

宇宙 · 地球 · 生命 · 人类文明

编年史提纲

六部分宏观时间线 · 从宇宙诞生到宗教信仰体系的形成

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宇宙与地球的诞生

从大爆炸到地球的形成：宇宙、星系、太阳系和地球的演化过程

1

大爆炸

约 138 亿年前

The Big Bang
(About 13.8 Billion Years Ago)



宇宙从一个极度炽热、致密的奇点开始，经历急剧膨胀。

The universe began at a singularity, an extremely hot and dense state, and started expanding rapidly.

2

黑暗时代结束

大爆炸后约 2~4 亿年

End of the Dark Ages
(About 200–400 Million Years After the Big Bang)



第一代恒星被点燃，结束了数百万年的黑暗。

The first generation of stars were born, ending hundreds of millions of years of darkness.

3

星系形成

约 100 亿年前

Formation of Galaxies
(About 10 Billion Years Ago)



宇宙尘埃与垂死恒星的残余汇聚在一起，形成了银河系。

Cosmic dust and the remnants of dying stars gathered together, forming galaxies, including our Milky Way.

4

太阳星云

约 46 亿年前

Solar Nebula
(About 4.6 Billion Years Ago)



一片巨大的气体和尘埃云发生坍缩，点燃了我们的太阳。

A vast cloud of gas and dust collapsed under gravity, igniting our Sun.

5

行星吸积

约 45.6 亿年前

Planetary Accretion
(About 4.56 Billion Years Ago)



太空碎片相互碰撞并粘连，孕育出了原始的地球胚胎。

Space fragments collided and merged, gradually forming the early Earth.

6

大碰撞

约 45.1 亿年前

The Giant Impact
(About 4.51 Billion Years Ago)



一颗名为忒伊亚的火星大小原行星与地球相撞，撞击产生的碎片最终形成了月球。

A Mars-sized protoplanet named Theia collided with Earth, and the resulting debris eventually formed the Moon.

7

岩浆海洋与冷却

约 45 亿年前

Magma Ocean and Cooling
(About 4.5 Billion Years Ago)



地球表面随着冷却凝固成地壳，并形成了原始大气层。

As Earth cooled, the surface solidified into a crust, and the primordial atmosphere was formed.

13.8

Billion Years Ago

200 – 400

Million Years After

10

Billion Years Ago

4.6

Billion Years Ago

4.56

Billion Years Ago

4.51

Billion Years Ago

4.5

Billion Years Ago

地球生命与地质演化

从最早的生命到人类的出现：地球生命的主要阶段与变化

1

冥古宙与太古宙

约 40~35 亿年前

Hadean and Archean Eons
(About 4.0 – 3.5 Billion Years Ago)



地球进一步冷却，海洋形成；在深海热泉附近，诞生了最早的单细胞生命（原核生物）。

Earth continued to cool, forming oceans. The earliest single-celled life (prokaryotes) emerged near hydrothermal vents in the deep oceans.

4.0 – 3.5
Billion Years Ago

2

寒武纪大爆发

约 5.4 亿年前

Cambrian Explosion
(About 540 Million Years Ago)



氧气水平急剧飙升，触发了绝大多数现代动物门类祖先的快速演化（例如三叶虫）。

A rapid rise in oxygen levels triggered the fast evolution of most major animal groups (e.g., trilobites), marking the Cambrian Explosion.

540
Million Years Ago

3

登陆陆地

约 4.0~2.5 亿年前

Life Moves Onto Land
(About 400 – 250 Million Years Ago)



臭氧层形成，使得植物、昆虫和两栖动物得以从海洋走向干涸的陆地。

The formation of the ozone layer allowed plants, insects, and amphibians to move from the oceans onto dry land.

400 – 250
Million Years Ago

4

中生代 / 恐龙时代

约 2.5~0.66 亿年前

Mesozoic Era
Age of Dinosaurs
(About 250 – 66 Million Years Ago)



恐龙成为陆地上的绝对主宰。随着一颗巨大的小行星撞击墨西哥，这一时代戛然而止。

Dinosaurs became the dominant life forms on land. This era ended abruptly when a massive asteroid struck Mexico.

