Appendix Epsilon: The Pavia Intellectual Line

Connecting brothers of Phi Kappa Psi Fraternity at Cornell University,
tracing their fraternal Big Brother/Little Brother line
to tri-Founder John Andrew Rea (1869)

John Andrew Rea, tri-founder of
Phi Kappa Psi at Cornell . . .
▽

. . . was advised by Andrew Dickson White,
President of Cornell . . .

. . . . who was lectured by, and referred Jack
Rea to, Washington Irving . . .

. . . and then through the Halle line, Appendix
Delta, to the University of Pavia . . .

. . . Pavia was elevated by the Carolingian
Emperor Lothair . . . ▽

. . . whose grandfather deposed the last
Lombardic king Desiderius . . .

. . . who ruled in succession to the founder of
his dynasty, Alboin . . .

. . . Alboin forcefully married Rosamund,
princess of the Gepids . . .

. . . Rosamund was daugther to Cunimund, last
king of the Gepids. . .

. . . the story of Cunimund's court was
preserved by Cassiodorus . . .
▽

. . . Cassiodorus succeeded Boethius as first
Minister to the Ostrogoths . . .

. . . Boethius was grandson of Emperor
Olybrius . . . ▷

**Below we present short biographies
of the Pavia intellectual line of
the Phi Kappa Psi Fraternity
at Cornell University.**

. . . Olybrius was nephew to Flavius
Maximus . . .

. . . Flavius Maximus was grandson to Sextus
Probus . .

. . . Sextus Probus was son-in-law and first
cousin to Quintus Olybrius . . . ▽

. . . Quintus Olybrius was the son of to Clodius
Celsinus Adelphus spouse to Faltonia Betitia
Proba . . .

. . . all of the above were Neo-Platonists in the
tradition of Plotinus . . .

. . . Plotimus was a student of Ammonius, he of
Numenius, he of Pythagoras, he of Pherecydes
. . .

. . . Pythagoras also studied under
Anaximenes, he under Anaximander,
he under Thales . . .
.
. . Thales studied in the school of Egyption
priest Petiese, who was invested by king
Psamtik . . .

. . . who served under Assyria king
Esarhaddon, successor to Sennencherib . . .

. . . successor to the two Sargons . . . □

"Who defends the House."

We begin with John "Jack" Andrew Rea, Cornell Class of 1869 and one of the three founders of the New York Alpha Chapter of the Phi Kappa Psi Fraternity at Cornell University:

❖ Jack only spent a year at Cornell, transferring in the summer before his Senior course of studies. Much of that year he spent founding the fraternity, and its predecessor, the Irving Literary Society. Jack was one (1) of nine (9) transfer students who were in the first Class of Cornellians. Three (3) of those nine (9) were the founders of Phi Kappa Psi. All three had Faculty advisors. Jack was assigned Andrew Dickson White, the first President of Cornell;

Mo Buchwalter was assigned visiting professor Goldwin Smith, the former Regis Professor of Modern History at Oxford University; and Joe Foraker was assigned visiting professor Theodore Dwight. These three (3) relationships, scholar-to-scholar in the Cornell tradition, form the tap root of the intellectual legacy within New York Alpha.

The founding of the Irving Literary Society was the common project of President White and his protégé Jack Rea; Jack then used the Irving as the vehicle to rush that first immortal Pledge Class of 1869, Phi Kappa Psi, *the* New York Alpha. The intellectual legacy of this relationship includes both the influences on Andrew Dickson White as a doctoral student (see Appendix Alpha and Gamma) and the role model proffered to Jack Rea by the Cornell president (this Appendix and Appendix Beta).

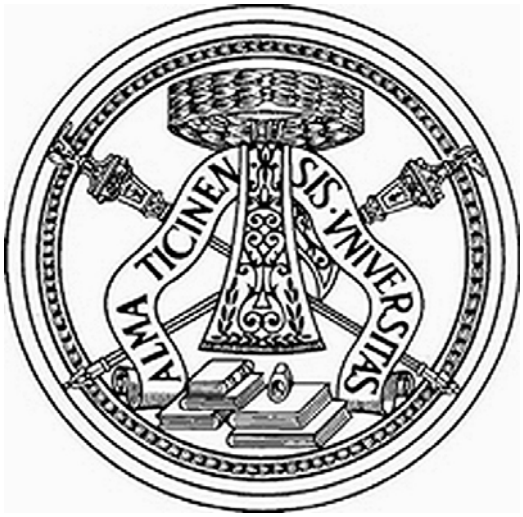
Andrew Dickson White was Faculty Advisor to John Andrew Rea (1869), founder of New York Alpha;

Andy White was lectured by, and looked to, author Washington Irving as one source of inspiration for the new Irving Literary Society, later to become the New York Alpha Chapter of the Phi Kappa Psi Fraternity at Cornell:

Washington Irving was influenced by the writing and works of Johann von Schiller, and this line – the Halle line – is recounted in Appendix Delta. Appendix Epsilon is an extension of Appendix Delta into the classical age, the age of most importance to a "Greek" organization such as the New York Alpha Chapter of the Phi Kappa Psi Fraternity at Cornell University.

At the base of the Halle line recounted in Appendix Delta lays the Italian University of Pavia, connected to the English ecclesiastical collegiate tradition through its alumnus Lafranc, Archbishop of Canterbury:

❖ The University of Pavia (Italian**:** *Università degli Studi di Pavia*, UNIPV) is a university located in Pavia**,** Lombardy**,** Italy. It was founded in 1361 and is organized in nine (9) Faculties. The University of Pavia is one of the oldest universities in Europe. An edict issued by King Lotarius quotes a higher education institution in Pavia as already established 825 A.D. This institution, mainly devoted to ecclesiastical and civil law as well as to divinity studies, was then elected as the prime educational centre for northern Italy. Enlarged and renovated by the Duke of Milan**,** Gian Galeazzo Visconti, it became the University of the Duchy, having been officially established as a studium generale by Emperor Charles IV in 1361.



University of Pavia

When the Holy Roman Emperor designated the University as a stadium generale of the Empire, the portion of Italy supporting the faculty – Lombardy – was connected politically and culturally with other regions important in the intellectual history of New York Alpha, Phi Kappa Psi, regions such as the Netherlands, which constituted the Empire's coast on the North Sea, and the German states which would produce the University system upon which Andrew Dickson White modeled Cornell University.

During the following centuries, even though passing through periods of both adversity and prosperity, the fame of the University of Pavia grew and not just in Italy. The continuous presence of learned men and scientists who wrote celebrated works and made important discoveries, such as Gerolamo Cardano, Alessandro Volta, Camillo Golgi, Ugo Foscolo, together with the distinguished educational record of the University, added to the good name of the institution. Private and public school residences contributed to increase and keep this fame alive during the centuries. The oldest residences, named Collegio Borromeo and Collegio Ghislieri, were built in the 16th century, and in more recent times others were founded through both public and private initiatives.

Nowadays, the University keeps on offering a wide variety of disciplinary and interdisciplinary teaching. Research is carried out in departments, institutes, clinics, centres and laboratories, in close association with public and private institutions, enterprises, and factories.

The Italian University of Pavia was elevated by the Frankish Lothair I, king of Italy and Holy Roman Emperor, grandson of Charlemagne:

❖ Lothair I (German: *Lothar*, French: *Lothaire*, Italian: *Lotario*) (795 – 29 September 855**),** king of Italy (818 – 855) and Holy Roman Emperor **(**840 – 855), was the eldest son of the emperor Louis the Pious and his wife Ermengarde of Hesbaye, daughter of Ingerman, duke of Hesbaye. He lead his full-brothers Pippin I of Aquitaine and Louis the German in revolt against their father on several occasions, in protest against his attempts to make their half-brother Charles the Bald a co-heir to the Frankish domains; the consequent struggles between the brothers would lead to the break up of the Empire, and would lay the foundation for the development of modern France and Germany. Little is known of his early life, which was probably passed at the court of his grandfather Charlemagne. Shortly after the accession of his father, he was sent to govern Bavaria. He first comes to historical attention in 817, when Louis the Pious drew up his *Ordinatio Imperii*.

Imperial Standard:
Holy Roman Empire

Lothair made the city of Pavia his Italian seat, and elevated its school to the status of a studium generale for the teaching of theology, and other subjects.

In this, Louis designated Lothar as his principal heir, to whom his younger brothers Pippin of Aquitaine and Louis the German, as well as his cousin Bernard of Italy, would be subject after the death of their father; he would also inherit their lands if they were to die childless. Lothair was then crowned joint emperor by his father at Aix-la-Chapelle. At the same time, Aquitaine and Bavaria were granted to his brothers Pippin and Louis respectively as subsidiary kingdoms. Following the murder of Bernard, King of Italy, by Louis the Pious, Lothair also received the Kingdom of Italy. In 821, he married Ermengarde (d. 851), daughter of Hugh, count of Tours. In 822, he assumed the government of Italy, and at Easter, 5 April 823, he was crowned emperor again by Pope Paschal I, this time at Rome.

In November 824, Lothair promulgated a statute concerning the relations of pope and emperor which reserved the supreme power to the secular

potentate, and he afterwards issued various ordinances for the good government of Italy.

On his return to his father's court his step-mother Judith won his consent to her plan for securing a kingdom for her son Charles, a scheme which was carried out in 829, when the young prince was given Alemannia as king. Lothair, however, soon changed his attitude and spent the succeeding decade in constant strife over the division of the Empire with his father. He was alternately master of the Empire, and banished and confined to Italy, at one time taking up arms in alliance with his brothers and at another fighting against them, whilst the bounds of his appointed kingdom were in turn extended and reduced.

The first rebellion began in 830. All three brothers fought their father, whom they deposed. In 831, he was reinstated and he deprived Lothair of his imperial title and gave Italy to the young Charles. The second rebellion was instigated by Angilbert II, Archbishop of Milan, in 833, and again Louis was deposed and reinstated the next year (834). Lothair, through the loyalty of the Lombards and later reconcilitions, retained Italy and the imperial position through all remaining divisions of the Empire by his father.

When Louis the Pious was dying in 840 C.E., he sent the imperial insignia to Lothar, who, disregarding the various partitions, claimed the whole of the Empire. Negotiations with his brother Louis the German and his half-brother Charles, both of whom armed to resist this claim, were followed by an alliance of the younger brothers against Lothair. A decisive battle was fought at Fontenay-en-Puisaye on 25 June 841, when, in spite of his and his allied nephew Pepin II of Aquitaine's personal gallantry, Lothair was defeated and fled to Aachen. With fresh troops he began a war of plunder, but the forces of his brothers were too strong for him, and taking with him such treasure as he could collect, he abandoned to them his capital. He met with the leaders of the *Stellinga* in Speyer and promised them his support in return for theirs, but Louis and then the native Saxon nobility put down the *Stellinga* in the next years.

Peace negotiations began, and in June 842 the brothers met on an island in the Saône, and agreed to an arrangement which developed, after much difficulty and delay, into the Treaty of Verdun signed in August 843. By this, Lothair received the imperial title as well as northern Italy and a long stretch of territory from the North Sea to the Mediterranean, essentially along the valleys of the Rhine and the Rhone. He soon left Italy to his eldest son, Louis, and remained in his new kingdom, engaging in alternate quarrels and reconciliations with his brothers and in futile efforts to defend his lands from the attacks of the Northmen (as Vikings were known in Frankish writings) and the Saracens.

In 855, he became seriously ill and, despairing of recovery, renounced the throne, divided his lands between his three sons, and on September 23, entered

the monastery of Prüm, where he died six days later. He was buried at Prüm, where his remains were found in 1860.

His kingdom was divided among his three sons — the eldest, Louis II, received Italy and the title of Emperor; the second, Lothair II, received Lotharingia; while the youngest, Charles, received Provence.

King Lothair, Holy Roman Emperor, above, was grandson of the king who married the daughter of Desiderius, last king of the Lombards, and then deposed him:

❖ Desiderius (also known as *Daufer* or *Dauferius*; *Didier* in French and *Desiderio* in Italian) was the last king of the Lombard Kingdom of northern Italy. He is chiefly known for his connection to Charlemagne, who married his daughter and conquered his realm. He was originally a royal officer, the *dux Langobardorum et comes stabuli*, "constable and duke of the Lombards," an office apparently similar to the contemporaneous Frankish office of *dux Francorum*. King Aistulf made him duke of Istria and Tuscany and he became king after the death of Aistulf in 756. At that time, Aistulf's predecessor, Ratchis, left his monastic retreat of Montecassino and tried to seize the kingdom, but Desiderius put his revolt down quickly with the support of Pope Stephen II.

A Shield of the Lombards

At his coronation, Desiderius promised to restore many lost papal towns to the Holy See, in return for the papacy's endorsement of his claim. Conflict with the Holy See under Pope Stephen III arose, for Stephen opposed Charlemagne's marriage to Desiderius' daughter. Desiderius ceased delivery of the towns after only a few.

Seeking, like his predecessors, to extend the Lombard power in Italy, he came into collision with the papacy and the southern Lombardic duchies. The duchy of Benevento and that of Spoleto were coaxed by Pope Stephen to commend themselves to the Franks and thus separate themselves again from monarchy. In 758, Duke Liutprand of Benevento attained his majority and rebelled. Desiderius defeated him and granted his duchy to one Arechis, tying the duchy more closely to Pavia than it had been since Grimoald's time. In that same year, Desiderius deposed Alboin of Spoleto and exercised himself the ducal powers there.

Stephen III opposed Charlemagne's marriage to Desiderius' daughter, Desiderata, in 768, but by his death in 772, he had made peace with the Lombards. The new pope, Adrian I, however, implored the aid of Charlemagne against him, for the marriage of dynasties was dissolved by Charlemagne's

repudiation of Desiderata in 771. Charles sent her back to her father. Moreover, Gerberga, the widow of Charlemagne's brother Carloman, sought the protection of the Lombard king after her husband's death in 771; and — probably in return for the insult Charlemagne had given to the Lombards by rejecting Desiderata — Desiderius recognised Gerberga's sons as lawful heirs, and attacked Pope Adrian for refusing to crown them kings and invaded the Pentapolis. The embassies of Adrian and Desiderius met at Thionville and Charlemagne favoured the pope's case.

Such was the position when Charlemagne and his uncle Bernard led troops across the Alps in 773. The Lombards were severely defeated at Mortara (Ara Mortis) and soon besieged in their capital of Ticinum, the modern Pavia. Desiderius' son Adelchis was raising an army at Verona, but the young prince was chased to the Adriatic littoral and fled to Constantinople when Charlemagne approached.

The siege lasted until June 774, when, in return for the lives of his soldiers and subjects, Desiderius surrendered and opened the gates. Desiderius was exiled to the abbey of Corbie, where he died, and his son Adelchis spent his entire life in futile attempts to recover his father's kingdom. Some sources state that the king and his family were banished to a monastery at Liège**,** Belgium. Desiderius died sometime around 786. The name Desiderius appears in the romances of the Carolingian period. Charlemagne took the title *rex Langobardorum*, the first time a Germanic king adopted the title of a kingdom he had conquered.

Discussion of Lombardic the kings of Italy (*rex Italiae* in Latin and *re d'Italia* in Italian) brings us to a general addressal of that title. It is a title adopted by many rulers of the Italian peninsula after the fall of the Roman Empire. Until 1870, however, no “King of Italy” ruled the whole peninsula, though some pretended to such authority.

After the deposition of Western Roman Emperor Romulus Augustulus in 476, Heruli leader Odoacer was appointed *dux Italiae* (Duke of Italy) by the reigning Eastern Roman Emperor Zeno. Later, he took the title of *rex* (*not*, as is sometimes said, *rex italiae*), though he always presented himself as an officer of the eastern government. In 483**,** Ostrogothic king Theodoric the Great defeated Odoacer, and set up a new dynasty of kings of Italy. Ostrogothic rule ended when Italy was reconquered by the Byzantine Empire in 552.

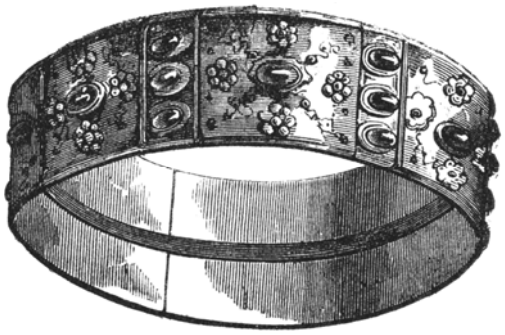
This state of affairs did not last long. In 568, the Lombards entered the peninsula and ventured to recreate a barbarian kingdom *in opposition to* the the Empire, establishing their authority over the whole of Italy (especially Lombardy) except the Exarchate of Ravenna and the duchies Rome**,** Venetia**,** Naples and the southernmost portions. For the next two centuries, Lombards and Byzantines fought for dominance in the peninsula.

In the 8th century, estrangment between the Italian Romans and the Byzantine Empire allowed the Lombards to capture the remaining Roman enclaves in northern Italy. However, in 774, they were defeated by the Franks under Charlemagne, who deposed their king and took up the title *rex Langobardorum* ("King of the Lombards"). Within the Frankish Empire, Italy was ruled by a *rex Italiae*. This Kingdom of Italy was integrated into the Holy Roman Empire by Otto I. All subsequent emperors used the title and most were crowned at some time in the ancient Lombard capital of Pavia before their imperial coronation in Rome.

In 1805, Napoleon Bonaparte endeavoured to attach the Lombard heritage to France again and was crowned with the Iron Crown of Lombardy in Pavia. The next year, the Emperor Francis II abdicated his Italian royal title. From the deposition of Napoleon (1814) until the Italian Unification (1861), there was no Italian monarch claiming the overarching title. The *Risorgimento* successfully established a dynasty, the House of Savoy, over the whole peninsula, uniting the kingdoms of Sardinia and the Two Sicilies. The monarchy was superseded by the Italian Republic (Italian: *Repubblica Italiana*) after a referendum was held in 1946.

King Cunimund, last Lombard king of Italy, above, succeeded in the line of Alboin, below, founding king of the Lombardic dynasty:

❖ Alboin or Alboïn (died 572 or 573) was king of the Lombards, and conqueror of Italy. He succeeded his father Audoin about 565.The Lombards were at that time dwelling in Noricum and Pannonia (the plain of eastern Austria south and east of the Danube, modern-day Slovenia and Istria). The Lombards had a Peace Treaty at the time Cunimund ascended the throne of the Gepids. At this time, the Lombards had established an alliance with the Avars, whom during the war occupied the lands of the Gepids. Cunimund forced his people to fight, and announced that if his people were able to overcome the Lombards, they would then remove the Avars from their land. Under the leadership of Alboin, the Lombards were victorious. The Lombards had defeated the Gepids, completing destruction. Alboin killed Cunimund, and fashioned his skull into a goblet, known as a scala.



The Iron Crown of the Lombards

The success of Alboin had spread so far, that it reached Rome. Rome sought out the help of Alboin to defeat the Goths. The Lombards were transported to Rome by way of sea, and much to the hope of the Romans, defeated the Goths. Alboin had defeated Totila, the king of the Goths. The Lombards returned to their homeland bearing riches and gifts for their people.

Alboin, after all his military success, was convinced that he could set out for Italy and lead his people in a migration. The Saxons supplied Alboin and his army with 20,000 men to fight. Alboin then gave Pannonia to the Huns under the condition that if the Lombards were to return they would receive the land immediately. Alboin first entered Venetia, and declared that his nephew Gisulf would be the duke of the land conquered. Gisulf demanded that he would need the Lombard people of his choice, which Alboin agreed to.

Alboin first arrived at the river Piave. Alboin proceeded to capture the cities of Vicenza, Verona, and the remaining cities of Venetia. He had captured all the cities but Padua, Monselice, and Mantua. After conquering Venetia, Alboin moved his army to Liguria. He took all the cities of Liguria, except those situated

on the shores. The city of Ticinum (Pavia), was the most difficult to take. The city lasted over three years before giving up after being besieged. In the end, Alboin had taken possession of everything as far as Tuscany, except Rome, Ravenna, and other fortified cities. Where the Lombards did meet with resistance, retribution was savage beyond anything Italy had experienced before. The bishops—who were virtually the leaders of the late antique Roman cities— fled, like the bishop of Milan, or parlayed with the barbarians for gentler treatment of their people.

The courageous resistance of Ticinum provoked the fury of Alboin; he vowed to slaughter all of its inhabitants regardless of age or sex. But as he marched through the gates, his horse inexplicably fell and expired. Whether from compassion or piety, Alboin recanted his vow and spared the city of the massacre. In 572, according to Paul the Deacon (Paulus Diaconus), the 8th century Lombard chronicler, Alboin fell a victim to the revenge of his wife Rosamund, the daughter of the king of the Gepids, whose skull Alboin had turned into a drinking cup (worn at his belt) and out of which he forced Rosamund to drink.

After Alboin ruled Italy for three and a half years, he was murdered by his wife. His wife, Rosemund, realized she should avenge the death of her father by murdering her husband. She formed a plan with the King's squire, Helmechis, who suggested using Peredeo, a strong man. Peredeo refused to help, and that night had relations with Rosemund whom he mistook for his dressing maid, with whom he usually had intercourse. After learning of this evil he committed, he agreed to slay the king. The next day, Rosemund ordered a great silence in the palace and bound the sword to Alboin's bed, because he was taking an afternoon nap. When Alboin awoke, he realized he would be murdered and reached for his sword, which he couldn't grab because Rosemund had bound it tightly to the bed. After attempting to defend him with a footstool, he was slain and was buried under a certain set of stairs in his palace, and the Lombard people were full of grief.

So Peredeo and the queen fled to the protection of the Byzantines at Ravenna. In these few years the Lombards had established themselves in the north of Italy (henceforth Lombardy). But they had little practice in governing large provinces. Lombard warlords (which Latin chroniclers called 'dukes') were established in all the strongholds and passes, and this arrangement became increasingly characteristic of the Lombard settlement. Their power extended tenuously across the Apennines into Liguria and Tuscany, and southwards to the outlying Lombard dukedoms of Spoleto and Benevento. The invaders failed to secure any maritime ports or any territory that was conveniently commanded from the sea, such as Ravenna. Local inhabitants fled into the marshes and lagoons, where Venice had its beginnings.

After his death and the short reign of his successor Cleph the Lombards remained for more than ten years without a king, ruled by the various dukes. The primary sources for the history of Alboin include Paul the Deacon, the Byzantine Procopius, and Andreas Agnellus (in his history of the church of Ravenna).

The Lombards (Latin *Langobardi*, whence the alternative names Langobards and Longobards) were a Germanic people originally from Northern Europe who settled in the valley of the Danube and from there invaded Byzantine Italy in 568 under the leadership of Alboin. They established a Kingdom of Italy which lasted until 774, when it was conquered by the Franks. Their influence on Italian political geography is plainly visible in the regional appellation Lombardy.

The fullest account of Lombard origins, history, and practices is the *Historia gentis Langobardorum* (*History of the Lombards*) of Paul the Deacon, written in the 8th century. Paul's chief source for Lombard origins, however, is the 7th-century *Origo Gentis Langobardorum* (*Origin of the People of the Lombards*).

The *Origo* tells the story of a small tribe called the *Winniler* dwelling on a Nordic island called *Scadanan*. (The *Codex Gothanus* writes that the Winniler first dwelt near a river called *Vindilicus* on the extreme boundary of Gaul.) The Winniler were split into three groups and one part left the native land to seek foreign fields. The reason for the exodus was probably overpopulation. The departing people were led by the brothers Ybor and Aio and their mother Gambara and arrived in the lands of *Scoringa*, perhaps the Baltic coast or the Bardengau on the banks of the Elbe. Scoringa was ruled by the Wandals, and their chieftains, the brothers Ambri and Assi, who granted the Winniler a choice between tribute or war. The Winniler were young and brave and refused to pay tribute, saying "It is better to maintain liberty by arms than to stain it by the payment of tribute." The Wandals prepared for war and consulted their god Godan, who answered that he would give the victory to those whom he would see first at sunrise. The Winniler were fewer in number and Gambara sought help from Frea, who advised that all Winniler women should tie their hair in front of their faces like beards and march in line with their husbands. So it came that Godan spotted the Winniler first, and asked, "Who are these long-beards?" and Frea replied, "My lord, thou hast given them the name, now give them also the victory." From that moment onwards, the Winniler were known as the *Langobarden* (Latinised and Italianised as *Lombards*).

When Paul the Deacon wrote the *Historia* between 787 and 796 he was a Catholic monk and devoted Christian. Therefore, he thought the pagan stories of his people "silly" and "laughable". Paul explained that the name "Langobarden" came from the length of their beards, that the Latin word *longus* meant *Lang* and *barba* meant *Bart*. A modern theory suggests that the name "Langobarden" comes from *Langbarðr*, a name of Odin. Priester states that when the Winniler changed their name to "Lombards", they also changed their old agricultural fertility cult to a cult of Odin, thus creating a conscious tribal tradition. Fröhlich

inverts the order of events in Priester and states that with the Odin cult, the Lombards grew their beards in resemblance of the Odin of tradition and their new name reflected this. Bruckner remarks that the name of the Lombards stands in close relation to the worship of Odin, who wore the epithet "the Long-bearded" or "the Grey-bearded", and that the Lombard given name *Ansegranus* ("he with the beard of the gods") shows that the Lombards had this idea of their chief deity.

From the combined testimony of Strabo (AD 20) and Tacitus (AD 117), the Lombards dwelt near the mouth of the Elbe shortly after the beginning of the Christian era, next to the Chauci. Strabo states that the Lombards dwelt on both sides of the Elbe. The German archaeologist Willi Wegewitz defined several Iron Age burial sites at the lower Elbe as *Langobardic*. The burial sites, are crematorial and are usually dated from the 6th century BC through the 3rd AD, so that a settlement breakoff seems unlikely. The lands of the lower Elbe fall into the zone of the Jastorf Culture and became Elbe-Germanic, differing from the lands between Rhine, Weser, and the North Sea. Archaeological finds show that the Lombards were an agricultural people.

The first mention of the Lombards occurred between AD 9 and 16, by the Roman court historian Velleius Paterculus, who accompanied a Roman expedition as prefect of the cavalry. Paterculus described the Lombards as "more fierce than ordinary German savagery." Tacitus counted the Lombards as a Suebian tribe, and subjects of Marobod the King of the Marcomanni. Marobod had made peace with the Romans, and that is why the Lombards were not part of the Germanic confederacy under Arminius at the battle of Teutonberger Wald in AD 9. In AD 17, war broke out between Arminius and Marobod. Tacitus records:

> Not only the Cheruscans and their confederates... took arms, but the Semnones and Langobards, both Suevian nations, revolted to him from the sovereignty of Marobod... The armies... were stimulated by reasons of their own, the Cheruscans and the Langobards fought for their ancient honor or their newly acquired independence. . .

In 47, a struggle ensued amongst the Cherusci and they expelled their new leader, the nephew of Arminius, from their country. The Lombards appear on the scene with sufficient power, it seems, to control the destiny of the tribe which, thirty-eight years before, had been the leader in the struggle for independence, for they restored the deposed leader to the sovereignty again. In the mid 2nd century, the Lombards also appear in the Rhineland. According to Ptolemy, the Suebic Lombards settled south of the Sugambri, but also remained at the Elbe, between the Chauci and the Suebi, which indicates a Lombard expansion. The *Codex Gothanus* also mentions *Patespruna* (Paderborn) in connections with the Lombards. By Cassius Dio, we are informed that just before the Marcomannic Wars, 6,000 Lombards and Ubii crossed the Danube and

invaded Pannonia. The barbarians were defeated, whereupon they desisted from their invasion and sent as ambassador to Aelius Basaus, who was then administering Pannonia, Ballomar, King of the Marcomanni. Peace was made and the barbarians returned to their homes, which in the case of the Lombards were the lands of the lower Elbe. At about this time, Tacitus, in his work *Germania* (AD 98), describes the Lombards as such:

> To the Langobardi, on the contrary, their scanty numbers are a distinction. Though surrounded by a host of most powerful tribes, they are safe, not by submitting, but by daring the perils of war.

From the 2nd century onwards, many of the Germanic tribes of the era of the Tiberian emperors started to unite into bigger tribal unions, resulting in the Franks, Alamanni, Bavarii, and Saxons. The reasons why the Lombards disappear, as such, from Roman history from 166–489 could be that they dwelt so deep into Inner Germania that they were only detectable when they appeared on the Danubian banks again, or that the Lombards were also subjected into a bigger tribal union, most probably the Saxons. It is, however, highly probable that when the bulk of the Lombards migrated, a considerable part remained behind and afterwards became absorbed by the Saxon tribes in the region, while the emigrants alone retained the name of Lombards. However, the *Codex Gothanus* writes that the Lombards were subjected by the Saxons around 300, but rose up against the Saxons with their king Agelmund. In the second half of the 4th century, the Lombards left their homes, probably due to bad harvests, and embarked on their migration.

The migration route of the Lombards, from their homeland to "Rugiland" in 489 encompassed several places: *Scoringa* (believed to be the their land on the Elbe shores), *Mauringa*, *Golanda*, *Anthaib*, *Banthaib*, and *Vurgundaib* (*Burgundaib*). According to the Cosmographer of Ravenna, Mauringa was the land east of the Elbe.

The crossing into Mauringa was very difficult, the Assipitti (Usipetes) denied them passage through their lands; a fight was arranged for the strongest man of each tribe, the Lombard was victorious, passage was granted, and the Lombards reached Mauringa. The first Lombard king, Agelmund, from the race of Guginger, ruled for thirty years.

