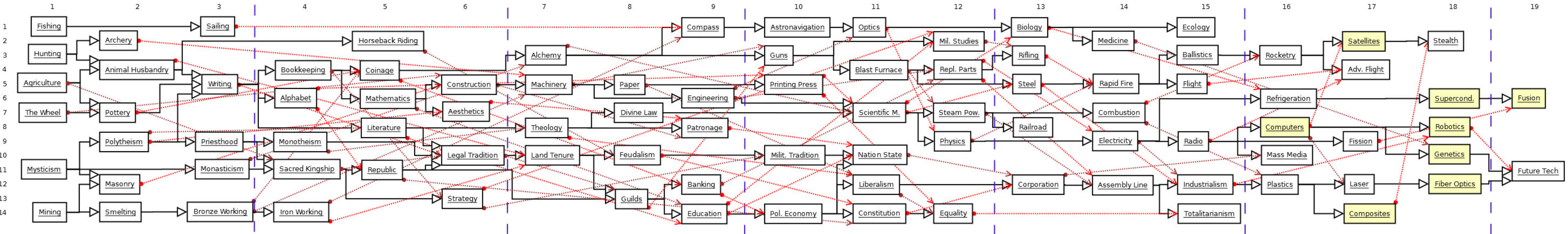


Legend

Blue dashed lines: Era boundaries
Red dotted arrows: Additional tech requirements (two different shades of red to make them less difficult to trace)
Yellow shade: Spaceship (SS) parts
Blue text: Different from BtS. Mere name or research cost changes not highlighted. When a tech name is blue, then almost everything about it is different from BtS.
Green text: Difference from BtS that is already implemented in AdvCiv.
Rationales in footnotes. These are mostly about historicity, whereas `stat-changes.pdf` mostly addresses game balance.
Alt + Left Arrow jumps back from a footnote in most PDF viewers. (The vertical space above the footnotes is a LibreOffice quirk.)
The small row and column numbers would only be relevant for implementing the layout in XML.

Correspondence between techs:

<i>new</i>	<i>BtS</i>	<i>new</i>	<i>BtS</i>
Smelting	Metal Casting	Astronavigation	Astronomy
Monasticism	Meditation	Guns	Gunpowder
Sacred Kingship	Monarchy	Political Economy	Economics
Bookkeeping	Calendar	Nation State	Nationalism
Coinage	Currency	Blast Furnace	Chemistry
Strategy	<i>n/a</i>	Military Studies	Military Science
Republic	Drama	Ballistics	Artillery
Alchemy	Philosophy	Rapid Fire	<i>n/a</i>
Land Tenure	Civil Service	Equality	Democracy+Communism
Divine Law	Divine Right	Totalitarianism	Fascism+Communism
Patronage	Music	<i>total: 93</i>	<i>92</i>



- Fishing (60): can work Coast, Work Boat, **faster movement** along rivers¹
- Hunting (60):⁻² Scout, Camp
- Agriculture (60): Farm, **Tree Plantation**³
- Wheel (60): Road, Chariot (with Horse)
- Mysticism (60): Monument, Stonehenge, reveal **Incense**³
- Mining (60): Mine, **can clear** Forest and Jungle for no yield⁴
- Archery (60): Archer, **Great Wall** (req. Walls)⁵
- Animal Husbandry (100): Pasture, reveal Horse and **Silk**³, **Stable** (with Horse or Ivory)⁵
- Pottery (90): Granary (with **Agriculture**)⁷, Cottage
- Polytheism (70):⁻⁸ **Temple**⁹, found Hinduism **if** discoverer has met the founder of Buddhism or if Buddhism not yet founded¹⁰
- Masonry (60):⁻⁵ Quarry, Walls, Pyramids¹¹
- Smelting** (70):⁻¹² reveal Copper¹³, Spearman (with Hunting, Copper or Iron)¹⁴, Workshop¹⁵
- Sailing (120):⁻¹⁶ Galley¹⁷, Lighthouse, trade along unowned Coast, Moai Statues (with Masonry)
- Writing (160): Library, Open Borders
- Priesthood (80): **Temple of Artemis**, Oracle,¹⁸ **Culture slider**¹⁹
- Monasticism (90):⁻²⁰ Monastery²¹, found Buddhism **if** discoverer knows the founder of Hinduism or if Hinduism not yet founded¹⁰
- Bronze Working (80):⁻²² Axeman (with Copper or Iron), 20 yield from chopping Forest, **Trireme** (with Sailing)
- Bookkeeping** (160):⁻²³ Market, gold trading,²⁴ Temple of Kukulcan (with Agriculture)²⁵
- Alphabet (200): Spy, **Espionage slider**²⁶, Commando promotion²⁷, build Research, increases tech **diffusion**²⁸
- Monotheism (150):⁻²⁹ Organized Religion, **Winery**³⁰, found Judaism **unless**³¹ discoverer owns a Holy City
- Sacred Kingship (160):⁻³² **Forced Labor**³³, **Barracks**³⁴, Dynastic Rule (**with** Writing)³⁵
- Iron Working (190): Swordsman (with Iron), reveal Iron, **Forge**³⁶