250 – 66
Million Years Ago

5

新生代 / 哺乳动物时代

约 6600 万年前至今

Cenozoic Era
Age of Mammals
(About 66 Million Years Ago to Present)



哺乳动物陆速演化以填补生态位。地球经历了多次冰期。

Mammals rapidly evolved to fill ecological niches. The Earth experienced multiple ice ages.

66 Million Years Ago
to Present

6

人类黎明

约 20~30 万年前

The Dawn of Humans
(About 200,000 – 300,000 Years Ago)



现代智人在非洲出现，开始制造工具并逐渐向全球迁徙（包括美洲）。

Anatomically modern humans (Homo sapiens) appeared in Africa, began making tools, and gradually migrated across the globe (including the Americas).

200,000 – 300,000
Years Ago

人类走出非洲，走向全球

The Global Migration of Humans Out of Africa (Complete Overview)

从非洲的起源到遍布全球：现代智人的主要迁徙路线与关键阶段

From the origin in Africa to a global presence: the major migration routes and key stages of Homo sapiens.



1

非洲的起源与走出 The Exodus

约 7 万 - 6 万年前
(About 70,000 - 60,000
Years Ago)



现代智人在非洲演化成熟后，跨越红海的曼德海峡（或称亚丁湾）进入阿拉伯半岛，开启了全球扩张。

After evolving in Africa, modern humans crossed the Bab el-Mandeb Strait (or via Sinai) into the Arabian Peninsula, beginning a global expansion.

地理环境与迁徙状态

冰河期导致海平面下降，海峡收窄，阿拉伯半岛当时处于短暂的“绿色走廊”期。Lower sea levels narrowed the strait, and the Arabian Peninsula was a temporary green corridor.

2

南线东进与印度 Coastal Route

约 6 万 - 5.5 万年前
(About 60,000 - 55,000
Years Ago)



先民沿着印度洋海岸线迅速东进，穿过今天的伊朗，到达印度次大陆。印度成了走向大洋洲和东亚的跳板。

Early humans moved rapidly along the Indian Ocean coast, through present-day Iran, reaching the Indian subcontinent, which became a stepping stone to Oceania and East Asia.

地理环境与迁徙状态

沿海地区丰富的海洋资源提供了充足的食物，使人类得以在几千年内推进上万公里。Rich marine resources along the coast allowed rapid migration over thousands of kilometers in just a few millennia.

3

东南亚与澳洲 Sahul Land

约 6.5 万 - 5 万年前
(About 65,000 - 50,000
Years Ago)



人类穿过马来半岛到达巽他陆架（今印尼苏门答腊），随后跨越深海峡，成功登陆巴布亚新几内亚与澳大利亚。

Humans moved through the Malay Peninsula to Sundaland (Indonesia), then crossed deep-sea straits, reaching Papua New Guinea and Australia.

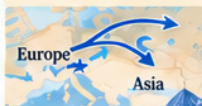
地理环境与迁徙状态

澳洲与新几内亚当时相连。澳洲土著在这片大陆追逐演化，成为全球现存最古老的连续文明之一。Australia and New Guinea were connected. Indigenous Australians evolved in isolation, forming one of the world's oldest continuous cultures.

4

北线中亚与欧洲 Inland Route

约 5 万 - 4.5 万年前
(About 65,000 - 45,000
Years Ago)



留在中东的另一支人群向内陆挺进，跨越帕米尔高原进入中亚和西伯利亚，随后向西扩散到欧洲，取代了尼安德特人。

Another group moved inland from the Middle East, crossed the Pamir Plateau into Central Asia and Siberia, then spread west into Europe, replacing the Neanderthals.

地理环境与迁徙状态

欧洲与斯堪的纳维亚冰盖，先民在洞穴中生活，留下了著名的阿尔塔米拉洞穴壁画（克罗马农人）。Europe was covered by ice sheets. People lived in caves, leaving famous cave paintings such as Altamira and Lascaux (Cro-Magnons).