The Lombards departed from Mauringa and reached Golanda. Schmidt thinks this was further east, perhaps on the right bank of the Oder. Schmidt considers that the name is the equivalent of Gotland and means simply "good land." This theory is highly plausible, Paul the Deacon mentions an episode of the Lombards crossing a river, and the Lombards could have reached *Rugiland* from the Upper Oder area via the Moravian Gate.

Moving out of Golanda, the Lombards passed through Anthaib and Banthaib until they reached Vurgundaib. Vurgundaib is believed to be the old lands of the Burgundes. In Vurgundaib, the Lombards were stormed in camp by "Bulgars" (probably Huns) and were defeated; King Agelmund was killed. Laimicho was raised to the kingship afterwards; he was in his youth and desired to avenge the slaughter of Agelmund.[The Lombards themselves were probably made subjects of the Huns after the defeat, but the Lombards rose up against them and defeated them with great slaughter. The victory gave the Lombards great booty and confidence, as they ". . . became bolder in undertaking the toils of war."

In 560 a new, energetic king emerged: Alboin, who defeated the neighbouring Gepidae, made them his subjects, and, in 566, married the daughter of their king Cunimund, Rosamund. In the spring of 568, Alboin led the Lombards, together with other Germanic tribes; (Bavarians, Gepidae, Saxons) and Bulgars, across the Julian Alps with a population of around 400,000 to 500,000, to invade northern Italy. The first important city to fall was *Forum Iulii* (Cividale del Friuli), in northeastern Italy, in 569. There, Alboin created the first Lombard duchy, which he entrusted to his nephew Gisulf. Soon Vicenza, Verona and Brescia fell into Germanic hands. In the summer of 569, the Lombards conquered the main Roman centre of northern Italy, Milan. The area was then recovering from the terrible Gothic Wars, and the small Byzantine army left for its defence could do almost nothing.

The Exarch sent to Italy by Emperor Justinian II, Longinus, could defend only coastal cities that could be supplied by the powerful Byzantine fleet. Pavia fell after a siege of three years, in 572, becoming the first capital city of the new Lombard kingdom of Italy. In the following years, the Lombards penetrated further south, conquering Tuscany and establishing two duchies, Spoleto and Benevento under Zotto, which soon became semi-independent and even outlasted the northern kingdom, surviving well into the 12th century. The Byzantines managed to retain control of the area of Ravenna and Rome, linked by a thin corridor running through Perugia.

When they entered Italy, some Lombards were and remained pagan, while some were Arian Christians. Hence they did not enjoy good relations with the Catholic Church. Gradually, they adopted Roman titles, names, and traditions, and partially converted to orthodoxy (7th century), not without a long series of religious and ethnic conflicts.

The whole Lombard territory was divided into 36 duchies, whose leaders settled in the main cities. The king ruled over them and administered the land through emissaries called *gastaldi*. This subdivision, however, together with the independent indocility of the duchies, deprived the kingdom of unity, making it weak even when compared to the Byzantines, especially after they began to recover from the initial invasion. This weakness became even more evident when

the Lombards had to face the increasing power of the Franks. In response to this problem, the kings tried to centralize power over time; but they lost control over Spoleto and Benevento definitively in the attempt.

Alboin was murdered in 572 in Verona by a plot led by his wife, who later fled to Ravenna. His successor, Cleph, was also assassinated, after a ruthless reign of 18 months. His death began an interregnum of years, the "Rule of the Dukes", during which the dukes did not elect any king, and which is regarded as a period of violence and disorder. In 584, threatened by a Frankish invasion, the dukes elected Cleph's son, Authari, king. In 589, he married Theodelinda, daughter of the Duke of Bavaria, Garibald I of Bavaria. The Catholic Theodelinda was a friend of Pope Gregory I and pushed for Christianization. In the mean time, Authari embarked on a policy of internal reconciliation and tried to reorganize royal administration. The dukes yielded half their estates for the maintenance of the king and his court in Pavia. On the foreign affairs side, Authari managed to thwart the dangerous alliance between the Byzantines and the Franks.

Authari died in 590. His successor was Agilulf, duke of Turin, who in 591, also married Theodelinda. He successfully fought the rebel dukes of Northern Italy, conquering Padua (601), Cremona and Mantua (603), and forcing the Exarch of Ravenna to pay a conspicuous tribute. Theodelinda reigned alone until 628, and was succeeded by Adaloald. Arioald, who had married Theodelinda's daughter Gundeberga, and head of the Arian opposition, later deposed Adaloald.

His successor was Rothari, regarded by many authorities as the most energetic of all Lombard kings. He extended his dominions, conquering Liguria in 643 and the remaining part of the Byzantine territories of thevinner Veneto, including the Roman city of *Opitergium* (Oderzo). Rothari also made the famous Edict bearing his name, which established the laws and the customs of his people in Latin: the edict did not apply to the tributaries of the Lombards, who could retain their own laws. Rothari's son Rodoald succeeded him in 652, still very young, and was killed by the Catholic party.

At the death of king Aripert in 661, the kingdom was split between his children Perctarit, who set his capital in Milan, and Godepert, who reigned from Pavia. Perctarit was overthrown by Grimoald, son of Gisulf, duke of Friuli and Benevento since 647. Perctarit fled to the Avars and then to the Franks. Grimoald managed to regain control over the duchies and deflected the late attempt of the Byzantine emperor Constans II to conquer southern Italy. He also defeated the Franks. At Grimoald's death in 671 Perctarit returned and promoted tolerance between Arians and Catholics, but he could not defeat the Arian party, led by Arachi, duke of Trento, who submitted only to his son, the filo-Catholic Cunipert.

Religious strife remained a source of struggle in the following years. The Lombard reign began to recover only with Liutprand the Lombard (king from

712), son of Ansprand and successor of the brutal Aripert II. He managed to regain a certain control over Spoleto and Benevento, and, taking advantage of the disagreements between the Pope and Byzantium concerning the reverence of icons, he annexed the Exarchate of Ravenna and the duchy of Rome. He also helped the Frankish marshal Charles Martel to drive back the Arabs. His successor Aistulf conquered Ravenna for the Lombards for the first time, but was subsequently defeated by the king of the Franks Pippin III, called by the Pope, and had to leave it. After the death of Aistulf, Ratchis tried once again to be king of the Lombardy but he was deposed in the same year.

After his defeat of Ratchis, the last Lombard to rule as king was Desiderius, duke of Tuscany, who managed to take Ravenna definitively, ending the Byzantine presence in Central Italy. He decided to reopen struggles against the Pope, who was supporting the dukes of Spoleto and Benevento against him, and entered Rome in 772, the first Lombard king to do so. But when Pope Hadrian I called for help from the powerful king Charlemagne, he was defeated at Susa and besieged in Pavia, while his son Adelchi had also to open the gates of Verona to Frankish troops. Desiderius surrendered in 774 and Charlemagne, in an utterly novel decision, took the title "King of the Lombards" as well. Before then the Germanic kingdoms had frequently conquered each other, but none had adopted the title of King of another people. Charlemagne took part of the Lombard territory to create the Papal States. The Lombardy region in Italy, which includes the cities of Brescia, Bergamo, Milan and the old capital Pavia, is a reminder of the presence of the Lombards.

Though the kingdom centred on Pavia in the north fell to Charlemagne, the Lombard-controlled territory to the south of the Papal States was never subjugated by Charlemagne or his descendants. In 774, Duke Arechis II of Benevento, whose duchy had only nominally been under royal authority, though certain kings had been effective at making their power known in the south, claimed that Benevento was the successor state of the kingdom. He tried to turn Benevento into a *secundum Ticinum*: a second Pavia. He tried to claim the kingship, but with no support and no chance of a coronation in Pavia.

Charlemagne came down with an army, and his son Louis the Pious sent men, to force the Beneventan duke to submit, but his submission and promises were never kept and Arechis and his successors were *de facto* independent. The Beneventan dukes took the title *princeps* (prince) instead of that of king.

The Lombards of southern Italy were thereafter in the anomalous position of holding land claimed by two empires: the Carolingian Empire to the north and west and the Byzantine Empire to the east. They typically made pledges and promises of tribute to the Carolingians, but effectively remained outside Frankish control. Benevento meanwhile grew to its greatest extent yet when it imposed a tribute on the Duchy of Naples, which was tenuously loyal to Byzantium and even conquered the Neapolitan city of Amalfi in 838. At the point in the reign of Sicard,

Lombard control covered most of southern Italy save the very south of Apulia and Calabria and Naples, with its nominally attached cities. It was during the ninth century that a strong Lombard presence became entrenched in formerly Greek Apulia. However, Sicard had opened up the south the invasive actions of the Saracens in his war with Andrew II of Naples and when he was assassinated in 839, Amalfi decalred independence and two factions fought for power in Benevento, crippling the principality and making it susceptible to external enemies.

The civil war lasted ten years and was ended only by a peace treaty imposed by the Emperor Louis II, the only Frankish king to exercise actual sovereignty over the Lombard states, in 849 which divided the kingdom into two states: the Principality of Benevento and the Principality of Salerno, with its capital at Salerno on the Tyrrhenian.

Andrew II of Naples hired Saracen mercenaries for his war with Sicard of Benevento in 836. Sicard responded with like. The Saracens initially concentrated their attacks on Sicily and Byzantine Italy, but soon Radelchis I of Benevento called in more mercenaries and they sacked Capua in 841. The ruins of that city are all that is left of "Old Capua" (Santa Maria Capua Vetere). Consequently, Landulf the Old founded the present-day Capua, "New Capua", on a nearby hill. The Lombard princes in general, however, were less inclined to ally with the Saracens than their Greek neighbours of Amalfi, Gaeta, Naples, and Sorrento. Guaifer of Salerno, however, briefly put himself under Muslim suzerainty.

A large Muslim force seized Bari, until then a Lombard gastaldate under the control of Pandenulf, in 847. Saracen incursions then proceeded northwards until finally the prince of Benevento, Adelchis called in the help of his suzerain, Louis II. Louis allied with the Byzantine emperor Basil I to expel the Arabs from Bari in 869. An Arab landing force was defeated by the emperor, after a brief imprisonment by Adelchis, in 871. Adelchis and Louis were at war for the rest of the latter's career. Adelchis regarded himself as the true successor of the Lombard kings and in that capacity he amended the *Edictum Rothari*, the last Lombard ruler to do so.

After Louis's death, Landulf II of Capua briefly flirted with a Saracen alliance, but Pope John VIII convinced him to break it off. Guaimar I of Salerno fought against the Saracens with Byzantine troops. Throughout this period the Lombard princes swung in allegiance from one party to another. Finally, towards 915, Pope John X managed to unite all the Christian princes of southern Itay against the Saracen establishments on the Garigliano river. That year, in the great Battle of the Garigliano, the Saracens were ousted from Italy.

The independent state at Salerno inspired the gastalds of Capua to move towards independence and, by the end of the century, they were styling

themselves "princes" and there was a third Lombard state. The Capuan and Beneventan states were united by Atenulf I of Capua in 900. He subsequently declared them to be in perpetual union and they were only separated in 982, on the death of Pandulf Ironhead. With all of the Lombard south under his control save Salerno, Atenulf felt safe in using the title *princeps gentis Langobardorum* ("prince of the Lombard people"), which Arechis II had begun using in 774. Among Atenulf's successors the principality was ruled jointly by fathers, sons, brothers, cousins, and uncles for the greater part of the century. Meanwhile, the prince Gisulf I of Salerno began using the title *Langobardorum gentis princeps* around mid-century, but the ideal of a united Lombard principality was only realised in December 977, when Gisulf died and his domains were inherited by Pandulf Ironhead, who temporarily held almost all Italy south of Rome and brought the Lombards into alliance with the Holy Roman Empire. His territories were divided upon his death.

Landulf the Red of Benevento and Capua tried to conquer the principality of Salerno with the help of John III of Naples, but with the aid of Mastalus I of Amalfi Gisulf repulsed him. The rulers of Benevento and Capua made several attempts on Byzantine Apulia at this time, but in late century the Byzantines, under the stiff rule of Basil II, gained ground on the Lombards.

The principle source for the history of the Lombard principalities in this period is the *Chronicon Salernitanum*, composed late in the century at Salerno.

The diminished Beneventan principality soon lost its independence to the papacy and declined in importance until it was gobbled up by in the Norman conquest of southern Italy, who, first called in by the Lombards to fight the Byzantines for control of Apulia and Calabria (under the likes of Melus of Bari and Arduin, among others), had become rivals for hegemony in the south. The Salernitan principality experienced a golden age under Guaimar III and Guaimar IV, but under Gisulf II, the principality shrunk to insignificance and fell in 1078 to the Robert Guiscard, who had married Gisulf's sister Sichelgaita. The Capua principality was hotly contested during the reign of the hated Pandulf IV, the *Wolf of the Abruzzi*, and, under his son, it fell, almost without contest, to the Norman Richard Drengot (1058). The Capuans revolted against Norman rule in 1091, expelling Richard's grandson Richard II and setting up one Lando IV.

Capua was again put under Norman rule by the Siege of Capua of 1098 and the city quickly declined in importance under a series of ineffectual Norman rulers. The independent status of these Lombard states is generally attested by the ability of their rulers to switch suzerains at will. Often the legal vassal of pope or emperor (either Byzantine or Holy Roman), they were the real power-brokers in the south until their erstwhile allies, the Normans, rose to preeminence. Certainly the Lombards regarded the Normans as barbarians and the Byzantines as oppressors. Regarding their own civilisation as superior, the Lombards did indeed provide the environment for the illustrious Schola Medica Salernitana.

The Lombard kings can be traced back as early as circa 380 and thus to the beginning of the Great Migration. Kingship developed amongst the Germanic peoples when the unity of a single military command was found necessary. Schmidt believed that the Germanic tribes were divided according to cantons and that the earliest government was a general assembly that selected the chiefs of the cantons and the war leaders from the cantons (in times of war). All such figures were probably selected from a caste of nobility. As a result of wars of their wanderings, royal power developed such that the king became the representative of the people; but the influence of the people upon the government did not fully disappear. Paul the Deacon gives an account of the Lombard tribal structure during the migration:

> . . . in order that they might increase the number of their warriors, confer liberty upon many whom they deliver from the yoke of bondage, and that the freedom of these may be regarded as established, they confirm it in their accustomed way by an arrow, uttering certain words of their country in confirmation of the fact.

Complete emancipation appears to have been granted only among the Franks and the Lombards.

Lombard society was divided into classes comparable to those found in the other Germanic successor states of Rome: Frankish Gaul and Visigothic Spain. Most basically, there was a noble class, a class of free persons beneath them, a class of unfree non-slaves (serfs), and finally slaves. The aristocracy itself was poorer, more urbanised, and less landed than elsewhere. Aside from the richest and most powerful of the dukes and the king himself, Lombard noblemen tended to live in cities (unlike their Frankish counterparts) and hold little more than twice as much in land as the merchant class (a far cry from the provincial Frankish aristocrat who held a vast swathe of land hundreds of times larger than the nearest man beneath him). The aristocracy by the eighth century was highly dependent on the king for means of income related especially to judicial duties: many Lombard nobles are referred in contemporary documents as *iudices* (judges) even when their offices had important military and legislative functions as well.

The freemen of the Lombard kingdom were far more numerous than in Frankland, especially in the eighth century, when they are almost invisible in the surviving documentary evidence for the latter. Smallholders, owner-cultivators, and rentiers are the most numerous types of person in surviving diplomata for the Lombard kingdom. They may have owned more than half of the land in Lombard Italy. The freemen were *exercitales* and *viri devoti*, that is, soldiers and "devoted men" (a military term like "retainers"); they formed the levy of the Lombard army and they were, if infrequently, sometimes called to serve, though this seems not to have been their preference. The small landed class, however, lacked the political influence necessary with the king (and the dukes) to control the politics

and legislation of the kingdom. The aristocracy was more thoroughly powerful politically if not economically in Italy than in contemporary Gaul and Spain.

The urbanisation of Lombard Italy was characterised by the *città ad isole* (or "city as islands"). It appears from archaeology that the great cities of Lombard Italy — Pavia, Lucca, Siena, Arezzo, Milan — were themselves formed of very minute islands of urbanisation within the old Roman city walls. The cities of the Roman Empire had been partially destroyed in the series wars of the fifth and sixth centuries. Many sectors were left in ruins and ancient monuments became fields of grass used as pastures for animals, thus the Roman Forum became the *campo vaccinio*: the field of cows. The portions of the cities which remained intact were small and modest and contained a cathedral or major church (often sumptuously decorated) and a few public buildings and townhomes of the aristocracy. Few buildings of importance were stone, most were wood. In the end, the inhabited parts of the cities were separated from one another by stretches of pasture even within the city walls.

The earliest indications of Lombard religion show that they originally worshipped the Germanic gods of the Vanir pantheon while in Scandinavia. After settling along the Baltic coast, through contact with other Germans they adopted the cult of the Aesir gods, a shift which represented a cultural change from an agricultural society into a warrior society.

After their migration into Pannonia, the Lombards had contact with the Iranian Sarmatians. From these people they borrowed a long-lived custom once of religious symbolism. A long pole surmounted by the figure of a bird, usually a dove, derived from the standards used in battle, was placed by the family in the ground the home of a man who had died far afield in war and who could not be brought home for funeral and burial. Usually the bird was oriented so as to point in the direction of the suspected site of the warrior's death.

While still in Pannonia, the Lombards were first touched by Christianity, but only touched: their conversion and Christianisation was largely nominal and far from complete. During the reign of Wacho, they were Roman Catholics allied with the Byzantine Empire, but Alboin converted to Arianism as an ally of the Ostrogoths and invaded Italy. All these Christian conversions only affected, for the most part, the aristocracy; for the common people remained pagan.

In Italy, the Lombards were intensively Christianised and the pressure to convert to Catholicism was great. With the Bavarian queen Theodelinda, a Catholic, the monarchy was brought under heavy Catholic influence. After an initial support for the Three Chapters, Theodelinda remained a close contact and supporter of Pope Gregory I. In 603, Adaloald, the heir to the throne, received a Catholic baptism. During the next century, Arianism and paganism continued to hold out in Austria (the northeast of Italy) and the Duchy of Benevento. A succession of Arian kings were militarily aggressive and presented a threat to the

Papacy in Rome. In the seventh century, the nominally Christian aristocracy of Benevento was still practising pagan rituals, such as sacrifices in "sacred" woods. By the end of the reign of Cunincpert, however, the Lombards were more or less completely Catholicised. Under Liutprand, the Catholicism became real as the king sought to justify his title *rex totius Italiae* by uniting the south of the peninsula with the north and bringing together his Italo-Roman subjects and his Germanic into one Catholic state.

The Duchy and eventually Principality of Benevento in southern Italy developed a unique Christian rite in the seventh and eighth centuries. The Beneventan rite is more closely related to the liturgy of the Ambrosian rite than the Roman rite. The Beneventan rite has not survived in its complete form, although most of the principal feasts and several feasts of local significance are extant. The Beneventan rite appears to have been less complete, less systematic, and more liturgically flexible than the Roman rite.

Characteristic of this rite was the Beneventan chant, a Lombard-influenced chant which bore similarities to the Ambrosian chant of Lombard Milan. Beneventan chant is largely defined by its role in the liturgy of the Beneventan rite; many Beneventan chants were assigned multiple roles when inserted into Gregorian chantbooks, appearing variously as antiphons, offertories, and communions, for example. It was eventually supplanted by the Gregorian chant in the eleventh century.

The chief centre of Beneventan chant was Montecassino, one of the first and greatest abbeys of Western monasticism. Gisulf II of Benevento had donated a large swathe of land to Montecassino in 744 and that became the basis for an important state, the *Terra Sancti Benedicti*, which was a subject only to Rome. The Cassinese influence on Christianity in southern Italy was immense. Montecassino was also the starting point for another characteristic of Beneventan monasticism: the use of the distinct Beneventan script, a clear, angular scrip derived from the Roman cursive as used by the Lombards.

During their nomadic phase, the Lombards created little in the way of art which was not easily carried with them, like arms and jewellery. Though relatively little of this has survived, it bears resemblance to the similar endeavours of other Germanic tribes of northern and central Europe from the same era.

The first major modifications to the Germanic style of the Lombards came in Pannonia and especially in Italy, under the influence of local, Byzantine, and Christian styles. The conversions from nomadism and paganism to settlement and Christianity also opened up new arenas of artistic expression, such as architecture (especially churches) and its accompanying decorative arts (such as frescoes).

Few Lombard buildings have survived. Most have been lost, rebuilt, or renovated at some point and so preserve little of their original Lombard structure. Lombard architecture has been well-studied in the twentieth century, and Arthur Kingsley Porter's four-volume *Lombard Architecture* (1919) is a "monument of illustrated history."

The small Oratorio di Santa Maria in Valle in Cividale del Friuli is probably one of the oldest preserved pieces of Lombard architecture, as Cividale was the first Lombard city in Italy. Parts of Lombard constructions have been preserved in Pavia (San Pietro in Ciel d'Oro) and Monza (cathedral). The *Basilic autariana* in Fara Gera d'Adda near Bergamo and the church of San Salvatore in Brescia also have Lombard elements. All these building are in northern Italy (Langobardia major), but by far the best-preserved Lombard structure is in southern Italy (Langobardia minor). The Church of Santa Sofia in Benevento was erected in 760 by Duke Arechis II. It preserves Lombard frescoes on the walls and even Lombard capitals on the columns.

Through the impulse given by the Catholic monarchs like Theodelinda, Liutprand, and Desiderius to te foundation of monasteries to further their political control, Lombard architecture flourished. Bobbio Abbey was founded during this time.

Some of the late Lombard structures of the ninth and tenth century have been found to contain elements of style associated with Romanesque architecture and have been so dubbed "first Romanesque". These edifices are considered, along with some similar buildings in southern France and Catalonia, to mark a transitory phase between the Pre-Romanesque and full-fledged Romanesque.

Alboin, first king of the Lombards in Italy, above, conquered the last Gepid king of Italy, Cunimund, and forcefully married his daughter, the lovely Rosamund, below:

❖ The fair Princess Rosamund, daughter of the defeated Gepid king Cunimund, was forced to marry Alboin, king of the Lombards after the decisive battle in north Italy during the Dark Ages. There are two versions of the story from this point. Rosamund then either murdered Alboin in revenge for him making her drink wine from a cup carved from her father's skull, or happily joined in drinking from the skull with Alboin but poisoned him because she was an evil woman intent on seizing the Lombard throne for herself.

She becomes important not so much for her influence over Alboin—which was complete, for she killed him—but rather for her importance to the brotherhood in the 1890s, after New York Alpha's second founding in 1885.

Rosamund, "second lady" of Phi Kappa Psi at Cornell, would not live 'under the skull' with a 'wily goat'.

As Mary Shelley was to the first generation of New York Alphans, Rosamund was to the second generation. The ancient Princess of the Gepids was offered to the brotherhood by Victorian arts and letters, a result of the Romantic movement Washington Irving brought to pass. She became their Chapter diva.

The New York Alpha Chapter membership prior to, and then after, the busting out at the creation of the Chi Chapter of Psi Upsilon was markedly different. What the men aspired to in 1869 they became in 1885, but the membership changed in the process. The house prior to 1885 produced the first Cornellian expelled for cheating; the house after 1885 produced a Chairman of the Cornell Physics Department and the first Cornell Electrical Engineer and the Professor of Electrical Engineering at Cornell. The refounding allowed for a break, and a rushing focus on a very narrow band of excellence at the University. For the next twenty years, it would be an diverse and eccentric Chapter, with

artists and engineers breaking bread together at the Gargoyle House on College Avenue. And it was the artistes that brought Rosamund to our ranks.

There was an engraving in the Gargoyle House library of Rosamund mourning her father, by cradling his skull-turned-to-cup by her husband king Alboin. The illustration had been clipped from a book at the Cornell Library (!), and tacked to the Library wall as a joke for late-night study inspiration. The Chapter motto, “Under the Skull and Wily Goat” was penciled on the illustration. It soon became much more.

This second engraving to inspire New York Alpha was of Rosamund, drawn by Anthony Frederick Augustus Sandys (1832-1904), an artist of the Arts & Crafts movement in England. When the artist Millais produced his picture Sir Isumbras at the Ford, with the knight and two children seated on a somewhat oversized horse, Frederick Sandys, then a young man of twenty (25), gained instant fame by drawing a caricature, showing Millais as the knight and Rossetti and Holman Hunt as the children, sitting on a donkey branded 'J.R.' for John Ruskin. This picture so impressed Rossetti, that he introduced the younger man into his circle, and they became close friends for many years.

Frederick Sandys painted oils in the Pre-Raphaelite style, his work being characterised by quality of draughtsmanship and a penchant for the femme fatales, such as Princess Rosamund. Often the people in his pictures have a 'Sandys sneer', which occurs even in allegorical pictures such as Spring, now in the Ashmolean Museum at Oxford University. As well as painting, Frederick Sandys gained an enormous reputation as an illustrator of books and magazines during the 1860s, despite producing relatively few drawings, only twenty-five (25) in total. Like the other Pre-Raphaelites, he treated each illustration as a major artwork. With an unsurpassed control of line, Sandys, along with Millais, is deemed the most successful of the group in woodcut illustration.

Sandys: gave life to “the Queen”, Rosamund

Sandys's sister Emma Sandys was also an artist, sending works to the Royal Academy in the late 1860s and early 1870s, just as New York Alpha was approaching its second founding. Pictures by Frederick Sandys include *Medea*

and *Morgan le Fay* in the Birmingham City Art Gallery, *Helen of Troy* in the Manchester City Art Gallery and *Spring* in the Ashmolean Museum, Oxford. In the Norwich Museum, there is a collection of several portraits by Sandys, and one large outdoors scene called *Autumn*. His Mary Magdalene housed a museum in Delaware. *Rosamund, Queen of the Lombards*, the illustration tacked on to the wall of the Chapter library of the Gargoyle House, is one of Sandys most striking illustrations. It combines Sandys' love of detail and drama and shows his ability to sum up the mood or events of a story by focusing on one figure, here the tragic figure of Queen Rosamund.

Sandys' illustration accompanies a version of the story in which Rosamund is the tragic heroine, although it is easy to imagne that Sandys himself would have preferred the other version in view of his other works such as 'Medea' and 'Morgan Le Fay'! Rather than show a specific event he sums up the mood of the tale by focusing on the mournful figure of Rosamund who clasps the skull. Slumped on a bed beyond lies Alboin, an overturned goblet beside him. The scene is full of supposedly 'Medieval' objects and demonstrates the Victorian love for all things Gothic.

The drawing was tacked to the wall by Phi Kappa Psi brother Harry Falkenau (1886), who was in the first class of the refounding in 1885. As a senior, Harry pushed to have Algernon Charles Swinburne's play*, Rosamund, Queen of the Lombards: A Tragedy*, performed by the pledges before the brotherhood, during the week before initiation. This was a bizarre development within Phi Kappa Psi, something probably more suited for Skull & Bones at Yale College, rather than a Cornell fraternity of the 1880s and 1890s.

Swinburne: the beginnings of thespian 'Hell Week' in the 1880s

You see, the playwright of *Rosamund*, *Queen* Algernon C. Swinburne (Apr. 5, 1837 – Apr. 10, 1909) was a Victorian era English poet. His poetry was highly controversial in its day, much of it containing recurring themes of sadomasochism, death-wish, lesbianism and irreligion.

Swinburne was born at in London**.** He was the eldest of six (6) children and born to Captain (later Admiral) Charles Henry Swinburne and Lady Jane

Hamilton Ashburnham. Through his mother, he descended from the Hanoverian earls Ashburnham. He grew up near East Dene on the Isle of Wight and attended Eton College (1849-53), where he first started writing poetry, and then Balliol College, Oxford (1856-60) with a brief hiatus when he was rusticated[1] from the university in 1859, returning in May 1860. At university he associated with the Pre-Raphaelites and counted among his best friends Dante Gabriel Rossetti. After university he lived in London and started an active writing career.

Eton College, from which Swinburne 'prepped' for Oxford.

His poetic works includes: *Atalanta in Calydon* (1865), *Poems and Ballads I* (1866), *Songs before Sunrise* (1871), *Poems and Ballads II*, (1878) *Tristram of Lyonesse* (1882), *Poems and Ballads III* (1889), and the novel *Lesbia Brandon* (published posthumously). *Poems and Ballads I* caused a sensation when it was first published, especially the poems written in homage of Sappho of Lesbos such as "Anactoria" and "Sapphics". Other poems in this volume such as "The Leper," "Laus Veneris," and "St Dorothy" evoke a Victorian fascination with the Middle Ages, and are explicitly medieval in style, tone and construction. Also featured in this volume are "Hymn to Proserpine", "The Triumph of Time" and "Dolores (Notre-Dame des Sept Douleurs)".

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[1] rus·ti·cate
v. rus·ti·cat·ed, rus·ti·cat·ing, rus·ti·cates
v.intr.
To go to or live in the country.
v.tr.
1. To send to the country.
2. *Chiefly British* To suspend (a student) from a university.
3. To cut or shape (masonry blocks) so as to create a bold textured look, often by beveling the edges to form deep-set joints while leaving the central face rough-hewn or carved with various pointed or channeled patterns.

Swinburne was an alcoholic and algolagniac,[2] and a highly excitable character. His health suffered as a result, and in 1879 at the age of forty-two (42) he had a mental and physical breakdown and was taken into care by his friend Theodore Watts,[3] who looked after him for the rest of his life in Putney. Thereafter he lost his youthful rebelliousness and developed into a figure of social respectability. He died in 1909 at the age of 72 and was buried at Bonchurch on the Isle of Wight.

