Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
1992 Volume III: Reading and Writing the City

Cathedrals, Pyramids and Mosques

Curriculum Unit 92.03.04
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Each year students in the fourth or fifth grade of the New Haven Talented and Gifted Program embark upon a year long study of the Middle Ages. This is what is called the "core curriculum," and it is the umbrella under which I prepare and teach a wide range of interdisciplinary lessons. The content, however, has been traditional in approach—centering on the events that took place in Europe during the period from 500 to 1500 A.D. Initially when I taught this curriculum, I emphasized the differences between Medieval times and now. I emphasized the notion that this was a time when the technology that we so take for granted today did not exist, and I used that concept to point out the difference in living then and now. What I have realized, however, is that there are many ways in which people then were very much like people today. There are similarities, especially when discussing the human condition. Then, as now, there were wars, governments were corrupt, attempts were made to take over other countries, people got sick, they stole from one another and laws were needed to control human behavior. I present my students with information about the quality of life in the Middle Ages. Obviously without the scientific knowledge we have today, life was difficult and much less pleasant. But many of the concerns my "city kids" have are the concerns of "city people" back then. These concerns are the links between then and now.

Recently, through my reading in professional journals, magazines and newspapers, I have become aware of the need to expand my curriculum to include other countries and cultures. This seems completely appropriate to me, as the backgrounds of the children I teach are evenly split between African-American, Hispanic and students of European descent. These are wise children, and although they enjoy the romance of knights in battles and tournaments, and understand the concept that castles were great machines of war, they also want to know what life was like in other parts of the world during that time period.

This unit has been prepared for students in the fourth and fifth grade who have been identified as talented and/or gifted as the result of a screening process that takes place each year. These students come to me once a week from their elementary or middle schools. Our day is planned so that larger periods of time (at least 1-1/2 hours) can be put aside for our core curriculum study, and all scheduling is flexible so that additional time can be added if student interest demands.

This unit will be a comparative study of three different cities that were thriving during the period 1450 to 1500: Florence, Italy; Tenochtitlan, Mexico; and Timbuktu, Africa. I have chosen to look at these cities for a variety of reasons. In my efforts to create a multicultural study, I have chosen city life as the appropriate vehicle for my students who are city dwellers themselves, and who are embarking on a beginning study of life

over 500 years ago. I realize that studying life in the city does exclude some topics that are important to this time period such as castles, crusades, life in villages and on manors. However, I am interested in showing students the links between life then and life now. A study of these three cities will allow students to compare and contrast three different cultures, as well as compare and contrast our modern times with life in the latter half of the fifteenth century. Traditional studies of this time period center on Europe. Thus, I have picked two cities not included in this traditional study that were far away from one another, and very different from the European city. It is important to note that at this time, because of European exploration, people in these parts of the world were just beginning to have contact. As early as 1470, the Florentine Benedetto Dei is reported to have visited Timbuktu (Freeman-Grenville 76). Even in the early fourteenth century, the brother of Mansa Musa, a Muslim leader of Timbuktu, was reported to have sent many ships across the Atlantic to find land (Harris 61). Another reason for choosing these cities was the information that I found available for my students. There are plenty of books that are age appropriate about life in Europe and life in Mexico during the mid to late fifteenth century. I chose to look at these cities during the mid to late fifteenth century because of the information available. Timbuktu poses a more difficult task. There are many books written for children about Africa, yet few present much information about daily life in this city during the mid to late fifteenth century. Therefore, much of the information students will get about this city will be in the form of “lectures” or readings that I write up for them. I will also, when appropriate, use short excerpts from “adult books” that we can read and discuss together.

Throughout the discussion of these cities, I have tried to avoid using either the term “medieval” or “renaissance” since these are terms that pertain only to Europe, and have no meaning to either Timbuktu or Tenochtitlan. These are merely terms of convenience, and, even in Europe, the different scales and paces of development of different cities throw the terms into question. By the mid-fifteenth century, Florence was a more advanced European city and beginning its renaissance, while cities in other parts of Europe were still much more medieval in development. Thus, I will state specific dates or centuries when referring to the time period.

This unit will begin with background information for the teacher. The background will begin with a discussion of the definition of a city and then progress to information about each of the three cities. Each city will be looked at in regard to its art and/or architecture, government, religious beliefs, daily life and commerce. Throughout the narrative, I will include suggestions for class discussions and activities that are separate from the activities included in the lesson plans at the end of this unit.