5

中国与东亚腹地 Populating China

约 4 万 - 3 万年前
(About 40,000 - 30,000
Years Ago)



沿河北上的南路人群与来自中亚的北路人群在中国腹地交汇，形成了现代东亚人的主要基因库（如周口店山顶洞人）。

Southern coastal groups and northern inland groups met in China, forming the main genetic pool of modern East Asians (e.g., Upper Cave people at Zhoukoudian).

地理环境与迁徙状态

这一时期南北族群的融合，为日后适应严酷的北亚和澳洲提供了适应力。The mixing of southern and northern groups provided adaptability for later expansion into colder northern regions and the Americas.

6

东北亚与日本 Reaching Japan

约 3.5 万 - 1.5 万年前
(About 35,000 - 15,000
Years Ago)



人类通过朝鲜半岛、华南陆桥及库页岛三跳进入日本，成为独立人。与此同时，另一支人群在西伯利亚极寒中向东迁徙。

Humans entered Japan via the Korean Peninsula, the South China land bridge, and Sakhalin, becoming the Jomon people. Meanwhile, another group pushed into the extreme east of Siberia.

地理环境与迁徙状态

当时海平面很低，日本列岛与亚洲大陆多处连桥相连，步行或简单的沿海划船即可到达。Sea levels were much lower, with many land connections to Japan, allowing travel on foot or by simple boats along the coast.

7

白令陆桥定居 Beringia Standstill

约 2 万 - 1.5 万年前
(About 20,000 - 15,000
Years Ago)



西伯利亚的远古猎人追踪猛犸象跨越了白令陆桥。由于两侧被巨冰阻挡，他们在此定居并演化了数千年。

Ancient Siberian hunters followed mammoths across Beringia. Blocked by massive ice sheets on both sides, they settled here for thousands of years, evolving in isolation.

地理环境与迁徙状态

这一时期波多民在孤立环境中演化，其基因和地理特征，'克隆'了阿拉斯加原住民（印第安人）的遗传。In isolation, this population evolved a distinct genetic identity, becoming the ancestors of Native Americans.

8

冰川融化与南下 Entering America

约 1.5 万 - 1.3 万年前
(About 15,000 - 13,000
Years Ago)



气候回暖，北美大陆冰盖融化，原先定北居的波多民开始南下，进入南美洲。由于冰盖融化，他们得以通过冰盖边缘的“海岸路线”逐渐向南推进。

As the climate warmed and ice sheets retreated, people moved into North America via an ice-free corridor and a coastal route, rapidly expanding inland.

地理环境与迁徙状态

克洛维斯文化在此时期萌芽，人类和猛犸象开始了他们漫长的旅程。The Clovis culture emerged, with refined stone spear points used to hunt large mammals across North America.

9

踏足南美洲终章 Southernmost End

约 1.4 万 - 1.2 万年前
(About 14,000 - 12,000
Years Ago)



迁徙先民跨越中美洲地峡，以极快的速度向南推进。智利蒙特雷内斯遗址证实了他们抵达南美洲最南端，完成人类史上最大规模的大陆迁徙。

Migrants crossed the Central American isthmus, rapidly populating South America. The Monte Verde site in Chile confirms they reached the southernmost tip, completing humanity's greatest continental migration.

地理环境与迁徙状态

在此，除了高海平面外，人类和猛犸象开始了他们漫长的旅程。At this point, humans had reached all continents except Antarctica, completing the global conquest of the land.

新石器革命与文明的黎明

The Neolithic Revolution and the Dawn of Civilization

从全球迁徙完成（约1万多年前）到两河流域最早的城市与文字：人类从狩猎采集走向农耕定居，开启文明时代。

From the completion of global migration (about 10,000+ years ago) to the first cities in Mesopotamia: humanity's great transition from hunting and gathering to farming and settled civilization.

1

新仙女木事件

Younger Dryas

约公元前 10900 年 – 前 9600 年
(About 10,900 BC – 9,600 BC)



核心历史事件 最后的严寒大倒退

就在冰河期即将结束、全球回暖时，地球突然遭遇了一场持续约1300年的极寒倒退性严寒（巧合的是，这与柏拉图记载的亚特兰蒂斯灭亡时间惊人重合）。这一绝境迫使中东等地的部分人类为了生存，开始尝试人工采集并保护特定植物种子，野生农业在此期间悄然萌芽。

Just as the Ice Age was ending and the climate was warming, the Earth suddenly experienced a 1,300-year return to severe cold. This harsh period forced some groups, especially in the Middle East, to begin collecting and preserving certain plant seeds, and early forms of cultivation quietly emerged.