Swinburne is considered a *decadent* poet, although he perhaps professed to more vice than he actually indulged in, a fact which Oscar Wilde famously and acerbically commented upon, stating that Swinburne was

> "a braggart in matters of vice, who had done everything he could to convince his fellow citizens of his homosexuality and bestiality without being in the slightest degree a homosexual or a bestializer."

It was Swinburne's misfortune that the two works, published when he was nearly thirty (30), soon established him as England's premier poet, the successor to Alfred, Lord Tennyson and Robert Browning. This was a position he held in the popular mind until his death, but sophisticated critics like A. E. Housman felt, rightly or wrongly, that the job of being one of England's very greatest poets was beyond him. Swinburne may have felt this way himself. He was a highly intelligent man and in later life a much-respected critic, and he himself believed that the older a man was, the more cynical and less trustworthy he became. This of course created problems for him as he aged.

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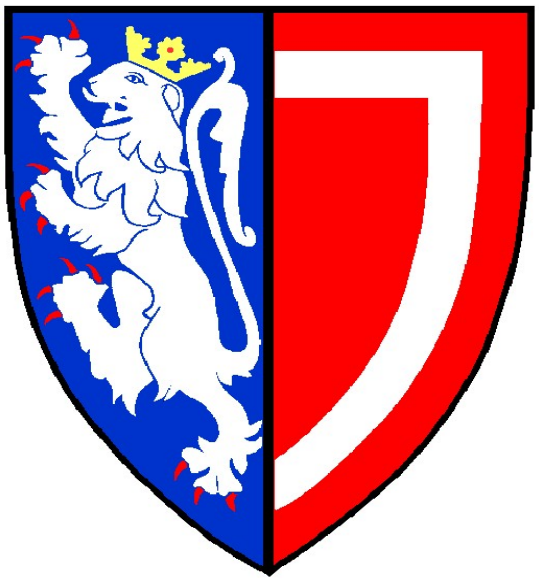
[2] Algolagnia (from the Greek άλγος, *algos*, "pain", and λαγνεία, *lagnia*, "lust") is a sexual tendency which is defined by deriving sexual pleasure and stimulation from physical pain, particularly involving an erogenous zone. Most current research suggests it has a fully biological basis, as it is proven that pain, just like sensorial pleasures such as sexual contact and sweet foods, causes the release of endorphins, the chemicals that induce pleasure. Furthermore, studies conducted indicate differences in how the brains of those with algolagnia interpret nerve input.

[3] Theodore Watts-Dunton (Oct. 12, 1832 – June 4, 1914) was an English critic and poet. He is now best remembered as the friend and minder of Algernon Charles Swinburne, whom he rescued from alcoholism.

Swinburne's mastery of vocabulary, rhyme and metre arguably put him among the most talented English language poets in history, although he has also been criticized for his florid style and word choices that only fit the rhyme scheme rather than contributing to the meaning of the piece. He is the virtual star of the third volume of George Saintsbury's famous *History of English Prosody*, and A. E. Housman, a more measured and even somewhat hostile critic, devoted paragraphs of praise to his rhyming ability.

Swinburne's work was once quite popular among undergraduates at Oxford and Cambridge, though today it has largely gone out of fashion. This largely mirrors the popular and academic consensus regarding his work as well, although his *Poems and Ballads, First Series* and his *Atalanta in Calydon* have never been out of critical favor.



Balliol College, Oxford "rusticated" Swiburne for supporting the attempted assassination of Napoleon III

After the first *Poems and Ballads*, Swinburne's later poetry is devoted more to philosophy and politics (notably, in favour of the unification of Italy, particularly in the volume Songs before Sunrise). He does not stop writing love poetry entirely, but the content is much less shocking. His versification, and especially his rhyming technique, remain in top form to the end.

T. S. Eliot, reading Swinburne's essays on the Shakespearean and Jonsonian dramatists in *The Contemporaries of Shakespeare* and *The Age of Shakespeare* and Swinburne's books on Shakespeare and Jonson, found that as a poet writing notes on poets, he had mastered his material and was "a more reliable guide to them than Hazlitt, Coleridge, or Lamb," Swinburne's three Romantic predecessors, though he characterized Swinburne's prose as

> "the tumultuous outcry of adjectives, the headstrong rush of undisciplined sentences, are the index to the impatience and perhaps laziness of a disorderly mind."

This is the playwright whose work ended up in the festivities leading up to Phi Kappa Psi's initiation, the pledges performing *Rosamund, Queen of the Lombards: A Tragedy* and, in the alternative, Nathaniel Parker Willis' *Bianca*

Visconti in off years. After the move from the Chapter's quarters in the Piano Box to Old Three Twelve in 1915, the performance of the skits trailed off. Rosamund, remained however, at least up through the 1990s in the form of "the Queen" during "the Queen's Ceremony".

Rosamund was the last of the Gepid pretenders to the Italian throne. Of all the main Germanic peoples of the *Völkerwanderung* Era, the Gepids remain the most elusive to history. Unlike many of their contemporaries, they never succeeded in creating their own state.

The Gepids first appeared in the Roman World when they accompanied the Goths in an invasion of Dacia after 260 C.E., but even after the province was abandoned by Rome, a decade later, they did not take possession of the territory they won. The very name Gepid is probably from 'Gepanta' meaning 'sluggish' or 'slow', and they had a reputation amongst the Goths of being lazy.

They settled, instead, east of the River Tisza in what we would later call "Transylvania", a marchland territory of the Holy Roman Empire, buffering Europe from the Islamic threat from Istanbul. The Gepids were first subjugated first by the Ostrogoths, then, along with them, by the Huns in 375 C.E. The Gepids provided Attila with the largest of all his 'allied' contingents and their king, Ardaric, was the most favoured of all the great Hun's vassals. They proved staunch allies and formed the right wing of the Hunnic army at the Battle of Châlons in 451, where the combined Franco-Roman army turned back Attila at the point in which he could have turned Europe into an Asian dependency.

But after Attila's death, it was the Gepids, still led by Ardaric, who led the alliance of rebel Germans and Sarmatians, which overthrew Hunnic domination at the battle of the Nedao in 454 C.E.. It was this victory which provided the Gepids with a homeland in the eastern Carpathians, now as allies of Rome. Their old enmity with the Ostrogoths continued, however, and Theodoric drove them out in 504 C.E. Only in 537 C.E., with the Goths distracted by the wars against the Byzantine emperor Justinian, did they settle around Sirmium in the Danube Valley.

In 546 C.E., the Romans employed their Lombard allies, under Alboin, to drive the Gepids out of this strategically important region and at the battle of Asfeld in 552 C.E. The Gepids were crushed, and Rosamund was wed to Alboin. What was left of Gepid power and autonomy was wiped out in 567 by the Avars, who had succeeded the Huns as the latest menace to Europe from the Asiatic steppes.

The Gepids were an East Germanic tribe closely related to the Goths. According to the 6th century Gothic historian Jordanes, they were originally a sub-tribe of the Gothic people. The legend Jordanes recounts says that when the Goths crossed from Scandinavia under their ancient king Berig, they arrived at

the mouth of the Vistula in modern-day Poland in three (3) ships. The third ship was the slowest, so the other Goths referred to the descendants of those on it as the "Gepanta" or 'sluggish ones'. This is, according to Jordanes, the origin of the name "Gepid".

The Gepids certainly seem to have lived on the Vistula near the Goths in the first and second centuries of the common era. And like the Goths, they found their way down the rivers of central Europe and settled east of the River Tisza in Hungary. They raided the Roman Empire several times in the 3rd century and fought a series of wars against the Ostrogoths, Visigoths and Burgundians. But after 370 C.E., along with the Ostrogoths and several other tribes of the region, they fell under the domination of the Huns.

Their greatest king was Ardaric, who ruled the tribe in the years of the Hunnic domination. He was a trusted and loyal lieutenant of Attila, and the Gepids formed the right wing of Attila's army at the Battle of Chalons in 451 C.E. After Attila's death, Ardaric led the rebellion of several Germanic and Indo-Iranian subject tribes against Attila's son, Ellac. This war reached its climax at the battle of the Nedao River in 454 C.E., where the rebel tribes defeated the Huns and their remaining allies and won their freedom.

The victory gave the Gepids new power and territory, making them a force to be reckoned with. The Eastern Empire agreed to a treaty with them and the Ostrogoths found their old rivals more troublesome than ever. In 469 C.E., an alliance of Gepids, Rugians, Skirians and some Eastern Roman troops met the Ostrogoths in battle on the River Bolia, but were defeated. This did not seriously reduce their power however and in 471 C.E. they captured the city of Sirmium.

This placed them in control of the approaches to northern Italy, so when Theodoric led his people against Odoacer's Italian kingdom, he was forced to pass through Gepid territory. The two rival tribes met in battle once again and the first Ostrogoth assault failed, but then Theodoric himself led a charge and the Gepids were defeated.

Once the Ostrogoths had passed into Italy, the Gepids reasserted themselves, retaking Sirmium, and remained a threat to the northern borders of Theodoric's new Italian Ostrogothic kingdom. Under Thraustila and his son Trarasich they consolidated their control of the western Balkans until they were attacked by one of Theodoric's generals, Pitzia, and defeated, with Sirmium being occupied by the victorious Ostrogoths. Sirmium was later retaken by the Gepid king, Elemund, who took advantage of the Goths' desperate wars in Italy against the East Roman generals Belisarius and Narses.

But as the Ostrogothic threat diminished a new one grew. The Lombards arrived in northern Pannonia, conquered the Herulians and were soon attacking the Gepids with the aid of the Eastern Emperor. From 546 to 567 C.E., the two

tribes fought a series of bitter wars. These ended when the Lombards arraged with the Avars — a newly arrived tribe of steppe nomads to the east of the Gepids — to attack their common enemy simultaneously. The famous Lombardic king Albion killed the Gepid king Kunimund and between them the Avars and Lombards destroyed the Gepidic kingdom.

The Gepids survived as subjects of the Avars and are last mentioned as a separate people in the 9th century.

Queen Rosamund, above was daughter to Cunimund, last king of the Gepids, below:

❖ Cunimund (d. 567) was a king of the Gepids in the 6th century. Cunimund was the last of the Gepid kings and led them in their defeat by the Lombards in 567. The Gepids had held the important city of Sirmium (now Sremska Mitrovica, Serbia) since 536, after taking it from the Byzantine emperor Justinian I. By 549, the Gepids were at war with the Lombards. The Lombards requested and received help from Justinian I in the form of 15,000 troops. This was a relatively large force, and the Gepids quickly came to a truce with the Lombards, but only while the Byzantine soldiers were in the area. There was, more or less, a long feud between the peoples of Turisind and Audoin, then king of the Lombards. Open war with the Lombards, now led by Alboin, began again in 565.

Cunimund

Cunimund appealed to the new Byzantine emperor, Justin II, for help and promising Sirmium in return. Justin II accepted, and the Gepids had a temporary advantage, even though Cunimund failed to release Sirmium after all.

The Lombards later formed an alliance with the Avars. Cunimund made the same offer to Justin II as he had before, and this time when Justin accepted, the Gepid king handed Sirmium over to the Byzantines. As it turned out, however, the Byzantine troops neglected to join the Gepids in their fight but kept Sirmium, and although the Avars did not show up either, the Lombards soundly defeated Cunimund's forces in 567. Alboin apparently killed the defeated king and had his skull converted into a drinking cup known as a *scala* or *patera*.

Cunimund succeeded Thurisind as king. According to multiple sources, the former king had been Cunimund's own father, and the enmity that both had for the Lombards was allegedly partly a result of Alboin's murder of Cunimund's brother (Thurisind's son), Thurismund.

Cunimund had a daughter named Rosamund (or Rosemund). She was forced into marrying Alboin after the Gepids' defeat, but she arranged his assassination in 572 or 573.

The life and court of King Cunimund of the Gepids, above, was chronicled by the Roman civil servant Cassiodorus, below:

❖ Flavius Magnus Aurelius Cassiodorus Senator (c. 485 to c. 585), commonly known as Cassiodorus, was a Roman statesman and great writer, serving in the administration of Theodoric the Great, king of the Ostrogoths. *Senator* was part of his surname not his rank. Cassiodorus was born at Scyllaceum (Squillace) in southern Italy, of a family that was apparently of Syro-Hellenic origin. He began his career as councillor to his father, the governor of Sicily, and made a name for himself while still very young as learned in the law. During his working life, as quaestor c. 507-511, as a consul in 514, then as *magister officiorum* under Theodoric, then under the regency for Theodoric's young successor, Athalaric, Cassiodorus kept copious records and letterbooks concerning public affairs.

Through the barbarians, New York Alpha Phi Kappa Psi finds its classical roots.

At the Gothic court, his literary skill that seems so mannered and rhetorical to a modern reader was accounted so remarkable that, whenever he was in Ravenna, significant public documents were often entrusted to him for drafting. His culminating appointment was as praetorian prefect for Italy, effectively the prime ministership of the Ostrogothic civil government and a high honor to finish any career.

James O'Donnell notes:

> . . . it is almost indisputable that he accepted advancement in 523 as the immediate successor of Boethius, who was then falling from grace after less than a year as *magister officiorum*, and who was sent to prison and later executed. In addition, Boethius' father-in-law (and step-father) Symmachus, by this time a distinguished elder statesman, followed Boethius to the block within a year. All this was a result of the worsening split between the ancient senatorial aristocracy centered in Rome and the adherents of Gothic rule at Ravenna. But to read Cassiodorus' *Variae* one would never suspect such goings-on.

There is no mention in Cassiodorus' selection of official correspondence of the death of Boethius. Athalaric died in early 534, and the remainder of Cassiodorus' public career was engulfed by the Byzantine reconquest and dynastic intrigue among the Ostrogoths. His last letters were drafted in the name of Witigis. Cassiodorus' successor was appointed from Constantinople.

Around 537-38 C.E., he left Italy for Constantinople where he remained almost two decades, concentrating on religious questions. He noticeably met Junilius, the quaestor of Justinianus. His constantinopolitean journey contributed to the improvement of his religious knowledge.

He spent his career trying to bridge the cultural divides that were causing fragmentation in the 6th century between East and West, Greek culture and Latin, Roman and Goth, and Christian people with their Arian ruler. He speaks fondly in his *Institutiones* of Dionysius Exiguus, the calculator of the Anno Domini era.

In his retirement he founded the monastery of *Vivarium* on his family estates on the shores of the Ionian Sea, and his writings turned to religion. The twin structure of the *Vivarium* was to permit coenobitic monks and hermits to coexist. Cassiodorus also established a library where, at the very close of the classical period, he attempted to bring Greek learning to Latin readers and preserve texts both sacred and secular for future generations. Directly across the Ionia Sea from Vivarium lay the Greek city-state of Ithaka.

As its unofficial librarian, Cassiodorus not only collected as many manuscripts as he could, he also wrote treatises aimed at instructing his monks in the proper uses of reading and methods for copying texts accurately. In the end, however, the library at *Vivarium* was dispersed and lost, though it was still active ca. 630, when the monks brought the relics of Saint Agathius from Constantinople, to whom they dedicated a spring-fed fountain shrine that still exists.

"If anyone should ask you, brother of New York Alpha,
how you are 'Greek', command them that the mystic cord of memory, from your Cornell desk those of the Squillace Vivarium, lies unbroken of the bonds of Phi Kappa Psi."

New York Alpha's late Roman intellectual,

Cassiodorus of the Pavia line,

established his monastic library on the Ionian sea coast at the

Golfo di Squillace,

and across the Ionia sea from Squillace lies the Greek island of Ithaca . . . .

**. . . which provided the inspiration to
New York State's Surveyor-General, Simeon DeWitt,
in naming the town at the southern end
of Cayuga Lake.**

De Witt was from an old New Netherlands Dutsch Colonial family, growing up at Wawarsing, Ulster County, New York, one of fourteen children of Jannetje Vernooy and his physician father Dr. Andries De Witt.

The the Roman civil servant Cassiodorus, above, was the immediate successor to Boethius, below:

❖ Anicius Manlius Severinus Boethius (480–524 C.E.) was a Christian philosopher of the 6th century. He was born in Rome to an ancient and important family which included emperors Petronius Maximus and Olybrius and many consuls. His father, Flavius Manlius Boethius, was consul in 487 after Odoacer deposed the last Western Roman Emperor. Boethius himself was consul in 510 C.E. in the kingdom of the Ostrogoths. In 522 C.E. he saw his two sons become consuls. Boethius was executed by King Theodoric the Great, who suspected him of conspiring with the Byzantine Empire. The exact birthdate of Boethius is unknown. However, it is generally placed at around AD 480, the same year of birth as Saint Benedict.

Boethius:
"last of the Romans"

Boethius was born to a patrician family which had been Christian for about a century. His father's line included two popes, and both parents counted Roman emperors among their ancestors.

It is unknown where Boethius received his formidable education in Greek. Historical documents are ambiguous on the subject, but Boethius may have studied in Athens, and perhaps Alexandria. Since Boethius is recorded as proctor of a school in Alexandria circa 470 C.E., the younger Boethius may have received some grounding in the classics from his father or a close relative. In any case, his accomplishment in Greek, though traditional for his class, was remarkable given the reduced knowledge which accompanied the end of the empire.

As a result of his increasingly rare education and experience, Boethius entered the service of Theodoric the Great, who commissioned the young Boethius to perform many roles. By 520 C.E., at the age of about forty, Boethius had risen to the position of *magister officiorum*, the head of all the government and court services. Afterwards, his two sons were both appointed consuls, reflecting their father's prestige.

In 523 C.E., however, Theodoric ordered Boethius arrested on charges of treason, possibly for a suspected plot with the Byzantine Emperor Justin I, whose religious orthodoxy (in contrast to Theodoric's Arian opinions) increased their political rivalry. Boethius himself attributes his arrest to the slander of his rivals. Whatever the cause, Boethius found himself stripped of his title and wealth and imprisoned in Pavia, awaiting an execution that took place in 524 the following year.

Boethius's most popular work is the *Consolation of Philosophy*, which he wrote in prison while awaiting his execution, but his lifelong project was a deliberate attempt to preserve ancient classical knowledge, particularly philosophy. He intended to translate all the works of Aristotle and Plato from the original Greek into Latin. His completed translations of Aristotle's works on logic were the only significant portions of Aristotle available in Europe until the 12th century. However, some of his translations (such as his treatment of the topoi in *The Topics*) were mixed with his own commentary, which reflected both Aristotelian and Platonic concepts.

Boethius also wrote a commentary on the *Isagoge* by Porphyry, which highlighted the existence of the problem of universals: whether these concepts are subsistent entities which would exist whether anyone thought of them, or whether they only exist as ideas. This topic concerning the ontological nature of universal ideas was one of the most vocal controversies in medieval philosophy.

Besides these advanced philosophical works, Boethius is also reported to have translated important Greek texts for the topics of the quadrivium. His loose translation of Nichomacus's treatise on arithmetic (*De institutione arithmetica libri duo*) and his textbook on music (*De institutione musica libri quinque*, unfinished) contributed to medieval education. His translations of Euclid on geometry and Ptolemy on astronomy, if they were completed, no longer survive.

Boethius introduced the threefold classification of music: 1. *Musica mundana* - music of the spheres/world; 2. *Musica humana* - harmony of human body and spiritual harmony; 3. *Musica instrumentalis* - instrumental music (incl. human voice). Boethius also wrote theological treatises, which generally involve support for the orthodox position against Arian ideas and other contemporary religious debates. His authorship was periodically disputed because of the secular nature of his other work, until the 19th century discovery of a biography by his contemporary Cassiodorus which mentioned his writing on the subject.

Boethius has been called by Lorenzo Valla the last of the Romans and the first of the scholastic philosophers. Despite the use of his mathematical texts in the early universities, it is his final work, the *Consolation of Philosophy*, that assured his legacy in the Middle Ages and beyond. This work is cast as a dialogue between Boethius himself, at first bitter and despairing over his imprisonment, and the spirit of philosophy, imaged as a woman of wisdom and

compassion. Alternately composed in prose and verse, the *Consolation* teaches acceptance of hardship in a spirit of philosophical detachment from misfortune. Parts of the work are reminiscent of the Socratic method of Plato's dialogues, as the spirit of philosophy questions Boethius and challenges his emotional reactions to adversity. The work was translated into Old English by King Alfred, and into later English by Chaucer and Queen Elizabeth; many manuscripts survive and it was extensively edited, translated and printed throughout Europe from the late 15th century onwards. Many commentaries on it were compiled and it has been one of the most influential books in European culture. No complete bibliography has ever been assembled but it would run into thousands of items.

"The Boethian Wheel" (or "The Wheel of Fortune") was a concept, stretching back at least to Cicero, that Boethius uses frequently in the *Consolation*; it remained very popular throughout the Middle Ages, and is still often seen today. As the wheel turns those that have power and wealth will turn to dust; men may rise from poverty and hunger to greatness, while those who are great may fall with the turn of the wheel. It was represented in the Middle Ages in many relics of art depicting the rise and fall of man. He is recognized as a saint by the Roman Catholic Church.

His feast day is October 23.

The the Roman philosopher Boethius, above, was the grandson of Emperor Olybrius, below:

❖ Flavius Anicius Olybrius, Western Roman Emperor with the designation and name Dominus Noster Flavius Anicius Olybrius Augustus from March 23 or July 11**,** 472 to October 23 or November 2**,** 472**,** was a member of the Anicii family - related to Petronius Maximus - and a native of Rome. He was the son of Flavius Anicius Hermogenianus Olybrius**,** Consul in **395**, and wife and relative Anicia Juliana. After the sack of the city by the Vandal king Geiseric in 455 C.E., Olybrius fled to Constantinople, where in 464 C.E. he was made Consul, and about the same time married Galla Placidia the Younger, daughter of Valentinian III and Licinia Eudoxia. This afforded Geiseric, whose son Huneric had married Princess Eudocia, the elder sister of Placidia, the opportunity of claiming the empire of the West for Olybrius.

Flavius Anicius Olybius:
Emperor of Rome in the West

In fact, Geiseric had attempted in 461 and again in 465 to get Olybrius made emperor. In 472 Olybrius was sent to Italy by the emperor Leo I to assist the emperor Anthemius against his son-in-law Ricimer, but, having entered into negotiations with the latter, was himself proclaimed emperor against his will, and on the murder of his rival ascended the throne unopposed. Because of his marriage to Placidia, Olybrius can be considered the last member of the House of Theodosius. His reign was otherwise as uneventful as it was brief. He died of natural causes later in 472.

Olybrius was survived by his wife and their daughter, Anicia Juliana. He appears, in a wholly unhistorical light, in the medieval *Golden Legend* as the persecutor of Saint Margaret the Virgin after she refused to marry him.

Olybrius was a member of the highly distinguished family of the Anicii which enjoyed excellent connections. One of Olybrius' ancestors had been Sextus Petronius Probus, a powerful ministerial figure during the reign of Valentinian I. Meanwhile Olybrius himself was married to Valentinian III's daughter Galla Placidia the Younger. But most important of all were his

connections to the Vandal court. Olybrius enjoyed good relations with king Geiseric whose son Huneric was married to Placidia's sister Eudocia.

When in AD 465 Libius Severus died, Geiseric proposed Olybrius as a successor, hoping to increase his influence over the western empire. Though Leo I, the Emperor of the East, instead saw to it that in AD 467 his nominee, Anthemius, took the throne. When alas the powerful 'Master of Soldiers' Ricimer fell out with Anthemius, Leo sent Olybrius to Italy to try and bring the two parties back together peaceably. But as Olybrius arrived in Italy early in AD 472, Ricimer was already besieging Rome to see Anthemius killed. Their relationship was indeed irreconcilable. However, Olybrius' arrival in Italy was welcomed by Ricimer, for it provided him with a credible candidate to succeed his opponent Anthemius.

Leo realizing the danger of an emperor on the western throne who was a friend of the Vandals, sent a letter to Anthemius, urging him to see to it that Olybrius was assassinated. But Ricimer intercepted the message. In any case Anthemius was most likely no longer in a situation to act. Shortly after, Rome fell and Anthemius was beheaded.

This left the way clear for Olybrius to succeed to the throne in March or April, 472 C.E. Although Leo naturally refused to recognize his accession. Only forty (40) days after his conquest of Rome, Ricimer died a gruesome death, vomiting blood. He was succeeded as 'Master of Soldiers' by his nephew Gundobad.

But Olybrius was not to spend much time on the throne. Only five or six months after the death of Ricimer he too died from illness, more exactly of hidropysia.

New York Alpha's first intellectual Olybrius, above, was nephew to Flavius Anicius Petronius Maximus, below:

❖ Falvius Anicius Petronius Maximus (c. 396 - April 22**,** 455), was a Roman aristocrat, and briefly Western Roman Emperor with the designation and name Dominus Noster Flavius Anicius Petronius Maximus Augustus during part of the year 455, more exactly between March 17**,** 455 and May 31**,** 455. Petronius was of senatorial rank. His earliest known office was *praetor*, held about 411; around 415 he served as a *tribunus et notarius*, which was an entry position to the imperial bureaucracy, and led to his serving as *Comes sacrarum largitionum* (Count of the Sacred Largess) between 416 and 419, as well as Urban Prefect between the years 419 and 433. In 433, he was consul, in 439 Praetorian Prefect of Italy, and in 443 he was consul a second time.

Flavius Anicius Maximus: Aristocrat and Emperor, briefly

When he was granted the title of Patrician in 445, he was briefly the most honored of all non-Imperial Romans, until the third consulate of Aëtius, generalissimo of the Western empire, the following year. It is clear that the enmity between Maximus and Aetius led to the gradual events that brought down the Western Roman Empire. According to the account of John of Antioch, Maximus and the eunuch Heraclius persuaded the emperor Valentinian III to have Aëtius killed – which he did by his own hands. The historian John further alleges that Valentinian's death (March 16, 455) at the hands of Optila and Thranstila was also at Maximus' instigation.

Following Valentinian's death, there was no one obvious successor to the throne: Maximus competed with one Maximianus, son of Domninus, who had been a bodyguard of Aëtius, and with the future emperor Majorian, who had the backing of the empress Licinia Eudoxia. Maximus managed to defeat his rivals by gaining control of the palace and forced Eudoxia to marry him.

Maximus quickly appointed Avitus as Master of Soldiers, and sent him on a mission to Toulouse to gain the support of the Visigoths; however, by the time Avitus arrived, Maximus was dead, and the mission pointless. Within two months

of Maximus gaining the throne, word came that Gaiseric, king of the Vandals, had arrived in Italy, news that panicked the inhabitants of Rome. In the disorder Maximus was killed, either by a mob or by "a certain Roman soldier named Ursus". Petronius Maximus was stoned to death.

Three days after Maximus' death on April 22, Gaiseric entered Rome with his army. While the Vandals looted the city and captured people as slaves or hostages, in response to the pleas of Pope Leo I, they desisted from more destructive behavior that accompanied a sack of a city – arson, torture, and murder.

Petronius Maximus was born in about 396, his birthplace being unknown. Being of obscure origin, yet belonging to the Anicii family — related to later Emperor Olybrius — a son either of Probinus or Olybrius, sons of Sextus Claudius Petronius Probus. Prefect of Illyricum in 364, Prefect of Gaul in 366, Prefect of Italy in 368-375 and again in 383 and consul in 371 and wife and first cousin once removed Anicia Faltonia Proba, Petronius Maximus achieved remarkable career early on in his life. He served as tribune and in 415 as notarius and already by 416 he had become finance minister, a post he held until about 419.

After this he became praetorian prefect for Italy two, perhaps even three times and was twice city prefect of Rome and twice consul. His career in 445 earned him promotion to the rank of patrician (patricius). And by this time he had become exceedingly wealthy, even building a forum in Rome.

With the murder of Valentinian III in 455 there was no heir to the western throne. The eastern emperor Marcian was not consulted, but his choice would most likely have been the military commander Majorian (who did in fact become emperor later). Another contender was a certain Maximianus who had been a follower of Aetius.

However, it was Petronius Maximus who eventually was chosen. True, he had great experience in administration, through having held high offices earlier. And yet, it is largely believed that he used his extensive wealth to buy himself favour and hence literally bought himself the throne.

On taking up office as emperor, Maximus immediately married Licinia Eudoxia, the widow of Valentinian III. She only married him reluctantly, suspecting that he in fact had been involved in the murder of her late husband. And indeed Maximus treated Valentinian III's assassins with considerable favour.

Despairing, Licinia Eudoxia eventually appealed for help to the Vandal king Geiseric. Licinia Eudoxia of course already had contacts to the Vandal court as her daughter Eudocia had been betrothed to Geiseric's son Huneric - before Petronius Maximus had cancelled the arrangement.

By May news reached Rome that Geiseric was sailing for Italy. As the news spread, panic gripped the city and many of its people took to fleeing the place. The emperor too was not concerned with staging a defence but far more with organizing his escape, urging the senate to accompany him.

Though in the panic Petronius Maximus was completely abandoned, left to fend for himself by his bodyguard and entourage. As he road out of the city on his own on May 31, 455, an angry mob set upon him and stoned him to death. His body was mutilated and flung into the Tiber. He had reigned for only seventy one (71) days.

His son from his first marriage, Flavius Palladus, then Flavius Palladus Caesar, Caesar between March 17 and May 31, who had married his stepsister Eudoxia, was also executed.

