214,
 216, 230
 Congreve, William (1772–1828), 48
 Constantinople, 27, 30, 35, 182, 184, 195
 Cosmology
 Chinese, 155
 Ptolemaic, 154–155
 Count of Onsenbray (1678–1754), also Pajot,
 Louis Léon, 112
 Couplet, Philippe (1623–1693), 222
 Cultural appropriation, 169
 Cultural redefinition, 165
Cursus mathematicus, 33
- D**
Dār al-Fonun, 268
Darülfünun, 177
Darüşşafaka, 178
 De La Hire, Philippe (1640–1718), 109
 Delisle, Guillaume (1675–1726), 95
De re militari, 30
 Descartes, René (1596–1650), 200
 Dhanvantri Mahal Hospital, 239–240
Dharani texts, 21
 Diagnosis methods, India, 234
 Dias, Manuel (1549–1639), 154
 Diathermy, 256–257
 Diderot, Denis (1713–1784), 199
Dingli yuheng, 152–155, 158, 160
Discurso de la artillería, 31
 Dissection, India, 234, 240, 267
 Dominic Gregory (18th c.), 236
Du, angular measurements, 156
 Du Bois-Reymond, Emil (1818–1896), 248
 Dulcert, Angelino (14th c.), 78
 Dutch East India Company, also VOC,
 209–210, 220–221, 246

E

- Earth, size of, 156
 Eclecticism, 2, 5, 54, 95–97, 99, 193–206
 éclcticism, 199–200
 Eclipsarium, 104–105, 108–110, 120
 Eclipse calculator, 103–106, 108–111, 113–122
 Eclipse, lunar, 4, 105–108, 116, 118, 153
 Eclipseometrum, 108, 119, 122
 Eclipse prediction, 103–122
 Eclipse, solar, 105–106, 109–110, 116, 118, 121–122
 Ecumenical Patriarchate, 195
 Education
 in colonial India, 167, 171, 175
 history of, 168, 171, 175
 science, in India, 172
 technical, in India, 173–175
 Electrotherapeutic appliances, 246–247, 250–251, 255–258
 Electrotherapeutics, 8, 245–258
 Empiricism, 170
 Enclosure Acts, 16
Encyclopédie, 199, 205
 Energy conservation, the principle of, 190
 Enlightenment, 3, 7, 29, 169, 195–198, 201–202, 214
 Enlightenment vision, 7, 169
 Equatorium, 107–108, 120
Erekiteru, 247–251, 255, 257
 Erilitou (ca. 1900–1550 BCE), 60
 Europe, 1–2, 4–5, 7, 9, 15, 17–20, 23–39, 47, 49, 52, 55, 57–58, 77–101, 103, 107–108, 121–122, 125, 127–128, 138–139, 152, 166–168, 170, 179, 182, 191, 195–197, 204
 Expansion of European science, 7, 151, 165
 Experimental philosophy, 197–198, 201, 203–204
 Experiment(s), 3, 19, 28, 42, 111–112, 165, 180, 185, 193, 197–198, 200–201, 203–205, 214, 236, 245–250

F

- Fazlı Necip (1863–1932), 178
Fenn-i Harb, 32–34
Fenn-i Harbiyye, 34
Fenn-i Lağım, 34
Fenn-i Muhasara, 34
 Figuier, Louis (1819–1894), 178
Firangi roga, 237
 Firearms, Ottoman, 2, 28–29, 36–38

- Flammarion, Camille (1842–1925), 178
Flora Sinensis, 216–217
Force vive, 190
 Foundry at Hasköy, 42
 Foundry, Ottoman also *Tophane*, 35, 42
 Foundry at Samakocuk, 52
 French Academy of Medicine, 189
Fünun-i Harbiye ve Ebniye-i Harbiye Sanayii, 33
Futuhnames, 89

