u3a Plettenberg Bay

Newsletter
November 2023



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Contact us
https://plettu3a.org.za

November 2023

As you know, Plett u3a closes from November to the beginning of February, so this is the last newsletter for 2023. It's a bumper issue, for which you will probably need two months (if not two years) to read and recover.

We wish you all a safe and relaxing holiday season and that the days ahead sparkle with joy and laughter and are full of wonderful surprises and treats. May you, your family and loved ones know only love, peace and happiness throughout the coming year!

We look forward to seeing you again in 2024.

Best wishes,
Plett u3a committee

Welcome

A very warm welcome to our new members: Teresa du Plessis, Reinhard Marx and Carole Penfold.

Thank you, FGV!



Jan, Ronelle, Lizette and Gerda



Jan and Bugs



Jan and Paul



Jan and Ronelle

Jan's great opportunity to hug the ladies!



Jan and Lizette

After our last meeting on Monday 27 November at Formosa Garden Village our chairman, Jan Hough, thanked the management and staff of FGV for their wonderful hospitality and support throughout 2023. Thanks again to Gerda for allowing us to use FGV as a venue, Ronelle and staff for the coffee/tea and other catering when needed, Paul and security staff for their friendly welcomes and efficient processing of our vehicles at the gate, and Bugs for resolving our technical issues. Special thanks to Lizette for always setting up the venue and projector, and the many other things you always do for us.

Plett u3a's 20th anniversary

Plett u3a's 20th anniversary falls on the 24th February 2024. We plan to celebrate this event with a luncheon on Wednesday 21 February, but we are still finalising the details. Please try to keep your diaries open for the week of 18-24 February 2024 in the event that we need to make changes. We would really like to see you all there. More information regarding this special occasion will follow in the new year.

Review of 2023

We started the year with 105 members and ended with 194.

Activities

Our motto is “live, learn and laugh’. We hope we lived up to it.

We organised a total of 63 events for the period February to November, with 2 700 attendances by members and 200 by visitors. We had 18 talks, eight outings and showed 40 documentary films. The subjects and attendances of the documentaries and talks are shown below.

Documentary films	Talks
• Art - 240 attendances • History - 140 attendances • Music - 220 attendances • Nature - 380 attendances • Travel - 530 attendances	• Archaeology - 130 attendances • Astronomy - 49 ----ditto---- • Books - 29 ----ditto---- • History - 145 ---ditto---- • Nature - 330 ---ditto---- • Philosophy - 28 ---ditto---- • Science - 80 ----ditto---- • Travel - 60 ----ditto---- • Walking - 70 ----ditto----

Attendances and topics of documentaries and talks

Interest groups

We have eight interest groups: Chess, Computer basics, French x 2 – advanced and beginners, German, Music – Monday Music Memos, Poetry and Science. Unfortunately not all of these groups are active. This is a great pity, as living, learning and laughing happens mostly within groups of people actively engaged with each other and the subject at hand, rather than being a passive attendant of a film or talk, as valuable and enjoyable as those might be. The University of the Third Age movement started as a way of enabling learning for leisure and pleasure, the last being the most operative word.

Looking ahead

As we close down for this year we hope you will give some thought as to whether you would like to have more interest groups that reflect your specific interests – and also consider leading such a group. An example might be ‘History for fun’, where a group member might decide to research a topic of personal interest (for example, Egyptology or lost civilisations) to then share the information with other group members. Alternately, groups can be devoted to practical and leisure activities, such as photography, dancing, backgammon – whatever may lead to shared learning and laughing. We currently do not have any short courses, whereby a ‘subject expert’ offers to provide a short course on any given topic of potential interest to more than one member, eg. astronomy, archaeology, etc.

In January we will ask you to pay your membership fees and to again complete a registration form indicating your interests, so that we can try to meet and exceed your expectations going forward.

Past activities

Documentaries

Andrew Marr's History of the World is a 2012 BBC documentary that covers 70,000 years of world history from before the beginning of human civilisation up to the twentieth century in 1998.

Producer Robin Dashwood provided background on how the series was made. Financial limitations set them seeking one location "which would furnish us the whole world". They found the answer in Cape Town, which has a highly-skilled film infrastructure in place, as well as a plethora of fantastic locations, all within close proximity of the city centre. With some skillful set dressing, Cape Town's Cathedral became Notre Dame and Wittenberg Cathedrals, while a car park in front of the Town Hall became revolutionary Paris; beaches stood in for Australia and the Caribbean; sand dunes became the Middle East; and forests became, well, forests from every continent. A young offenders' institution became a 19th century Chinese street, complete with circling baboons.

Dashwood also noted the diversity of actors available: "Luckily Cape Town is a bit of a melting pot: African, Chinese, European, Middle Eastern you name it, they've got it [except Aborigines]." Though crowds are often shown, this was done with the help of computers. Budgetary considerations meant they had to make a limited number of performers seem like many more - a crowd of 15 often had to stand in for a crowd of 1500. Digital effects were also used to recreate the Palace of Knossos and the diversionary channels dug to control flooding of the Yellow River.

Monday 30 October: E1 - Survival

The earliest anatomically modern humans left Africa about 70 000 years ago and spread around the world, adapting and surviving against the odds. They made contact with Neanderthals in Europe 40 000 years ago, after which the Neanderthals disappeared, either due to the competition for resources, interbreeding with or the aggression of *Homo sapiens*. The invention of the needle 30 000 years ago enabled humans to sew animal skins, thereby protecting themselves from the cold. Prehistoric European cave 'paintings', 27 000 years old, show stencilled hands, the meaning of which remains unknown. Hunter-gatherer cultures were often nomadic until they started to settle and become the first farmers. The emergence of agriculture in Mesopotamia 12 000 years is known as the Neolithic Revolution, or the First Agricultural Revolution. Human lifestyles began to change as groups formed permanent settlements, which later became towns and cities. Settled communities enabled humans to domesticate various types of plants and animals.