On June 2, 455 Geiseric captured the city of Rome and thoroughly sacked it for two weeks. He left, carrying away a great amount of loot as well as the empress Licinia Eudoxia and her daughters Galla Placidia the Younger and Eudoxia. (Eudocia married Huneric in 456 as had been originally intended.)

New York Alpha's first intellectual Flavius Anicius Petronius Maximus, above, was grandson to Sextus Claudius Petronius Probus, below:

❖ Sextus Claudius Petronius Probus was a leading Roman aristocrat of the late 4th century, renowned for his wealth, power and social connexions. A pagan and a scion of the powerful Anician family from Verona, he married Anicia Faltonia Proba, the daughter of his first cousin Quintus Clodius Hermogenianus Olybrius, by whom he had two sons. He held an administrative post in Africa and was consul as colleague of the Emperor Gratian in 371. He also held the posts of Prefect of Illyricum in 364, Prefect of Gaul in 366, Prefect of Italy in 368-375 and again in 383. In 372**,** he defended the town of Sirmium in the Danube valley against barbarian attack and in 375 was accused of corruption and repression in extorting taxes for Valentinian I**.**

Sextus Claudius Petronius Proba: scion of the Anicia of Verona

Ammianus Marcellinus**,** in his *History* (Book 27, ch.11) portrays Sextus Claudius as a vain and rapacious man who 'owned estates in every part of the empire, but whether they were honestly come by or not is not for a man like me to say' (Ammianus Marcellinus, *The Later Roman Empire* selected and translated by Walter Hamilton (Penguin, 1986), p.345). Ammianus says he was one who was benevolent to his friends and a pernicious schemer against his enemies, servile to those more powerful than him and pitiless to those weaker, who craved office and exercised enormous influence through his wealth, always insecure and petty even at the height of his power.

On various inscriptions he describes himself vaingloriously as 'the summit of the Anician house' (*Aniciae domus culmen*), 'most learned in all subjects' (*omnibus rebus eruditissimus*) and 'the acme of the nobility, the light of literature and eloquence' (*nobilitatis culmen, litterarum et eloquentiae lumen*). As these phrases suggest he was a patron of literature, including the poet Ausonius. His two sons Probinus and Olybrius continued the tradition by being the patrons of Claudian, who paints a flattering picture of Probus in his *Panegyricus dictus Probino et Olybrio consulibus* written to celebrate his sons' joint consulship in

395. Through his sons, Probus was the paternal grandfather of two Emperors, Petronius Maximus and Olybrius.

His date of death is unknown, though he was still living in 390 when, according to the *Vita Ambrosii* of Paulinus of Nola, two Persian noblemen presented themselves before Theodosius I at Mediolanum but departed the next day for Rome in order to see for themselves Petronius Probus, the pride of the Roman aristocracy, a legend in his lifetime.

And a real fat head.

The Roman aristocrat Sextus Claudius Petronius Probus, above, was son-in-law and first cousin of Quintus Clodius Hermogenianus Olybrius, below:

❖ Quintus Clodius Hermogenianus Olybrius (ca 335 C.E. - 380 C.E.), was the Consul of Rome in 379 C.E. with Decimus Magnus Ausonius. He was the son of Clodius Celsinus Adelphus, Prefect of Rome.

Hermogenianus was also known as Claudius Pontius Petronius Probus of Limoges. He married before 365 to Turrenia Anicia Juliana or Anicia Faltonia Proba (ca 345 or 360 – 410 or 432), daughter of Anicius Auchenius Bassus, Prefect of Rome in 382 and Consul of Rome in 408, and wife Turrenia Honorata, and a *descendant of the Amnii, the Pincii and the Anicii*, and they had three children:

Quintus:
"Counsel of Rome"

- Anicia, married before 390 to Pontius (born ca 360), the son of (Pontius) Paulinus, Nobleman at Bordeaux, then *Burdigala*, the parents of Hermogenianus and Adelphius, Bishop of Limoges;
- Anicia Faltonia Proba (born ca 365), married to her first cousin once removed on her father's side Sextus Claudius Petronius Probus, holder of an administrative post in Africa, Prefect of Illyricum in 364, Prefect of Gaul in 366, Prefect of Italy in 368 – 375 and again in 383 and Consul of Rome in 371, by whom she had two sons, Probinus and Olybrius, one of them the father of Petronius Maximus;
- Flavius Anicius Hermogenianus Olybrius (born ca 365), Consul of Rome in 395 (this is his grandson, not his son).

The Roman Counsel Quintus Clodius Hermogenianus Olybrius, above, was son to Clodius Celsinus Adelphus, below:

❖ Clodius Celsinus Adelphus was a Prefect of Rome. He was the father of Quintus Clodius Hermogenianus Olybrius, Consul of Rome in 379. He was married to Faltonia Betitia Proba.

Education as we know it today in America has deep roots in the late Roman Republic and Roman Empire. In the span of a few centuries, Rome went from an informal system of education that passed knowledge from parents to children to a specialized, tiered system of schools inspired by Greek educational practices.

Roman educational practice made great and lasting contributions to the field of education as we know it.

Clodius:
"Prefect of Rome"

The rise of an agrarian city-state to a world power is recapitulated in the teaching and learning styles of its citizens. From Rome's founding in approximately 750 BCE to the middle of the third century BCE, there is little evidence of anything more than rudimentary education. A child's primary educators were likely to be his or her own parents. Parents taught their children the skills necessary for living in the early republic, namely agricultural, domestic and military skills. Most important, however, were the moral and civil responsibilities that would be expected of citizens of the republic, for Rome as a whole was the inculcation of *vir bonus*. In its infancy, Roman education not only provided the basic skills necessary for survival, but also conveyed a sense of Roman values, lending cohesion to the populace.

The first schools in Rome arose by the middle of the fourth century BCE. These schools were called ''ludi'' (singular: ''ludus''), the name being derived from the Latin word for "play," and like modern play schools were concerned with the basic socialization and rudimentary education of young Roman children. In the second half of the third century BCE, an ex-slave named Spurius Carvilius is credited with opening the first fee-paying *ludus* and thereby forging a teaching profession in ancient Rome. Nevertheless, organized education was relatively

rare at this time, as we have very few primary sources or accounts of Roman educational process until the second century BCE.

At the height of the Roman Republic and later the Roman Empire, the Roman educational system gradually found its final form. Formal schools were established, which served paying students (very little in the way of free public education as we know it can be found). Normally, both boys and girls were educated, though not necessarily together[1].

Following various military conquests in the Greek East, Romans adapted a number of Greek educational precepts to their own fledgling system. Roman students were taught (especially at the elementary level) in similar fashion to Greek students, sometimes by Greek slaves who had a penchant for education. But differences between the Greek and Roman systems emerge at the highest tiers of education. Roman students that wished to pursue the highest levels of education went to Greece to study philosophy, as the Roman system developed to teach speech, law and *gravitas*.

In a system much like the one that predominates in the modern world, the Roman education system that developed arranged schools in tiers. The educator Quintilian recognized the importance of starting education as early as possible, noting that “memory … not only exists even in small children, but is specially retentive at that age”. A Roman student would progress through schools just as a student today might go from elementary school to middle school, then to high school, and finally college. Progression depended more on ability than age with great emphasis being placed upon a student’s *ingenium* or inborn “gift” for learning, and a more tacit emphasis on a student’s ability to afford high-level education.

We should recognize important contrasts to formal education as we know it today. In the modern world, a student generally pursues higher levels of education to gain the skills and certifications necessary to work in a more prestigious field. In contrast, only the Roman elite would expect a complete formal education. A tradesman or farmer would expect to pick up most of his vocational skills on the job. Higher education in Rome was more of a status symbol than a practical concern.

As Rome grew in size and in power following the Punic Wars, the importance of the family as the central unit within Roman society began to deteriorate. With this declined the old Roman system of education carried out by the paterfamilias. The new educational system began to center more on the one encountered by the Romans with the Hellenistic Greeks and prominent centers of learning such as Alexandria later on. It was becoming a literary educational system.

The situation of the Greeks was ideal for the foundation of literary education as they were the possessors of the great works of Homer, Hesiod and the Lyric poets of Archaic Greece. The absence of a literary method of education from Roman life is due to the fact that Rome was bereft of any national literature. The military arts were all that Rome could afford to spend time studying. When not waging war, the Romans devoted what time remained to agriculture. The concern of Rome was that of survival, whether through defense or dominion. It is not until the appearance of Ennius (239-169 BCE), the father of Roman poetry, that any sort of national literature surfaces.

While the Romans adopted many aspects of Greek education, two areas in particular were viewed as trifle: music and athletics. Music to the Greeks was fundamental to their educational system and tied directly to the Greek *paideia*. *Mousike* encompassed all those areas supervised by the Muses, comparable to today's liberal arts. The area that many Romans considered unimportant equates to our modern definition of music. To the Greeks, the ability to play an instrument was the mark of a civilized, educated man, and through an education in all areas of *mousike* it was thought that the soul could become more moderate and cultivated. The Romans did not share this view but did, however, adopt one area of *mousike*: Greek literature.

Athletics, to the Greeks, was the means to obtaining a healthy and beautiful body, which was an end in and of itself and further promoted their love of competition. The Romans, though, did not share this stance either, believing that athletics was only the means to maintaining good soldiers.

This illustrates one of the central differences between the two cultures and their take on education: that to the Greeks beauty or an activity could be an end in itself, and the practice of that activity was beneficial accordingly. The Romans, on the other hand, were more practically minded when it came to what they taught their children. To them, it would appear, an area of study was only good so far as it served a higher purpose or end determined outside of itself.

The Roman Prefect Clodius Celsinus Adelphus, above, was spouse to Faltonia Betitia Proba, below:

❖ Faltonia Betitia Proba (born about 306, died about 366) was a Roman Christian poetess from Orte. Faltonia was the daughter of Petronius Probianus (consul 322) and the sister of Petronius Probinus (consul 341). She was married to Clodius Celsinus Adelphus, prefect of Rome. They had three children named Quintus Clodius Hermogenianus Olybrius, Adelphia Olybria, and another daughter who married a Lucius Valerius Septimius Bassus.

Faltonia:
"Poetess of Rome"

Very little is known about her life other than she was tutored in the liberal arts. She knew Virgil's poems quite well and memorized most of them. She devised a scheme one day that the history of the Bible could be compiled in a pleasant easy to read verse.

She researched Bucolics, the Georgics, and the Aeneid. She then mixed various lines from each to complete a story. They were done with a respect of the original verse that a connoisseur had trouble detecting the scheme.

One of her poems reflects this. It is a cento called *Cento virgilianus* and presents the Biblical story from the creation of the world up to the coming of the Holy Spirit by using 694 lines from Virgil. It is said to have been done so expertly that most experts would have trouble distinglishing this from Virgil himself since it reflects a scholarly knowledge of the Bible. This poem was declared apocryphal (not heretic, but also not allowed to be read in public) by Pope Gelasius I and is her only surviving work. She also wrote a Homeric *cento* with verses taken from Homer that was basically the same scheme. She was skilled in both the Greek and Latin languages.

The Roman poetess and New York Alpha intellectual Faltonia Betitia Proba, above, and her husband were Neoplatonists in the tradition of Plotinus:

❖ Plotinus (Greek: Πλωτῖνος) (ca. AD 205–270) was a major philosopher of the ancient world who is widely considered the father of Neoplatonism. Much of our biographical information about him comes from Porphyry's preface to his edition of Plotinus' *Enneads*. His metaphysical writings have inspired centuries of Pagan, Christian, Jewish, Islamic and Gnostic metaphysicians and mystics.

Porphyry reported that Plotinus was 66 years old when he died in 270, the second year of the reign of the emperor Claudius II, thus giving us the year of his teacher's birth as around 205. Eunapius reported that Plotinus was born in the Deltaic Lycopolis (Latin: Lyco) in Egypt, which has led to speculations that he may have been a native Egyptian of Roman, Greek, or Hellenized Egyptian descent.

From Flatonia to Plotinus, the move from the Latin to Hellenic first intellectuals of New York Alpha

Plotinus had an inherent distrust of materiality (an attitude common to Platonism), holding to the view that phenomena were a poor image or mimicry (mimesis) of something "higher and intelligible" [VI.I] which was the "truer part of genuine Being". This distrust extended to the body, including his own; it is reported by Porphyry that at one point he refused to have his portrait painted, presumably for much the same reasons of dislike. Likewise Plotinus never discussed his ancestry, childhood, or his place or date of birth. From all accounts his personal and social life exhibited the highest moral and spiritual standards.

Plotinus took up the study of philosophy at the age of twenty-seven, around the year 232, and travelled to Alexandria to study. There Plotinus was dissatisfied with every teacher he encountered until an acquaintance suggested he listen to the ideas of Ammonius Saccas. Upon hearing Ammonius lecture, he declared to his friend, "this was the man I was looking for," and began to study intently under his new instructor. Besides Ammonius, Plotinus was also influenced by the works of Alexander of Aphrodisias, Numenius, and various Stoics.

After spending the next eleven years in Alexandria, he then decided to investigate the philosophical teachings of the Persian philosophers and the Indian philosophers around the age of 38. In the pursuit of this endeavour he left Alexandria and joined the army of Gordian III as it marched on Persia. However, the campaign was a failure, and on Gordian's eventual death Plotinus found himself abandoned in a hostile land, and only with difficulty found his way back to safety in Antioch.

At the age of forty, during the reign of Philip the Arab, he came to Rome, where he stayed for most of the remainder of his life. There he attracted a number of students. His innermost circle included Porphyry, Amelius Gentilianus of Tuscany, the Senator Castricius Firmus, and Eustochius of Alexandria, a doctor who devoted himself to learning from Plotinus and attended to him until his death. Other students included: Zethos, an Arab by ancestry who died before Plotinus, leaving him a legacy and some land; Zoticus, a critic and poet; Paulinus, a doctor of Scythopolis; and Serapion from Alexandria. He had students amongst the Roman Senate beside Castricius, such as Marcellus Orontius, Sabinillus, and Rogantianus. Women were also numbered amongst his students, including Gemina, in whose house he lived during his residence in Rome, and her daughter, also Gemina; and Amphiclea, the wife of Ariston the son of Iamblichus. Finally, Plotinus was a correspondent of the philosopher Cassius Longinus.

While in Rome Plotinus also gained the respect of the Emperor Gallienus and his wife Salonica. At one point Plotinus attempted to interest Gallienus in rebuilding an abandoned settlement in Campania, known as the 'City of Philosophers', where the inhabitants would live under the constitution set out in Plato's *Laws*. An Imperial subsidy was never granted, for reasons unknown to Porphyry, who reports the incident.

Porphyry subsequently went to live in Sicily, where word reached him that his former teacher had died. The philosopher spent his final days in seclusion on an estate in Campania which his friend Zethos had bequeathed him. According to the account of Eustochius, who attended him at the end, Plotinus' final words were: "Strive to give back the Divine in yourselves to the Divine in the All." Eustochius records that a snake crept under the bed where Plotinus lay, and slipped away through a hole in the wall; at the same moment the philosopher died.

Plotinus wrote the essays that became the *Enneads* over a period of several years from *ca.* 253 until a few months before his death seventeen years later. Porphyry makes note that the Enneads, before being compiled and arranged by himself, were merely the enormous collection of notes and essays which Plotinus used in his lectures and debates, rather than a formal book. Plotinus was unable to revise his own work due to his poor eyesight, yet his writings required extensive editing, according to Porphyry: his master's

handwriting was atrocious, he did not properly separate his words, and he cared little for niceties of spelling. Plotinus intensely disliked the editorial process, and turned the task to Porphyry, who not only polished them but put them into the arrangement we now have.

Plotinus taught that there is a supreme, totally transcendent "One", containing no division, multiplicity or distinction; likewise it is beyond all categories of being and non-being. The concept of "being" is derived by us from the objects of human experience, and is an attribute of such objects, but the infinite, transcendent One is beyond all such objects, and therefore is beyond the concepts that we derive from them. The One "cannot be any existing thing", and cannot be merely the sum of all such things (compare the Stoic doctrine of disbelief in non-material existence), but "is prior to all existents". Thus, no attributes can be assigned to the One. We can only identify it with the Good and the principle of Beauty. [I.6.9]

For example, thought cannot be attributed to the One because thought implies distinction between a thinker and an object of thought. Even the self-contemplating intelligence must contain duality. "Once you have uttered 'The Good,' add no further thought: by any addition, and in proportion to that addition, you introduce a deficiency." [III.8.10] Plotinus denies sentience, self-awareness or any other action to the One [V.6.6], rather if we insist on describing it further we must call the One a sheer Dynamis or potentiality without which nothing could exist. [III.8.10] As Plotinus explains in both places and elsewhere [e.g. V.6.3], it is impossible for the One to be Being or a self-aware Creator God. At [V.6.4], Plotinus compared the One to "light", the Divine Nous *(first will towards Good)* to the "Sun", and lastly the Soul to the "Moon" whose light is merely a "derivative conglomeration of light from the 'Sun'". The first light could exist without any celestial body.

The One, being beyond all attributes including being and non-being, is the source of the world -- but not through any act of creation, willful or otherwise, since activity cannot be ascribed to the unchangeable, immutable One. Plotinus argues instead that the multiple cannot exist without the simple. The "less perfect" must, of necessity, "emanate", or issue forth, from the "perfect" or "more perfect". Thus, all of "creation" emanates from the One in succeeding stages of lesser and lesser perfection. These stages are not temporally isolated, but occur throughout time as a constant process. Later Neoplatonic philosophers, especially Iamblichus, added hundreds of intermediate beings as emanations between the One and humanity; but Plotinus' system was much simpler in comparison.

Plotinus offers an alternative to the orthodox Christian notion of creation *ex nihilo* (out of nothing), which attributes to God the deliberation of mind and action of a will, although Plotinus never mentions Christianity in any of his works. Emanation *ex deo* (out of God), confirms the absolute transcendence of the One,

making the unfolding of the cosmos purely a *consequence* of its existence; the One is in no way affected or diminished by these emanations. Though the emanations are, since as they become farther away from the source they became diminished. Plotinus uses the analogy of the Sun which emanates light indiscriminately without thereby diminishing itself, or reflection in a mirror which in no way diminishes or otherwise alters the object being reflected.

The first emanation is *nous* (thought or the divine mind, logos or order, reason), identified metaphorically with the demiurge in Plato's *Timaeus*. It is the first will towards Good. From *nous* proceeds the world soul, which Plotinus subdivides into upper and lower, identifying the lower aspect of Soul with nature. From the world soul proceeds individual human souls, and finally, matter, at the lowest level of being and thus the least perfected level of the cosmos. Despite this relatively pedestrian assessment of the material world, Plotinus asserted the ultimately divine nature of material creation since it ultimately derives from the One, through the mediums of *nous* and the world soul. It is by the Good or through beauty that we recognize the One, in material things and then in the Forms.

The essentially devotional nature of Plotinus' philosophy may be further illustrated by his concept of attaining ecstatic union with the One (henosis see Iamblichus). Porphyry relates that Plotinus attained such a union four times during the years he knew him. This may be related to enlightenment, liberation, and other concepts of mystical union common to many Eastern and Western traditions. Some have compared Plotinus' teachings to the Hindu school of Advaita Vedanta (*advaita* "not two", or "non-dual").

Authentic human happiness for Plotinus consists of the true human identifying with that which is the best in the universe. Because happiness is beyond anything physical, Plotinus stresses the point that worldly fortune does not control true human happiness, and thus "… there exists no single human being that does not either potentially or effectively possess this thing we hold to constitute happiness." (Enneads I.4.4) The issue of happiness is one of Plotinus' greatest imprints on Western thought, as he is one of the first to introduce the idea that eudaimonia is attainable only within consciousness.

The true human is an incorporeal contemplative capacity of the soul, and superior to all things corporeal. It then follows that real human happiness is independent of the physical world. Real happiness is, instead, dependent on the metaphysical and authentic human being found in this highest capacity of Reason. "For man, and especially the Proficient, is not the Couplement of Soul and body: the proof is that man can be disengaged from the body and disdain its nominal goods." (Enneads I.4.14) The human who has achieved happiness will not be bothered by sickness, discomfort, etc., as his focus is on the greatest things. Authentic human happiness is the utilization of the most authentically human capacity of contemplation. Even in daily, physical action, the flourishing

human's "…Act is determined by the higher phase of the Soul." (Enneads III.4.6) Even in the most dramatic arguments Plotinus considers (if the Proficient is subject to extreme physical torture, for example), he concludes this only strengthens his claim of true happiness being metaphysical, as the truly happy human being would understand that that which is being tortured is merely a body, not the conscious self, and happiness could persist.

Plotinus offers a comprehensive description of his conception of a person who has achieved eudaimonia. "The perfect life" involves a man who commands reason and contemplation.(Enneads I.4.4) A happy person will not sway between happy and sad, as many of Plotinus' contemporaries believed. Stoics, for example, question the ability of someone to be happy (presupposing happiness is contemplation) if they are mentally incapacitated or even asleep- Plotinus disregards this claim, as the soul and true human do not sleep or even exist in time, nor will a living human who has achieved eudaimonia suddenly stop using its greatest, most authentic capacity just because of the body's discomfort in the physical realm. "…The Proficient's will is set always and only inward." (Enneads I.4.11)

Overall, happiness for Plotinus is "...a flight from this world's ways and things." (Theat 176AB) and a focus on the highest, i.e. Forms and The One.

Plotinus seems to be one of the first to argue against the still popular notion of causal Astrology. In the late tractate 2.3, "Are the stars causes?", Plotinus makes the argument that specific stars influencing one's fortune (a common hellenistic theme) attributes irrationality to a perfect universe, and eliminates moral turpitude. He does, however, claim the stars and planets are ensouled, as witnessed by their movement.

Modern conferences within the Hellenic philosophy fields of study have been held in order to address what Plotinus stated in his tract *Against the gnostics* and who he was addressing it to. In order to separate and clarify the events and persons involved in the origin of the term "Gnostic". From the dialogue, it appears that the word had an origin in the Platonic and Hellenistic tradition long before the group calling themselves "Gnostics" -- or the group covered under the modern term "Gnosticism" -- ever appeared. It would seem that this shift from Platonic to Gnostic usage has led many people to confusion. The strategy of sectarians taking Greek terms from philosophical contexts and re-applying them to religious contexts was popular in Christianity, Mithraism, the Cult of Isis and other ancient religious contexts including Hermetic ones (see Alexander of Abonutichus for an example).

In the case of gnosticism it is important to understand that Plotinus and the Neoplatonists viewed it as a form of heresy or sectarianism to the Pythagorean and Platonic philosophy of the Mediterranean and Middle East. He accused them of using senseless jargon and being overly dramatic and insolent

in their distortion of Plato's Ontology. Plotinus attacks his opponents as untraditional, irrational and immoral and arrogant. He also attacks them as elitist and blasphemous to Plato for the gnostics despising the material world and it's maker.

Plotinus, for example, attacked the Gnostics he was familiar with for vilifying Plato's ontology of the universe contained in Timaeus, and the universes' creation by the demiurge. In this view the Demiurge is an artist or craftsman, in that he creates through mixing or amalgamating what already is. Plotinus accused Gnosticism of vilifing the Demiurge or craftsman that crafted the material world, even thinking of the material world as evil or a prison.

The Neoplatonic movement (though Plotinus would have simply referred to himself as a philosopher of Plato) seems to be motivated by the desire of Plotinus to revive the pagan philosophical tradition. Plotinus was not claiming to innovate with the *Enneads*, but to clarify aspects of the works of Plato that he considered misrepresented or misunderstood. Plotinus referred to tradition as a way to interpret Plato's intentions. Because the teachings of Plato were for members of the academy rather than the general public, it was easy for outsiders to misunderstand Plato's meaning. However, Plotinus attempted to clarify how the philosophers of the academy had not arrived at the same conclusions (such as misotheism or Dystheism of the creator God as an answer to the problem of evil) as the targets of his criticism.

Neoplatonism was sometimes used as a philosophical foundation for paganism, and as a means of defending the theoretic of paganism against Christianity (see Porphyry, Eunapius). However, many Christians were also influenced by Neoplatonism, most notably Pseudo-Dionysius the Areopagite. St. Augustine, though often referred to as a "Platonist," acquired his Platonist philosophy through the mediation of Plotinus' teachings.

In the Renaissance the philosopher Marsilio Ficino set up an Academy under the patronage of Cosimo de Medici in Florence, mirroring that of Plato. His work was of great importance in reconciling the philosophy of Plato directly with Christianity. One of his most distinguished pupils was Pico della Mirandloa, author of An Oration On the Dignity of Man. Our term 'Neo Platonist' has its origins in the Renaissance. In England, Plotinus was the cardinal influence on the 17th-century school of the Cambridge Platonists, and on numerous writers from Samuel Taylor Coleridge (q.v.) to W.B. Yeats and Kathleen Raine.

Indeed, Plotinus' philosophy still exerts influence today: in the 20th century, American integral theorist Ken Wilber has drawn heavily upon the Enneads in his cosmology, reaching some metaphysical conclusions comparable to Plotinus' own. Robert Pirsig's "Metaphysics of Quality" is similar to Plotinus's philosophy in that Pirsig posited a preconscious dynamic quality that precedes

the subject/object dichotomy. Many of the Indian philosophers of great renown such as Sarvepalli Radhakrishnan, Ananda Coomaraswamy and others used the writing of Plotinus in their own texts as a superlative elaboration upon Indian monism, specifically Upanishadic and Advaita Vedantic thought.

Neo-Platonism and the ideas of Plotinus influenced medieval Islam as well, since the Sunni Abbasids fused Greek concepts into sponsored state texts, and found great influence amongst the Ismaili Shia. Persian philosophers as well, such as Muhammad al-Nasafi and Abu Yaqub Sijistani. By the 11th century, Neo-Platonism was adopted by the Fatimid state of Egypt, and taught by their da'i (Islam). Neo-Platonism was brought to the Fatimid court by Iraqi Hamid al-Din al-Kirmani, although his teachings differed from Nasafi and Sijistani, who were more aligned with original teachings of Plotinus. The teachings of Kirmani in turn influenced philosophers such as Nasir Khusraw of Persia.

The Hellenic-Egyptian philosopher and New York Alpha intellectual Plotinus, above, was a student in the tradition of Ammonius Saccas, below:

❖ Ammonius Saccas (3rd century AD) was a Greek philosopher from Alexandria who was often referred to as one of the founders of Neoplatonism. He had a humble background, and appears to have earned a living as a porter at the docks of Alexandria, hence his nickname of "Sack-bearer" (*Sakkas* for *sakkophoros*). Until the 19th century he was credited with devising the early medieval divisions of the text of the Four Gospels, still usually known as the Ammonian Sections. These are now usually ascribed to Eusebius of Caesarea instead. All that is known of the life and teachings of Ammonius is retained in a fragment of Porphyry writing quoted in the writings of Eusebius and Jerome:

Saccas the Neoplatonist

> Eusebius, *History of the Church*, VI, 19:1-12: As an example of this absurdity take a man whom I met when I was young, and who was then greatly celebrated and still is, on account of the writings which he has left. I refer to Origen, who is highly honored by the teachers of these doctrines.
>
> For this man, having been a hearer of Ammonius, who had attained the greatest proficiency in philosophy of any in our day, derived much benefit from his teacher in the knowledge of the sciences; but as to the correct choice of life, he pursued a course opposite to his.
>
> For Ammonius, being a Christian, and brought up by Christian parents, when he gave himself to study and to philosophy straightway conformed to the life required by the laws. But Origen, having been educated as a Greek in Greek literature, went over to the barbarian recklessness. And carrying over the learning which he had obtained, he hawked it about, in his life conducting himself as a Christian and contrary to the laws, but in his opinions of material things and of the Deity being like a Greek, and mingling Grecian teachings with foreign fables. For he was continually

> studying Plato, and he busied himself with the writings of Numenius and Cronius the Pythagorean, Apollophanes, Longinus, Moderatus of Gades, and Nicomachus, and those famous among the Pythagoreans. And he used the books of Chaeremon the Stoic, and of Cornutus. Becoming acquainted through them with the figurative interpretation of the Grecian mysteries, he applied it to the Jewish Scriptures.
>
> [Eusebius then states:]These things are said by Porphyry in the third book of his work against the Christians. He speaks truly of the industry and learning of the man, but plainly utters a falsehood (for what will not an opposer of Christians do?) when he says that he went over from the Greeks, and that Ammonius fell from a life of piety into heathen customs. For the doctrine of Christ was taught to Origen by his parents, as we have shown above. And Ammonius held the divine philosophy unshaken and unadulterated to the end of his life. His works yet extant show this, as he is celebrated among many for the writings which he has left.

Jerome, *On Illustrious Men* 55: Porphyry falsely accused him [Ammonius] of having become a heathen again, after being a Christian, but it is certain that he continued a Christian until the very end of his life.

The fragments left from Porphyry's writings, *Against the Christians*, give details about the life and teachings of Ammonius. According to Porphyry, his parents were Christian, but upon learning Greek philosophy, Ammonius rejected his parents' religion for polytheism. This conversion is denied by the Christian writers Jerome and Eusebius, who stated that Ammonius remained a Christian throughout his lifetime. This disagreement accounts for why some believe there exist two different men: Ammonius Saccas, the Neoplatonist, and Ammonius of Alexandria, the Christian.

After a long period of study and meditation, Ammonius opened a school of philosophy in Alexandria, where his principal pupils were Herennius, Origen of Alexandria, Cassius Longinus, Plotinus, Heracles the Christian, Olympius, and Antonius.