G

- Galante, Henri, 189
 Galen (129–201), 224
 Galenic tradition, in India, 235
 Galvani, Luigi (1737–1798), 248
 Galvanism, 248–250
 Gananath Sen (1877–1945), 242
 Gangadhar Ray (19th c.), 241
 Gangaprasad Sen (19th c.), 241
 Ganot, Adolphe (1804–1887), 177
 Garcia d’Orta (16th c.), 236
 Gariel, Charles Marie (1841–1924), 187
 Gastaldi, Giacomo (d. 1566), 86
 Gavarrat, Jules (1809–1890), 187
Gazette Médicale d’Orient, 184
 Gazi Hasan Pasha, Cezayirli (1713–1790), 49
Genki, original *qi*, 254
 Geography, Chinese, 217
 Gircikyan, Antranik (1819–1894), 178
 Girindrasekhar Bose (1887–1953), 169
 Gotō Rishun, 247
 Govinda Das (18th c.), 237
 Graham, Thomas (1805–1869), 187
 Greek
 communities, 3
 orthodox populations, 194
 -speaking scholars, 193–206
 Gribeauval, Jean Baptiste de (1715–1789), 41
Gufa, the ancient methods, 157
 Gun carriage drivers, also *top arabacıları*, 29
 Gun, carriages, Ottoman, 2, 29, 36, 41, 43–44, 47–51, 53–55
 Gun, heavy, Ottoman, 45
 Gun, Howitzer (Obus), 45
 Gunpowder
 invention of, 5, 19
 social effects in China, 18, 20
 social effects in Europe, 20
 technology, in China, 2
 technology, in Europe, 2, 29, 37
 technology, Ottoman, 28–30

Gun, quick-fire, Ottoman, 42, 44–51, 53–55
 Guo Shoujing (1231–1316), 157
 Gutenbergs, Johannes (1398–1468), 224

H

Hacı İbrahim (Reşid) Efendi (d.1807), 43
 Hafez-e Abrū (d. 1429), 79
 Hajji Khalifa (d. 1657), 81
 Hakeem, also *hakim*, 242, 266
 Hakim Ajmal Khan (1868–1927), 243
 Hakim Sharif Khan, 236
Hakims, in Mughal court, 236
 Han dynasty (206 BCE–220 CE), 17, 67–68
Han-gul script, 22
 Hapsburg Empire, 195
 Hayrullah (1818–1866), 187
 Heat, 188–190, 231, 255–256
 Heaven, circumference of, 156
 Herbarium, 223, 229, 239
 Hermes Trismegistus, 214
 Hernández, Francisco (1514–1587), 210
 Hideyoshi Toyotomi (1536/1537–1598), 138
Hikmatparadipa, 235
Hikmatprakasa, 235
 Hippocrates (460–370 BCE), 224, 262, 267
 Hiraga Gennai (1729–1779), 247
 Hirose Shuhaku, 249
 Hisashige Tanaka (1799–1881), 146
 Historiography of sciences, 165, 167, 176, 193
 Hobbes, Thomas (1588–1679), 200
 Holwell, John Zephaniah (1711–1789), 237
 Holy War, 27
 Homann, Baptist (1664–1724), 95
 Hondius, Henricus (1597–1651), 84
 Horology room, also *muvaqqithane*, 126–127
 Horse and chariot, 6, 63–65, 72
 Horse, domestic, 57–59
 Horse-riding, 6, 57, 67, 71
Hortus Malabaricus, 228
 Hospitals, India, also *bimaristan* and *dar-us-shifa*, 235
 Hours, unequal, 125, 127
 Humoral, 8, 235–237, 241, 260, 264–267
 Humoral, imbalance, 235
 Humoral pathology, India, 241
 Humours, Indian medicine, 241
 Hunayn b. Ishaq (809–873), 259
 Hüseyin Rifkî Tamani (d.1817), 43

I

Ibn Moqaffa, Abd-Allah (d. ca. 756), 261
 Ibn Sina (980–1037), 236
 İbrahim b. Ahmad, 31
 İbrahim Müteferrika (1674–1745/1747), 111
 İbrāhīm Müteferriqa (d. 1744), 95
 Ieyasu Tokugawa (1543–1616), 138
İlm-i Hikmet-i Tabiiye, 178, 180, 182, 186–191
 Industrial Revolution, 14–18, 26
 Inoculation, India, 236
Introductionem in universam geographicam tam veteram quam novam, 93
 Iron industry, 26
 Islamic philosophy, 264
 Islamic sciences, 2, 78, 136, 184, 260–261, 263–265
 Islamic *shari'at*, 263–264
 İsmail Ali (1866–1913), 180
 Istanbul observatory, 114
 Italian peninsula, 195

