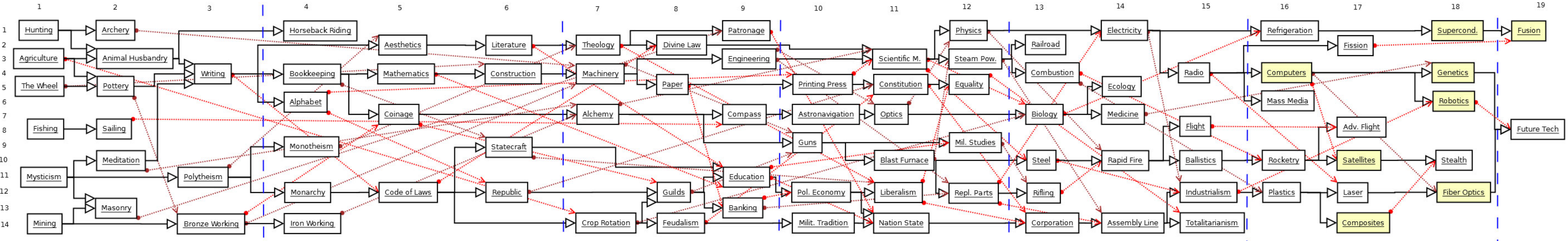


Legend

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.)

Correspondence between techs:			
<i>new</i>	<i>BtS</i>	<i>new</i>	<i>BtS</i>
Bookkeeping	Calendar	Guns	Gunpowder
Coinage	Currency	Political Economy	Economics
Statecraft	Civil Service	Nation State	Nationalism
Republic	Drama	Blast Furnace	Chemistry
Alchemy	Philosophy	Military Studies	Military Science
Crop Rotation	Metal Casting	Ballistics	Artillery
Divine Law	Divine Right	Rapid Fire	<i>n/a</i>
Patronage	Music	Equality	Democracy+Communism
Astronavigation	Astronomy	Totalitarianism	Fascism+Communism
		<i>(no replacement)</i>	Priesthood



- Hunting (60): Scout, Camp, Spear (with Copper)
- Agriculture (60): Farm, **Plantation** (on Silk, Dye, Incense)¹
- Wheel (60): Road, Chariot (with Horse)
- Fishing (60): can work Coast, Workboat, **faster movement** along rivers²
- Mysticism (60): Monument, Stonehenge, reveal **Incense**¹
- Mining (60): Mine, **can clear** Forest and Jungle for no yield³
- Archery (60): Archer, **Great Wall** (req. 2 Walls)⁴
- Animal Husbandry (100): Pasture, reveal Horse and **Silk**,¹ **Stable** (with Horse or Ivory)⁵
- Pottery (90): Granary (with **Agriculture**)⁶, Cottage, **Workshop** on Plains⁷
- Sailing (120): Galley⁸, Lighthouse, Moai Statues, trade along unowned Coast
- Meditation (80):⁹ Monastery, found Buddhism **if** discoverer owns a Hindu city or if Hinduism not yet founded¹⁰
- Masonry (60): Quarry, Walls, Great Lighthouse (with Lighthouse), Pyramids¹¹
- Writing (150): Library, Open Borders
- Polytheism (80): **Temple**,⁹ **Oracle**¹¹, Temple of Artemis, found Hinduism **if** discoverer owns a Buddhist city or if Buddhism not yet founded¹⁰
- Bronze Working (120)¹²: Axeman (with Copper or Iron), reveal Copper, 20 yield from chopping Forest, Forced Labor¹³
- Horseback Riding (220): Horse Archer (with Archery, Horse)
- Bookkeeping** (160):¹⁴ Market, Gold trading,¹⁵ Temple of Kukulcan (with Polytheism)¹⁶
- Alphabet (200): Spy, Commando promotion, **build Research**, increases tech **diffusion**¹⁷
- Monotheism (150):¹⁸ Organized Religion, **Winery**,¹⁹ **unless** discoverer owns a Holy City, found **Zoroastrianism**; if already founded, found Judaism instead²⁰
- Monarchy (200): Hereditary Rule, **Barracks**, **Fort**²¹
- Iron Working (190): Swordsman (with Iron), **Forge**²², reveal Iron
- Aesthetics (280): **Mausoleum of Mausolos**²³, Statue of Zeus (req. 2 Monuments), **Angkor Wat**²⁴
- Mathematics** (240):²⁵ Aqueduct (with Mining)²⁶, Hanging Gardens (with Aqueduct), centers the map²⁷, Trireme (with Sailing, Bronze Working)²⁸
- Coinage (320):²⁹ +1 rade route, build Wealth, **Shwedagon Paya**³⁰ (with Meditation)
- Code of Laws (270):³¹ Courthouse, Caste System, **Vassal agreement**³², Missionaries **can spread** to foreign cities³³
- Literature (350): Heroic Epic (with Polytheism, Library),³⁴ Great Library (with Library), **Theater**, **Culture slider**³⁵