10900 – 9600 BC

约公元前 10900 – 9600 年

2

新石器时代革命

Neolithic Revolution

约公元前 9500 年 – 前 7000 年
(About 9,500 BC – 7,000 BC)



核心历史事件 农业诞生与动物驯化

随着严寒彻底过去，地球进入温暖的全新世。在中东肥沃月弯，人类成功驯化了小麦、大麦、绵羊和山羊。人类正式从“大自然的寄生者（掠夺猎物）”变成了“大自然的生产者（农耕和畜牧）”。

As the severe cold ended, the Earth entered the warmer Holocene. In the Fertile Crescent, humans successfully domesticated wheat, barley, sheep, and goats. Humanity transitioned from a "parasite of nature" (hunting) to a "producer of nature" (farming and animal husbandry).

9500 – 7000 BC

约公元前 9500 – 7000 年

3

定居部落与村落

Sedentary Villages

约公元前 7000 年 – 前 5000 年
(About 7,000 BC – 5,000 BC)



核心历史事件 最早的永久定居点

农业带来了稳定的食物保障，人类告别了四处流浪。在土耳其和肥沃月弯出现了如加泰土丘（Çatalhöyük）等最早的泥砖房屋村落，人口开始密集，社会阶层、宗教祭司和手工业（陶器）开始萌芽。

Agriculture provided a stable food supply, and humans ended their nomadic lifestyle. In places like Çatalhöyük in present-day Turkey and the Fertile Crescent, the earliest mud-brick villages appeared. Populations grew, and social hierarchy, religious priests, and handicrafts (such as pottery) began to emerge.

7000 – 5000 BC

约公元前 7000 – 5000 年

4

欧贝德时期

Ubaid Period

约公元前 6500 年 – 前 4100 年
(About 6,500 BC – 4,100 BC)



核心历史事件 两河流域的初垦

先民们带着农耕技术走进了由底格里斯河和幼发拉底河冲积而成的美索不达米亚平原。由于两河经常泛滥且气候干旱，人类开始联合起来修建大型灌溉水渠网络。这种大规模的集体协作，直接催生了早期的管理阶层和神庙经济。

People brought farming techniques to the Mesopotamian plain formed by the Tigris and Euphrates rivers. Frequent floods and a dry climate led humans to build large irrigation networks. This large-scale cooperation directly gave rise to early administrative elites and temple economies.

6500 – 4100 BC

约公元前 6500 – 4100 年

5

乌鲁克时期

Uruk Period

约公元前 4000 年 – 前 3100 年
(About 4,000 BC – 3,100 BC)



核心历史事件 世界最早的城市崛起

在两河流域南部，苏美尔人建立了人类历史上第一座真正的成熟城市——乌鲁克（Uruk）。城市人口达到数万人，巍峨的神庙（塔庙）拔地而起。为了记录神庙的庞大账目，苏美尔人发明了最早的符号记事系统。

In southern Mesopotamia, the Sumerians established the first true city in human history—Uruk. The city's population reached tens of thousands, and monumental temples rose. To record the temple's vast accounts, the Sumerians developed the earliest symbolic writing system.

4000 – 3100 BC

约公元前 4000 – 3100 年

6

楔形文字与文明确立

Cuneiform & Civilization

约公元前 3200 年 – 前 3000 年
(About 3,200 BC – 3,000 BC)



核心历史事件 真正的文明正式诞生

苏美尔人的象形符号演变成了人类历史上最古老的系统文字——楔形文字。随着文字、法律、青铜冶炼技术以及成文法典的出现，美索不达米亚文明正式被确立。人类自此跨入信史时代（有文字记录的历史），告别了漫长的史前蛮荒。

The Sumerian pictographic symbols evolved into cuneiform, the world's oldest system of writing. With writing, laws, bronze technology, and written codes, the Mesopotamian civilization was firmly established. Humanity entered the historical era (recorded history), leaving behind the long prehistoric wilderness.