J

Jafar Yar Khan (18th c.), 235
 Jambhekar, Bal Gangadhar (1802–1846), 239
 Jamin, Jules Célestin (1818–1886), 187
Jami-ul-Jawami, 236
 Janissaries, 29, 44, 113
 Jehangir (r.1605–1627), 236
 Jesuits, 4, 7, 138–139, 148, 210–211, 213–229
 Jörg of Nürnberg (15th c.), 35
 Jörg of Nürnberg *Memoire della Guerra*, 32

K

Kangxi, the emperor (1661–1722), 223
Keimyaku, 256
 Kircher, Athanasius (1602–1680), 217, 219
 Knowledge
 diffusionist model of, 233
 imperial sociology of knowledge, 168
 indigenous, 171
 local, 9, 88, 167, 171
 naturalisation of, 171–172
 pre-modern forms and practices, 176
 regional adaptations, 166
 regional variations, 166
 transmission, 122, 262
 transmission of scientific knowledge, 167–168

Koehler, George Frederick (1758–1800), 51
Kogury kingdom (37 BCE–668 CE), 70
Koran, 263, 265

L

Laboratory (ies), 112, 190–191, 197, 242
Language, in medical education,
183–184, 240
L'Artiglieria, 31
Lauh al-attnsalat, 108
Lechunga, Cristóval (17th c.), 31
Leclerc, Jean (1657–1736), 200
Leibnitz, Gottfried Wilhelm (1646–1716), 200
Les Secrets de la Médecine Chinoise, 210,
223–224, 230
Les Travaux de Mars, 33
Levāmi' al-nūr, 93
Leyden jar, 246–247, 249
Li, the principle of, 159
Local apparent time (LAT), 125,
131–132
Localization of science, 175
Localization, strategies of, 172, 176
Logic, 166, 190, 201
Low-frequency therapeutic(s), 256

M

Madhava (18th c.), 235
Madhusudan Gupta (19th c.), 241
Ma'din al-shifa-i Sikandarshahi, 235
Makura dokei, 143, 146
Malaguti, Faustino (1802–1878), 178
Malebranche, Nicolas (1638–1715), 200
Mallet, Allain Manesson (1630–1706), 33
Manchus, 13, 215, 219, 221
Mannen Dokei, 147
Manual de Artilleria, 31
Manucci, Nicolao (17th c.), 236
Mapmakers, 86, 92–93, 95, 99
Mappa mundi, see World maps
Maps
of al-Iṣṭakhri (11th c.), 79
of Anatolia, 87, 90, 92
Arabic, 79
of *Asia*, 87–88, 96
of the Caspian Sea, 95–96
Fatimid, 78
in Ḥāfez-e Abrū's (d.1429) *Kitāb-e Tār
īkh*, 79
hemispheric, 81, 83–84

in Ibn Faḍ lallāh al-'Umarī's (d.1349)
Masālik al-abṣār, 79–80
of Ibn Ḥawqal (d. ca. 977), 79
of Iran, 95
in Niẓām al-Dīn Nīsābūrī's (d.1329)
commentary on *Tadhkira*, 79
non- Ptolemaic, 86
Ottoman Turkish, 78–79, 81
Persian, 78, 81, 89, 95, 108, 120
Ptolemaic, 92
in Sirāj al-Dīn al-Sajawandī's (d. 1210)
text on folk astronomy, 79
Martini, Martinus (1614–1661), 217,
219, 221
Matter, 17, 22–23, 25–26, 43, 46, 196,
202–203, 206, 248
Mattioli, Pietro Andrea (1501–1587), 87
Medical ideas, India, 209–210, 233–243
Medical practices, India, 7, 209–210,
236–237, 267, 269
Medical techniques, India, 1
Medical texts, in Sanskrit, 235
Medicine
Chinese, 7, 209–232
colonial India, 7, 234–237, 268
education, in Turkey, 183–184
Galenic, 260, 264–265, 267–268
Greek, 260, 265–266, 268
Islamic, 8, 184, 231, 235
modern, 7–8, 183, 233, 260, 266–270
Pre-Colonial India, 7, 234–237
of the Prophet, 259, 262, 264–265
traditional, 8, 255, 257, 260, 266, 268
tropical, 238
western, 8, 236, 238, 242, 246, 249–251,
255–256, 266, 268–269
Medicus Sinicus, 212, 217–218
Mehmed Çelebi, Yirmisekiz (d.1732), 104
Mehmed Said (d.1761), also Said Pasha,
104, 111
Mehmet Ikhlaṣī, 93, 95, 99, 101, 178
Mehmet IV, Sultan (1642–1693), 99
Meiji period, 251
Mei Wending (1633–1721), 153
Membré, Michele (1505–1595), 88
Mercator, Gerard (1512–1594), 84
Meridian, 97, 115–116, 118, 131, 249, 256
Metaphysics, 201, 205
Meyer Company, 128
Meyer, Emile (1883–1954), 135
Meyer, Johann (1843–1920), 128
Meyer, Wolfgang (1909–1981), 135–136
Miasmatic theories, 241