Stencilled hand cave paintings

Çatalhöyük is a very large 9 000 year-old Neolithic and Chalcolithic proto-city settlement in southern Anatolia, Turkey, which existed from approximately 7 500 BC to 6 400 BC, and flourished around 7000 BC. It was composed entirely of domestic buildings clustered tightly together. The average population is estimated to have been between 5 000 and 7 000. No footpaths or streets were used between the dwellings. Most were accessed by holes in the ceiling with ladders. The rooftops were effectively streets. As a part of ritual life, the people of Çatalhöyük buried their dead in a flexed position within the



Typical Çatalhöyük house interior

village in pits beneath the floors.


Yu the Great

Man has always sought to try to control nature and modify the environment to suit his needs. Yu the Great, or Yu the Engineer, is famed for controlling the Yellow River in China 4,000 years ago. During the reign of Emperor Yao (2356 – 2255 BCE) the Chinese heartland was frequently plagued by floods that prevented further economic and social development. Yu's father, Gun, was tasked with devising a system to control the flooding. He spent more than nine years building a series of dikes and dams along the riverbanks, which were however ineffective. Yu dredged the riverbeds and successfully devised a system of flood controls. Instead of directly damming the rivers' flow, Yu created a system of irrigation canals which directed floodwaters into fields. This allowed Chinese culture to flourish along the Yellow River and other waterways of the Chinese heartland.



Egyptian hieroglyphic alphabet

People have lived along the banks of the Nile River for at least 10,000 years. About 5,000 years ago, the civilization of ancient Egypt began. The ancient Egyptians understood the principles of engineering, which enabled them to build huge pyramids, temples, palaces, and tombs. Their paintings and carvings depicted scenes of everyday life, their gods, work, and play, which help us understand how they lived. By 3100 BC the Egyptians had created hieroglyphics, a written language in a picture form. The pictures stood for sounds of words.


Minoan Linear A script

The Minoan civilization, a Bronze Age culture, was centred on the island of Crete. It is often regarded as the first civilization in Europe, which developed from the local Neolithic culture. Along with trade, the Minoans also invented coins and money, as well as Linear A, a logo-syllabic script used for administrative purposes to record transactions. At Knossos the remains were found of human sacrifices made 3 700 years ago, possibly to appease the gods of nature, especially those connected with earthquakes.

Monday 2 November: E2 - Age of empire

The story of the first empires which laid the foundations for the modern world. An empire is a political unit made up of several territories and peoples, usually created by conquest. From the Assyrians to Alexander the Great, conquerors rampaged across the Middle East and vicious wars were fought all the way from China to the Mediterranean. However, this time of chaos and destruction also brought enormous progress and inspired human development.


Map showing the ancient Assyrian heartland (red) and the extent of the Neo-Assyrian Empire in the 7th century BC (orange)

Sennacherib was the King of Assyria who reigned from 705 BCE until his death in 681 BCE. He was the son of the former King, Sargon II. Upon taking the throne, he inherited the entirety of the Assyrian state. Assyria was at its strongest in the Neo-Assyrian period, when the Assyrian army was the strongest military power in the world and the Assyrians ruled the largest empire then yet assembled in world history, spanning from parts of modern-day Iran in the east to Egypt in the west.

Sennacherib is most known for stabilizing Assyria after a period of revolt and instability, which required him to undertake a series of military campaigns. Because Babylon had been the target of most of his military campaigns and had caused the death of his son, Sennacherib destroyed the city in 689 BC. Along with this,



Cast of a rock relief of Sennacherib from the foot of Mount Judi, near Cizre

he is also known for both besieging Jerusalem and the vast building projects which were undertaken in the city of Nineveh, the last great Assyrian capital. The triumph of ancient Assyria can be attributed not only to its vigorous warrior-monarchs but also to its adeptness in efficiently assimilating and governing conquered territories using inventive and advanced administrative mechanisms. The developments in warfare and governance introduced by ancient Assyria continued to be employed by subsequent empires and states for countless centuries. Ancient Assyria also left a legacy of great cultural significance, by influencing later Assyrian, Greco-Roman and Hebrew literary and religious traditions.



The Phoenicians came to prominence in the mid-12th century BC, following the decline of most major cultures in the Late Bronze Age collapse. They were skilled traders and mariners, becoming the dominant commercial power for much of classical antiquity. The Phoenicians established colonies and trading posts across the Mediterranean and developed an expansive maritime trade network that lasted over a millennium, helping facilitate the exchange of cultures, ideas, and knowledge between major cradles of civilization such as Greece, Egypt, and Mesopotamia. Their best known legacy is the world's oldest verified alphabet, which was transmitted across the Mediterranean and used to develop the Arabic script and Greek alphabet and in turn the Latin and Cyrillic alphabets. The Phoenicians are also credited with innovations in shipbuilding, navigation, industry, agriculture, and government. Their international trade network is believed to have fostered the economic, political, and cultural foundations of classical Western civilization.



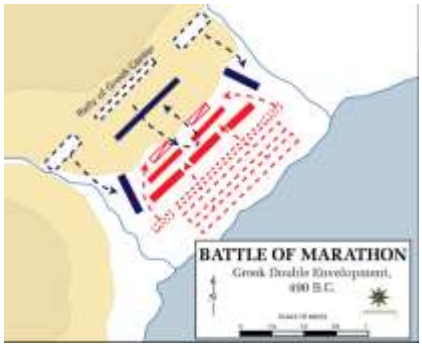
Cyrus the Great

The Persian king Cyrus the Great (590-529 BC) established one of the largest empires in world history, which stretched from the shores of the Mediterranean to the foothills of the Himalayas in India. He is remembered for his benevolence and tolerance and for respecting the customs and religious traditions of the lands that he conquered. Cyrus is also recognized for his achievements in human rights, politics, and military strategy, as well as his influence on the traditions of both the Eastern world and the Western world. He set the Jews free from their Babylonian captivity in 539 BC and facilitated their return to the promised land.



The Pactolus river, from which Lydia obtained electrum, a combination of silver and gold.