- Horseback Riding (230):⁻⁵ Horse Archer (with Archery, Horse)
- Coinage (320):⁻³⁷ +1 trade route, build Wealth, **Shwedagon Paya**³⁸ (with Monasticism)
- Mathematics (240):⁻³⁹ Aqueduct (with **Mining**⁴⁰), Hanging Gardens (with Aqueduct), **Great Lighthouse**⁴¹ (with Lighthouse), **centers** the map⁴²
- Literature (350):⁻⁴³ Heroic Epic (with Library)⁴⁴, Great Library (with Library, **Mathematics**⁴⁵), **Theater**⁴⁶
- Republic** (360):⁻⁴⁷ Parthenon⁴⁸, Arena (with Masonry)⁴⁹, Academy⁵⁰, Triumphal Arch (with Construction)⁵¹
- Construction (400): Catapult (with **Archery**⁵³), Bridge building, **Harbor**⁵³ (Sailing), **Colossus** (with Harbor, Iron Working)⁵⁴
- Aesthetics (280):⁻⁴³ ⁵⁵ **Mausoleum of Mausolos**⁵⁶, Statue of Zeus, **Angkor Wat** (with Priesthood)⁵⁷
- Legal Tradition (400):⁻⁵⁸ Courthouse, Caste System, found Confucianism **if** discoverer owns a Taoist city or if Taoism not yet founded⁵⁹, **Vassal agreement**⁶⁰
- Strategy** (300):⁻⁶¹ War Elephant⁶² (with Horseback Riding, Ivory), Guerrilla promotion⁶³, free Great General if first to discover⁶⁴, Fort⁶⁵
- Alchemy (700):⁻⁶⁶ Pacifism, +10% research from **Monastery**⁶⁷, found Taoism **if** discoverer owns a Confucian city or if Confucianism not yet founded⁵⁹
- Machinery (800):⁻⁶⁸ Watermill, **Lumbermill**, **+50% chopping** yield,⁶⁹ Crossbowman (with Iron or **Copper**)⁷⁰
- Theology (800):⁻⁷¹ Apostolic Palace, Hagia Sophia (with **Construction**⁷²), found Christianity (in a **Jewish** city if one exists⁷³)
- Land Tenure** (800):⁻⁷⁴ Serfdom⁷⁵, can build Farm on Grassland without irrigation⁷⁶
- Paper (1200):⁻⁷⁷ University of Sankore, **Bureaucracy** (with Legal Tradition)⁷⁸, Forbidden Palace⁷⁹ (with Courthouses)
- Divine Law (1000):⁻⁸⁰ **Theocracy**⁸¹, Spiral Minaret, found Islam (in a **Jewish or Christian** city if one exists)⁷³
- Feudalism (800): Longbow (with Archery)⁸², **Knight** (with Machinery, Iron, Horse)⁸³, **Castle**⁸⁴, Vassalage civic
- Guilds (1100):⁻⁸⁵ **Maceman** (with Machinery, Iron)⁸⁶, **Field Plantation**⁸⁷, Workshop +1 production⁸⁸
- Compass (1400):⁻⁸⁹ **Map trading**⁹⁰, Explorer, **Grocer** (with Guilds)⁹¹, **Whaling Boats**⁹²
- Engineering (1500): **Windmill**⁹³, Trebuchet, Notre Dame (**with** Theology), **Taj Mahal** (with Divine Law)⁹⁴
- Patronage (1300):⁻⁹⁵ Sistine Chapel, build Culture, Cathedral
- Banking (1500): Bank, **Pikeman**⁸⁶, **Great Merchant** if first to discover⁹⁶
- Education (1400):⁻⁹⁷ University, Oxford University (with University)
- Astronavigation (1900):⁻⁹⁸ Caravel (with **Machinery**)⁹⁹, **Navigation II** promotion¹⁰⁰, **+1 sight** on water¹⁰¹
- Guns (2400):⁻¹⁰² Muskettman, Pinch promotion
- Printing Press (2000): +1 commerce from Village and Town, **obs. Great Library**¹⁰³
- Military Tradition (2400):⁻¹⁰⁴ Cuirassier (with Guns, Horse), **Kremlin**¹⁰⁵, **Militarism**¹⁰⁶, Defensive Pact¹⁰⁷
- Political Economy** (2100):⁻¹⁰⁸ Mercantilism, +1 production from Lumbermill¹⁰⁹, Customs House¹¹⁰ (with Harbor), Versailles¹¹¹
- Optics (2500):⁻¹¹² Galleon, **Privateer** (with Guns and Copper or Iron)¹¹³, trade across Ocean, **Lookout** promotion for naval units¹¹⁴, **obs. Great Lighthouse**¹¹⁵