- Military Academy, Ottoman, 180, 188
 Military acculturation, 37–39, 42
 Military reforms, late 18th c., Ottoman, 42
 Military treatises, 30–34, 38
 Mines
 of Ergani, 50–51
 of Gümüşhane, 51
 of Kastamonu, 50–51
 of Sidrekapsi, 50–52
 Ming dynasty (1368–1644), 23
 Mir Muhammad Hashim (17th–18th c.), 236
 Mir Muhammad Jafar (18th c.), 236
 Mirza Alavi Khan (18th c.), 236
 Miyan Bhuwah (16th c.), 235
 Mongols, 13, 19, 23, 27, 59, 62, 269
 Montecuccoli, Raimondo (1609–1680), 32
 Mortar, Ottoman, also *havan*, 32, 45
 Movable type printing, in China, 22
 Moxa, 210, 227, 255
 Moxibustion, 209, 227, 255–257
 Mughals, 37–38, 236, 268–269
 Muhammad Shah (r.1719–1748),
 235–236
Muhasara-yı Kıla, 34
Mujintō, 147
 Münster, Sebastian (1488–1552), 87
 Mustafa Reşid Beğ (d.1819), 47–50
 Mustafa Sidki (d. 1769–1770), 113
- N**
- Naifukudōkō*, 250
 Napoleon Bonaparte (1769–1821), 41,
 48–49
 Nationalists, Indian, 169
 Natural history museum of the medical
 school, Ottoman, 179
 Nature, 2, 16, 28, 66, 77, 106, 112, 160, 176,
 194, 197, 200–205
 Needham, Joseph (1900–1995), 151
 Needham question, 5, 14
 Neelamber Sen (19th c.), 241
 Negretti, Angelo Ludovico (1818–1879), 189
 Neo-Confucian theory, 159
 Nervous force, 245–246, 248, 252, 254, 257
 Neurasthenia, 252, 254
 Newtonian natural philosophy, 202
 Newtonian physics, 202
 Nobunaga Oda (1534–1582), 138
 Nosology, India, 237
Novus Atlas Sinensis, 217, 219
 Nurul Haq (17th c.), 236
 Nuzhen, 13
- O**
- Observatory(ies), 104–105, 107–109, 112,
 114, 120, 123, 136, 197
 Optics, 110, 112, 154, 172
Oranda Banashi, 247
 Ortelius, Abraham (1527–1598), 92
 Ovington, John (17th c.), 236
 Ox cart, 62–63, 66, 68, 73
- P**
- Pandit Mahadeva (18th c.), 236
 Paris Observatory, 104, 108–109, 111–112, 120
 Patriarchate (Ecumenical), 195
 Paul, Constantin (1833–1896), 189
 Paulhan, Frédéric (1856–1931), 178
 Period of division (220–581), 22
 Peter I (1682–1721), 95
 Phanariots, 195
 Philip II (1527–1598), 210
 Physics, 3, 65, 111–112, 156, 177–180,
 182–188, 190–191, 202, 205, 250
 Physics instruments, 179, 185
 Pirckheimer, Willibald (1470–1530), 87
 Planets, size of, 154
Plática Manual de Artillería, 31
 Plato (428/427–348/347 BCE), 262
 Portolan charts
 Catalan Atlas, 78
 of Dulcert, 78
 Portolan charts, in the *Geography* of
 Ptolemy, 86–88, 91–92
 Post-colonial scholarship, 168
 Post-colonial theory, 165
 Post-colonial theory of science, 165
 Prediction of eclipses, 105–106, 108
 Pre-Islamic sciences, 264–265
 Printing
 in China, 21–24
 in Europe, 23
 social effect, in China, 21
 social effect, in the West, 20
 Prytanée National Militaire de la Flèche, 178
 Psychoanalysis, 6, 168–170
 career of, 170
 cultural appropriation of, 169
 the decline of, in India, 170
 Freudian, in India, 168–169
 Psychoanalysts, British, 169
 Ptolemy (*ca.* 125), 78
 Pulse, 210–211, 219–220, 223–225,
 228–231, 234
 India, –220, 234