The Iron Age kingdom of Lydia (in Anatolia, Turkey) existed from about 1200 BC to 546 BC. Lydian coins, made of silver and dated to around the 7th century BC, are among the oldest in existence. The deposits of electrum, a naturally occurring pale yellow alloy of gold and silver, in the river Pactolus were the source of the proverbial wealth of Croesus, Lydia's last king. (To this day we use expressions such as "rich as Croesus" or "richer than Croesus" to indicate great wealth). Croesus is credited with issuing the first true gold coins with a standardised purity for general circulation. Cyrus the Great conquered Lydia in 546 BC and condemned Croesus to be burnt to death, but a thunderstorm's extinguished the fire. Thereafter Cyrus kept Croesus as his advisor.

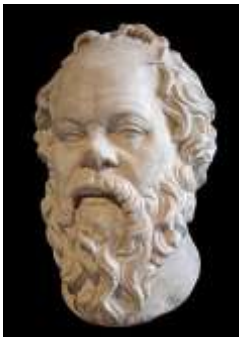


The first Persian invasion of Greece took place in 490 BC and resulted in the Battle of Marathon (about 40 km from Athens). The Persian Empire landed a force of 30,000 soldiers at the Bay of Marathon, where they were decisively defeated by a Greek force of about 11,000 hoplite soldiers. The Greeks ran into the battle, minimizing the amount of time they were exposed to the Persians' arrow fire, whilst the right and left wings of the Greek army crushed those of the Persians. This ushered in an era of hoplite warfare. The marathon race is named after the story that Pheidippides ran from Marathon to Athens (a distance of 26.2 miles) to deliver news of the victory. The Persian defeat at Marathon halted the Persian Empire's western expansion, thereby ensuring continued Greek independence. It also allowed Greek ideas to further develop and spread, greatly influencing the Western world even today.



Parthenon on the Acropolis

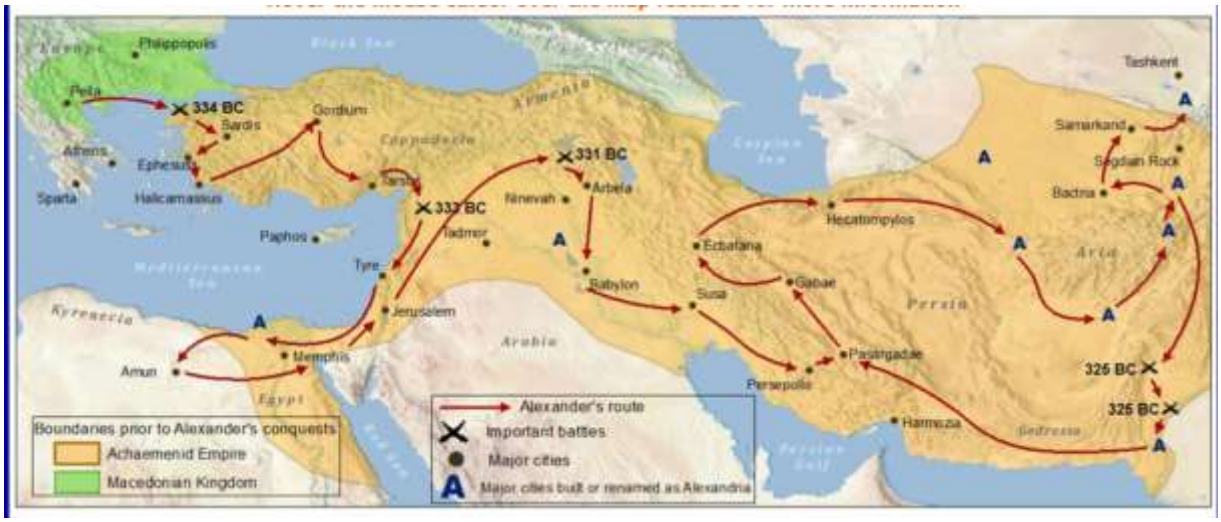
Fifth-century Athens (also known as the Golden Age of Athens) was a Greek city-state from 480 to 404 BC. After the defeat of the Persian invasion at the Battle of Marathon the alliance of independent Greek city-states became the Athenian empire under Pericles (c. 495 – 429 BC), a Greek politician and general. Pericles promoted the arts and literature, and it is principally through his efforts that Athens acquired the reputation of being the educational and cultural centre of the ancient Greek world. He started the project that generated most of the surviving structures on the Acropolis, including the Parthenon. Pericles also fostered Athenian democracy (Greek: *dēmokratia* combines the words *demos* "people" and *krátos* "power" - thus "people power").



Socrates

Socrates (c. 470–399 BC) was a Greek philosopher in Athens who is credited as the founder of Western philosophy. Socrates authored no texts and is known mainly through the posthumous writings of his students Plato and Xenophon. Socrates was a polarizing figure in Athenian society. In 399 BC, he was accused of impiety (not believing in the Athenian gods) and corrupting the youth and was thus was perceived as a threat to democracy. After a trial that lasted a day, he was sentenced to death by drinking poison hemlock. Socrates exerted a strong influence on philosophers in later antiquity and has continued to do so until today.

Alexander the Great (356 BC – 332 BC) is known as one of the greatest generals in all history. His father, King Philip II of Macedonia, hired Aristotle to be his private tutor, through whose teachings Alexander developed a love of science, particularly of medicine and botany. Alexander included botanists and scientists in his army to study the lands he conquered. Alexander became king of Macedonia in 336 BC aged 20 when his father was assassinated. He spent most of his 13-year reign on military campaigns. Alexander built many new cities in the lands he conquered, often naming them after himself, including Alexandria in Egypt. He went on to conquer the lands of the Persian Empire. His conquest continued through Asia until he reached the shores of the Ganges River in India, when his exhausted army refused to continue further. Alexander the Great created one of the largest empires of the ancient world, stretching from Greece to north-western India. Alexander's legacy extended beyond his military conquests, and his reign marked a turning point in European and Asian history. His campaigns greatly increased contacts and trade between East and West, and vast areas to the east were significantly exposed to Greek civilization and influence.



Monday 9 November: E3 - The word and the sword

*These episode segments featured in Episode 2. However, they are located here because they are more relevant to this episode's title and description of spiritual revolutions that shook the world between 300 BC and 700 AD.