Due to the confusion surrounding Ammonius's religion, many scholars claim that he deliberately wrote nothing, and, with the aid of his pupils, kept his views secret after the manner of the Pythagoreans; thus, the scholars believe that his philosophy must be inferred mainly from the writings of Plotinus (see the Enneads). However, Ammonius did write two books, which had a direct impact on Christian doctrine.

Hierocles, writing in the 5th century, states that Ammonius' fundamental doctrine was an eclecticism derived from a critical study of Plato and Aristotle.

Nemesius, a bishop and a Neoplatonist *c.* 400, cites two passages, one of which he declares to contain the views of Numenius and Ammonius, the other he attributes to Ammonius alone. They concern the nature of the soul and its relation to the body; but they appear to have been merely the traditional views of Ammonius, not any actual written words of his.

Eduard Zeller points out there is reason to think that Ammonius's doctrines were closer to those of the earlier Platonists than to those of Plotinus. Another part of Ammonius's fundamental doctrine was based on the gospels. The two books that are attributed to him dealt with the gospels and were lauded by Eusebius and Jerome. One titled *Harmony of the Gospels* still exists in Latin; the other called On the "Harmony of Moses and Jesus" had been either lost or plagiarized under another name.

His neoplatonic admirers credited him with having reconciled the quarrels of the two great schools of the philosophy of Plato and Aristotle. In Christian circles, according to Eusebius, he was "celebrated among many for the writings which he has left". *Smith's Dictionary of Greek and Roman Biography and Mythology* credits him with holding to a kind of "philosophical theology" in combining the study of philosophy with Christianity.

The death of Ammonius Saccas, also known as Ammonius of Alexandria and Ammonius the Christian and Neoplatonist, is variously given as between AD 240 and AD 245 at a great age.

The Egyptian-Hellenic philosopher and New York Alpha intellectual Ammonius Saccas, above, was schooled in the tradition of Numenius of Apamea:

❖ Numenius of Apamea was a Greek philosopher, who lived in Apamea in Syria and flourished during the latter half of the second century AD He was a Neo-Pythagorean and forerunner of the Neo-Platonists. He seems to have taken Pythagoras as his highest authority, while at the same time he chiefly follows Plato. He calls the latter an "Atticizing Moses." In which he comparatively states that Plato was the Hellenic Moses (see Treatise of the Good First book, Practical Questions 13 Plato as a Greek Moses). His chief divergence from Plato is the distinction between the "first god" and the "demiurge." This is probably due to the influence of Jewish-Alexandrian philosophers (especially Philo and his theory of the Logos).

Numenius the Pythagorean

According to Proclus (Comment. in Timaeum, 93), Numenius held that there was a trinity of gods: the "father," the "maker," and "that which is made," i.e. the world. The first is supreme deity or pure intelligence, the second is creator of the world, the third the world. His works were esteemed by the Neoplatonists, and Plotinus' student Amelius said to have composed nearly two books of commentaries upon them. Though not completely inline with Judeo-Christian teaching Numenius wrote of the human body as a prison. Numenius according to Professor Michael Wagner showed gnostic tendencies in viewing matter as coeval with God.

Fragments of his treatises on the points of divergence between the Academicians and Plato, *on the Good* (in which according to Origen, *Contra Celsum*, iv. 51, he makes allusion to Jesus Christ), and on the mystical sayings in Plato, are preserved in the *Praeparatio Evangelica* of Eusebius. The fragments are collected in F. G. Mullach, *Frag. Phil. Gram.* iii.; see also F. Thedinga, *De Numenio philosopho Platonico* (Bonn, 1875); Ritter and Preller, *Hist. Phil. Graecae* (ed. E. Wellmann, 1898), 624-7; T. Whittaker, *The Neo-Platonists* (1901), E.-A. Leemans, *Studie over den Wijsgeer Numenius van Apamea met*

Uitgave der Fragmenten, Brussels 1937, and E. Des Places, *Numénius, Fragments*, Collection Budé, Paris: Les Belles Lettres, 1973.

The Hellenic philosopher and New York Alpha intellectual Numenius of Apamea, above, was a student of Pythagoras of Samos, below:

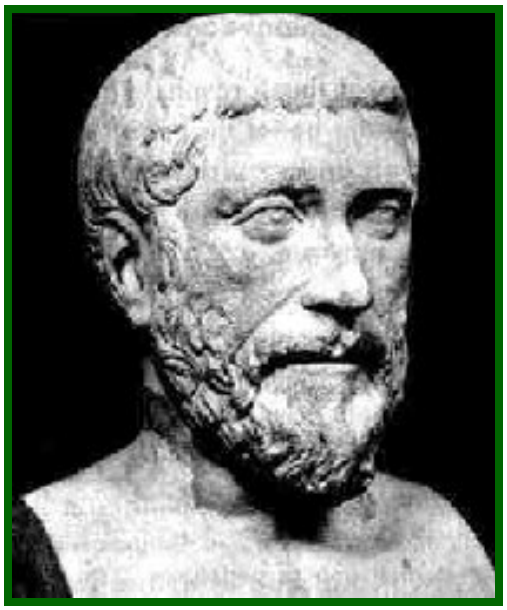
❖ Pythagoras of Samos (Greek: Πυθαγόρας; between 580 and 572 BC– between 500 and 490 BC) was an Ionian (Greek) philosopher and founder of the religious movement called Pythagoreanism. He is often revered as a great mathematician, mystic and scientist; however some have questioned the scope of his contributions to mathematics or natural philosophy. Herodotus referred to him as "the most able philosopher among the Greeks". His name led him to be associated with Pythian Apollo; Aristippus explained his name by saying, "He spoke (*agor-*) the truth no less than did the Pythian (*Pyth-*)," and Iamblichus tells the story that the Pythia prophesied that his pregnant mother would give birth to a man supremely beautiful, wise, and of benefit to humankind.

Pythagoras, New York Alpha's Prime Greek

He is best known for the Pythagorean theorem which bears his name. Known as "the father of numbers", Pythagoras made influential contributions to philosophy and religious teaching in the late 6th century BC. Because legend and obfuscation cloud his work even more than with the other pre-Socratics, one can say little with confidence about his life and teachings. We do know that Pythagoras and his students believed that everything was related to mathematics and that numbers were the ultimate reality and, through mathematics, everything could be predicted and measured in rhythmic patterns or cycles. According to Iamblichus, Pythagoras once said that "number is the ruler of forms and ideas and the cause of gods and demons."

He was the first man to call himself a philosopher, or lover of wisdom, and Pythagorean ideas exercised a marked influence on Plato. Unfortunately, very little is known about Pythagoras because none of his writings have survived. Many of the accomplishments credited to Pythagoras may actually have been accomplishments of his colleagues and successors.

Pythagoras' religious and scientific views were, in his opinion, inseparably interconnected. However, they are looked at separately in the 21st century. Religiously, Pythagoras was a believer of metempsychosis. He believed in transmigration, or the reincarnation of the soul again and again into the bodies of humans, animals, or vegetables until it became moral. His ideas of reincarnation were influenced by ancient Greek religion. He was one of the first to propose that the thought processes and the soul were located in the brain and not the heart. He himself claimed to have lived four lives that he could remember in detail, and heard the cry of his dead friend in the bark of a dog.



New York Alpha's intellectual, Pythagoras

One of Pythagoras' beliefs was that the essence of being is number. Thus, being relies on stability of all things that create the universe. Things like health relied on a stable proportion of elements; too much or too little of one thing causes an imbalance that makes a being unhealthy. Pythagoras viewed thinking as the calculating with the idea numbers. When combined with the Folk theories, the philosophy evolves into a belief that Knowledge of the essence of being can be found in the form of numbers. If this is taken a step further, one can say that because mathematics is an unseen essence, the essence of being is an unseen characteristic that can be encountered by the study of mathematics.

No texts by Pythagoras survive, although forgeries under his name — a few of which remain extant — did circulate in antiquity. Critical ancient sources like Aristotle and Aristoxenus cast doubt on these writings. Ancient Pythagoreans usually quoted their master's doctrines with the phrase *autos ephe* ("he himself said") — emphasizing the essentially oral nature of his teaching. Pythagoras appears as a character in the last book of Ovid's *Metamorphoses,* where Ovid has him expound upon his philosophical viewpoints. Pythagoras has been quoted as saying, "No man is free who cannot command himself."

There is another side to Pythagoras, as he became the subject of elaborate legends surrounding his historic persona. Aristotle described Pythagoras as wonder-worker and somewhat of a supernatural figure, attributing to him such aspects as a golden thigh, which was a sign of divinity. According to Aristotle and others' accounts, some ancients believed that he had the ability to travel through space and time, and to communicate with animals and plants. An

extract from Brewer's Dictionary of Phrase and Fable's entry entitled "Golden Thigh":

> *Pythagoras is said to have had a golden thigh, which he showed to Abaris, the Hyperborean priest, and exhibited in the Olympic games.*

Another legend, also taken from Brewer's Dictionary, describes his writing on the moon:

> *Pythagoras asserted he could write on the moon. His plan of operation was to write on a looking-glass in blood, and place it opposite the moon, when the inscription would appear photographed or reflected on the moon's disc.*

One of Pythagoras's major accomplishments was the discovery that music was based on proportional intervals of the numbers one through four. He believed that the number system, and therefore the universe system, was based on the sum of these numbers: ten. Pythagoreans swore by the Tetrachtys of the Decad, or ten, rather than by the gods. Odd numbers were masculine and even were feminine. He discovered the theory of mathematical proportions, constructed from three to five geometrical solids.

In addition to the Golfo di Squillace and the island of Ithaca, Samos is a cradle of New York Alpha's intellectual legacy.

One of his order, Hippasos, also discovered irrational numbers, but the idea was unthinkable to Pythagoras, and according to one version this member was executed. Pythagoras (or the Pythagoreans) also discovered square numbers. They found that if one took, for example, four small stones and arranged them into a square, each side of the square was not only equivalent to the other, but that when the two sides were multiplied together, they equaled the sum total of stones in the square arrangement, hence the name "Square Root". He was one of the first to think that the earth was round, that all planets have an axis, and that all the planets travel around one central point. He originally identified that point as Earth, but later renounced it for the idea that the planets revolve around a central “fire” that he never identified as the sun. He also believed that the moon was another planet that he called a “counter-Earth” – furthering his belief in the Limited-Unlimited.

Pythagoras or in a broader sense, the Pythagoreans, allegedly exercised an important influence on the work of Plato. According to R. M. Hare, his influence consists of three points: a) the platonic Republic might be related to the idea of "a tightly organized community of like-minded thinkers", like the one established by Pythagoras in Croton. b) there is evidence that Plato possibly took from Pythagoras the idea that mathematics and, generally speaking, abstract thinking is a secure basis for philosophical thinking as well as "for substantial theses in science and morals". c) Plato and Pythagoras shared a "mystical approach to the soul and its place in the material world". It is probable that both have been influenced by Orphism.

Plato's harmonics were clearly influenced by the work of Archytas, a genuine Pythagorean of the third generation, who made important contributions to geometry, reflected in Book VIII of Euclid's *Elements.*

In the legends of ancient Rome, Numa Pompilius, the second King of Rome, is said to have studied under Pythagoras. This is unlikely, since the commonly accepted dates for the two lives do not overlap.

Pythagoras started a secret society called the Pythagorean brotherhood devoted to the study of mathematics. This had a great effect on future esoteric traditions, such as Rosicrucianism and Freemasonry, both of which were occult groups dedicated to the study of mathematics and both of which claimed to have evolved out of the Pythagorean brotherhood. The mystical and occult qualities of Pythagorean mathematics are discussed in a chapter of Manly P. Hall's *The Secret Teachings of All Ages* entitled "Pythagorean Mathematics".

Pythagorean theory was tremendously influential on later numerology, which was extremely popular throughout the Middle East in the ancient world. The 8th-century Islamic alchemist Jabir ibn Hayyan grounded his work in an elaborate numerology greatly influenced by Pythagorean theory.

Pythagoras of Samos is often described as the first pure mathematician. He is an extremely important figure in the development of mathematics yet we know relatively little about his mathematical achievements. Unlike many later Greek mathematicians, where at least we have some of the books which they wrote, we have nothing of Pythagoras's writings. The society which he led, half religious and half scientific, followed a code of secrecy which certainly means that today Pythagoras is a mysterious figure.

We do have details of Pythagoras's life from early biographies which use important original sources yet are written by authors who attribute divine powers to him, and whose aim was to present him as a god-like figure. What we present below is an attempt to collect together the most reliable sources to reconstruct an account of Pythagoras's life. There is fairly good agreement on the main events of his life but most of the dates are disputed with different scholars giving dates which differ by 20 years. Some historians treat all this information as merely legends but, even if the reader treats it in this way, being such an early record it is of historical importance.

Pythagoras's father was Mnesarchus, while his mother was Pythais and she was a native of Samos. Mnesarchus was a merchant who came from Tyre, and there is a story that he brought corn to Samos at a time of famine and was granted citizenship of Samos as a mark of gratitude. As a child Pythagoras spent his early years in Samos but travelled widely with his father. There are accounts of Mnesarchus returning to Tyre with Pythagoras and that he was taught there by the Chaldaeans and the learned men of Syria. It seems that he also visited Italy with his father.

Little is known of Pythagoras's childhood. All accounts of his physical appearance are likely to be fictitious except the description of a striking birthmark which Pythagoras had on his thigh. It is probable that he had two brothers although some sources say that he had three. Certainly he was well educated, learning to play the lyre, learning poetry and to recite Homer. There were, among his teachers, three philosophers who were to influence Pythagoras while he was a young man. One of the most important was Pherekydes who many describe as the teacher of Pythagoras.

The other two philosophers who were to influence Pythagoras, and to introduce him to mathematical ideas, were Thales and his pupil Anaximander who both lived on Miletus. In it is said that Pythagoras visited Thales in Miletus when he was between 18 and 20 years old. By this time Thales was an old man and, although he created a strong impression on Pythagoras, he probably did not teach him a great deal. However he did contribute to Pythagoras's interest in mathematics and astronomy, and advised him to travel to Egypt to learn more of these subjects. Thales's pupil, Anaximander, lectured on Miletus and Pythagoras attended these lectures. Anaximander certainly was interested in geometry and cosmology and many of his ideas would influence Pythagoras's own views.

In about 535 BC Pythagoras went to Egypt. This happened a few years after the tyrant Polycrates seized control of the city of Samos. There is some evidence to suggest that Pythagoras and Polycrates were friendly at first and it is claimed that Pythagoras went to Egypt with a letter of introduction written by Polycrates. In fact Polycrates had an alliance with Egypt and there were therefore strong links between Samos and Egypt at this time. The accounts of Pythagoras's time in Egypt suggest that he visited many of the temples and took part in many discussions with the priests. According to Porphyry, Pythagoras was refused admission to all the temples except the one at Diospolis where he was accepted into the priesthood after completing the rites necessary for admission.

It is not difficult to relate many of Pythagoras's beliefs, ones he would later impose on the society that he set up in Italy, to the customs that he came across in Egypt. For example the secrecy of the Egyptian priests, their refusal to eat beans, their refusal to wear even cloths made from animal skins, and their striving for purity were all customs that Pythagoras would later adopt. Porphyry says that Pythagoras learnt geometry from the Egyptians but it is likely that he was already acquainted with geometry, certainly after teachings from Thales and Anaximander.

In 525 BC Cambyses II, the king of Persia, invaded Egypt. Polycrates abandoned his alliance with Egypt and sent 40 ships to join the Persian fleet against the Egyptians. After Cambyses had won the Battle of Pelusium in the Nile Delta and had captured Heliopolis and Memphis, Egyptian resistance collapsed. Pythagoras was taken prisoner and taken to Babylon. Iamblichus writes that Pythagoras:

> *... was transported by the followers of Cambyses as a prisoner of war. Whilst he was there he gladly associated with the Magoi ... and was instructed in their sacred rites and learnt about a very mystical worship of the gods. He also reached the acme of perfection in arithmetic and music and the other mathematical sciences taught by the Babylonians...*

In about 520 BC Pythagoras left Babylon and returned to Samos. Polycrates had been killed in about 522 BC and Cambyses died in the summer of 522 BC, either by committing suicide or as the result of an accident. The deaths of these rulers may have been a factor in Pythagoras's return to Samos but it is nowhere explained how Pythagoras obtained his freedom. Darius of Persia had taken control of Samos after Polycrates' death and he would have controlled the island on Pythagoras's return. This conflicts with the accounts of Porphyry and Diogenes Laertius who state that Polycrates was still in control of Samos when Pythagoras returned there.

Pythagoras made a journey to Crete shortly after his return to Samos to study the system of laws there. Back in Samos he founded a school which was called the semicircle. Iamblichus writes in the third century AD that:

> *... he formed a school in the city* [*of Samos*]*, the 'semicircle' of Pythagoras, which is known by that name even today, in which the Samians hold political meetings. They do this because they think one should discuss questions about goodness, justice and expediency in this place which was founded by the man who made all these subjects his business. Outside the city he made a cave the private site of his own philosophical teaching, spending most of the night and daytime there and doing research into the uses of mathematics...*

Pythagoras left Samos and went to southern Italy in about 518 BC (some say much earlier). Iamblichus gives some reasons for him leaving. First he comments on the Samian response to his teaching methods:

> *... he tried to use his symbolic method of teaching which was similar in all respects to the lessons he had learnt in Egypt. The Samians were not very keen on this method and treated him in a rude and improper manner.*

This was, according to Iamblichus, used in part as an excuse for Pythagoras to leave Samos:

> *... Pythagoras was dragged into all sorts of diplomatic missions by his fellow citizens and forced to participate in public affairs. ... He knew that all the philosophers before him had ended their days on foreign soil so he decided to escape all political responsibility, alleging as his excuse, according to some sources, the contempt the Samians had for his teaching method.*

Pythagoras founded a philosophical and religious school in Croton (now Crotone, on the east of the heel of southern Italy) that had many followers. Pythagoras was the head of the society with an inner circle of followers known as mathematikoi. The mathematikoi lived permanently with the Society, had no personal possessions and were vegetarians. They were taught by Pythagoras himself and obeyed strict rules.

The beliefs that Pythagoras held were:

(1) *that at its deepest level, reality is mathematical in nature,*

(2) *that philosophy can be used for spiritual purification,*

(3) *that the soul can rise to union with the divine,*

(4) *that certain symbols have a mystical significance, and*

(5) *that all brothers of the order should observe strict loyalty and secrecy.*

Both men and women were permitted to become members of the Society, in fact several later women Pythagoreans became famous philosophers. The outer circle of the Society were known as the akousmatics and they lived in their own houses, only coming to the Society during the day. They were allowed their own possessions and were not required to be vegetarians.

Of Pythagoras's actual work nothing is known. His school practised secrecy and communalism making it hard to distinguish between the work of Pythagoras and that of his followers. Certainly his school made outstanding contributions to mathematics, and it is possible to be fairly certain about some of Pythagoras's mathematical contributions. First we should be clear in what sense Pythagoras and the mathematikoi were studying mathematics. They were not acting as a mathematics research group does in a modern university or other institution. There were no 'open problems' for them to solve, and they were not in any sense interested in trying to formulate or solve mathematical problems.

The Hellenic philosopher and New York Alpha intellectual Pythagoras of Samos, above, was tutored by Pherecydes of Syros:

❖ Pherecydes of Syros (in Greek: Φερεκύδης) was a Greek thinker from the island of Syros, of the 6th century BC. Pherecydes authored the *Heptamychia*, one of the first attested prose works in Greek literature, which formed an important bridge between mythic and pre-Socratic thought. Very little is known of his life. The sources are often contradictory. It has been said that he was a son of Babys, and that he was most likely active in ca. 540 B.C.E. In this piece, Pherecydes taught his philosophy through the medium of mythic representations. Although it is lost, the fragments that survive are enough to reconstruct a basic outline. Aristotle in *Metaphysics* (section 1091 b 8) thus characterized Pherecydes' work as a mixture of myth and philosophy.

Pherecydes, teacher of Pythagoras

Pherecydes gives a history of the world that proceeds by rationalizing the Greek pantheon. The king of the gods is not Zeus but *Zas* ("he who lives"). His father is Chronos ("time") rather than Cronus, from whom water, earth, air and fire spring. The antagonism between father and son seems to have been omitted. Chronos and Zas fight a war against Ophion or Ophioneus ("the snake man"), and Zas celebrates his victory by weaving a robe for Chthonie, who is transformed into Ge ("the surface of the earth").

Aside from his writing, Pherecydes is known for having made a sundial on the island of Syros. His works include:

(1) A 'heliotropion', or 'shadow-chaser', the first example of this instrument, which was a more advanced kind of gnomon used determine midday and to calculate the length of the year and the geographical latitude, was built by Pherecydes in Samos.

(2) "On the seven sections of the universe": Unbounded space, heaven of the fixed stars, heaven of the 'wandering stars' (planets), sphere of the sun, sphere of the moon, sphere of the earth, underworld.

(3) "Heptamychos": (or "Pentamychos"). History of the creation of the world. Pherecydes held that there were three eternal beings: Zeus, Time and Chthone (Earth). Pherecydes predicted lunar and solar eclipses.

Pherecydes' contribution to the early Presocratic thought is (1) the denial of ex nihilo creation; (2) cosmos self-creation; (3) the eternal nature of the first principles. Both Cicero and Augustine thought that Pherecydes of Syros first taught the immortality of the soul.

Diogenes Laertius writes that some considered Pherecydes to have been the teacher of Pythagoras. He is occasionally counted among the Seven Sages of Greece.

The Hellenic philosopher and New York Alpha intellectual Pythagoras of Samos, above, was also mentored by Anaximenes of Miletus:

❖ Pherec Anaximenes (Greek: Ἀναξιμένης) of Miletus (c. 585 BC–c. 525 BC) was a Greek philosopher from the latter half of the 6th century, probably a younger contemporary of Anaximander, whose pupil or friend he is said to have been. He held that the air, with its variety of contents, its universal presence, its vague associations in popular fancy with the phenomena of life and growth, is the source of all that exists. Everything is air at different degrees of density, and under the influence of heat, which expands, and of cold, which contracts its volume, it gives rise to the several phases of existence. The process is gradual, and takes place in two directions, as heat or cold predominates.

Anaximenes, teacher of Pythagoras

In this way was formed a broad disk of earth, floating on the circumambient air. Similar condensations produced the sun and stars; and the flaming state of these bodies is due to the velocity of their motions. He states:

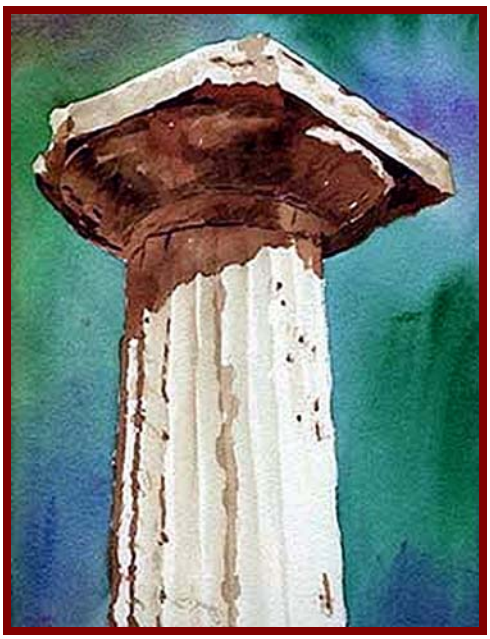
> "Just as our soul, being air, holds us together, so do breath and air encompass the whole world."

What makes the three Milesian philosophers, Thales, Anaximander and Anaximenes, stand out is that the theoretical human has become a reality. The way of thinking has in its basic form moved away from the mythological thinking (or *mythos*) and into the domain of the theoretical thinking (or *logos*). From now on it is about explaining the universal and the general. Everything in the universe can now be approached by the thoughts of humans. This notably influenced the Pythagoreans.

It was actually "aer" which he believed to be the common characteristic between all things. "Aer" is the Greek word for a mist rather than just pure air.

The Hellenic philosopher and New York Alpha intellectual Anaximenes of Miletus was a pupil of Anaximander of Miletus:

❖ Anaximander (Ancient Greek: Ἀναξίμανδρος) (c. 610 BC–c. 546 BC) was a pre-Socratic philosopher who lived in Miletus, a city of Ionia. He joined the Milesian school and studied the teachings of its master Thales. He succeeded him and became the second master of that school where he counted Anaximenes and Pythagoras amongst his pupils. Little of his life and work is known today. According to available historical documents, he is the first philosopher known to have written down his studies, although only one fragment of his work remains. Fragmentary testimonies found in documents after his death provide a portrait of the man. Anaximander was one of the earliest Greek thinkers at the start of the Axial Age, the period from approximately 700 BC to 200 BC, during which similarly revolutionary thinking appeared in China, India, Iran, the Near East, and Ancient Greece.



Anaximander, teacher of Anaximenes

He was an early proponent of science and tried to observe and explain different aspects of the universe, with a particular interest in its origins, claiming that nature is ruled by laws, just like human societies, and anything that disturbs the balance of nature does not last long. Like many thinkers of his time, his contributions to philosophy relate to many disciplines. In astronomy, he tried to describe the mechanics of celestial bodies in relation to the Earth. In physics, he postulated that the indefinite (or apeiron) was the source of all things. His knowledge of geometry allowed him to introduce the gnomon in Greece. He created a map of the world that contributed greatly to the advancement of geography. He was also involved in the politics of Miletus as he was sent as a leader to one of its colonies.

With his assertion that physical forces, rather than supernatural means, create order in the universe, Anaximander can be considered the first true scientist. He is known to have conducted the earliest recorded scientific experiment.

Anaximander, son of Praxiades, was born in Miletus during the third year of the 42nd Olympiad (610 BCE). According to Apollodorus, Greek grammarian of the 2nd century BCE, he was sixty-four years old during the second year of the 58th Olympiad (547 BC-546 BCE), and died shortly afterwards.

Very few documents provide details on his life. Fragments that refer to him deal with his work, except for the very short description provided by Diogenes Laertius. Diogenes explains that Anaximander was a pupil of Thales, founder of the Milesian School of philosophy. He succeeded him as master of the School where his work influenced Anaximenes and Pythagoras. According to the *Suda*, Thales was also a relative, probably his cousin or uncle, but no other text provides any information about his family life.

Establishing a timeline of his work is now impossible, since no document provides chronological references. Anaximander would have reached the pinnacle of his career around the time of Polycrates, tyrant of Samos. Themistius, a 4th century Byzantine rhethorician, mentions that he was the "first of the known Greeks to publish a written document on nature" and therefore his texts would be amongst the earliest written in prose, at least in the Western world. By the time of Plato, his philosophy was almost forgotten, and Aristotle, his successor Theophrastus and a few doxographers provide us with the little information that remains.

The 3rd century Roman rhetorician Aelian depicts him as leader of the Milesian colony to Apollonia on the Black Sea coast, and hence some have inferred that he was a prominent citizen. Indeed, *Various History* (III, 17) explains that philosophers sometimes left the contentment of their thoughts to deal with political matters. It is very likely that leaders of Miletus sent him there as a legislator to create a constitution or simply to maintain the colony's allegiance.

In *Lives and Opinions of Eminent Philosophers* (II, 2), Diogenes Laertius reports an amusing anecdote regarding his personality: learning that children were mocking him when he was singing, Anaximander replied that he should learn to sing better for the children.

The antipope Hippolytus of Rome (I, 5), and later 4th century Byzantine philosopher Simplicius of Cilicia, attribute to Anaximander the earliest use of the word *apeíron* (ἄπειρον/*infinite* or *limitless*) to designate the original principle. He is the first philosopher to employ, in a philosophical context, the term *arkhḗ* (ἀρχή), which until then had meant *beginning* or *origin*. For him, it became no longer a mere point in time, but a source that could perpetually give birth to whatever will be.

Aristotle writes (*Metaphysics*, I III 3-4) that the Pre-Socratics were searching for the *element* that constitutes all things. While each pre-Socratic philosopher gave a different answer as to the identity of this element (water for

Thales, air for Anaximenes, fire for Heraclitus), Anaximander understood the beginning or first principle to be an endless, unlimited primordial mass (*apeiron*), subject to neither old age nor decay, that perpetually yielded fresh materials from which everything we perceive is derived. He proposed the theory of the apeiron in direct response to the earlier theory of his teacher, Thales, who had claimed that the primary substance was water.

For Anaximander, the principle of things, the constituent of all substances, is nothing determined and not an element such as water in Thales' view. Neither is it something halfway between air and water, or between air and fire, thicker than air and fire, or more subtle than water and earth. Anaximander argues that water cannot embrace all of the opposites found in nature — for example, water can only be wet, never dry — and therefore cannot be the one primary substance; nor could any of the other candidates. He postulated the *apeiron* as a substance that, although not directly perceptible to us, could explain the opposites he saw around him.

Anaximander explains how the four elements of ancient physics (air, earth, water and fire) are formed, and how Earth and terrestrial beings are formed through their interactions. Unlike other Pre-Socratics, he never defines this principle precisely, and it has generally been understood (e.g., by Aristotle and by Saint Augustine) as a sort of primal chaos. According to him, the Universe originates in the separation of opposites in the primordial matter. It embraces the opposites of hot and cold, wet and dry, and directs the movement of things; an entire host of shapes and differences then grow that are found in "all the worlds" (for he believed there were many).