- Blast Furnace** (2700):⁻¹¹⁶ Cannon (with Iron)¹¹⁷, Frigate (with Optics and Iron), Grenadier¹¹⁸, Barrage promotion¹¹⁹, **obs. Colossus**¹²⁰
- Scientific Method (2500):⁻¹²¹ **can impart tech**¹²², **+1 research per specialist**¹²³, **obs. Statue of Zeus, Angkor Wat**¹²⁴ and Monastery
- Nation State** (2600):⁻¹²⁵ Hermitage, Globe Theater (with Theater)¹²⁶, free Great Artist if first to discover¹²⁷, Cities don't demand protection¹²⁸
- Liberalism (2500): **Free Market**,¹²⁹ Free Religion, **obs. Castle**¹³⁰, **Oracle**¹³¹ and **Temple of Artemis**¹³²
- Constitution (2700):⁻¹³³ Jail, **Federation** (with Nation State)¹³⁴, Representation, **obs. Monument, Stonehenge**¹³⁵ and Mausoleum of Mausolos¹³⁶
- Military Studies (2900):⁻¹³⁷ Ship of the Line (with Optics, Blast Furnace and Iron), Military Academy (with **Barracks**)¹³⁸, **+1 movement on Roads**¹³⁹ and along rivers¹⁴⁰, Blitz promotion¹⁴¹
- Replaceable Parts (3300):⁻¹⁴² **Drydock**¹⁴³, **+1 production** from Windmill, Watermill and **Workshop**¹⁴⁴
- Steam Power (3400):⁻¹⁴⁵ Levee¹⁴⁶, **Ironclad** (with Iron and Coal)¹⁴⁷, reveal Coal, Farms and (flat) Cities **spread Irrigation**¹⁴⁸
- Physics (2700):⁻¹⁴⁹ **Observatory**¹⁵⁰, free Great Scientist if first to discover
- Equality** (3100):⁻¹⁵¹ Emancipation, Police Headquarters, Security Bureau,¹⁵² Statue of Liberty (with Harbor, and must be in Emancipation and Free Religion)¹⁵³, **obs. Deer**¹⁵⁴
- Biology (4700):⁻¹⁵⁵ +1 food from Farm, can build Farms without irrigation, **Cereal Mills** Executive (with Corporation, University)¹⁵⁶, **obs. Temple of Kukulcan**¹⁵⁷
- Rifling (4000):⁻¹⁵⁸ Rifleman, Cavalry (with Military Tradition, Horse)
- Steel** (4200):⁻¹⁵⁹ Bunker¹⁶⁰, Steelworks (with Iron, Coal, Forge)¹⁶¹, Cristo Redentor (with Theology)¹⁶², construct Ancient and Classical buildings faster¹⁶³, **Creative Constructions Executive**¹⁶⁴ (with Corporation, University)
- Railroad (3700):⁻¹⁶⁵ Rail (with Coal or Oil), **Public Transportation** (with Oil)¹⁶⁶, can **trade Crab**¹⁶⁷, Mining Inc. Executive (with Corporation, University), **obs. Walls**¹⁶⁸
- Corporation (4200):⁻¹⁶⁹ Wall Street (with Bank), +1 trade route, **State Property** (with Equality)¹⁷⁰, can **train Executives** at Universities¹⁷¹, **obs. Great Wall**¹⁷²
- Medicine (4200): Hospital (**with power**), Red Cross (with Hospital), **Fallout Shelter** (with Steel, Manhattan Project)¹⁷³, **Medic III** promotion¹⁷⁴
- Rapid Fire** (4800): Machine Gun,¹⁷⁵ Field Gun¹⁷⁶, Interception I¹⁷⁷ and Ambush¹⁷⁸ promotions, Mount Rushmore¹⁷⁹
- Combustion (4100):⁻¹⁸⁰ **reveal Oil**¹⁸¹, Oil Well, **Airship** (with Physics)¹⁸², **Std. Ethanol Executive** (with Corporation, University)¹⁸³, **obs. Whale, Dye**¹⁸⁴
- Electricity (5000):⁻¹⁸⁵ reveal **Aluminum**¹⁸⁶, Broadway (**with Theater**), +1 commerce from Watermill¹⁸⁷, **Coal Plant** (with Coal)¹⁸⁸, **Hydroplant** (with Steel), **Three Gorges Dam** (with Steel)¹⁸⁹
- Assembly Line (5200):⁻¹⁹⁰ Factory (**with** Coal, Oil or power)¹⁹¹, Infantry (with **Rapid Fire**)¹⁹², **Universal Suffrage** (with Equality)¹⁹³
- Ecology** (5100): Environmentalism¹⁹⁴, Treatment Plant¹⁹⁵, Preserve Forest, National Park,¹⁹⁶ **obs. Ivory**¹⁹⁷