* Buddha, originally named Siddhartha Gautama (c. 6th–4th century BC), was born a prince of the Shakya republic on the present-day India-Nepal border. He is said to have lived a sheltered life of luxury that was interrupted when he left the palace and encountered an old man, a sick man, and a corpse. Renouncing his princely life, he spent six years seeking out teachers and trying various ascetic practices, including fasting, to gain enlightenment. Unsatisfied with the results, he meditated beneath the bodhi tree, where he realized the Four Noble Truths and achieved enlightenment. He became the founder and spiritual leader of Buddhism, which became a major world religion and philosophy. Buddhist teachings strongly oppose the use of violence. The term *Buddha* (Sanskrit: "awakened one") is a title rather than a name. The historical Buddha is referred to as the Buddha Gautama or simply as (the) Buddha.


Buddha under the bodhi tree

*Confucius (c. 551 – c. 479 BC) lived in the latter part of the Zhou dynasty, a royal dynasty of China (1046 BC – 256 BC) that lasted 789 years, the longest dynastic regime in Chinese history. Confucius was a Chinese philosopher who is traditionally considered the paragon of Chinese sages. His philosophical teachings, called Confucianism, emphasized personal and governmental morality, correctness of social relationships, justice, kindness, and sincerity, as well as an emphasis on a ruler's duty to their subjects. Confucius considered himself a transmitter for the values of earlier periods, which he claimed had been abandoned in his time. The teachings and philosophy of Confucius underpin East Asian culture and society, and remain influential across China and East Asia to this day. The Confucian work ethic has been credited with the rise of the East Asian economy.


Confucius

Ashoka (c. 304 – 232 BC), was the third Mauryan Emperor of Magadha in India during c. 268 to 232 BC). His empire covered a large part of the Indian subcontinent, stretching from present-day Afghanistan in the west to present-day Bangladesh in the east. In 260 BC he conquered Kalinga after a brutal war. The sufferings of that war moved him to such remorse that Ashoka renounced armed conquests and adopted a policy that he called “conquest by dharma” (principles of right life). To make his teachings (edicts) widely known, Ashoka had them orally announced and also engraved on rocks and pillars at suitable sites. The Lion Capital of Ashoka on a pillar in Sarnath was adopted as the official State Emblem of India in 1950. Ashoka is credited with remaking the Mauyran Dynasty from a war machine into a society of tolerance and nonviolence, and for spreading Buddhism throughout India and across ancient Asia.


An Ashoka pillar in Vaishali

Qin Shi Huang (259 – 210 BC), founder of the Qin dynasty, ruled China from 221 to 210 BC as the first "emperor". This title, which he invented for himself, would see continuous use by Chinese monarchs for the next two millennia. By the age of 38 he had conquered all the Warring States and unified all of China. Qin Shi Huang enacted major economic and political reforms aimed at the standardisation of the diverse practices of the earlier Chinese states. He is said to have banned and burned many books and executed scholars. His public works projects included the incorporation of diverse state walls into a single Great Wall of China, a national road system, as well as his city-sized (ca. 3 x 6 km) underground mausoleum guarded by a life-sized Terracotta Army, discovered in Xian in 1974 and yet to be fully excavated.


Terracotta Army

Cleopatra VII (70/69 BC – 30 BC) was Queen of the Ptolemaic Kingdom of Egypt from 51 to 30 BC, and its last active ruler/pharaoh. She was a descendant Ptolemy I Soter, a Macedonian Greek general of Alexander the Great. When her father died in 51 BC, the joint reign of Cleopatra and her brother Ptolemy XIII began, but a falling-out between them led to civil war. Julius Caesar (100 BC – 44 BC), a Roman general and statesman (whose victories in the Gallic Wars completed by 51 BC greatly extended Roman territory) was then occupying Alexandria. Caesar attempted to reconcile the rival Ptolemaic siblings. Cleopatra allegedly seduced Caesar (to create an alliance and stable political connection with Rome) after having herself wrapped in a carpet and smuggled into his personal quarters. Their affair produced a son, Caesarion. Cleopatra supported advancements in science and medicine and also contributed to The Great Library of Alexandria. She features in many ancient and modern famous works of literature and art.


Cleopatra

Cleopatra believed herself to be a living goddess, which apparently made Caesar aspire to a divine status. He became a dictator from 49 BC. Julius Caesar was assassinated by a group of senators on the Ides of March (15 March) of 44 BC. They claimed to be acting over fears that Caesar's unprecedented concentration of power during his dictatorship was undermining the Roman Republic. Caesar played a critical role in the events that led to the demise of the Roman Republic and the rise of the Roman Empire. Ironically, the Roman emperors who succeeded him claimed divine status.



Julius Caesar

Paul (c. 5 – c. 64/65 AD), formerly a Jew called Saul of Tarsus, later known as Paul the Apostle and Saint Paul, was a Christian apostle who spread the teachings of Jesus in the first-century world. He founded several Christian communities in Asia Minor and Europe from the mid-40s to the mid-50s AD. Early Christians were persecuted and killed for their faith. One of the oldest Christian texts is by Vibia Perpetua, a young woman who was nursing an infant. Perpetua described the physical and emotional torments that she suffered in the prison leading up to her martyrdom at Carthage in 203 AD. The early Christian period before Constantine I was the "Age of Martyrs". Constantine I (c. 272 – 337AD), also known as Constantine the Great, was Roman emperor from AD 306 to 337. He was the first emperor to convert to Christianity.



Constantine the Great

Monotheism probably originated in Egypt in circa 1350 BC with the pharaoh Akhenaten. However, this particular form of monotheism quickly died out. The monotheism that characterizes Judaism began in ancient Israel with the adoption of Yahweh as the single object of worship and the rejection of the gods of other tribes and nations. Monotheism is characteristic of three major global religions - Judaism, Christianity, and Islam - all of which view God as the creator of the world and who oversees and intervenes in human events as a beneficent and holy being. The origin of Judaism dates back more than 3 500 years and is rooted in the lands now known as Israel and the Palestinian territories. What is considered classical, or rabbinical, Judaism did not emerge until the 1st century AD. Historically, Judaism went from being a religion practiced primarily in and around the lands that are modern Israel up to the year 70 AD to one practiced in lands beyond due to the exile and forced dispersal of Jews.