- Construction (400):³⁶ Catapult (with **Archery**²⁷), **Harbor**³⁸ (with Lighthouse)³⁹, **Colossus**⁴⁰ (with Forge), Bridge building
- Statecraft** (400):⁴¹ War Elephant⁴² (with Horseback Riding, Ivory), Forbidden Palace⁴³ (with Courthouses), Guerilla promotion⁴⁴, found Confucianism if discoverer owns a Taoist city or if Taoism not yet founded⁴⁶
- Republic** (420):⁴⁶ Parthenon⁴⁷, Arena (with Masonry)⁴⁸, Academy⁴⁹, Triumphal Arch (with Construction)⁵⁰
- Theology (800):⁵¹ Apostolic Palace, Hagia Sophia, found Christianity **if** discoverer owns a Jewish or Zoroastrian city⁵²
- Machinery (800):⁵³ Watermill, **Lumbermill**, **+50% chopping** yield,⁵⁴ Crossbow (with Iron or **Copper**)⁵⁵
- Alchemy (700):⁵⁶ Pacifism, +10% research from **Monastery**,⁵⁷ found Taoism **if** discoverer owns a Confucian city or if Confucianism not yet founded⁵⁸
- Crop Rotation** (800):⁵⁹ Serfdom⁶⁰, can build Farm on Grassland without irrigation⁶¹
- Divine Law (1000):⁶² **Theocracy**,⁶³ Spiral Minaret, found Islam **if** discoverer owns a Christian, Jewish or Zoroastrian city⁶²
- Paper (1200):⁶⁴ University of Sankhore, **Bureaucracy** (with Statecraft)⁶⁵
- Guilds** (1300):⁶⁶ Pikeman (with Iron), Maceman (with Machinery, Iron),⁶⁷ Plantation (on Banana, Spice, Sugar)⁶⁸, Workshop on all flat tiles⁶⁹
- Feudalism (800): Longbow (with Archery, Iron Working)⁷⁰, **Knight**⁷¹ (with Machinery, Horseback Riding, Iron, Horse), **Castle**⁷², Vassalage civic
- Patronage (1400):⁷³ Sistine Chapel, build Culture, Cathedral, Stupa etc.
- Engineering (1500): Trebuchet, **Windmill**⁷⁴, Notre Dame (**with** Theology), **Taj Mahal** (with Divine Law)⁷⁵
- Compass (1400):⁷⁶ **Map trading**⁷⁷, Explorer, **Grocer** (with Guilds)⁷⁸, **Whaling Boats**⁷⁹
- Education (1500):⁸⁰ University, Oxford University (with University)
- Banking (1500):⁸¹ Bank, **Great Merchant** if first to discover⁸²
- Printing Press (2000): +1 commerce from Village and Town, **obs. Great Library**⁸³
- Astronavigation (1900):⁸⁴ Caravel (with **Construction**)⁸⁵, **Navigation II** promotion⁸⁶, **+1 sight** on water⁸⁷
- Guns (2400):⁸⁸ Musketman, Pinch promotion
- Political Economy** (2100):⁸⁹ Mercantilism, +1 production from Lumbermill⁹⁰, Customs House⁹¹ (with Harbor), Versailles⁹²
- Military Tradition (2400):⁹³ Cuirassier (with Guns, Horseback Riding, Horse), **Kremlin**⁹⁴, **Militarism**⁹⁵, Defensive Pact
- Scientific Method (2500):⁹⁶ **Tech trading**⁹⁷, **+1 research per specialist**⁹⁸, **obs. Statue of Zeus, Angkor Wat**⁹⁹ and Monastery
- Constitution (2700):¹⁰⁰ Jail, **Federation** (with Nation State)¹⁰¹, Representation, **obs. Monument**, Stonehenge¹⁰² and Mausoleum of Mausolos¹⁰³
- Optics (2500):¹⁰⁴ Galleon, **Privateer** (with Guns and Copper or Iron)¹⁰⁵, trade across Ocean, **Lookout** promotion for naval units¹⁰⁶, **obs. Great Lighthouse**¹⁰⁷
- Blast Furnace** (2700):¹⁰⁸ Cannon (with Iron)¹⁰⁹, Frigate (with Optics and Iron), Grenadier¹¹⁰, Barrage promotion¹¹¹, **obs. Colossus**¹¹² and Walls (except defensive effects)¹¹³