Anaximander maintains that all dying things are returning to the element from which they came (*apeiron*). The one surviving fragment of Anaximander's writing deals with this matter. Simplicius transmitted it as a quotation, which describes the balanced and mutual changes of the elements:

> Whence things have their origin, Thence also their destruction happens, According to necessity; For they give to each other justice and recompense For their injustice In conformity with the ordinance of Time.

This concept of returning to the element of origin was often revisited afterwards, notably by Aristotle (*Metaphysics*, I, 3, 983 *b* 8-11; *Physics*, III, 5, 204 *b* 33-34) and by the Greek tragedian Euripides ("what comes from earth must return to earth", *Supplices*, v. 532). It is even echoed in the Judeo-Christian phrase, "For dust you are and to dust you will return".

Anaximander's bold use of non-mythological explanatory hypotheses considerably distinguishes him from previous cosmology writers such as Hesiod. It confirms that pre-Socratic philosophers were making an early effort to demythify the genealogical process. His major contribution to history was writing the oldest prose document about the Universe and the origins of life; for this he is

often called the "Father of Cosmology" and founder of astronomy. However, pseudo-Plutarch (the name given to unknown authors whose works are attributed to the Greek biographer Plutarch) (I, 7) states that he still viewed celestial bodies as deities.

Anaximander was the first to conceive a mechanical model of the world. In his model, the Earth floats very still in the centre of the infinite, not supported by anything. It remains "in the same place because of its indifference", a point of view that Aristotle considered ingenious, but false, in *On the Heavens* (II, 13). Its curious shape is that of a cylinder with a height one-third of its diameter. The flat top forms the inhabited world, which is surrounded by a circular oceanic mass.

Such a model allowed the concept that celestial bodies could pass under it. It goes further than Thales' claim of a world floating on water, for which Thales faced the problem of explaining what would contain this ocean, while Anaximander solved it by introducing his concept of infinite (*apeiron*).

At the origin, after the separation of hot and cold, a ball of flame appeared that surrounded Earth like bark on a tree. This ball broke apart to form the rest of the Universe. It resembled a system of hollow concentric wheels, filled with fire, with the rims pierced by holes like those of a flute. Consequently, the Sun was the fire that one could see through a hole the same size as the Earth on the farthest wheel, and an eclipse corresponded with the occlusion of that hole. The diameter of the solar wheel was twenty-seven times that of the Earth (or twenty-eight, depending on the sources) and the lunar wheel, whose fire was less intense, eighteen (or nineteen) times. Its hole could change shape, thus explaining lunar phases. The stars and the planets, located closer, followed the same model.

Anaximander was the first astronomer to consider the Sun as a huge mass, and consequently, to realize how far from Earth it might be, and the first to present a system where the celestial bodies turned at different distances. Furthermore, according to Diogenes Laertius (II, 2), he built a celestial sphere. This invention undoubtedly made him the first to realize the obliquity of the Zodiac as the Roman philosopher Pliny the Elder reports in Natural History (II, 8). It is a little early to use the term ecliptic, but his knowledge and work on astronomy confirm that he must have observed the inclination of the celestial sphere in relation to the plane of the Earth to explain the seasons. The doxographer and theologian Aetius attributes to Pythagoras the exact measurement of the obliquity.

According to Simplicius, Anaximander already speculated on the plurality of worlds, similar to atomists Leucippus and Democritus, and later philosopher Epicurus. These thinkers supposed that worlds appeared and disappeared for a while, and that some were born when others perished. They claimed that this

movement was eternal, "for without movement, there can be no generation, no destruction".

In addition to Simplicius, Hippolytus (*Refutation* I, 6) reports Anaximander's claim that from the infinite comes the principle of beings, which themselves come from the heavens and the worlds (several doxographers use the plural when this philosopher is referring to the worlds within, which are often infinite in quantity). Cicero writes that he attributes different gods to the countless worlds.

This theory places Anaximander close to the Atomists and the Epicureans who, more than a century later, also claimed that an infinity of worlds appeared and disappeared. In the timeline of the Greek history of thought, some thinkers conceptualized a single world (Plato, Aristotle, Anaxagoras and Archelaus), while others instead speculated on the existence of a series of worlds, continuous or non-continuous (Anaximenes, Heraclitus, Empedocles and Diogenes).

Anaximander attributed some phenomena, such as thunder and lightning, to the intervention of elements, rather than to divine causes. In his system, thunder results from the shock of clouds hitting each other; the loudness of the sound is proportionate with that of the shock. Thunder without lightning is the result of the wind being too weak to emit any flame, but strong enough to produce a sound. A flash of lightning without thunder is a jolt of the air that disperses and falls, allowing a less active fire to break free. Thunderbolts are the result of a thicker and more violent air flow.

He saw the sea as a remnant of the mass of humidity that once surrounded Earth. A part of that mass evaporated under the sun's action, thus causing the winds and even the rotation of the celestial bodies, which he believed were attracted to places where water is more abundant. He explained rain as a prod ander of Miletus considered that from warmed up water and earth emerged either uct of the humidity pumped up from Earth by the sun. For him, the Earth was slowly drying up and water only remained in the deepest regions, which someday would go dry as well. According to Aristotle's *Meteorology* (II, 3), Democritus also shared this opinion.

Anaximander speculated about the beginnings and origin of animal life. Taking into account the existence of fossils, he claimed that animals sprang out of the sea long ago. The first animals were born trapped in a spiny bark, but as they got older, the bark would dry up and break. As the early humidity evaporated, dry land emerged and, in time, humankind had to adapt. In *De Die Natali* (IV, 7), the 3rd century Roman writer Censorinus reports:

Anaxim fish or entirely fishlike animals. Inside these animals, men took form and embryos were held prisoners until puberty; only then, after these animals burst open, could men and women come out, now able to feed themselves.

Anaximander put forward the idea that humans had to spend part of this transition inside the mouths of big fish to protect themselves from the Earth's climate until they could come out in open air and lose their scales. He thought that, considering humans' extended infancy, we could not have survived in the primeval world in the same manner we do presently.

Even though he had no theory of natural selection, some people consider him as evolution's most ancient proponent. The theory of an aquatic descent of man was re-conceived centuries later as the aquatic ape hypothesis. These pre-Darwinian concepts may seem strange, considering modern knowledge and scientific methods, because they present complete explanations of the universe while using bold and hard-to-demonstrate hypotheses. However, they illustrate the beginning of a phenomenon sometimes called the "Greek miracle": men try to explain the nature of the world, not with the aid of myths or religion, but with material principles. This is the very principle of scientific thought, which was later advanced further by improved research methods.

Both Strabo and Agathemerus (Greek geographers whose work postdates Anaximander) claim that, according to the geographer Eratosthenes, Anaximander was the first to publish a map of the world. The map probably inspired the Greek historian Hecataeus of Miletus to draw a more accurate version. Strabo viewed both as the first geographers after Homer.

Local maps were produced in ancient times, notably in Egypt, Lydia, the Middle East, and Babylon. They indicated roads, towns, borders, and geological features. Anaximander's innovation was to represent the entire inhabited land known to the ancient Greeks.

Such an accomplishment is more significant than it at first appears. Anaximander most likely drew this map for three reasons. First, it could be used to improve navigation and trade between Miletus' colonies and other colonies around the Mediterranean Sea and Black Sea. Second, Thales would probably have found it easier to convince the Ionian city-states to join in a federation in order to push the Median threat away if he possessed such a tool. Finally, the philosophical idea of a global representation of the world simply for the sake of knowledge was reason enough to design one.

Surely aware of the sea's convexity, he may have designed his map on a slightly rounded metal surface. The centre or “navel” of the world (ὀμφαλός γῆς/*omphalós gẽs*) could have been Delphi, but is more likely in Anaximander's time to have been located near Miletus. The Aegean Sea was near the map's centre and enclosed by three continents, themselves located in the middle of the ocean and isolated like islands by sea and rivers. Europe was bordered on the south by the Mediterranean Sea and was separated from Asia by the Pontus Euxinus (the Black Sea), the Lake Maeotis, and, further east, either by the Phasis River (now called the Rioni) or the Tanais. The Nile flowed south into the

ocean, separating Libya (which was the name for the part of the then-known African continent) from Asia.

The *Suda* relates that Anaximander explained some basic notions of geometry. It also mentions his interest in the measurement of time and associates him with the introduction in Greece of the gnomon. In Lacedaemon, he participated in the construction, or at least in the adjustment, of sundials to indicate solstices and equinoxes. Indeed, a gnomon required adjustments from a place to another because of the difference in latitude.

In his time, the gnomon was simply a vertical pillar or rod mounted on a horizontal plane. The position of its shadow on the plane indicated the time of day. As it moves through its apparent course, the sun draws a curve with the tip of the projected shadow, which is shortest at noon, when pointing due south. The variation in the tip's position at noon indicates the solar time and the seasons; the shadow is longest on the winter solstice and shortest on the summer solstice.

However, the invention of the gnomon itself cannot be attributed to Anaximander because its use, as well as the division of days into twelve parts, came from the Babylonians. It is they, according to Herodotus' Histories (II, 109), who gave the Greeks the art of time measurement. It is likely that he was not the first to determine the solstices, because no calculation is necessary. On the other hand, equinoxes do not correspond to the middle point between the positions during solstices, as the Babylonians thought. As the *Suda* seems to suggest, it is very likely that with his knowledge of geometry, he became the first Greek to accurately determine the equinoxes.

In his philosophical work De Divinatione (I, 50, 112), Cicero states that Anaximander convinced the inhabitants of Lacedaemon to abandon their city and spend the night in the country with their weapons because an earthquake was near. The city collapsed when the top of the Taygetus split like the stern of a ship. Pliny the Elder also mentions this anecdote (II, 81), suggesting that it came from an "admirable inspiration", as opposed to Cicero, who did not associate the prediction with divination.

Bertrand Russell in the *History of Western Philosophy* interprets Anaximander's theories as an assertion of the necessity of an appropriate balance between earth, fire, and water, all of which may be independently seeking to aggrandize their proportions relative to the others. Anaximander seems to express his belief that a natural order ensures balance between these elements, that where there was fire, ashes (earth) now exist. His Greek peers echoed this sentiment with their belief in natural boundaries beyond which not even their gods could operate.

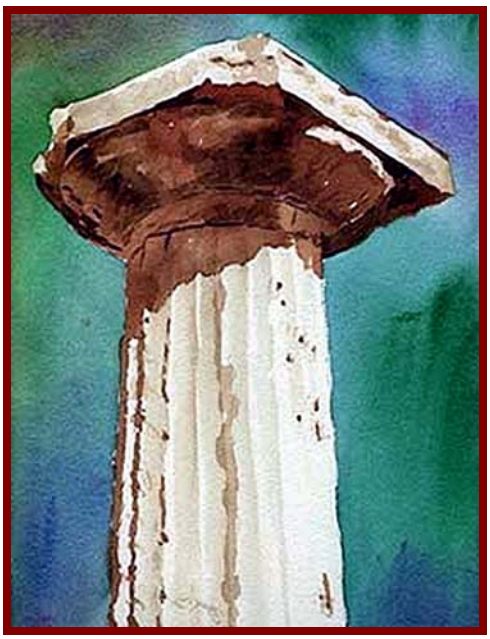
Friedrich Nietzsche, in *Philosophy in the Tragic Age of the Greeks*, claimed that Anaximander was a pessimist who asserted that the primal being of

the world was a state of indefiniteness. In accordance with this, anything definite has to eventually pass back into indefiniteness. In other words, Anaximander viewed "...all coming-to-be as though it were an illegitimate emancipation from eternal being, a wrong for which destruction is the only penance". (*Ibid.*, § 4) The world of individual objects, in this way of thinking, has no worth and should perish.

Martin Heidegger lectured extensively on Anaximander, and delivered a lecture entitled "Anaximander's Saying" which was subsequently included in *Off the Beaten Track*. The lecture examines the ontological difference and the oblivion of Being or *Dasein* in the context of the Anaximander fragment. Heidegger's lecture is, in turn, an important influence on the French philosopher Jacques Derrida.

*T*he Hellenic philosopher and New York Alpha Intellectual Anaximander of Miletus was a pupil of Thales:

❖ Thales of Miletos (Θαλῆς ὁ Μιλήσιος, ca. 624 BC–ca. 546 BC), was a pre-Socratic Milesian philosopher and one of the Seven Sages of Greece. Many regard him as the first philosopher in the Greek tradition, while some also consider him the "father of science". Thales lived around mid 620s–547 BCE and was born in the city of Miletus (Greek: Μίλητος trans-literated Miletos, Turkish: Milet) an ancient Ionian seaport on the western coast of Asia Minor (in what is today the Aydin Province of Turkey), near the mouth of the Maeander River. The dates of Thales' life are not known precisely. The time of his life is roughly established by a few dateable events mentioned in the sources and an estimate of his length of life.



Thales, father of science

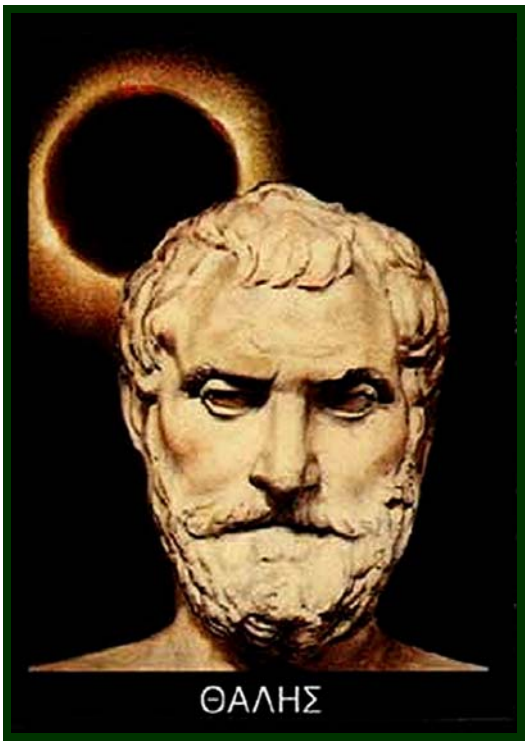
According to Herodotus, Thales once predicted a solar eclipse which has been determined by modern methods to have been on May 28, 585 BC. Diogenes Laërtius quotes the chronicle of Apollodorus as saying that Thales died at 78 in the 58th Olympiad, and Sosicrates as reporting that he was 90 at his death.

As for his origin, the majority opinion considers Thales to have been a Milesian by descent, though Herodotus and others suggest that his parents may have been Phoenician. After repeating a story that Thales had been naturalized, or recently enrolled as a citizen, Diogenes Laërtius informs us that a more common statement was that he was "a right-born Milesian". Diogenes Laërtius and others further suggested that Thales was the son of Examyas and Cleobulina and that they were of the Thelidae family (hence Thales), who were of noble descent from Agenor and Cadmus of ancient Thebes, Greece.

When the Greeks settled Miletus, it included a Carian population. Families on monuments have both Greek and Carian names. Thales' father's name is of the Carian type, like Cheramyes and Panamyes.

Diogenes Laërtius reports two stories about Thales' family life, one that he married and had a son, Cybisthus or Cybisthon, or adopted his nephew of the same name. The second is that he never married, telling his mother as a young man that it was too early to marry, and as an older man that it was too late.

The well-traveled Ionians had many dealings with Egypt and Babylon, and Thales may have studied in Egypt as a young man. In any event, Thales almost certainly had exposure to Egyptian mythology, astronomy, and mathematics, as well as to other traditions alien to the Homeric traditions of Greece. Perhaps because of this, his inquiries into the nature of things took him beyond traditional mythology.



Thales, New York Alpha's first "Greek"

Thales involved himself in many activities, taking the role of an innovator. Some say that he left no writings, others that he wrote "On the Solstice" and "On the Equinox". Neither have survived. Diogenes Laërtius quotes letters of Thales to Pherecydes and Solon, offering to review the book of the former on religion, and offering to keep company with the latter on his sojourn from Athens. Thales identifies the Milesians as Athenians. Several anecdotes suggest that Thales was not solely a thinker; he was involved in business and politics. One story recounts that he bought all the olive presses in Miletus after predicting the weather and a good harvest for a particular year. Another version of this same story states that he bought the presses not to become wealthy, but merely to demonstrate to his fellow Milesians that he could use his intelligence to enrich himself.

Thales' political life had mainly to do with the involvement of the Ionians in the defense of Anatolia against the growing power of the Persians, who were then new to the region. A king had come to power in neighboring Lydia, Croesus, who was somewhat too aggressive for the size of his army. He had conquered most of the states of coastal Anatolia, including the cities of the Ionians. The story is told in Herodotus.

The Lydians were at war with the Medes, a remnant of the first wave of Iranians in the region, over the issue of refuge the Lydians had given to some

Scythian soldiers of fortune inimical to the Medes. The war endured for five years, but in the sixth an eclipse of the sun (mentioned above) spontaneously halted a battle in progress (the Battle of Halys).

It seems that Thales had predicted this eclipse. The Seven Sages were most likely already in existence, as Croesus was also heavily influenced by Solon of Athens, another sage. Whether Thales was present at the battle is not known, nor are the exact terms of the prediction, but based on it the Lydians and Medes made peace immediately, swearing a blood oath.

The Medes were dependencies of the Persians under Cyrus. Croesus now sided with the Medes against the Persians and marched in the direction of Iran (with far fewer men than he needed). He was stopped by the river Halys, then unbridged. This time he had Thales with him, perhaps by invitation. Whatever his status, the king gave the problem to him, and he got the army across by digging a diversion upstream so as to reduce the flow, making it possible to ford the river. The channels ran around both sides of the camp.

The two armies engaged at Pteria in Cappadocia. As the battle was indecisive but paralyzing to both sides, Croesus marched home, dismissed his mercenaries and sent emissaries to his dependents and allies to ask them to dispatch fresh troops to Sardis. The issue became more pressing when the Persian army showed up at Sardis. Diogenes Laertius tells us that Thales gained fame as a counsellor when he advised the Milesians not to engage in a symmachia, a “fighting together”, with the Lydians. This has sometimes been interpreted as an alliance, but you do not ally with your subjects.

Croesus was defeated before the city of Sardis by Cyrus, who subsequently spared Miletus because it had taken no action. The Great King was something of a philosopher himself. He was so impressed by Croesus’ wisdom and his connection with the sages that he spared him and took his advice on various matters.

The Ionians were now free. Herodotus says that Thales advised them to form an Ionian state; that is, a bouleuterion (“deliberative body”) to be located at Teos in the center of Ionia. The Ionian cities should be demoi, or “districts”. Miletus, however, received favorable terms from Cyrus. The others remained in an Ionian League of 12 cities (excluding Miletus now), and were subjugated by the Persians.

The ethics of Thales can be estimated from the sayings attributed to him, reported in Diogenes Laertius. First, he recognizes a transcendental God, who has neither beginning nor end. He believes that God is just and expects men to behave justly. Neither men being unjust (ἄδικος) nor thinking injustice escape the notice of the Gods (θεοί). In this form of polytheism the transcendental god expresses himself through gods, so that a man can say θεοί and mean God.

Thales' idea of justice includes both the letter of the law and the spirit of the law. Concerning the former, he advises that adultery and perjury about it in court are equally bad. His value of civic law is supplemented by some practical advice. Expect the same support from your children that you give to your parents. Do not let talk influence you against those whom you have come to trust. Be rich, yes, for success is sweet. However, do not be rich badly (κακῶς).

As to the spirit of the law, we find Thales expressing a rather well known principle for leading the best (ἄριστα) and most just (δικαιότατα) life:

ἃ τοῖς ἄλλοις ἐπιτιμῶμεν, αὐτοὶ μὴ δρῶμεν

"That for which we blame others, let us not do ourselves"

This rejection of hypocrisy resembles the foundational principle of Jewish law, "Do not unto thy neighbor what is hateful to thyself." His view of enemies is somewhat more severe than the Old Testament, which supports an equal exchange of penalties: an eye for an eye, tooth for a tooth etc (Exodus 21:23–25). According to Thales, a man can better bear adversity if he sees that his enemies are worse off.

Thales' view was that men are better than women and Greeks are better than barbarians. (He stated this despite the fact that his proudest ancestor was dethroned in Thebes for being a barbarian.)

Thales was not Democratic. One story has him living with Thrasybulus, tyrant of Miletus. In his letter to Solon he offers to live elsewhere with him, seeing that Solon finds tyranny so offensive. Ancient philosophers in general tended to support benign tyranny, such as Plato's ideal philosopher-king. Unquestionably, sages were more at home with absolutism than with democratic forms of government. They could not resist undertaking to reform the morals of the citizens, with well-known results. Philosophers' support of tyrants generally had poor results; the outcome was generally the expulsion or murder of the tyrant and the massacre of the philosophers.

According to Thales, a happy man is defined as one,

ὁ τὸ μὲν σῶμα ὑγιής, τὴν δὲ ψυχὴν εὔπορος, τὴν δὲ φύσιν εὐπαίδευτος

"Who is healthy in body, resourceful in soul and
of a readily teachable nature"

which is similar to the Roman "Mens sana in corpore sano", our "sane mind in a healthy body." Perhaps Thales did exercise, but he did not cultivate the body, as he preached not beautifying the appearance (ὄψις) but practicing the good, not the bad.

Diogenes Laertius tells us that the Seven Sages were created in the archonship of Damasius at Athens about 582 BC and that Thales was the first sage. The same story, however, asserts that Thales emigrated to Miletus. There is also a report that he did not become a student of nature until after his political career. Much as we would like to have a date on the seven sages, we must reject these stories and the tempting date if we are to believe that Thales was a native of Miletus, predicted the eclipse, and was with Croesus in the campaign against Cyrus.

Thales had no instruction but that of Egyptian priests, we are told. Whether we should believe that story is a different matter. It was fairly certain that he came from a wealthy and established family, and the wealthy customarily educated their children. Moreover, the ordinary citizen, unless he was a seafaring man or a merchant, could not afford the grand tour in Egypt, and in any case did not consort with noble lawmakers such as Solon. Perhaps the source only meant that Thales had not been instructed in philosophy before proposing his theories about nature.

He did participate in some games, most likely Panhellenic, at which he won a bowl twice. He dedicated it to Apollo at Delphi. As he was not known to have been athletic, his event was probably declamation, and it may have been victory in some specific phase of this event that led to his being designated sage.

Another trophy, a tripod, is said to have been bestowed upon him and was given by him to another sage, going the rounds until it came back to him, at which time he dedicated it to Apollo. The oracle given to the Koans, in obedience to which the tripod was given to Thales (in this story), said that it should go to

ὃς σοφὸς ᾖ̃ τὰ ἐόντα τὰ τ'ἐσσόμενα πρό τ'ἐόντα

”Who is wise in the things that are, the things that will be,
and the things that were”

which is delivered in dactylic hexameter, the verse form of the Iliad, and contains a formula said of Calchas, a Homeric mantis, or “seer”. Thales did predict an eclipse. Perhaps it was on that basis that he was pronounced sage. One of the verses attributed to him proclaims that

σοφώτατον χρόνος: ἀνευρίσκει γὰρ πάντα

”Time is the wisest because it discovers everything”

The time, place and reasons for Thales being declared officially sage remain obscure, although the sources made some good guesses, one or more of which were probably right. The essence of his wisdom seems to have been

simplicity of theory with emphasis on insight and inspiration, as these words of a song attributed to him by Laertius indicate:

οὔ τι τὰ πολλὰ ἔπη φρονίμην ἀπεφήνατο δόξαν:
ἕν τι μάτευε σοφόν, ἕν τι κεδνὸν αἰροῦ:

”Never did many words declare a mindful teaching:
strive after a single wise thing, pick one thing you can depend on:”

It is ironic that a man with this principle had many and various achievements.Thales is said to have died of dehydration while watching a gymnastic contest.

Before Thales, the Greeks explained the origin and nature of the world through myths of anthropomorphic gods and heroes. Phenomena such as lightning or earthquakes were attributed to actions of the gods.

In contrast to these mythological explanations, Thales attempted to find naturalistic explanations of the world, without reference to the supernatural. He explained earthquakes by hypothesizing that the Earth floats on water, and that earthquakes occur when the Earth is rocked by waves.

Thales, according to Aristotle, asked what was the nature (Greek physis, Latin natura) of the object so that it would behave in its characteristic way. Physis (φύσις) comes from phuein (φύειν), "to grow", related to our word "be". *(G)natura* is the way a thing is "born", again with the stamp of what it is in itself.

Aristotle characterizes most of the philosophers "at first" (πρῶτον) as thinking that the "principles in the form of matter were the only principles of all things", where "principle" is arche, "matter" is hyle ("wood") and "form" is eidos.

"Principle" translates arche, but the two words do not have precisely the same meaning. A principle of something is merely prior (related to pro-) to it either chronologically or logically. An arche (from αρχειν, "to rule") dominates an object in some way. If the arche is taken to be an origin, then specific causality is implied; that is, B is supposed to be characteristically B just because it comes from A, which dominates it.

The archai that Aristotle had in mind in his well-known passage on the first Greek scientists are not necessarily chronologically prior to their objects, but are constituents of it. For example, in pluralism objects are composed of earth, air, fire and water, but those elements do not disappear with the production of the object. They remain as archai within it, as do the atoms of the atomists.

What Aristotle is really saying is that the first philosophers were trying to define the substance(s) of which all material objects are composed. As a matter

of fact, that is exactly what modern scientists are trying to do in nuclear physics, which is a second reason why Thales is described as the first scientist

Thales' most famous belief was his cosmological doctrine, which held that the world originated from water. Aristotle considered this belief roughly equivalent to the later ideas of Anaximenes, who held that everything in the world was composed of air.

The best explanation of Thales' view is the following passage from Aristotle's *Metaphysics*. The passage contains words from the theory of matter and form that were adopted by science with quite different meanings.

> That from which is everything that exists (ἅπαντα τὰ ὄντα) and from which it first becomes (ἐξ οὗ γίγνεται πρῶτου) and into which it is rendered at last (εἰς ὃ φθείρεται τελευταῖον), its substance remaining under it (τῆς μὲν οὐσίας ὑπομενούσης), but transforming in qualities (τοῖς δὲ πάθεσι μεταβαλλούσης), that they say is the element (στοιχεῖον) and principle (ἀρχήν) of things that are.

And again:

> For it is necessary that there be some nature (φύσις), either one or more than one, from which become the other things of the object being saved... Thales the founder of this type of philosophy says that it is water.

Aristotle's depiction of the change problem and the definition of substance is clear. If an object changes, is it the same or different? In either case how can there be a change from one to the other? The answer is that the substance "is saved", but acquires or loses different qualities (πάθη, the things you "experience").

A deeper dip into the waters of the theory of matter and form is properly reserved to other articles. The question for this article is, how far does Aristotle reflect Thales? He was probably not far off, and Thales was probably an incipient matter-and-formist.

The essentially non-philosophic Diogenes Laertius states that Thales taught as follows:

> Water constituted (ὑπεστήσατο, 'stood under') the principle of all things.

Heraclitus Homericus states that Thales drew his conclusion from seeing moist substance turn into air, slime and earth. It seems clear that Thales viewed the Earth as solidifying from the water on which it floated and which surrounded Ocean.

Thales applied his method to objects that changed to become other objects, such as water into earth (he thought). But what about the changing itself? Thales did address the topic, approaching it through magnets and amber, which, when electrified by rubbing, attracts also. A concern for magnetism and electrification never left science, being a major part of it today.

How was the power to move other things without the mover's changing to be explained? Thales saw a commonality with the powers of living things to act. The magnet and the amber must be alive, and if that were so, there could be no difference between the living and the dead. When asked why he didn't die if there was no difference, he replied "because there is no difference."

Aristotle defined the soul as the principle of life, that which imbues the matter and makes it live, giving it the animation, or power to act. The idea did not originate with him, as the Greeks in general believed in the distinction between mind and matter, which was ultimately to lead to a distinction not only between body and soul but also between matter and energy.

If things were alive, they must have souls. This belief was no innovation, as the ordinary ancient populations of the Mediterranean did believe that natural actions were caused by divinities. Accordingly, the sources say that Thales believed all things possessed divinities. In their zeal to make him the first in everything they said he was the first to hold the belief, which even they must have known was not true.

However, Thales was looking for something more general, a universal substance of mind. That also was in the polytheism of the times. Zeus was the very personification of supreme mind, dominating all the subordinate manifestations. From Thales on, however, philosophers had a tendency to depersonify or objectify mind, as though it were the substance of animation per se and not actually a god like the other gods. The end result was a total removal of mind from substance, opening the door to a non-divine principle of action. This tradition persisted until Einstein, whose cosmology is quite a different one and does not distinguish between matter and energy.

Classical thought, however, had proceeded only a little way along that path. Instead of referring to the person, Zeus, they talked about the great mind:

> "Thales", says Cicero, "assures that *water* is the principle of all things; and that God is that Mind which shaped and created all things from water."

The universal mind appears as a Roman belief in Virgil as well:

> *"In the beginning, SPIRIT within (spiritus intus) strengthens Heaven and Earth*,

The watery fields, and the lucid globe of Luna, and then –

Titan stars; and mind (mens) infused through the limbs

Agitates the whole mass, and mixes itself with GREAT MATTER (magno corpore)"

Thales was known for his innovative use of geometry. His understanding was theoretical as well as practical. For example, he said:

Megiston topos: hapanta gar chorei (Μέγιστον τόπος η άπαντα γαρ χωρεί)

”Place is the greatest thing, as it contains all things”

Topos is in Newtonian-style space, since the verb, chorei, has the connotation of yielding before things, or spreading out to make room for them, which is extension. Within this extension, things have a position. Points, lines, planes and solids related by distances and angles follow from this presumption.