Wailing Wall in Jerusalem

Bilāl ibn Rabāḥ (580 — 640 AD) was one of the most trusted companions of the Islamic prophet Muhammad. He was born in Mecca and is considered to have been the first mu'azzin in history, chosen by Muhammad himself. He was a former Abyssinian slave who was whipped by his master for refusing to renounce Islam. He is still venerated by Mu'azzins as the original practitioner of their profession. Bilal's story is the most frequently cited demonstration of Islam's views of measuring people by their Taqwah (piety). Islam spread through military conquest, trade, pilgrimage, and missionaries. Arab Muslim forces conquered vast territories and built empires over time. Most of the significant expansion occurred during the reign of the Rashidun from 632 to 661 AD, which was the reign of the first four successors of Muhammad. Over a few hundred years, Islam spread from its place of origin in the Arabian Peninsula to modern Spain in the west and northern India in the east.



Bilal being whipped after declaring his Islamic faith

The Medieval Period (or Middle Ages), between the 5th to 15th centuries, stretches between the Fall of the Western Roman Empire and the beginning of the Renaissance. Change does not always originate at the centre. Often it happens at the edges, which is what brought about the Renaissance.



After the collapse of the Roman Empire, when the city of Rome was sacked by the Visigoths in 410 AD, Europe became little more than a muddy backwater for centuries. Vikings, or Norsemen (people from Scandinavia - Denmark, Norway and Sweden) undertook large-scale raiding, colonising, conquest, and trading throughout Europe and became the first Europeans to reach North America. Vikings from present-day Sweden under the rule of Oleg seized Kiev in 882 AD because of its strategic location on the Dnieper River to facilitate Viking trade with Constantinople. Kiev later became the capital of Kievan Rus, also known as *Rus land* or *Rusia/Russia* in Latin.


Vladimir the Great

Vladimir the Great (c. 958 – 1015 AD) was Prince of Novgorod from 970 and Grand Prince of Kiev from 978 until his death. In 987 Vladimir, a follower of Slavic paganism, sent envoys to study the religions of the various neighbouring peoples who had been urging him to embrace their respective faiths. Vladimir rejected all options except the Eastern Orthodox Church, which brought Christianity to the eastern borders of Europe.



The Islamic Golden Age, a period of scientific, economic and cultural flourishing, dates from the 8th century to the 13th century. Scholars from all over the Muslim world flocked to Baghdad, then the world's largest city, to translate the known world's classical knowledge into Arabic and Persian. During this period, the Muslims showed a strong interest in assimilating the scientific knowledge of the civilizations they had conquered. The period is said to have ended with the collapse of the Abbasid caliphate due to Mongol invasions and the Siege of Baghdad in 1258.


Woodcut panel depicting al-Khwarizmi

Muḥammad ibn Mūsā al-Khwārizmī (c. 780 – c. 850), or al-Khwarizmi, was a polymath who produced vastly influential works in mathematics, astronomy, and geography. He is described as the founder of algebra. The term algebra itself comes from the title of his book on the subject, the word *al-jabr* meaning "completion" or "rejoining".His name gave rise to the term algorithms, which are today widely used in mathematics and computer science. Around 830 AD a group of Muslim astronomers led by Al-Khwarizmi calculated the Earth's circumference (by planting sticks in the desert) to be within 10% of the modern value.


Mosque-Cathedral of Córdoba

The territory of the Caliphate of Córdoba, an Arab Islamic state ruled by the Umayyad dynasty from 929 to 1031, comprised Iberia and parts of North Africa, with its capital in Córdoba, Spain. This period of prosperity was marked by an expansion of trade and culture, and saw the construction of masterpieces of al-Andalus architecture and increased diplomatic relations with Berber tribes in North Africa, Christian kings from the north, and with France, Germany and Constantinople. Advances in science, history, geography, philosophy, and language occurred during the Caliphate. Al-Andalus's prosperity and the caliph's patronage attracted travellers, diplomats and scholars, who brought new styles of art, music and literature from the eastern Islamic world. Andalusi Christians journeyed to and from the Christian-controlled territories to the north

and in the rest of Europe, contributing to the transmission of knowledge from al-Andalus to the rest of Europe.



Genghis Khan statue, Mongolia

Genghis Khan ("Universal Ruler"), born Temüjin;(c.1162 – 1227) was the founder of the Mongol Empire. After spending the major part of his life uniting the various Mongol tribes, he launched a series of military campaigns, conquering large parts of China and Central Asia. Genghis Khan was the first to lead an 'entire nation' in arms. He created the world's first artillery, the world's most powerful cavalry, the first Mongol writing system and their first postal system, espoused meritocracy and encouraged religious tolerance, and expanded trade across Asia and Eastern Europe. He also left behind his powerful genes. Russian scientists estimated he had 16 million male descendants living in Central Asia in 2003.



The Mongol Empire of the 13th and 14th centuries was the largest contiguous empire in history. After conquering the Chinese, the first to produce gunpowder, Genghis Khan had access to new weapons. The Mongol Empire is said to be the first 'gunpowder empire'. The vast transcontinental empire connected the East with the West, and the Pacific to the Mediterranean, which allowed the exchange of trade, technologies, commodities, and ideologies across Eurasia. Historians regard the Mongol devastation as one of the deadliest episodes in history. In addition, Mongol expeditions may have spread the bubonic plague across much of Eurasia, helping to spark the Black Death of the 14th century.



Marco Polo

Marco Polo (c. 1254 – 1324) was a Venetian merchant and explorer who travelled through Asia along the Silk Road between 1271 and 1295. His travels are recorded in *The Travels of Marco Polo,* written by Rustichello da Pisa when they were imprisoned together in Genoa. Though he was not the first European to reach China, Marco Polo was the first to provide a detailed chronicle of his experiences in the Orient, which provided Europeans with a clear picture of the East's geography and ethnic customs, and was the first Western record of porcelain, gunpowder, paper money, and some Asian plants and exotic animals. His book inspired Christopher Columbus and many other travellers. In Xanadu (also called Shangdu) Marco met Kublai Khan, the grandson of Genghis Khan and a ruler of the Mongol Empire for over 30 years. Kublai Khan founded the Yuan dynasty in present day Mongolia and China. Marco Polo acted as a diplomat for Kublai Khan, travelling throughout China and Asia representing the Yuan Dynasty.