- Liberalism (2500): **Free Market** (with Nation State),¹¹⁴ Free Religion, Statue of Liberty (with **Harbor and must be in** Emancipation and Free Religion)¹¹⁵, **obs. Castle**¹¹⁶, **Oracle**¹¹⁷ and Temple of Artemis¹¹⁸
- Nation State** (2600):¹¹⁹ Hermitage, Globe Theater (with Theater)¹²⁰, free Great Artist if first to discover¹²¹
- Physics (2700):¹²² **Observatory**¹²³, free Great Scientist if first to discover
- Steam Power (3400):¹²⁴ Levee¹²⁵, Workers build improvements faster¹²⁶, **Ironclad** (with Iron and Coal)¹²⁷, reveal Coal, Farms **spread Irrigation**¹²⁸
- Equality** (3100):¹²⁹ Emancipation, Police Headquarters, Security Bureau,¹³⁰ **obs. Deer**¹³¹
- Military Studies (2900):¹³² Ship of the Line (with Optics, Blast Furnace and Iron), Military Academy (with **Barracks**)¹³³, **+1 movement on Roads**¹³⁴, Blitz and Ambush promotions
- Replaceable Parts (3300):¹³⁵ **Drydock**¹³⁶, +1 production from Windmill, Watermill and **Workshop**¹³⁷
- Railroad (3700):¹³⁸ Rail Track (with Coal or Oil), **Public Transportation** (with Oil)¹³⁹, can **trade Crab**¹⁴⁰, Mining Inc. Executive (with Corporation, University)
- Combustion (4100):¹⁴¹ **reveal Oil**¹⁴², Oil Well, **Airship** (with Physics)¹⁴³, **Std. Ethanol Executive** (with Corporation, University)¹⁴⁴, **obs. Whale**, **Dye**¹⁴⁵
- Biology (4700):¹⁴⁶ +1 food from Farm, can build Farms without irrigation, **Cereal Mills Executive** (with Corporation, University)¹⁴⁷, **obs. Temple of Kukulcan**¹⁴⁸
- Steel (4200):¹⁴⁹ Bunker¹⁵⁰, Steelworks (with Iron, Coal, Forge)¹⁵¹, Cristo Redentor (with Theology)¹⁵², faster production of Ancient and Classical buildings¹⁵³, **Creative Constructions Executive**¹⁵⁴ (with Corporation, University)
- Rifling (4000):¹⁵⁵ Rifleman, Cavalry (with Military Tradition, Horseback Riding, Horse)
- Corporation (4200):¹⁵⁶ Wall Street (with Bank), +1 trade route, **State Property** (with Equality)¹⁵⁷, can **train Executives** at Universities¹⁵⁸, **obs. Great Wall**¹⁵⁹
- Electricity (5000):¹⁶⁰ reveal **Aluminium**¹⁶¹, Broadway (**with Theater**), +1 commerce from Watermill¹⁶², **Coal Plant** (with Coal)¹⁶³, **Hydroplant** (with Steel), **Three Gorges Dam** (with Steel)¹⁶⁴
- Ecology** (5100): Environmentalism¹⁶⁵, Treatment Plant¹⁶⁶, Preserve Forest, National Park,¹⁶⁷ **obs. Ivory**¹⁶⁸
- Medicine (4200): Hospital (**with power**), Red Cross (with Hospital), **Fallout Shelter** (with Steel, Manhattan Project)¹⁶⁹, **Medic III** promotion¹⁷⁰
- Rapid Fire** (4800): Machine Gun,¹⁷¹ Field Gun¹⁷², Infantry (with Assembly Line)¹⁷³, **Interception I** promotion¹⁷⁴, Mount Rushmore¹⁷⁵
- Assembly Line (5200):¹⁷⁶ Factory (with Coal, Oil or power)¹⁷⁷, **Universal Suffrage** (with Equality)¹⁷⁸
- Radio (7800):¹⁷⁹ **Attack Submarine** (Oil or Uranium)¹⁸⁰, Rock'n'roll (**with Arena**⁴⁸, **power**), Eiffel Tower (with Forge), reveal **Uranium**¹⁸¹; Air Recon can **reveal Submarines**¹⁸²