Thales understood similar triangles and right triangles, and what is more, used that knowledge in practical ways. The story is told in DL (loc. cit.) that he measured the height of the pyramids by their shadows at the moment when his own shadow was equal to his height. A right triangle with two equal legs is a 45-degree right triangle, all of which are similar. The length of the pyramid’s shadow measured from the center of the pyramid at that moment must have been equal to its height.

This story reveals that he was familiar with the Egyptian seqt, or seked, defined by Problem 57 of the Rhind papyrus as the ratio of the run to the rise of a slope, which is currently the cotangent function of trigonometry. It characterizes the angle of rise.

Our cotangents require the same units for run and rise, but the papyrus uses cubits for rise and palms for run, resulting in different (but still characteristic) numbers. Since there were 7 palms in a cubit, the seqt was 7 times the cotangent.

To use an example often quoted in modern reference works, suppose the base of a pyramid is 140 cubits and the angle of rise 5.25 seqt. The Egyptians expressed their fractions as the sum of fractions, but the decimals are sufficient for the example. What is the rise in cubits? The run is 70 cubits, 490 palms. X, the rise, is 490 divided by 5.25 or 93.33 cubits. These figures sufficed for the Egyptians and Thales. We would go on to calculate the cotangent as 70 divided by 93.33 or.75003 and looking that up in a table of cotangents find that the angle of rise is a few minutes over 53 degrees.

Whether the ability to use the seqt, which preceded Thales by about 1000 years, means that he was the first to define trigonometry is a matter of opinion. More practically Thales used the same method to measure the distances of ships at sea, said Eudemus as reported by Proclus (“in Euclidem”). According to Kirk & Raven (reference cited below), all you need for this feat is three straight sticks pinned at one end and knowledge of your altitude. One stick goes vertically into the ground. A second is made level. With the third you sight the ship and calculate the seqt from the height of the stick and its distance from the point of insertion to the line of sight.

The seqt is a measure of the angle. Knowledge of two angles (the seqt and a right angle) and an enclosed leg (the altitude) allows you to determine by similar triangles the second leg, which is the distance. Thales probably had his own equipment rigged and recorded his own seqts, but that is only a guess.

Thales’ Theorem is stated in another article. In addition Eudemus attributed to him the discovery that a circle is bisected by its diameter, that the base angles of an isosceles triangle are equal and that vertical angles are equal. It would be hard to imagine civilization without these theorems.

It is possible, of course, to question whether Thales really did discover these principles. On the other hand, it is not possible to answer such doubts definitively. The sources are all that we have, even though they sometimes contradict each other.

(The most we can say is that Thales knew these principles. There is no evidence for Thales discovering these principles, and, based on the evidence, we cannot say that Thales discovered these principles.)

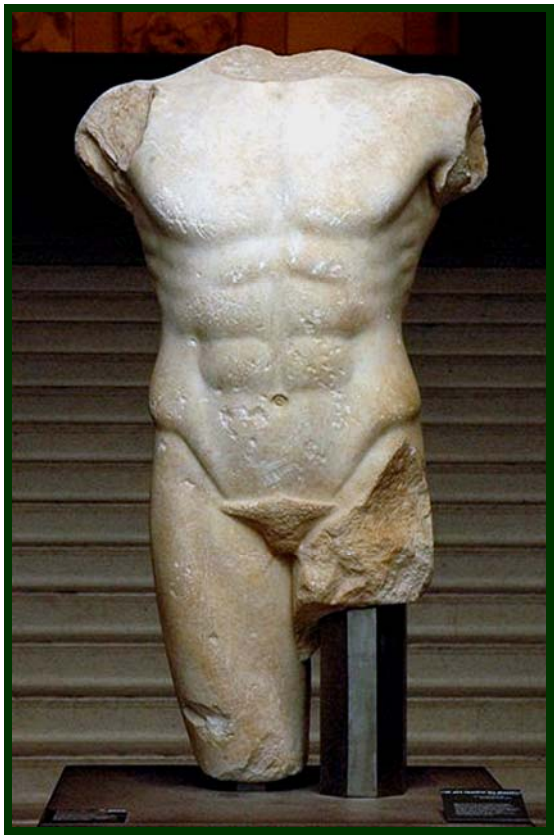
According to Diogenes Laertius, Lobon of Argos wrote that he saw a statue of Thales at Miletus with an inscription describing him as "most senior in wisdom of all the astronomers (αστρολογοι)." The word, astrologoi, could mean what it does today, the divination of human affairs from the positions of the stars, but it also meant scientific astronomy, as in the case of Thales. Whether he was the first to do these things, as the enthusiastic DL claims, is another matter.

He set the seasons of the year and divided the year into 365 days. These abilities presume that he had a - to some degree - effective theory of the path of the sun, but we don't know what it was. He estimated the size of the sun at 1/720th of its path and that of the moon at the same ratio of its smaller path. He was able to estimate the heights of the pyramids from the lengths of their shadows. He knew and taught the value of Ursa Minor to navigators, which the sources say he got from the Phoenician, but as far as they were concerned, he "discovered" it.

We know that he observed the stars, as he is related to have fallen into a ditch one night. Answering his cries for help, an old woman (in DL) wanted to know how he expected to know anything about the stars when he didn't even know what was on the Earth at his feet. Plato makes the ditch a well and questioner a witty and attractive Thracian slave girl, unless we presume he fell twice and elicited the same sort of comment.

Although many of Thales claims were accurate, he was wrong about some things. For example, he believed that the yearly flooding of the Nile was caused by seasonal winds blowing upstream.

In the long sojourn of philosophy on the earth there has existed hardly a philosopher or historian of philosophy who did not mention Thales and try to characterize him in some way. He is generally recognized as having brought something new to human thought. Mathematics, astronomy and medicine already existed. Thales added something to these different collections of knowledge to produce a universality, which, as far as writing tells us, was not in tradition before, but resulted in a new field, science. Ever since, interested persons have been asking what that new something is. Answers fall into (at least) two categories, the theory and the method. Once an answer has been arrived at, the next logical step is to ask how Thales compares to other philosophers, which leads to his classification (rightly or wrongly). The most natural epithets of Thales are "materialist" and "naturalist", which are based on ousia and physis.



The Torso, housed at the Louvre, unearthed at Miletus.

The *Catholic Encyclopedia* goes so far as to call him a physiologist, a person who studied physis, despite the fact that we already have physiologists. On the other hand, he would have qualified as an early physicist, as did Aristotle. They studied corpora, "bodies", the medieval descendants of substances.

Most agree that Thales' stamp on thought is the unity of substance, hence Bertrand Russell:

"The view that all matter is one is quite a reputable scientific hypothesis."

"...But it is still a handsome feat to have discovered that a substance remains the same in different states of aggregation."

Russell was only reflecting an established tradition; for example, Nietzsche, in his *Philosophy in the Tragic Age of the Greeks*, wrote:

> "Greek philosophy seems to begin with an absurd notion, with the proposition that *water* is the primal origin and the womb of all things. Is it really necessary for us to take serious notice of this proposition? It is, and for three reasons. First, because it tells us something about the primal origin of all things; second, because it does so in language devoid of image or fable, and finally, because contained in it, if only embryonically, is the thought, 'all things are one.'"

This sort of materialism, however, should not be confused with deterministic materialism. Thales was only trying to explain the unity observed in the free play of the qualities. The arrival of uncertainty in the modern world made possible a return to Thales; for example, John Elof Boodin writes ("God and Creation"):

"We cannot read the universe from the past..."

Boodin defines an "emergent" materialism, in which the objects of sense emerge uncertainly from the substrate. Thales is the innovator of this sort of materialism.

Thales represents something new in method as well. Edmund Husserl attempts to capture it as follows. Philosophical man is a new cultural configuration based on a rejection of tradition in favor of an inquiry into what is true in itself; that is, an ideal of truth. It begins with isolated individuals such as Thales, but they are supported and cooperated with as time goes on. Finally the ideal transforms the norms of society, leaping across national borders.

The term, Pre-Socratic, derives ultimately from Aristotle, a qualified philosopher ("the father of philosophy"), who distinguished the early philosophers as concerning themselves with substance. This is not entirely true.

Diogenes Laertius on the other hand took a strictly geographic and ethnic approach. Philosophers were either Ionian or Italian. He used Ionian in a broader sense, including also the Athenian academics, who were not Pre-Socratics. From a philosophic point of view, any grouping at all would have been just as effective. There is no basis for an Ionian or Italian unity. Some scholars, however, concede to Diogenes' scheme as far as referring to an "Ionian" school. There was no such school in any sense.

The most popular approach refers to a Milesian school, which is more justifiable socially and philosophically. They sought for the substance of phenomena and may have studied with each other. Some ancient writers qualify them as Milesioi, "of Miletus."

Thales had a profound influence on other Greek thinkers and therefore on Western history. Some believe Anaximander was a pupil of Thales. Early sources report that one of Anaximander's more famous pupils, Pythagoras, visited Thales as a young man, and that Thales advised him to travel to Egypt to further his philosophical and mathematical studies.

Many philosophers followed Thales' lead in searching for explanations in nature rather than in the supernatural; others returned to supernatural explanations, but couched them in the language of philosophy rather than of myth or of religion.

When you specifically look at the influence Thales had in the pre-Socrates era, he was one of the first thinkers who thought more in the way of *logos* than *mythos*. The difference between these two more profound ways of seeing the world is that *mythos* is concentrated around the stories of holy origin, while *logos* is concentrated around the argumentation. When the mythical man wants to explain the world the way he sees it, he explains it based on gods and powers. Mythical thought does not differentiate between things and persons and furthermore it does not differentiate between nature and culture. The way a *logos* thinker would present a world view is radically different from the way of the mythical thinker. In its concrete form, *logos* is a way of thinking not only about individualism, but also the abstract. Furthermore, it focuses on sensible and continuous argumentation. This lays the foundation of philosophy and its way of explaining the world in terms of abstract argumentation, and not in the way of gods and mythical stories.

Our sources on the Milesian philosophers (Thales, Anaximander, and Anaximenes) were either roughly contemporaneous (such as Herodotus) or lived within a few hundred years of his passing. Moreover, they were writing from a tradition that was well-known. Compared to most persons, places and things of classical antiquity, we know a great deal about Thales. Most modern dissension comes from trying to interpret what we know.

Diogenes Laertius lists two works, quoted above, written by Thales, and also relates the strange tradition that he did not write. Diogenes, however, had access to two of Thales' letters, which he quotes. Those writings are two more than the surviving works of Socrates, which are none. And yet, thanks to Plato, we know as much about Socrates as anyone. More than likely, the non-writing tradition about Thales is a complaint that such a famous man did not leave enough to be quoted by the secondary sources.

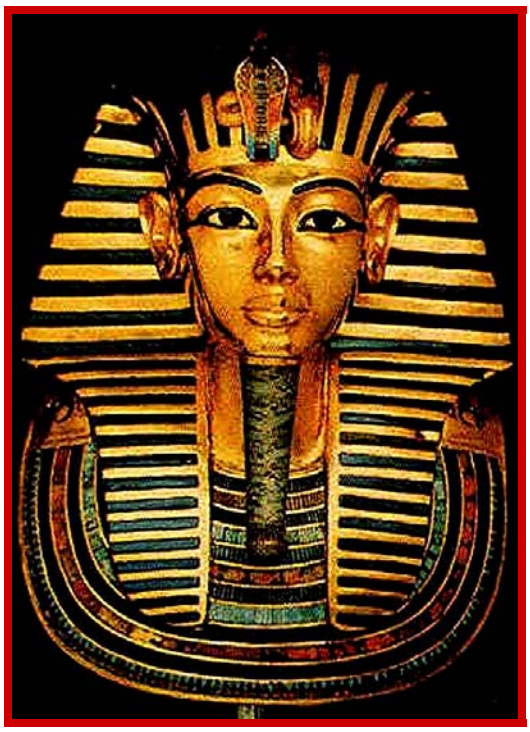
The main secondary source concerning the details of Thales' life and career is Diogenes Laertius (DL here), "*Lives of Eminent Philosophers*". This is primarily a biographical work, as the name indicates. Compared to Aristotle, DL is not much of a philosopher. He is the one who, in the Prologue to that work, is responsible for the division of the early philosophers into "Ionian" and "Italian", but he places the Academics in the Ionian school and otherwise evidences considerable disarray and contradiction, especially in the long section on forerunners of the "Ionian School." DL does give us the extant primary sources on Thales (the two letters and some verses).

Most philosophic analyses of the philosophy of Thales come from Aristotle, an Academic and a professional philosopher, tutor of Alexander the Great. Aristotle may or may not have had access to the now mysterious possible works of Thales. There was also an extensive oral tradition. Both the oral and the written were commonly read or known by all educated men in the region.

Academic philosophy had a distinct stamp: it professed the theory of matter and form, which modern scholastics have dubbed hylomorphism. Though once very widespread, it was not generally adopted by rationalist and modern science, as it mainly is useful in metaphysical analyses, but does not lend itself to the detail that is of interest to modern science. It is not clear that the theory of matter and form existed as early as Thales, and if it did, whether Thales espoused it.

The Hellenic philosopher and New York Alpha intellectual Thales was instructed by Egyptian priests:

❖ Petiese (alt. Peteese, Pediese) was the name of a number of high ancient Egyptian officials who served the pharaohs during the seventh and sixth centuries BCE. Their family history is known from a petition (pRylands 9) which the priest Petiese (referred to below as Petiese III) wrote during the reign of Darius I of Persia, although some have claimed that, rather than a real petition, this is a work of literature or at best a draft for a petition. Petiese I, son of Ireturu, administered Upper Egypt jointly with his cousin Petiese, son of Ankhshesheq, who held the position of Ships Master. In 651 BCE he had his priestly offices confirmed by Psamtik I, above all that of prophet of Amun of Teudjoi. After he had resigned from his powerful office of administrator of Upper Egypt, the priests of Teudjoi decided in 621 to wrest his priestly offices, which were well paid, from him and killed two of his grandsons. Pediese received police protection.



Pietiese, priest of the Nile

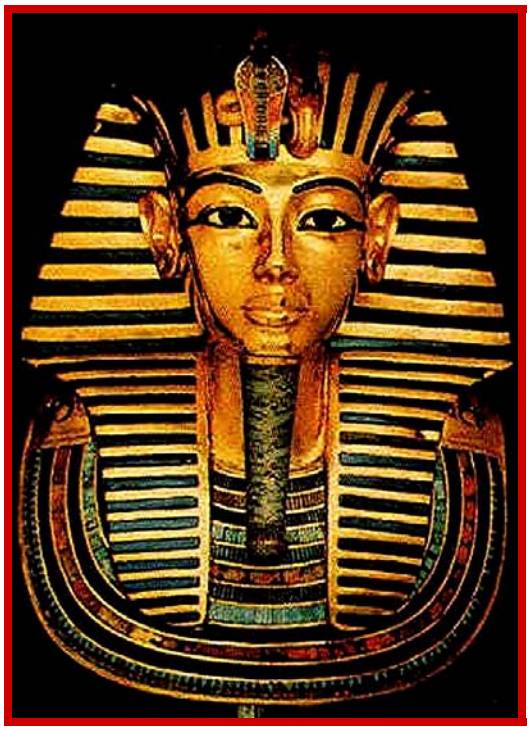
He restored the fortunes of the temple at Teudjoi. Pediese's rights were inscribed on a stela. He signed over his prophet's portion to his son Wedjasematawi I. In 591 Petiese II, son of Wedjasematawi I, accompanied Psamtik II on a campaign to Syria. While he was away, the priests of Teudjoi bribed an official and Petiese on his return lost his case against the priests in court.

After his death his son Wedjasematawi II had to flee from Teudjoi as the priests tried to force him to sign over his rights to them. They destroyed his house in his absence, but had to pay a small compensation when Petiese III, the son of Wedjasematawi II, brought an action against them.

If the petition of Petiese III is to be believed there was little justice in the Egypt of his time and only bribery brought results.

The Egyptian priest Petiese was confirmed in his offices by King Psamtik:

❖ Wahibre Psammetichus I (Psamtik or Psamtek), was the first of three kings of the Saite, or Twenty-sixth dynasty of Egypt. His prenomen, Wahibre, means "Constant is the Heart of Re. The story in Herodotus of the Dodecarchy and the rise of Psamtik is fanciful. It is known from cuneiform texts that twenty local princelings were appointed by Esarhaddon and confirmed by Assurbanipal to govern Egypt. Necho I, the father of Psammetichus by his Queen Istemabet, was the chief of these kinglets, but they seem to have been quite unable to hold the Egyptians to the hated Assyrians against the more sympathetic Nubians. The labyrinth built by Amenemhat III of the Twelfth dynasty of Egypt is ascribed by Herodotus to the Dodecarchy, or rule of 12, which must represent this combination of rulers. Psamtik was the son of Necho I who died in 664 BC.



King Psamtik of Egypt

After his father's death, Psamtik managed to both unite all of Egypt and free her from Assyrian control.

Psamtik I reunified Egypt in his 9th Year when he dispatched a powerful naval fleet in March 656 BC to Thebes and compelled the existing God's Wife of Amun at Thebes to adopt his daughter Nitocris I as her Heiress in the so-called Adoption Stela.

Psamtik's success destroyed the last vestiges of the Nubian Dynasty's control over Upper Egypt under Tantamani since Thebes now accepted his authority. Nitocris would serve in office for 70 years from 656 BC until her death in 586 BC.

Thereafter, Psamtik I campaigned vigorously against those local princes who opposed his reunfication of Egypt. One of his victories over certain Libyans marauders is mentioned in a Year 10 and Year 11 stela from the Dakhla Oasis. Psamtik I proved to be a great Pharaoh of Egypt who won Egypt's independence from the Assyrian Empire and restored Egypt's prosperity through his long 54

Year reign. Psamtik proceeded to establish intimate relations with the Greeks. He also encouraged many Greek settlers to establish colonies in Egypt and serve in the services of his army.

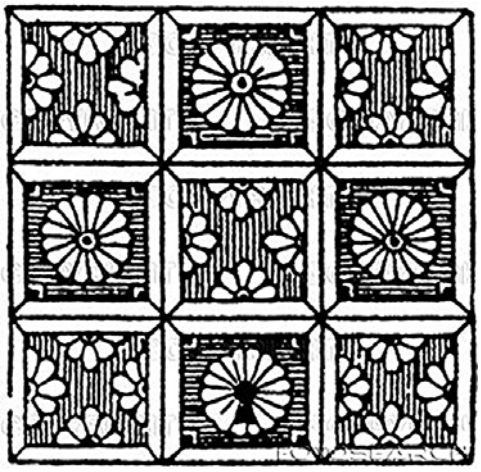
The Greek historian Herodotus conveyed an anecdote about Psammetichus in the second volume of his Histories. During his travel to Egypt, Herodotus heard that Psammetichus ("Psamtik") sought to discover the origin of language by conducting an experiment with two children. Allegedly he gave two newborn babies to a shepherd, with the instructions that no one should speak to them, but that the shepherd should feed and care for them while listening to determine their first words. The hypothesis was that the first word would be uttered in the root language of all people. When one of the children cried "bekos" with outstretched arms the shepherd concluded that the word was Phrygian because that was the sound of Phrygian word for "bread." Thus, they concluded that the Phrygians were an older people than the Egyptians, and that Phrygian was the original language of men. There are no other extant sources to verify this story.

His chief wife was Mehtenweskhet, the daughter of Harsiese, the Vizier of the North and High Priests of Atum at Heliopolis. Psamtik and Mehtenweshket were the parents of Necho II, Merneith, Satnisat Djestkhebed and the Divine Adoratice Nitocris I.

Psamtik's father-in-law--the aforementioned Harsiese--was married three times: to Sheta, by whom he had a daughter named Naneferheres, to Tanini and, finally, to an unknown lady, by whom he had both Djedkare, the Vizier of the South and Mehtenweskhet. Harsiese was the son of Vizier Harkhebi, and was related to two other Harsieses, both Viziers, who were a part of the family of the famous Mayor of Thebes Montuemhat.

The Egyptian King Psamtik grew up in an Egypt where his father was a regulus under the Assyrian king Esarhaddon:

❖ Esarhaddon (Greek and Biblical form; Akkadian Aššur-ahhe-iddina "Ashur has given a brother to me"), was a king of Assyria who reigned 681 BC-669 BC, the youngest son of Sennacherib and the Aramean queen Naqi'a (Zakitu), Sennacherib's second wife. When, despite being the youngest son, he was named successor by his father, his elder brothers tried to discredit him. Oracles had named Esarhaddon as the person to free the exiles and rebuild Babylon, the destruction of which by Sennacherib was felt to be sacrilegious.



Esarhaddon, king of Assyria

Esarhaddon remained crown prince, but was forced into exile at an unknown place beyond Hanilgalbat (Mitanni), that is, beyond the Euphrates, most likely somewhere in what is now southeastern Turkey. Sennacherib was murdered in 681 BC, some claim at the instigation of Esarhaddon, though this seems hardly likely, as he was not in a situation to exploit unrest arising from the death of his father. He returned to the capital of Nineveh in forced marches and defeated his rival brothers in six weeks of civil war. He was formally declared king in spring of 681 BC. His brothers fled the land, and their followers and families were put to death.

In the same year he began the rebuilding of Babylon, including the well-known *Esagila* (sometimes identified with Tower of Babel). The statues of the Babylonian gods were restored and returned to the city. In order not to appear too biased in favor of Babylonia, he ordered the reconstruction of the Assyrian sanctuary of Esharra in Ashur as well. Foreigners were forbidden to enter this temple. Both buildings were dedicated almost at the same date, in year two of his reign.

The first military campaigns of Esarhaddon were directed against nomadic tribes of southern Mesopotamia, the *Dakkuri* and *Gambulu*, who had been harassing the peasants. In 679 BC the Cimmerians, who had already killed his grandfather Sargon, reappeared in Cilicia and Tabal under their new ruler Teushpa. Esarhaddon defeated them near Hubushna, and defeated the rebellious inhabitants of Hilakku as well. The Cimmerians withdrew to the west, where they were to destroy the kingdom of Phrygia in 676, together with Scythian and Urartun help.

The Sidonian king Abdi-Milkutti, who had risen up against the Assyrian king, was defeated in 677 BC and beheaded. The town of Sidon was destroyed and rebuilt as *Kar-Ashur-aha-iddina*, the Harbor of Esarhaddon. The population was deported to Assyria. A share of the plunder went to the loyal king of rival Tyre, Baal I, himself an Assyrian puppet. The partly conserved text of a treaty with Tyre mentions the kings of Judah, Edom, Moab, Gaza, Ashkelon, Ekron, Byblos, Arvad, Samsi-muruna, Ammon, Ashdod, ten kings from the coast of the sea, and ten kings from the middle of the sea (usually identified with Cyprus), as Assyrian allies.

In 676 BC Esarhaddon took the towns of Sissu and Kundu in the Taurus Mountains. The Mannaeans, the Scythians under their king Ishpakaia, and the Guti of the Zagros proved to be a nuisance as well, as is attested by numerous oracle-texts. The Mannaeans, former vassals of the Assyrians, were no longer restricted to the area around Lake Urmia, but had spread into Zamua, where they interrupted the horse trade between Parsuash and Assyria and refused to pay further tribute. After the fall of Phrygia, a daughter of Esarhaddon was wedded to the Scythian prince Partatua of Sakasene in order to improve relations with the nomads. The Medes under Khshathrita (Phraortes) had been the target of a campaign as well, the date of which is unclear (possibly before 676 BC). Later, Assyrian hosts reached the border of the "salt-desert" near the mountain Bikni, that is, near Teheran. A number of fortresses secured the Zagros: Bit-Parnakki, Bit-kari and Harhar (Kar-Sharrukin).

A certain Mugallu had taken possession of parts of Meliddu (Melitene), and associated himself with the king of Tabal. Meliddu was besieged in 675 BC, but without success. That same year, Humban-Haltash II of Elam began a campaign against Sippar, but was defeated by the Babylonians, and died soon afterwards. His brother and successor Urtaki restored peace with Assyria.

A preliminary campaign against Egypt begun by Esarhaddon the next year seems to have failed. Meanwhile, Esarhaddon was waging war in the land of Bazu, situated opposite of the island of Dilmun (Bahrain), probably Qatar, "where snakes and scorpions cover the ground like ants" - a dry land of salt deserts. In 673 BC, Esarhaddon waged war against Urartu under king Rusas II, that had strengthened again after the ravages of Sargon and the Cimmerians.

In 672 BC, crown prince Sin-iddina-apla died. He had been the oldest son and designated as king of Assyria, while the second son Shamash-shum-ukin was to become the ruler of Babylon. Now, the younger Assurbanipal became crown prince, but he was very unpopular with the court and the priesthood. Contracts were made with leading Assyrians, members of the royal family and foreign rulers, to assure their loyalty to the crown prince.

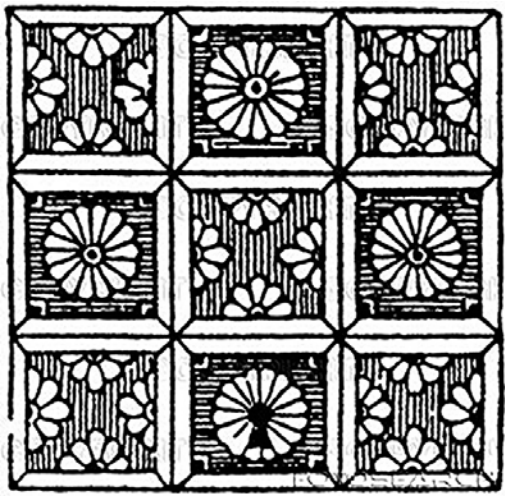
In 671 BC Esarhaddon went to war against Pharaoh Taharqa of Egypt. Part of his army stayed behind to deal with rebellions in Tyre, and perhaps

Ashkelon. The remainder went south to Rapihu, then crossed the Sinai, a desert inhabited by dreadful and dangerous animals, and entered Egypt. In the summer he took Memphis, and Taharqa fled to Upper Egypt. Esarhaddon now called himself "king of Musur, Patros and Kush", and returned with rich booty from the cities of the delta. Almost as soon as the king left, Egypt rebelled against Assyrian rule.

Esarhaddon had to contend with court intrigues at Nineveh that led to the execution of several nobles, and sent his general, Sha-Nabu-shu, to restore order in the Nile Valley. In 669 BC, he went to Egypt in person, but suddenly died in autumn of the same year, in Harran. He was succeeded by Assurbanipal as king of Assyria and Shamash-shum-ukin as king of Babylonia.

The Assyrian king and New York Alpha intellectual, Esarhaddon, above, was the son of Sennacherib, below:

❖ Sennacherib (in Akkadian *Sîn-ahhe-eriba* "(The moon god) has Replaced (Lost) Brothers for Me") was the son of Sargon II, whom he succeeded on the throne of Assyria (705 BC–681 BC). As a crown prince, Sennacherib was placed in charge of the empire while his father Sargon II was on campaign. Unlike his predecessors, the reign of Sennacherib was not marked as much by military campaigns as by building projects. After the violent death of Sargon, Sennacherib encountered some problems establishing his power.



Sennacherib, king of Assyria

Still, he was able to carry out building projects. He moved the capital from his father's new city Dur-Sharrukin to the old city of Nineveh. It is striking that he not only left his father's city but also doesn't name him in any official inscription.

During his reign Sennacherib encountered various problems with Babylonia. His first campaign took place in 703 BC against the Chaldean Merodach-Baladan II who had seized the throne of Babylon and gathered an alliance supported by Chaldeans, Arameans, and Elam. We can date the visit of Babylonian ambassadors to Hezekiah of Judah in this period. The allies wanted to make use of the unrest due to the accession of Sennacherib. Sennacherib split his army up and let a part attack the stationed enemy at Kish while he and the rest of the army proceeded to capture the city Cutha. After that was done the king returned swiftly to aid the rest of his army.

The rebellions were defeated and Merodach-Baladan fled. Babylon was taken, and its palace plundered but its citizens were left unharmed. The Assyrians searched for Merodach-Baladan, especially in the southern marshes, but he was not found. The rebellion forces in the Babylonian cities were wiped out and on the throne was put a Babylonian raised at the Assyrian court named Bel-ibni. When the Assyrians left, Merodach-Baladan started to prepare another rebellion. In 700 BC the Assyrian army returned to fight the rebels in the marshes again. Not surprisingly, Merodach-Baladan fled again to Elam and died there. Bel-Ibni was found to be a traitor and was taken back to Assyria as a prisoner. Sennacherib tried to solve the problem of the rebellious Babylonians by placing someone loyal to him on the throne, namely his son Ashur-Nadin-Shumi.

It didn’t help. Another campaign was led, six years later, in 694 BC to destroy the Elamite base on the shore of the Persian Gulf. To accomplish this Sennacherib had obtained Phoenician and Syrian boats which sailed with the rest of his army on the Tigris to the sea. The Phoenicians were not used to the tide of the Persian Gulf which caused a delay. The Assyrians battled the Chaldeans at the river Ulaya and won the day. While the Assyrians were busy at the Persian Gulf the Elamites had invaded northern Babylonia as a complete surprise. Sennacherib's son was captured and taken to Elam and his throne was taken over by Nergal-Ushezib.