Q

Qājār, 267–268
Qamun, 236
Qi, the vital force, 155
Qi, the vital spirit, 231
 Qin dynasty (221–206 BCE), 63
 Quadrants, 32, 120, 122, 125, 127
 Quli Shah (16th c.), 235

R

Raja Serfoji (1798–1832), 239
 Rajsimhasudhasindhu, 236
 Ramusio, Giovanni Battista (1485–1557), 92
 Rangaku, 247
 Rasashastra, 234
 Raşid Mehmed (18th c.), 109
 Rationality, 6, 160, 170
 Reformation, 24
 Rhinoplasty, India, 237
 Ribot, Théodore (1839–1916), 178
 Ricci, Matteo (1552–1610), 217
 Rice cultivation, social effects in China, 17–18, 20
 Richardson, Benjamin Ward (1828–1896), 190
 Rogarogvada, 235
 Römer, Ole (1644–1710), 108
 Rudigerus, Andreas (1673–1731), 200
 Russo-Ottoman War of, 42, 176–177

S

Sâbt b. Qurra (b. 835), 259
 Sağlam, Tevfik (1882–1963), 180
 Saint-Remy, Charles Alexandre Louis Rouxel de (1746–1800), 48
 Salih Zeki (1864–1921), 178
 Samhitas, 234
 Sanden, Albert T., 252
 Sanden Denki Shökai, 252–255
 Sanden's electric belt, 252, 254–255, 258
 Sarabendra Vaidya Muraiga, 239
 Sarangdhara (13th c.), 234
 Sardi, Pietro (17th c.), 31
 Sasanian, 261–262
 Sasseti, Filippo (16th c.), 237
 Schall von Bell, Adam (1591–1666), 157
 School of Medicine
 civil (Istanbul), 179–180, 183
 imperial (Istanbul), 179–180, 183
 Schott, Gaspar (1608–1666), 33
 Schreck, Johann (1576–1630), also Terrentius, 218

Scientific center (s), 193–194, 198
 Scientific knowledge, 3, 7, 103, 167–168, 174, 176, 191, 203, 205–206
 Scientific method (s), 1, 107, 193–206, 242
 Scientific periphery(ies), 193–194, 198
 Scientific revolution, 24, 166, 202, 204, 210, 267
 Seasonal time system, 137–138, 140–144, 148–149
Seisetsu Igensüyō, 249
 Selim III, Sultan (1761–1808), 32, 34, 42, 47, 54–55
 Shah Alam II (1759–1806), 236
Shaku dokei, 143, 148–149
 Shams-al-din-Gilani (16th–17th c.), 236
 Shang dynasty (ca. 1250–1050 BCE), 64
 Shapur b. Sahl (d. 869), 259
Sharh-i Gilani, 236
Shinkei suizyaku, 254
Shu, the numbers, 159–160
Siddhantanišana, 242
 Six, James (1731–1793), 189
 Societies
 Academia Naturae Curiosorum, 211, 226
 Leopoldina, 211
 Ottoman Medical Society (Istanbul), 183
 Société de Médecine (Paris), 189
 Société Impériale de Médecine de Constantinople, 184
 Society of Jesus, 139, 210, 213
 Song dynasty (960–1279), 26
 Specimen, 22, 78, 81, 94, 100, 112, 170, 210–213, 220, 222, 226, 228–230
 Spices, trade of, 7
 Stadlin, Franz (1658–1740), 139
 Standardization
 of the caliber, 41
 of the measuring rod, 47
 of the ordnance, 29, 39, 41, 43, 46
 Standard time (ST), 125, 131, 145
Stato militare dell'Imperio ottomano, 31
 Steppe cultures
 Andronovo, 62
 Circum-Pontic, 64
 Lchashen, 59
 Stirrup, 5, 57–73
 Sugita Genpaku (1733–1817), 249
 Sui dynasty (581–618), 13, 68, 70, 157
 Sundials, 111, 125, 127, 131, 136
Sushruta, 234
 Syncretism, 97, 199, 239
 Syrbius, Johann Jacob (1674–1738), 200