- Ballistics** (5500):⁻¹⁹⁸ Battleship (with Coal or Oil or Uranium), Destroyer (with Radio and Coal or Oil),¹⁹⁹ Tank (with Assembly Line, Railroad and Oil)²⁰⁰
- Flight (7000):⁻²⁰¹ Fighter (with Oil), **Bomber** (with Radio²⁰², Oil and **Aluminum**²⁰³), Carrier (with **Coal** or Oil or Uranium), **Paratrooper** (with Silk or Plastics)²⁰⁴
- Radio (7800):⁻²⁰⁵ **Attack Submarine** (Oil or Uranium)²⁰⁶, Rock'n'Roll (**with Arena**⁴⁹, **power**), Eiffel Tower (with Forge), reveal **Uranium**²⁰⁷, Air Recon can **reveal Submarines**²⁰⁸
- Industrialism (7200):⁻²⁰⁹ Industrial Park (with Factory, **power**), Marine (with **Rapid Fire**)²¹⁰, **Transport** (with Coal or Oil)²¹¹, **Pentagon**²¹², **Aluminum Co.** Executive (with University)²¹³
- Totalitarianism (5500):⁻²¹⁴ Police State, Permanent Alliance, **Intelligence Agency**, free Great **Spy** if first to discover²¹⁵, **obs. Parthenon**¹¹⁶
- Rocketry (8500):⁻²¹⁷ SAM Infantry (**with Radio**²¹⁸), **Anti-Tank**²¹⁹, Guided Missile (**with Electricity**²²⁰), **Nuclear Submarine** (with Uranium)²¹⁹, **Missile Cruiser** (with Computers and Oil or Uranium)²²¹
- Refrigeration (8000): Supermarket (**with power**), **+1 food** from Fishing Boats²²², **Sid's Sushi** Executive (with Corporation, University)²²³
- Computers** (8400):⁻²²⁴ 100% conversion rate from Processes²²⁵, **SS Life Support** (with Ecology)²²⁶
- Mass Media (9000):⁻²²⁷ United Nations, Hollywood (**with Broadcast Tower**), Broadcast Tower (**with power**), **Jubilant Jewelers** Executive (with Corporation, University)²²⁸, **obs. Apostolic Palace**
- Plastics (8500):⁻²²⁹ **+1 trade route** from Harbor²³⁰, **+3 happiness** in all cities²³¹, Offshore Platform²³², **obs. Fur, Silk**²³³
- Satellites (9000):⁻²³⁴ **Apollo Project** (with Plastics)²³⁵, reveal map²³⁶, **SDI** (with Manhattan Project)²³⁷
- Advanced Flight (11000):⁻²³⁸ Gunship (with Oil); Jet Fighter (with Aluminum, Oil), **Airport** (with Oil)²³⁹, **obs. Stable and Horse**²⁴⁰
- Fission (9500):⁻²⁴¹ Manhattan Project (with **Nuclear Plant**), Tactical Nuke (with Rocketry, Uranium and Manhattan Project), **ICBM** (**with Satellites**²⁴², Uranium and Manhattan Project), Nuclear Plant (with Uranium)
- Laser (11000):⁻²⁴³ Mobile SAM (with Rocketry, Oil), **Howitzer**²⁴⁴ (with Ballistics and Oil), **Space Elevator** (with Satellites)²⁴⁵
- Composites (11000):⁻²⁴⁶ **SS Casing**, **Mechanized Infantry** (with Rapid Fire, Aluminum, Oil)²⁴⁷, Modern Armor (with **Laser, Ballistics**, Oil)²⁴⁸
- Stealth (12000):⁻²⁴⁹ Stealth Bomber (with Advanced Flight, Aluminum, Oil), Stealth Destroyer (with Oil or Uranium), Air Recon can **reveal stealth ships**²⁵⁰
- Superconductors (12000): **SS Thrusters**, Particle Accelerator (**with** Fission and power)²⁵¹
- Robotics** (10000): **SS Docking Bay**, +1 free Engineer from Industrial Park²⁵²
- Genetics (12000):⁻²⁵³ **SS Stasis Chamber** (with Refrigeration)²⁵⁴, **+2 health, +1 food** in Grassland tiles with at least 5 food²⁵⁵
- Fiber Optics (12000):⁻²⁵⁶ **SS Cockpit**, **Internet**²⁵⁷
- Fusion (12000):⁻²⁵⁸ **SS Engine**, free Great Engineer²⁵⁹ if first to discover
- Future Tech (10000):⁻²⁶⁰ +1 health, +1 happiness

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