Mansa Musa

Mansa Musa (reigned c. 1312 – c. 1337) was king of the Mali Empire, which consisted of land that is now part of Guinea, Senegal, Mauritania, the Gambia, and the modern state of Mali. Musa is known for his wealth and generosity. His wealth came principally from gold panned and mined in the gold rich regions to the south of his empire. Musa went on Hajj (Islamic pilgrimage) to Mecca in 1324, travelling with an enormous entourage and a vast supply of gold. En route, he spent time in Cairo, where his lavish gift-giving is said to have noticeably – and negatively - affected the value of gold in Egypt and garnered the attention of the Muslim community. He sought closer ties with the rest of the Muslim world, and recruited their scholars (including an Andalusian poet) to travel to Mali, and helped establish Timbuktu as a centre of Islamic learning. Musa is the first person who connected Europe to African cultures.
The Ottoman siege and conquest of Constantinople, the capital of the Byzantine Empire, in 1453, marked the end of the last remains of



Fall of Constantinople

the Roman Empire, a state which began in roughly 27 BC and had lasted nearly 1500 years. The fall of Constantinople also marked the end of the medieval period. The city's fall stood as a turning point in military history. Since ancient times, cities and castles had depended upon ramparts and walls to repel invaders. The Walls of Constantinople, especially the Theodosian Walls, regarded as the strongest and most fortified walls in the ancient and medieval era, were some of the most advanced defensive systems in the world at the time. For 800 years the Theodosian Walls had protected Constantinople from attack. However, these fortifications were overcome with the use of gunpowder, specifically from Ottoman cannons, heralding a change in siege warfare.



The Last Supper by Leonardo da Vinci

The Last Supper (dated to c. 1495–1498) is a mural painting by Leonardo da Vinci (1452 – 1519), an Italian polymath, who was active as a painter, draughtsman, engineer, scientist, theorist, sculptor, and architect. Leonardo is widely regarded to have been a genius who epitomized the Renaissance humanist ideal. The painting represents the scene of the Last Supper of Jesus with the Twelve Apostles – specifically the moment after Jesus announces that one of his apostles will betray him. Its handling of space, mastery of perspective, treatment of motion and complex display of human emotion has made it one of the Western world's most recognizable paintings and among Leonardo's most celebrated works. Some commentators consider it pivotal in inaugurating the transition into what is now termed the High Renaissance period of history.

Monday 27 November: The Private Life of a Masterpiece – Bruegel's White Christmas, "The Census at Bethlehem"



Pieter Bruegel the Elder, The Census at Bethlehem (1566), also known as the Numbering at Bethlehem.

Essentially, we are looking at three paintings in one here – a religious painting, a snowy landscape, and a genre scene of life in a Flemish village some 450 years ago. Bruegel's palette of ochres, whites, browns and grey-greens predominates. As he often did, Bruegel treats a biblical story, here the census of Quirinius, as a contemporary event. There were in fact some significant parallels between the social and political circumstances in both 16th-century Flanders and Palestine at the time of Christ's birth. Both were ruled by foreign militaristic dictatorships – Flanders by Spain, and Palestine by Rome. In both, those foreign powers exacted heavy taxes. According to the Biblical account (Luke 2: 1-5), Joseph and Mary left their home in Nazareth because of a decree from Caesar Augustus that "all the [Roman] world be taxed" in their "own city". They have come to Bethlehem because they are required to register and pay tax there.

The painting shows Bethlehem as a Flemish village in winter at sundown, which teems with different characters (about 200 of them) and activities. In the lower left of the painting, outside an inn identified by its sign as 'The Green Wreath', a crowd of people, bundled up against the cold, has gathered to register with the seated scribe and to pay their taxes. A sign bearing the Spanish king Philip II's Habsburg coat of arms is visible on the building. Other people are making their way to the same building, including the figures of Joseph and the pregnant Virgin Mary on a donkey. A pig is being slaughtered, though such an event would not have occurred in Jewish Bethlehem. People are going about their daily business in the cold, children are shown playing with toys on the ice and having snowball fights. At the very centre of the painting a wagon appears to have collapsed, leaving the two wheels prominent. These are sometimes interpreted as the wheels of fortune, or as representing the cyclical nature of things, or as a sign of chaos. To the right, a man in a small hut is shown holding a clapper, a warning to keep away from leprosy. Leprosy was endemic in that part of Europe when the painting was created. There is a begging bowl in front of the hut. In the background, men drink at a makeshift bar, and in the distance are a well-kept church and a crumbling castle.

The snowy setting was inspired by the recent extraordinarily severe winter of 1564-65 that created such hardship in Europe that it is often credited as giving rise to the “Little Ice Age”. Bruegel is credited for being the first to popularise the now-familiar genre of the snowy winter scene. The *Census* is the first depiction in art of a “White Christmas”.

At least 14 copies of *The Census* are known to exist – all of them by Bruegel’s son. Pieter Bruegel the Younger made a prosperous living by copying and selling his father’s works, which is why he is known by art historians as Pieter the Photocopier.

For those who want to know more about Pieter Bruegel the Elder and his art, here is a link to an English article found on the website of the Oliva u3a in Spain:
https://u3aoliva.org/wp-content/uploads/2020/10/Breugel.pdf

Talks

Wednesday 15 November: Gus Mills - Kalahari Kaleidoscopes

Gus Mills and his wife Margie spent 18 years in the Kgalagadi Transfrontier Park (about 36 000 km^2 in extent) carrying out extensive studies on the brown hyaena and the spotted hyaena. After a 22-year stint in the Kruger National Park they returned to the Kalahari in 2006 to carry out a six-year study on cheetahs.