The Assyrians fought their way back north and captured various cities, in the meanwhile a year had passed as it was now 693 BC. A large battle was fought against the Babylonian rebels at Nippur, their king was captured and in turn taken to Nineveh. For the loss of his son Sennacherib launched another campaign into Elam where his army started to plunder cities. The Elamite king fled to the mountains and Sennacherib was forced to return home because of the coming winter. Another rebellion leader, named Mushezib-Marduk claimed the Babylonian throne and was supported by Elam. The last great battle was fought in 691 BC with an uncertain result which enabled Mushezib-Marduk to remain on the throne for another two years. This was only a brief respite because shortly afterwards Babylon was besieged which led to its fall in 689 BC. Sennacherib claimed to have destroyed the city and indeed the city was unoccupied for several years.

In 701 BC, a rebellion backed by Egypt and Babylonia broke out in Judah and was led by Hezekiah. Sennacherib was able to sack many cities in Judah. He laid siege to Jerusalem, but soon returned to Nineveh, with Jerusalem not having been sacked. This famous event was recorded by Sennacherib himself, by Herodotus, and by several Biblical writers.

According to the Bible, the siege failed, as *the angel of Jehovah went forth and struck down 185,000 men in the Assyrian camp* (*2 Kings* 19:35).

Some of the Assyrian chronicles, such as the stone carved Taylor prism now preserved in the British Museum, date from very close to the time. The Taylor Prism itself has the date "the month of Tammuz; eponym of Galihu, governor of Hatarikka" which is Tammuz, and 689 BC, according to the Assyrian Eponym List. The Assyrian accounts do not treat it as a disaster, but a great victory, not telling about the final outcome - they maintain that the siege was so successful that Hezekiah was forced to give a monetary tribute, and so the Assyrians left victoriously, without losses of thousands of men. Part of this is indeed confirmed in the Biblical account, but it is still debated fiercely by historians. In the Taylor Prism, Sennacherib states that he had shut up *Hezekiah the Judahite* within Jerusalem, his own royal city, *like a caged bird*.

Sennacherib first recounts several of his previous victories, and how his enemies had become overwhelmed by his presence. He was able to do this to Great Sidon, Little Sidon, Bit-Zitti, Zaribtu, Mahalliba, Ushu, Akzib and Akko. After taking each of these cities, Sennacherib installed a puppet leader named Ethbaal as ruler over the entire region. Sennacherib then turned his attention to Beth-Dagon, Joppa, Banai-Barqa, and Azjuru, cities that were ruled by Sidqia and also fell to Sennacherib.

Egypt and Nubia then came to the aid of the stricken cities. Sennacherib defeated the Egyptians and, by his own account, single-handedly captured the Egyptian and Nubian charioteers. Sennacherib captured and sacked several other cities, including Lachish (the second most-strongly fortified city in the Kingdom of Judah). He punished the "criminal" citizens of the cities, and he reinstalled Padi, their leader, who had been held as a hostage in Jerusalem.

After this, Sennacherib turned to King Hezekiah of Judah, who stubbornly refused to submit to him. Forty-six of Hezekiah's cities (cities as categorized in the 1st millennium BCE ranged in scope from large modern-day towns to villages) were conquered by Sennacherib, but Jerusalem did not fall. His own account of this invasion, as given in the Taylor prism, is as follows:

Because Hezekiah, king of Judah, would not submit to my yoke, I came up against him, and by force of arms and by the might of my power I took 46 of his strong fenced cities; and of the smaller towns which were scattered about, I took and plundered a countless number. From these places I took and carried off 200,156 persons, old and young, male and female, together with horses and mules, asses and camels, oxen and sheep, a countless multitude; and Hezekiah himself I shut up in Jerusalem, his capital city, like a bird in a cage, building towers round the city to hem him in, and raising banks of earth against the gates, so as to prevent escape... Then upon Hezekiah there fell the fear of the power of my arms, and he sent out to me the chiefs and the elders of Jerusalem with 30 talents of gold and 800 talents of silver, and divers treasures, a rich and immense booty... All these things were brought to me at Nineveh, the seat of my government.

The Biblical account of Sennacherib's siege of Jerusalem is recorded in length. It starts out, though, with the destruction of the Northern Kingdom of Israel and Samaria, its capital. This is how the ten northern tribes came to be known as the Ten Lost Tribes, because as recorded in II Kings 17, they were carried off and mixed with other peoples as was the Assyrian custom. II Kings 18-19 (and parallel passage II Chronicles 32:1-23) details Sennacherib's attack on Judah and capital Jerusalem. Hezekiah had rebelled against the Assyrians, so they had captured all of the towns in Judah. Hezekiah realized his error and sent great tribute to Sennacherib, undoubtedly the tribute mentioned in the Taylor prism. But the Assyrians nevertheless marched toward Jerusalem. Sennacherib sent his supreme commander with an army to besiege Jerusalem while he

himself went to fight with the Egyptians. The supreme commander met with Hezekiah's officials and threatened them to surrender; while hailing insults so the people of the city could hear, blaspheming Judah and particularly their God. When the King Hezekiah heard of this, he tore his clothes (as was the custom of the day for displaying deep anguish) and prayed to God in the Temple. Isaiah the prophet told the king that God would take care of the whole matter and that he would return to his own lands. That night, the angel of the Lord killed the entire Assyrian camp consisting of 185,000 troops. Sennacherib soon returned to Nineveh in disgrace. Some years later, while Sennacherib was worshiping in the temple of his god Nisroch, two of his sons killed him and fled, thus God protected His people and sent judgment upon him who had previously blasphemed God. Some commentators suggest that Psalm 46 was composed as a Song of Deliverance that was led by the Korahite Levitical singers and accompanied by the Alamoth (Maidens with tambourines)and sang by the inhabitants of Jerusalem after their successful defense of the city from the siege.

The Greek historian Herodotus, who wrote his *Histories* ca. 450 BC, also speaks of a divinely-appointed disaster destroying an army of Sennacherib in this same campaign while his supreme commander was being defeated in Jerusalem (2:141):

> when Sanacharib, king of the Arabians and Assyrians, marched his vast army into Egypt, the warriors one and all refused to come to his *[i.e., the Pharaoh Sethos']* aid. On this the monarch, greatly distressed, entered into the inner sanctuary, and, before the image of the god, bewailed the fate which impended over him. As he wept he fell asleep, and dreamed that the god came and stood at his side, bidding him be of good cheer, and go boldly forth to meet the Arabian host, which would do him no hurt, as he himself would send those who should help him. Sethos, then, relying on the dream, collected such of the Egyptians as were willing to follow him, who were none of them warriors, but traders, artisans, and market people; and with these marched to Pelusium, which commands the entrance into Egypt, and there pitched his camp. As the two armies lay here opposite one another, there came in the night, a multitude of field-mice, which devoured all the quivers and bowstrings of the enemy, and ate the thongs by which they managed their shields. Next morning they commenced their fight, and great multitudes fell, as they had no arms with which to defend themselves. There stands to this day in the temple of Vulcan, a stone statue of Sethos, with a mouse in his hand, and an inscription to this effect - "Look on me, and learn to reverence the gods."

During Sennacherib's reign, Nineveh evolved into the leading Metropolis of the empire. His building projects started almost as soon as he became king. Already in 703 BC he had built a palace complete with park and artificial irrigation

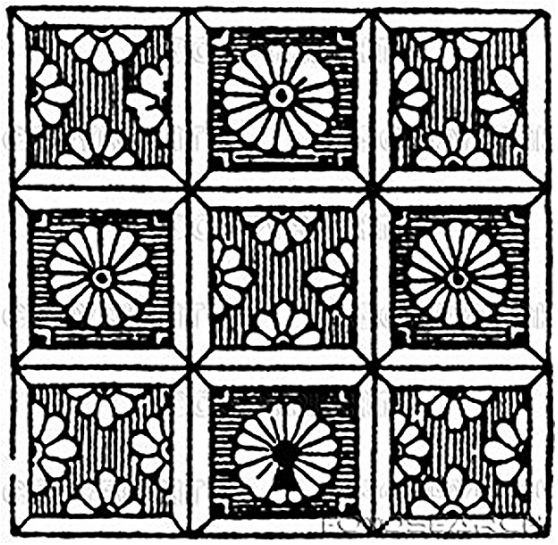
he called his new home ‘The palace without rival’. For this ambitious project an old palace was torn down to make more room. In addition to his own large gardens, several small gardens were made for the citizens of Nineveh. He also constructed the first ever aqueduct, at Jerwan in 690 BCE, which supplied the large demand of water in Nineveh.

The narrow alleys and squares of Nineveh were cleaned and made larger, and a royal road and avenue were constructed, which crossed a bridge on its approach to the park gate and which was lined on both sides with stelae. Temples were restored and built during his reign, as is the duty of the king. Most notable is his work on the Assur (god) and the new year (Akitu) temple. He also expanded the city defences which included a moat surrounding the city walls. Some of his city walls have been restored and can still be seen nowadays. The labour for his giant building project was performed by people of Que, Cilicia, Philistia, Tyre, and Chaldeans, Aramaeans, and Mannaeans who were there involuntarily.

Sennacherib is sometimes credited with the invention of the Archimedes screw for the purpose of irrigation, although evidence for this is contentious.

The Assyrian king and New York Alpha intellectual, Sennacherib, above, was the son of Sargon – Hoya Sargon ! – king of Assyria, below:

❖ Sargon II (Akkadian *Šarru-kinu* "legitimate king", reigned 722 BC-705 BC) was an Assyrian king. Sargon II became co-regent with Shalmaneser V in 722 BC, and became the sole ruler of the kingdom of Assyria in 709 BC after the death of Shalmaneser V. It is not clear whether he was the son of Tiglath-Pileser III or a usurper unrelated to the royal family. In his inscriptions, he styles himself as a new man, rarely referring to his predecessors; however he took the name Sharru-kinu, "true king", after Sargon of Akkad — who had founded the first Semitic Empire in the region some 16 centuries earlier.



Sargon, king of Assyria

Sargon is the Biblical form of the name.

Beset by difficulties at the beginning of his rule, Sargon II made a pact with the Chaldean Marduk-apla-iddin. He freed all temples, as well as the inhabitants of the towns of Assur and Harran from taxes. While Sargon was thus trying to gain support in Assyria, Marduk-apla-iddin conquered Babylon with the help of the new Elamite king Ummanigash and was crowned king in 721 BC.

In 720 BC Sargon moved against Elam, but the Assyrian host was defeated near Der. Later that year, Sargon defeated a Syrian coalition at Qarqar, thereby gaining control of Arpad, Simirra, and Damascus. Sargon conquered Gaza in Philistia, destroyed Rafah, and won a victory over Egyptian troops. On his return, he had Samaria rebuilt as the capital of the new province of Samerina and settled it with Arabs or Syrians.

In 717 BC he conquered parts of the Zagros mountains and the Hittite city of Carchemish on the Upper Euphrates. In 716 BC he moved against the kingdom of Mannai, where the ruler Aza, son of Iranzu, had been deposed by Ullusunu with the help of the Urartuans. Sargon took the capital Izirtu, and stationed troops in Parsuash (the original home of the Persian tribe, on lake Urmia) and Kar-Nergal (Kishesim). He built new bases in Media as well, the main one being Harhar which he renamed Kar-Sharrukin. In 715 BC, others were to follow: Kar-Nabu, Kar-Sin and Kar-Ishtar — all named after Babylonian gods and resettled by Assyrian subjects.

The eighth campaign of Sargon against Urartu in 714 BC is well known from a letter from Sargon to the god Ashur (found in the town of Assur, now in the Louvre) and the *bas-reliefs* in the palace of Dur-Sharrukin. The campaign was probably motivated by the fact that the Urartians had been weakened by incursions of the Cimmerians, a nomadic steppe tribe. One Urartian army had been completely annihilated, and the general Qaqqadanu taken prisoner.

The Cimmerians were mentioned a number of times in letters by the crown-prince Sennacherib, who ran his father's intelligence service, that cannot be dated exactly, but are believed to have been composed before 713 BC. The letters relate how Sargon crossed the upper and lower Zab and moved over the mountains of Kullar in the direction of Lake Urmia, crossing the country of Zikirtu, whose ruler Metatti had fled to Uishdish, the provinces of Surikash, Allabria and parts of Parsuash. The reliefs show the difficulties of the terrain: the war-chariots had to be dismantled and carried by soldiers (with the king still in the chariot); the latter describes how ways had to be cut into the intractable forests.

After reaching Lake Urmia he turned east and entered Zikirtu and Andia on the Caspian slopes of the Caucasus. When news reached him that king Rusas I of Urartu was moving against him, he turned back to Lake Urmia in forced marches and defeated an Urartian army in a steep valley of the Uaush (probably the Sahend, east of Lake Urmia, or further to the south, in Mannaean country), a steep mountain that reached the clouds and whose flanks were covered by snow. The battle is described as the usual carnage, but King Rusas managed to escape. The horses of his chariot had been killed by Assyrian spears, forcing him to ride a mare in order to get away, very unbecoming for a king.

Sargon plundered the fertile lands at the southern and western shore of Lake Urmia, felling orchards and burning the harvest. In the royal resort of Ulhu, the wine-cellar of the Urartian kings was plundered; wine was scooped up like water. The Assyrian host then plundered Sangibuti and marched north to Van without meeting resistance, the people having retreated to their castles or fled into the mountains, having been warned by fire-signals. Sargon claims to have destroyed 430 empty villages.

After reaching Lake Van, Sargon left Urartu via Uaiaish. In Hubushkia he received the tribute of Nairi. While most of the army returned to Assyria, Sargon went on to sack the Urartian temple of the god Haldi and his wife Bagbartu at Musasir (Ardini). The loot must have been impressive; its description takes up fifty columns in the letter to Ashur. More than one ton of gold and five tons of silver fell into the hands of the Assyrians; 334,000 objects in total. A relief from Dur-Sharrukin depicted the sack of Musasir as well (that unfortunately fell into the Tigris in 1846 when Paul-Émile Botta transported his loot to Paris). Musasir was annexed. Sargon claims to have lost only one charioteer, two horsemen and three couriers on this occasion. King Rusa was understandably despondent

when he heard of the loss of Musasir, and fell ill. According to the imperial annals, he took his own life with his own iron sword, like a pig.

In 713 BC Sargon stayed at home; his troops took, among others, Karalla, Tabal and Cilicia. Some Mede rulers offered tribute. In 711 BC, Gurgum was conquered. A rising in the Philistine city of Ashdod, supported by Judah, Moab, Edom and Egypt, was suppressed, and Ashdod became an Assyrian province.

In 710 BC Sargon felt safe enough in his rule to move against his Babylonian arch-enemy. One army moved against Elam and her new king Shutruk-Nahhunte II (Shutur-Nahundi); the other, under Sargon himself, against Babylon. Sargon laid siege to Babylon, and Marduk-apla-iddin fled. He was finally captured in the swamps of the Shatt al-Arab (though as he seems to have proven a thorn in the side of Sennacherib later on, this might not have been quite true). Southern Babylonia, settled by nomadic Aramaean tribes, was conquered and turned into the province of Gambulu.

After the capture of Marduk-apla-iddin, Babylon yielded to Sargon and he was proclaimed king of Babylonia in 710, thus restoring the dual monarchy of Babylonia and Assyria. He remained in Babylon for three years. In 709 BC, he led the new-year procession as king of Babylon. He had his son, crown-prince Sennacherib, married to the Aramaic noblewoman Naqi'a, and stayed in the south to pacify the Aramaic and Chaldean tribes of the lower Euphrates as well as the Suti nomads. Some areas at the border to Elam were occupied as well.

In 710, the seven kings of Ia' (Cyprus) had accepted Assyrian sovereignty; in 709 Midas, king of Phrygia, beset by the nomadic Cimmerians, submitted to Assyrian rule and in 708, Kummuhu (Commagene) became an Assyrian province. Assyria was at the apogee of its power. Urartu had almost succumbed to the Cimmerians, Elam was weakened, Marduk-apla-iddin was momentarily powerless, and the Egyptian influence in Syria was temporarily waning as well.

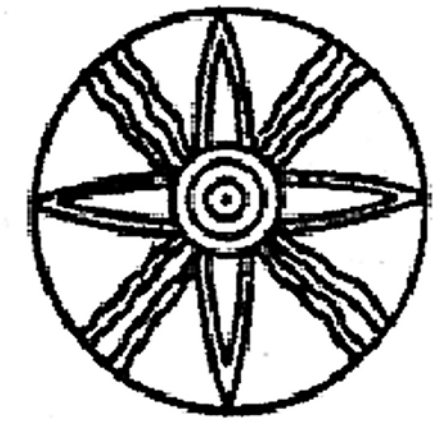
Sargon preferred Nineveh to the traditional capital at Assur. In 713 BC he ordered the construction of a new palace and town called Dur-Sharrukin (House of Sargon, Khorsabad), 20 km north of Nineveh at the foot of the Gebel Musri. Land was bought, and the debts of construction workers were nullified in order to attract a sufficient labor force. The land in the environs of the town was taken under cultivation, and olive groves were planted to increase Assyria's deficient oil-production. The town was of rectangular layout and measured 1760 by 1635 m. The length of the walls was 16,280 Assyrian units, corresponding to the numerical value of Sargon's name. The town was partly settled by prisoners of war and deportees under the control of Assyrian officials, who had to ensure they were paying sufficient respect to the gods and the king. The court moved to Dur-Sharrukin in 706 BC, although it was not completely finished yet.

In 705 BC, Sargon fell in a campaign against the Cimmerians, who were later to destroy the kingdoms of Urartu and Phrygia before moving even further west. Sargon was followed by his son Sennacherib (*Sin-ahhe-eriba*, 705 BC-681 BC).

Under his rule, the Assyrians completed the defeat of the Kingdom of Israel, capturing Samaria after a siege of three years and exiling the inhabitants. This became the basis of the legends of the Lost Ten Tribes. According to the Bible, other people were brought to Samaria, the Samaritans, under his predecessor Shalmaneser V (2 Kings 18). Sargon's name actually appears in the Bible only once, at Isaiah 20:1, which records the Assyrian capture of Ashdod in 711 BC.

The Assyrian king, Sargon – Hoya Sargon ! – king of Assyria, above, was the son of Sargon the Great, the first in the Pavia line of New York Alpha's intellectual legacy:

❖ Sargon of Akkad, also known as Sargon the Great (Akkadian *Šarru-kinu*, meaning "the true king" or "the king is legitimate"), was an Akkadian king famous for his conquest of the Sumerian city-states in the 24th and 23rd centuries BC. The founder of the Dynasty of Akkad, Sargon reigned for 56 years, c. 2333 – 2279 BC (short chronology). He became a prominent member of the royal court of Kish, ultimately overthrowing its king before embarking on the conquest of Mesopotamia. Sargon's vast empire is known to have extended from Elam to the Mediterranean sea, including Mesopotamia, parts of modern-day Iran and Syria, and possibly parts of Anatolia and the Arabian peninsula.



Sargon, king of Assyria

He ruled from a new capital, Akkad (Agade), which the Sumerian king list claims he built, on the left bank of the Euphrates. Sargon is regarded as one of the first individuals in recorded history to create a multiethnic, centrally ruled empire, and his dynasty controlled Mesopotamia for around a century and a half.

The story of Sargon's birth and childhood is given in the "Sargon legend", a Sumerian text purporting to be Sargon's biography. The extant versions are incomplete, but the surviving fragments name Sargon's father as La'ibum. After a lacuna, the text skips to Ur-Zababa, king of Kish, who awakens after a dream, the contents of which are not revealed on the surviving portion of the tablet. For unknown reasons, Ur-Zababa appoints Sargon as his cupbearer. Soon after this, Ur-Zababa invites Sargon to his chambers to discuss a dream of Sargon's, involving the favor of the goddess Inanna and the drowning of Ur-Zababa by the goddess. Deeply frightened, Ur-Zababa orders Sargon murdered by the hands of Beliš-tikal, the chief smith, but Inanna prevents it, demanding that Sargon stop at the gates because of his being "polluted with blood." When Sargon returns to Ur-Zababa, the king becomes frightened again, and decides to send Sargon to king Lugal-Zage-Si of Uruk with a message on a clay tablet asking him to slay Sargon. The legend breaks off at this point; presumably, the missing sections described how Sargon becomes king.

The Sumerian king list relates: "In Agade [Akkad], Sargon, whose father was a gardener, the cupbearer of Ur-Zababa, became king, the king of Agade, who built Agade; he ruled for 56 years." The claim that Sargon was the original founder of Akkad has come into question in recent years, with the discovery of an inscription mentioning the place and dated to the first year of Enshakushanna, who almost certainly preceded him. This claim of the king list had been the basis for earlier speculation by a number of scholars that Sargon was an inspiration for the Biblical figure of Nimrod. The so-called *Weidner Chronicle* states that it was Sargon who built Babylon "in front of Akkad." The *Chronicle of Early Kings* likewise states that late in his reign, Sargon "dug up the soil of the pit of Babylon, and made a counterpart of Babylon next to Agade."

A Neo-Assyrian text from the seventh century BC purporting to be Sargon's autobiography asserts that the great king was the illegitimate son of a priestess. In the Neo-Assyrian account Sargon's birth and his early childhood are described thus:

> My mother was a high priestess, my father I knew not. The brothers of my father loved the hills. My city is Azupiranu, which is situated on the banks of the Euphrates. My high priestess mother conceived me, in secret she bore me. She set me in a basket of rushes, with bitumen she sealed my lid. She cast me into the river which rose over me. The river bore me up and carried me to Akki, the drawer of water. Akki, the drawer of water, took me as his son and reared me. Akki, the drawer of water, appointed me as his gardener. While I was a gardener, Ishtar granted me her love, and for four and […] years I exercised kingship.

The image of Sargon as a castaway set adrift on a river resembles the better-known birth narrative of Moses. Scholars such as Joseph Campbell and Otto Rank have compared the 7th century BC Sargon account with the obscure births of other heroic figures from history and mythology, including Karna, Oedipus, Paris, Telephus, Semiramis, Perseus, Romulus, Gilgamesh, Cyrus, Jesus, and others.

After coming to power in Kish, Sargon soon attacked Uruk, which was ruled by Lugal-Zage-Si of Umma. He captured Uruk and dismantled its famous walls. The defenders seem to have fled the city, joining an army led by fifty ensis from the provinces. This Sumerian force fought two pitched battles against the Akkadians, as a result of which the remaining forces of Lugal-Zage-Si were routed. Lugal-Zage-Si himself was captured and brought to Nippur; Sargon inscribed on the pedestal of statue (preserved in a later tablet) that he brought Lugal-Zage-Si "in a dog collar to the gate of Enlil." Sargon pursued his enemies to Ur before moving eastwards to Lagash, to the Persian Gulf, and thence to Umma. He made a symbolic gesture of washing his weapons in the "lower sea" (Persian Gulf) to show that he had conquered Sumer in its entirety.

Another victory Sargon celebrated was over Kashtubila, king of Kazalla. According to one ancient source, Sargon laid the city of Kazalla to waste so effectively "that the birds could not find a place to perch away from the ground."

To help limit the chance of revolt in Sumer he appointed a court of 5,400 men to "share his table" (i.e., to administer his empire). These 5,400 men may have constituted Sargon's army. The governors chosen by Sargon to administer the main city-states of Sumer were Akkadians, not Sumerians. The Semitic Akkadian language became the *lingua franca*, the official language of inscriptions in all Mesopotamia, and of great influence far beyond. Sargon's empire maintained trade and diplomatic contacts with kingdoms around the Arabian Sea and elsewhere in the Near East. Sargon's inscriptions report that ships from Magan, Meluhha, and Dilmun, among other places, rode at anchor in his capital of Agade.

The former religious institutions of Sumer, already well-known and emulated by the Semites, were respected. Sumerian remained, in large part, the language of religion and Sargon and his successors were patrons of the Sumerian cults. Enheduanna, the author of several Akkadian hymns who is identified as Sargon's daughter, was made priestess of Nanna, the moon-god of Ur. Sargon styled himself "anointed priest of Anu" and "great *ensi* of Enlil".

Shortly after securing Sumer, Sargon embarked on a series of campaigns to subjugate the entire Fertile Crescent. According to the *Chronicle of Early Kings*, a later Babylonian historiographical text:

> [Sargon] had neither rival nor equal. His splendor, over the lands it diffused. He crossed the sea in the east. In the eleventh year he conquered the western land to its farthest point. He brought it under one authority. He set up his statues there and ferried the west's booty across on barges. He stationed his court officials at intervals of five double hours and ruled in unity the tribes of the lands. He marched to Kazallu and turned Kazallu into a ruin heap, so that there was not even a perch for a bird left.]

Sargon captured Mari, Yarmuti and Ebla as far as the Cedar Forest (Amanus) and the silver mountain (Taurus). The Akkadian Empire secured trade routes and supplies of wood and precious metals could be safely and freely floated down the Euphrates to Akkad.

In the east, Sargon defeated an invasion by the four leaders of Elam, led by the king of Awan. Their cities were sacked; the governors, viceroys and kings of Susa, Barhashe, and neighboring districts became vassals of Akkad, and the Akkadian language made the official language of international discourse. During Sargon's reign Akkadian was standardized and adapted for use with the cuneiform script previously used in the Sumerian language. A style of calligraphy

developed in which text on clay tablets and cylinder seals was arranged amidst scenes of mythology and ritual.

The text known as *Epic of the King of the Battle* depicts Sargon advancing deep into the heart of Asia Minor to protect Akkadian and other Mesopotamian merchants from the exactions of the King of Burushanda (Purshahanda). The same text mentions that Sargon crossed the Sea of the West (Mediterranean Sea) and ended up in Kuppara.

Famine and war threatened Sargon's empire during the latter years of his reign. The *Chronicle of Early Kings* reports that revolts broke out throughout the area under the last years of his overlordship:

> Afterward in his [Sargon's] old age all the lands revolted against him, and they besieged him in Akkad; and Sargon went forth to battle and defeated them; he accomplished their overthrow, and heir widespreading host he destroyed. Afterward he attacked the land of Subartu in his might, and they submitted to his arms, and Sargon settled that revolt, and defeated them; he accomplished their overthrow, and their widespreading host he destroyed, and he brought their possessions into Akkad. The soil from the trenches of Babylon he removed, and the boundaries of Akkad he made like those of Babylon. But because of the evil which he had committed, the great lord Marduk was angry, and he destroyed his people by famine. From the rising of the sun unto the setting of the sun they opposed him and gave him no rest.

Later literature proposes that the rebellions and other troubles of Sargon's latter reign were the result of sacrilegious acts committed by the king. Modern consensus is that the veracity of these claims are impossible to determine as disasters were virtually always attributed to sacrilege inspiring divine wrath in ancient Mesopotamian literature.

Sargon died, according to the short chronology, around 2279 BC. His empire immediately revolted upon hearing of the king's death. Most of the revolts were put down by his son and successor Rimush, who reigned for nine years and was followed by another of Sargon's sons, Manishtushu (who reigned for 15 years). Sargon was regarded as a model by Mesopotamian kings for some two millennia after his death. The Assyrian and Babylonian kings who based their empires in Mesopotamia saw themselves as the heirs of Sargon's empire. Kings such as Nabonidus (r. 556–539 BC) showed great interest in the history of the Sargonid dynasty, and even conducted excavations of Sargon's palaces and those of his successors. Indeed, such later rulers may have been inspired by the king's conquests to embark on their own campaigns throughout the Middle East. The Neo-Assyrian Sargon text challenges his successors thus:

> The black-headed peoples [Sumerians] I ruled, I governed; mighty mountains with axes of bronze I destroyed. I ascended the upper mountains; I burst through the lower mountains. The country of the sea I besieged three times; Dilmun I captured. Unto the great Dur-ilu I went up, I ... I altered ... Whatsoever king shall be exalted after me, ... Let him rule, let him govern the black-headed peoples; mighty mountains with axes of bronze let him destroy; let him ascend the upper mountains, let him break through the lower mountains; the country of the sea let him besiege three times; Dilmun let him capture; To great Dur-ilu let him go up.

Another source attributed to Sargon the challenge "now, any king who wants to call himself my equal, wherever I went [conquered], let him go." Stories of Sargon's power and that of his empire may have influenced the body of folklore that was later incorporated into the Bible. A number of scholars have speculated that Sargon may have been the inspiration for the biblical figure of Nimrod, who figures prominently in the Book of Genesis as well as in midrashic and Talmudic literature. The Bible credits Nimrod with the building of Akkad, among other cities.

The name of Sargon's primary wife Tashlultum and those of a number of his children are known to us. His daughter Enheduanna, who flourished during the late 24th and early 23rd centuries BC, was a priestess who composed ritual hymns. Many of her works, including her *Exaltation of Inanna*, were in use for centuries thereafter. Sargon was succeeded by his son, Rimush; after Rimush's death another son, Manishtushu, became king. Two other sons, Shu-Enlil (Ibarum) and Ilaba'is-takal (Abaish-Takal), are known.

Conclusion of the Pavia intellectual line

So ***what is the lesson*** of the Pavia line's intellectual legacy within New York Alpha?

Pavia brings is two important legacies. First, the Pavia line connects Jack Rea of Cornell's Class of 1869 – one of the founders of New York Alpha – to the classical Greek philosophers. New York Alpha is "Greek" in more than name. Second, the Pavia line, being the fifth intellectual line of the House, imparts to the fraternity a tradition 'south of the Alps'. It is, accordingly, a source of intellectual diversity.

Hoya Sargon !

The Pavia intellectual line is part of New York Alpha's local Chapter lore, first recorded by brother Cadwalader E. Linthicum (1885)(1889) and preserved by Walter Sheppard ('29)('32) and Fred E. Hartzch ('28)('31).