3200 – 3000 BC

约公元前 3200 – 3000 年

早期国家、城邦与律法的奠基

The Rise of Early States, City-States, and Written Laws

苏美尔人确立文字与城市之后，人类社会迎来了更深层次的变革。人口的激增促成了世袭君主与中央集权国家的出现。

为了管理庞大的领土、规范复杂的社会阶层并裁决纠纷，人类历史上最早的成文律法、职业军队和官僚组织相继诞生。

After the Sumerians established writing and cities, human society underwent a deeper transformation. Population growth led to hereditary monarchies and centralized states. To manage vast territories, regulate complex social hierarchies, and resolve disputes, the earliest written laws, professional armies, and bureaucratic systems emerged in human history.

1

苏美尔城邦割据 Early Dynastic Period

约公元前 2900 年 – 前 2334 年
(About 2900 BC – 2334 BC)



美索不达米亚南部形成了乌鲁克、乌尔、拉格什等繁荣的独立城邦。为了争夺水源与土地，城邦间战争频繁。此时，最早的行政管理、税收契约和不成文的习惯法规则在各种神庙中开始确立。

Independent city-states such as Uruk, Ur, and Lagash flourished in southern Mesopotamia. Frequent conflicts arose over water and land. Early administration, taxation, contracts, and customary laws began to take shape in temples.



2900 – 2334 BC
约公元前 2900 – 2334 年

2

古埃及一统 Early Dynastic Egypt

约公元前 3100 年 – 前 2686 年
(About 3100 BC – 2686 BC)



传奇君主美尼斯（那尔迈）统一了上、下埃及，建立了人类历史上第一个庞大的中央集权大一统国家。法老被尊为神，通过神圣的“乌阿特（Ma'at，代表真理、秩序与正义）”原则统治万民。

King Narmer (Menes) unified Upper and Lower Egypt, establishing the first large centralized state in human history. The pharaoh was regarded as a god, ruling through the sacred principle of Ma'at (truth, order, and justice).



3100 – 2686 BC
约公元前 3100 – 2686 年

3

阿卡德帝国时代 Akkadian Empire

约公元前 2334 年 – 前 2154 年
(About 2334 BC – 2154 BC)



雄才大略的萨尔贡大帝征服了整个苏美尔地区，建立了人类历史上第一个跨区域、多民族的中央集权军事帝国。由于领土辽阔，帝国统一了度量衡，并开创了成文的法令公告系统。

The great king Sargon conquered the Sumerian region, establishing the world's first multi-ethnic, centralized military empire. The empire unified weights and measures, and introduced a system of written decrees.



2334 – 2154 BC
约公元前 2334 – 2154 年

4

最早的成文律法 Ur-Nammu Code

约公元前 2100 年左右
(Around 2100 BC)



乌尔第三王朝的统治者颁布了人类历史上现存最古老的成文法典。这部法典废除了许多残酷的肉刑，采用“罚款、经济赔偿”等理性手段来解决伤害罪、契约纠纷和婚姻案件，标志着法律从口头演变为绝对文字。

The ruler of the Third Dynasty of Ur issued the oldest surviving written law code in human history. It replaced many cruel physical punishments with fines and compensation, dealing with assaults, contracts, and marriage cases—marking the transition from oral rules to written law.



约公元前 2100 年左右
(Around 2100 BC)

5

印度河流域文明 Indus Valley

约公元前 2500 年 – 前 1900 年
(About 2500 BC – 1900 BC)



在南亚印度河流域，崛起了解密至今尚无文字，但工程惊人哈拉帕和摩亨佐·达罗两大超级城邦。它们拥有高度集中的标准化下水道、街道规划和度量衡系统，展示了一种极其神秘而严谨的早期社会组织与公共秩序模式。

In the Indus Valley, the remarkable cities of Harappa and Mohenjo-daro emerged. Though still undeciphered, they featured advanced urban planning, standardized weights and measures, and sophisticated drainage systems, showing a highly organized and mysterious early social structure.