It would be interesting to start this unit with a discussion of the definition of a city. While all of my students are city dwellers, it is obvious to state that this is probably not something about which they have thought much. They are aware that they don’t live the country and it would be an interesting discussion to brainstorm characteristics under the categories of city and country to see then what conclusions can be drawn.

There are several different theories as to the origin of the city and the truth of the origin of a city is probably a combination of two or more theories, depending on the specifics of the city looked at. The word “town” originated as a word for an enclosure. Initially the walls were empty within except during time of war. Eventually people stayed within the walls and a city began (Pirenne 58). The earliest symbol for a city is a circle with a cross inside it. The circle is a wall and the cross represents two roads crossing where goods and people can come together. Lopez in “The Crossroads within the Wall” (31) points out that the wall may not be a tangible wall but merely ideas that keep a group of people together with a sense of identity and a sense of separateness from the “outside”. The reasons people came together may vary. It could have been for trade, for mutual gain in manufacturing, for protection from adversities, to gather around a church or cathedral, or to

provide a marketplace for the work of artisans. Regardless of the reason a city developed, what is important is that there was a “wall” that marked the citizens within as separate from the country without. Students can be asked to consider the question of walls, also. While there are no physical walls separating New Haven from other areas, are there ways in which there are intangible walls around their city that define it as a community? Certainly this can lead to a lively discussion and would lend itself to writing topics as well.

Students can also be asked to use the dictionary to find the definition of the word “city”. This definition can be included in the discussion to see if it adds information. At this step, with guidance from the teacher, students can be asked to create a working definition of “city” that can be kept posted in the room and referred to at later times.

Once the definition of city has been written up and made available to students, they can be introduced to the three cities to be studied in this unit. I have included a simple world map showing the location of the cities as reference for this unit but this is certainly an opportunity to do some indepth map work with my students. I have found that many of them lack even the most rudimentary map skills and knowledge of world geography, and I welcome the opportunity to put map work in context. Students can locate the cities and identify the continents and modern day countries that the cities are in. This is a chance to discuss the idea that the political boundaries of these cities’ countries are not necessarily the boundaries of today. What we call Italy today was a group of city-states. The country of Mexico did not exist then either. This concept can be related to the continent of Africa whose countries, names, and borders have changed frequently throughout the years. More recently, students can be reminded of the events in Germany and the former U.S.S R. Once students have located the cities on a map, it would be worthwhile to ask them some questions before beginning their study. Using New Haven (and what they know about our climate), they can be asked to predict what the climate is like in the three locales of the cities in this unit. This would be an opportunity to point out certain geographic land marks such as the Sahara Desert north of Timbuktu which might have an effect upon its climate and the effect the Adriatic Sea and the Mediterranean Ocean might have on the climate of Florence, even though it is on a slightly more northern latitude than Connecticut. There are many questions and observations that can be presented based upon the classes’ level of knowledge.

(figure available in print form)

The first city to be studied is Florence. I have chosen Florence somewhat arbitrarily: there is some information specifically about Florence that is written for children, and the Yale Art Gallery has many examples of work from Florentine artists in the 14th and 15th centuries. Field trips are an important part of my curriculum. Much information about life during the Middle Ages can be generalized and related to Florence. Florence also produced Dante, Donatello, Brunelleschi, and da Vinci, and was ruled by a Medici during the specific time period we are studying. These are all names that my students should begin to know.

By the time we enter the walls of Florence in the mid-fifteen century, the city is several hundred years old. Not much is known of Florence’s beginning but records were kept beginning in the twelfth century that show it had a government run by consuls (Duffy 56). Cities in the area we now call Europe had declined with the collapse of the Roman Empire and were under constant siege by Muslims and Vikings up until the ninth century. Those cities that were in existence built walls to protect nearby residents from these attacks. The security offered by these cities caused them to flourish so that by the mid-tenth century, town-fortresses were found throughout western and northern Europe. Eventually these cities developed into trade centers, as the people who lived within the walls were strictly consumers who could not grow all their own food or provide for their own clothing and other needs and depended upon others for these items. As people came into the city to trade, they built stalls which eventually became more and more substantial until eventually they built their homes