- Flight (7000):¹⁸³ Fighter (with Oil), **Bomber** (with Radio and Oil)¹⁸⁴, Carrier (with **Coal** or Oil or Uranium), **Paratrooper**¹⁸⁵
- Ballistics** (5500):¹⁸⁶ Battleship (with Coal or Oil or Uranium), Destroyer (with Radio and Coal or Oil),¹⁸⁷ Tank (with Assembly Line, Railroad and Oil)¹⁸⁸
- Industrialism (7200):¹⁸⁹ Industrial Park (with Factory, **power**), Marine (with **Rapid Fire**)¹⁹⁰, **Transport** (with Coal or Oil)¹⁹¹, **Pentagon**¹⁹², **Aluminium Co.** Executive (with University)¹⁹³
- Totalitarianism (5500):¹⁹⁴ Police State, Permanent Alliance, **Intelligence Agency**, free Great **Spy** if first to discover,¹⁹⁵ **obs. Parthenon**¹⁹⁶
- Refrigeration (8000): Supermarket (**with power**), **+1 food** from Fishing Boats¹⁹⁷, **Sid's Sushi Executive** (with Corporation, University)¹⁹⁸
- Computers** (8400):¹⁹⁹ 100% conversion rate from Processes²⁰⁰, **SS Life Support** (with Ecology)²⁰¹
- Mass Media (9000): United Nations, Hollywood (**with Broadcast Tower**), Broadcast Tower (**with power**), Civ. Jewelers Executive (with Corporation, University)²⁰², **obs. Apostolic Palace**
- Rocketry (8500):²⁰³ SAM Infantry (**with Radio**²⁰⁴), **Anti-Tank**²⁰⁵, Guided Missile, **Missile Submarine** (with Radio and Oil or Uranium)¹⁸⁰, **Missile Cruiser** (with Radio and Oil or Uranium)²⁰⁶
- Plastics** (8500):²⁰⁷ +1 trade route from Harbor²⁰⁸, +3 happiness in all cities²⁰⁹, Offshore Platform²¹⁰, **obs. Fur**, **Silk**²¹¹
- Fission (9500):²¹² Manhattan Project (with Nuclear Plant), Tactical Nuke (with Rocketry, Uranium and Manhattan Project), **ICBM** (with **Satellites**²¹³, Uranium and Manhattan Project), Nuclear Plant (with Uranium)
- Advanced Flight (11000):²¹⁴ Gunship (with Oil); Jet Fighter (with Aluminium, Oil), **Airport** (with Radio, Oil)²¹⁵, **obs. Stable and Horse**²¹⁶
- Satellites (9000):²¹⁷ **Apollo Project** (with Plastics)²¹⁸, reveal map, **SDI** (with Manhattan Project)²¹⁹
- Laser (11000):²²⁰ Mobile SAM (with Rocketry, Oil), **Howitzer**²²¹ (with Ballistics and Oil), **Space Elevator** (with Satellites)²²²
- Composites (11000):²²³ **SS Casing**, **Mechanized Infantry** (with Rapid Fire, Aluminium, Oil)²²⁴, Modern Armor (with **Laser**, **Ballistics**, Oil)²²⁵
- Superconductors (12000): **SS Thrusters**, Particle Accelerator (**with** Computers, Fission and power)²²⁶
- Genetics (12000):²²⁷ **SS Stasis Chamber** (with Refrigeration)²²⁸, **+2 health**, **+1 food** in Grassland tiles with at least 5 food²²⁹
- Robotics** (10000): **SS Docking Bay**, +1 free Engineer from Industrial Park²³⁰
- Stealth (12000): Stealth Bomber (with Advanced Flight, Aluminium, Oil),²³¹ Stealth Destroyer (with Oil or Uranium), Air Recon can **reveal stealthy ships**²³²
- Fiber Optics (12000):²³³ **SS Cockpit**, **Internet**²³⁴
- Future Tech (10000):²³⁵ + 1 health, +1 happiness
- Fusion (12000):²³⁶ **SS Engine**, free Great Engineer²³⁷ if first to discover