The southern part of the park is the most arid part of the Kalahari and the sand is deposited in parallel sand dunes that cover the area. The sand is red due to iron oxide. The fossil riverbeds of the Nossob and Auob rivers run for several hundred kilometres through the park and they provide a very different environment from the dunes, thereby creating two distinct habitats in the park. In summer the day temperatures reach well over 35 degrees and in winter it can get very cold at night, sometimes well below freezing. Rainfall drives the ecosystem and the summer rain storms can be spectacular. Afterwards you can smell the petrichor. After the long dry winter season the vegetation is dry and brown. After good rains (20 mm+) within a week there is a carpet of flowers and bushes and trees (such as the swarthaak/ black thorn and driedoring/three thorn) start to bloom, providing some food for the browsers when there's very little else. A while later the whole environment changes as the grass grows and you get a beautiful green Kalahari. Several lily species and other plants flower and then it all starts drying out fairly quickly.

There is no permanent drinking water in the Kalahari, so all the animals there have adapted to being able to live without water. There are water holes in the river beds, but most animals go there to lick salts from the brackish water deposits rather than for drinking. Many animals, especially ground squirrels and bown hyaenas, get most of their moisture from plants such as the Tsamma melon and wild, or horned, cucumber. An ostrich killed by a cheetah had a stomach full of Tsamma melons swallowed whole. Bushmen grind the pips, which are very rich in protein, to make a porridge. Carnivores get their moisture by drinking the blood and rumen contents of their prey. Cheetahs were seen licking rain drops off each other’s backs.

Several animals dig large holes to escape the heat. One day they found an exceptionally big hole and heard a purring-type noise. The Bushman tracker said it was a snake. Gus disagreed and went inside to investigate. He found a large chamber and about 50 Egyptian slit-faced bats, which he photographed. A few days later he looked at the photos and discovered a Cape cobra had been within a metre of him. Characteristic of the Kalahari are the huge communal sociable weaver nests. If you scrutinise them you are bound to find a cobra moving around.

Kalahari lions are reputed to be the largest lions, but it's probably the low vegetation and wide open spaces that make them stand out and look larger. However, they are unique in their predilection for porcupines: approximately 35 percent of their kills are porcupines. Gus once saw lions playing with a tortoise. After a while they got bored and moved off, leaving the tortoise on its back. Some minutes later its head emerged and then it started moving its legs until it rocked itself back onto all fours and ambled off.



The little known brown hyaena is a nocturnal scavenger. About 90% or more of their food consists of small bits of carrion or the remains of kills. They are solitary animals – until you see several together feeding on a carcass. So, although they forage on their own, they share a territory with a number of other hyaenas. Sometimes they will carry a fairly large piece of food for 5-10 km to a den where their cubs are. The adults do not live at the den. One night a female hyaena came across an ostrich nest with 27 eggs in it. She proceeded to eat the eggs. One ostrich egg is equivalent to 24 chicken eggs. After she'd eaten her full she picked up the eggs one at a time in her mouth and started putting them under bushes a few hundred metres from the nest, so that she had a future supply of food.

Unlike the brown hyaena the spotted hyaena is a very efficient hunter. In the Kalahari they kill at least two-thirds of their food, mainly antelope calves. They chase their prey for up to three kilometres at a speed of about 55 km/h. Having lots of food means you can feed lots of animals, so spotted hyaenas are social animals that travel in groups. The clans are arranged in a dominance hierarchy controlled by the females. The top ranking female is the alpha female and below her come all the other females and the highest-ranking male comes just below the lowest ranking female. Males are not allowed to feed at a kill until the females have had their fill. For the first nine months to a year of their lives the sole form of nutrition for spotted hyaenas is milk, so females have to feed well to produce milk, which may account for the female aggression. Female spotted hyaenas have large amounts of testosterone and their reproductive organs resemble those of a male.

A common carnivore is the black-backed jackal and they can be cheeky scavengers, biting a cheetah at its kill on the tail, while its partner grabs a morsel. There is a small population of leopards, African wildcats and caracal. Gus found a caracal that had caught and killed an African wildcat and also a leopard that killed and ate a cheetah. Bigger predators will often kill and feed on a smaller closely related animal. Cheetahs are very well adapted to arid regions. One would think being the fastest animal on earth would make it easy to catch your prey. However, cheetah hunts are only about 40% successful. Different cheetah liaisons (such as two males, mother and cubs) have different hunting success rates. Cheetahs also kill each other, as there is a fair amount of competition, especially between cheetah males, particularly when there's an oestrus female around. Gus ended his talk with photographs of glorious Kalahari sunsets.

Dr Michael 'Gus' Mills spent more than 40 years studying African ecology, focusing on Africa's large carnivores, a subject in which he is recognised as a world authority. A prolific writer, Gus has published two definitive studies on large African carnivores -Kalahari hyaenas; the comparative behavioural ecology of two species (Unwin Hyman) and Kalahari Cheetahs: adaptations to an arid region (Oxford University Press). He has also published 153 scientific papers and presented over 100 papers at conferences locally and internationally. Gus

and Margie have published three popular scientific books: Hyaena Nights and Kalahari Day (Jacana Media) and A Natural History Guide to the Arid Kalahari (Black Eagle Media). Their most recent book, Fast Cats on Red Sands – a story about Kalahari Cheetahs and their Researchers (Crocuta Publishers) was published in 2022.

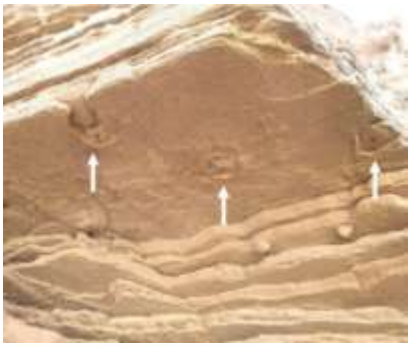
Wednesday 29 November: Charles Helm - Fossil trackways of Robberg and the Cape south coast



Charles provided an overview of his research findings on more than 350 fossil vertebrate track sites that have been identified on the Cape south coast since 2007, which have yielded more than thirty-five published scientific papers. Fossil tracks have been found along the Cape coast from Arniston to Robberg, a stretch of some 350 km. These include the greatest density in the world of hominin tracks and traces left by our ancestors. Key points of the talk were the fifteen track sites at Robberg and his research findings from the 2023 field season. The day before this talk, Charles photographed at Robberg newly found fossil tracks of a brown hyaena, which he included in his presentation.