2500 – 1900 BC
约公元前 2500 – 1900 年

6

华夏早期国家萌芽 Erlitou / Xia / Shang

约公元前 2000 年 – 前 1600 年
(About 2000 BC – 1600 BC)



在中国黄河流域，以河南二里头遗址为代表的早期国家组织开始成型（对应史书中的夏商时期）。人类社会由禅让的部落联盟，演变为以青铜礼器、世袭王权为核心的国家政权，并逐步形成了以血缘、氏族为基础的“礼乐之法”雏形。

In the Yellow River region of China, early state organizations took shape, represented by the Erlitou site (corresponding to the Xia and Shang dynasties). Society evolved from tribal alliances to hereditary monarchies centered on bronze rituals, gradually forming the early framework of “rites and music.”



2000 – 1600 BC
约公元前 2000 – 1600 年

7

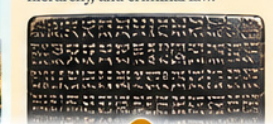
古巴比伦与铁律 Code of Hammurabi

约公元前 1792 年 – 前 1750 年
(About 1792 BC – 1750 BC)



著名的汉谟拉比国王统一两河流域，并将其统治条文刻在一根巨大的黑色玄武岩石柱上。法典的核心原则是“以眼还眼，以牙还牙”，它是人类古代法治史上最完整、最著名的成文国家法律集大成者，彻底规范了商业、阶层以及刑法。

King Hammurabi unified Mesopotamia and inscribed his laws on a massive black basalt stele. Based on the principle of “an eye for an eye, a tooth for a tooth,” it became one of the most complete and famous legal codes in history, standardizing commerce, social hierarchy, and criminal law.



1792 – 1750 BC
约公元前 1792 – 1750 年

人类宗教信仰与精神演化史

A Chronology of Human Belief and Spiritual Traditions

从自然崇拜、祖先与图腾信仰，到经典、伦理与世界宗教，人类不断探索生命、宇宙与精神世界的意义。

1

原始泛灵与巫术

Animism & Shamanism

约10万—3万年前



智人以仪式安葬死者，形成灵魂与死后世界的早期观念；萨满通过舞蹈、击鼓与自然之灵沟通。

2

图腾与巨石崇拜

Totemism

约公元前10000—前7000年



哥贝克力石阵等祭祀中心出现；动物、植物被视为氏族祖先或守护神，并用于跨部落祭祀与祖先崇拜。

3

吠陀教与早期印度教

Vedic Hinduism

约公元前1500—前500年



《吠陀经》与火祭传统形成；轮回、因果业报等观念逐步发展，奠定印度教长期延续的思想基础。

4

犹太教与一神论

Judaism

约公元前1300—前1000年



希伯来传统确立对雅威的唯一信仰；《摩西五经》与十诫成为宗教律法、伦理和共同体生活的核心。

5

祆教（琐罗亚斯德教）

Zoroastrianism

约公元前1000—前600年



古代波斯发展出光明与黑暗、善与恶的宇宙观；圣火象征纯洁，强调“善思、善言、善行”。

6

佛教的崛起

Buddhism

约公元前6—前5世纪



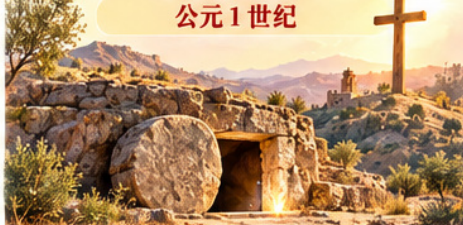
释迦牟尼提出四圣谛与八正道；通过持戒、禅定与智慧破除无明，追求解脱与涅槃。

7

基督教的建立

Christianity

公元1世纪



耶稣的教导以爱、宽恕与救赎为核心；其门徒传播福音，洗礼、圣餐与《圣经》成为重要传统。

8

伊斯兰教的兴起

Islam

公元7世纪（约610年）



穆罕默德在麦加接受启示，《古兰经》形成；信仰生活以念证、礼拜、斋戒、天课和朝觐五功为核心。