T

- Tabaq al-manateq*, 107
 Taccola (Ser Mariano di Giacomo Vanni) (1381–ca.1458), 30
 Takano Chōei (1802–1850), 249
Talim-i-Ilaj, 235
 Tang dynasty (618–907), 13
 Taqi al-Din (d.1585), 105
 Technological dialogue, 2, 27–39
Tempu, 141, 143, 145
Tennen ni okeru Kenkō, 252–255
 Ten Rhijne, Willem (1647–1700), 226–231
 Terminology, geographical, 86, 97, 100
 Terrentius, 218
Tertib-i Ceng, 33
 Textbook(s), 3, 6, 34, 79, 122, 165–176, 178, 186–187, 191, 196–197
 Textbooks, on physics in Turkey, 178
Theatrum Orbis Terrarum, 87, 93
 Theophrastos (ca. 371 BCE–ca. 287 BCE), 262
 Theti, Carlo (1529–1589), 33
 Thomasius, Christian (1655–1728), 200
Three Classes of Man, 253
 Tibb, 235
Tibb-i Akbari, 235
 Time
alla franca, 125
alla turca also *ezāni*, Turkish, 126
 bell, 137–138, 144–146, 149
 equation, 132, 134
 International standard, 125
 keeper, also *muvaqqit*, 105
 mean solar, 125, 134
 Turkish system, also *alla turca*, 125–136
Todarananda, 234
Tokisoba, 144
 Tokugawa period, 137, 148, 246
 Tott, Baron François de (1733–1793), 37
Traité de la construction et des principaux usages des instruments de mathématique, 115
Traité élémentaire de physique expérimentale et appliquée, 177
Tsubo, 255–256
Tuhafatul-Masiha, 236
 Tyco Brahe (1546–1601), 154

U

- Unani* medicines, 7, 236, 266
Unani tibb, 242, 269
 Universalization, 167
 Universal Time (UT), 4, 126

- University, Ottoman, also *Darülfünun*, 177
Usul-i Harbiyye, 34

V

- Vaidyas*, 237, 241–243
 Valturio, Roberto (1413–1484), 30
 Vangasena (13th c.), 234
 Van Reede, Hendrik (1636–1691), 228
 Van Verden, Carl (18th c.), 96
 Varier, P.S. (19th–20th c.), 243
 Variolation, India, 237
 Vauban, Sébastien le Prestre de (1633–1707), 34
Vijnana, 237
 Vivesvara (17th c.), 235
 VOC, 209–211, 220–227, 229–230
 Volta, Alessandro (1745–1827), 248
 Volvelles, 108

W

- Wadokei*, 138, 141–142
Warikoma, 142–144, 147–148
 Watches, *Hamidiye*, 128–129
 Watches, Longines, 128
 Western anatomy, 249
 Wheat cultivation, 17
 World map
 Chinese, 216
 of al-Nawaji's (d.1455) poems, 79
 Catalan, 78
 hemispheric, 81, 83
 in Mehmed b. 'Alī Sipāhīzādeh's (d. 997/1589) *Awḍ aḥ al-masālik*, 80–81
 in Pseudo-Ibn al-Wardī's cosmography (1419), 79
 in Zakariyā' Qazvīnī's (d. 682/1283) *'Ajā'ib al-makhlūqāt*, 79

X

- Xavier, Francis (1506–1552), 213
 Xavier, Francisco (1506–1552), 138
 Xianbei culture, 68, 70, 72
Xuanye cosmology, 155, 161

Y

- Yang Guangxian (1597–1669), 157
 Yanshi (ca. 1700–1600 BCE), 63
Yijing, 158
 Ypsilanti, Konstantin (1760–1816), 34
 Yuan dynasty (1271–1368), 13, 153, 156

Z

- Zabarella, Jacopo (1532–1589), 203
Zambra, Joseph Warren (1822–1887), 189
Zhang Yongjing (17th c.), 152, 160
- Zhoubi suanjing*, 155–156
Zhou dynasty (ca. 1050–221 BCE), 62–63
Zoroastrians, 8, 261–262, 264
Zukai Ransetsu Sansaikikan, 249