Fossil tracks tell us about the creatures that lived in ancient times, how they behaved and what their environment was like. They also augment knowledge gained from studying body fossils. The fossil tracks found here date back from about 30 000 to 400 000 years ago (the Pleistocene period) with the exception of some recently found tracks that are about three million years old. Most of the fossil tracks are found in coastal dunes and caves, including the ceilings of the caves.



Ceiling prints protrude from the surface. So how do footprints in beach sand become fossils or rocks, given that wind and rain usually erase any trace thereof within hours? After the imprint something like a gentle drizzle or heavy dew moistens the dune surface without altering the tracks. Then a soft wind gently fills in the tracks with sand and covers them. The prints are then buried for thousands of years until something happens to re-expose them, mostly wave action. In the case of ceiling tracks what is left is the infill layer. The tracks therefore appear to hang down from the ceiling and are known as natural casts.



The fossil animal tracks found were made by many different animal species, many of them now extinct, such as giant buffalos, giant Cape horse, giant tortoises and other mega-fauna species. Scientists do not know whether they died out due to climate change or because of humans hunting them to extinction. Giraffe tracks indicate that the current coastline must have once been a savanna, as giraffes require trees to exist. There are many instances of elephant footprints, including a set with concentric circles, caused by the vibrations of elephants' infrasound communications across distances. There is also a site where an elephant dragged its trunk along the ground.

An astonishing number of different animal species have been identified by their fossil tracks, for which to date no other evidence has been found of the Pleistocene fauna of the Cape south coast and now provide an insight into the lost world and extinct ecosystem of the Palaeo-Agulhas Plain: birds – including ostriches, seals, crocodiles, hyaenas, rhinoceros, puffadders, tortoises, sea turtles, lions, aardvark, pangolin, gerbils, golden mole 'sand-swimming' traces – and more. Evidence of insects (arachnids) includes spider trackways and fossilised baboon spider burrows.



Correctly identifying which creature made certain tracks is a challenge, especially when extinct species are involved. This year Charles's team included two San men (who prefer to be called Bushmen) from a group of ten surviving 'senior trackers' in Namibia. They were able to confirm some of the interpretations and also found additional tracks and identified what made them.



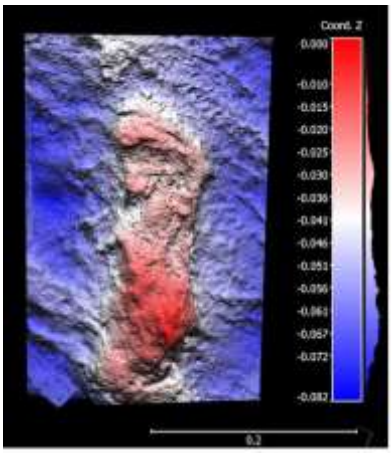
Between Buffalo Bay and Brenton-on-Sea there are dozens of human footprints running down a dune slope, providing the first evidence of *Homo sapiens* activity in the late Ice Age 90 000 years ago. Those prints fill a 71,000-year gap in the history of *Homo sapiens* between the 117 000-year-old tracks in Langebaan on the Cape west coast and 46 000-year-old evidence from a cave in Greece. Near Gericke Point are human prints, but clad in footwear, probably crude leather sandals. This is the first example showing that Middle Stone Age humans were capable of fashioning footwear.



Examples of fossilised palaeoart made by our ancestors include patterns (termed ammoglyphs) and a drawing of a stingray. Ammoglyphs are some of the oldest evidence on earth of human abstract expression. To date 17 sites of early (Pleistocene) hominin tracks of adults and children, probably made by *Homo sapiens*, have been found along the Cape in coastal aeolianite deposits (old cemented sand dunes).



Photogrammetry is used to record, measure and interpret the photographic images and patterns made during the field studies of the track surfaces. Photogrammetry produces digital data which can be used to create full-size replicas of the tracks, using either moulds or 3D printing. This means that the fossil tracks do not need to be removed from the site, unless they are severely threatened, either by imminent rock falls or wave erosion. However, moving fossil trackways usually necessitates large earth machinery and helicopters for transportation – and finding museums willing to house the specimens. One of the major concerns is how to protect and preserve South African fossil trackways from graffiti. Currently the Cape coast, especially the Robberg peninsula, represents a pristine area for these records of a bygone age.



Dr Charles Helm, a medical doctor, was born in Cape Town. He moved to Canada in 1986 and settled in Tumbler Ridge in north-eastern British Columbia in 1992, where he practised as a family physician, and is a Fellow of the College of Family Physicians of Canada. Following the discovery of Cretaceous dinosaur trackways near Tumbler Ridge by his eight-year-old son and a friend in 2000, he became a founding member of the Tumbler Ridge Museum in 2002, where he helped establish a palaeontology research centre that specialises in ichnology (the study of the fossilized tracks, trails, burrows and excavations made by animals). Since 2007 he has applied the palaeontological knowledge he acquired in Canada to South Africa on his annual field study trips to this country, documenting the wealth of Pleistocene fossil trackways that he and his research team have discovered along a 350 km stretch of the south Cape coastline. Dr Charles Helm has a PhD in geoscience and is a research associate with the African Centre for Coastal Palaeoscience at Nelson Mandela University. He is the author of nine books and more than 73 research articles.

Programme calendar

Use our website programme calendar to view our forthcoming events by day, week or month. The calendar is printable. After clicking on a specific event you can click to either invite a friend, RSVP, or copy the event and its details to your online or phone calendar.

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Vice Chair	Lorna van der Merwe	082-784-9903
Secretary	Beth Hackland	072-266-1821
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Outings	Beth Hackland	072-266-1821
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Website	Felicity (Flick) Grube	082-557-7779

Special interest groups

Chess	Frank Hollenberg	082-566-2964.
Computer basics	Peter Grube	083-381-5929
French conversation (full)	Merle Decot	084 581 7379
French for beginners	Ingrid James	076-689-5245
German	Doris Engelhardt	082 626 0212
Music (Monday Music Memos)	Peter Grube	083-381-5929
Poetry group	Chrissy Hay	083-648-0306
Science group	Henry Timme	078-877-5829

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