over them and began living in the cities permanently. At this time the population of Europe in general was growing because of new inventions in farm tools which allowed people to clear more land and grow more food (Gies 10). Also at this time, Venice was flourishing because of its location on the Mediterranean Ocean and its relative proximity to Constantinople and the Byzantine Empire. Thus, other cities, including Florence, took their lead from Venice and, in Florence's case, a woolen industry was developed. Because Florence was centrally located on a main north-south trade route on the Italian peninsula, she was able to import raw materials to manufacture, and then sell the finished goods. The Italian cities were full of serious business men who began using the bookkeeping methods we use today (Girouard 23). This was aided by the use of Arabic numerals which made manipulating numbers much easier than when Roman numerals were used.

In the mid-thirteenth century Florence began minting a gold coin, called a "florin", which was greater in value than the commonly used silver coin. This made larger transactions easier to handle and was of great importance throughout the commerce centers of Europe (Schevill 290). Also at this time, Florence was responsible for one of its artists, Leon Batista Alberti, becoming one of the first writers to write in pure Italian rather than using Latin which had been used for all written documents up to that point. He felt that a living nation couldn't manage with a dead language and began writing his novels and books about family life and public men in Italian (Hyett 328).

Prior to the rise of cities, there were two possibilities for people, dictated by birth: to own land and serfs, or to be a serf. The rise of cities allowed a third option: a middle class grew in Europe. Florence was no exception. While the merchants of Florence were not nobles, they began to own property bought with their money earned from producing and selling. Before the rise of Florence's manufacturing, the land had only been owned by nobles and bishops.

By the mid-fifteenth century, Florence, which had been ruled by an oligarchy of leading mercantile and noble families, came under the single-handed rule of Cosimo de Midici. The Medici family was famous for its great wealth and its interest in the arts. Cosimo was no different as he contributed money to the building of churches, monasteries and libraries. However, despite these good qualities, he insured his power by manipulating taxes—easing them for his supporters and levying more on those he wanted to keep under control (Schevill 365). In addition to the Medici Prince, there were a number of other city officials who helped with the everyday running of the city. It should be noted here that as cities developed and as groups of people came together, it became necessary to set up rules and regulations to assure the well being of its citizens. This is a concept that could be discussed with students in light of the family and their schools. Why are the rules and regulations of any community necessary? What happened to people who broke the law? In "The Society of Renaissance Florence," Brucker states that criminal court records of that time indicate that people were violent. The "popolo minuto" or little people were poor and illiterate and acted violently out of frustration from unemployment, disease, and obviously, their poverty. The upper classes often acted violently to defend their family honor. There were three magistrates to act as judges and policemen, but often crimes went unpunished. Eventually Ordinances of Justice were enacted in which families prone to violence were named and excluded from community positions (96). When enforced, capital punishment, in the form of hanging, was in existence. Thieves might have their hands cut off or be branded. Traitors, heretics and witches were burned at the stake and fines were levied against offenders in civil matters (Gies 204) with whomever administered the fine getting the money. This is noted because there was also a bishop's court that was in competition with the city courts (Gies 206).

The church was very important and very powerful during this period in the Middle Ages. Besides having its own court, its importance can be attested to by the beautiful churches and cathedrals built during this time.

They cost huge amounts of money and took years to build. Florence's cathedral, which was consecrated in 1436 is a combination of Roman and Gothic architecture and one of the largest and most complete examples of Italian architecture (Hyett 305). Lesson Plan II at the end of this paper will look at the cupola of the cathedral, designed by Pilippo Brunelleschi, in more detail.

All holidays during this time were church holidays, and the church initially was responsible for looking after the sick. As a result, it built hospitals which are some of the earliest and largest public buildings (Girouard 44).

Because commerce was so important to Florence, guilds were very important also. A guild was an organization or society of people who all were in the same business. In Florence at this time there were seven major guilds: Judges and Notaries, the Cloth Merchants who brought cloth in from abroad, the Wool Guild, the Silk Guild, the Moneychangers, the Doctors and Druggists, and the Furriers (Duffy 237). At this time Florentines were masters of manufacturing and preparing cloth. Once they learned how to spin gold and silver, they became masters of brocade fabrics also. The guilds guaranteed quality by regulating what could be used to make a product and what could be sold. Guilds provided on-the-job-training for apprentices, who worked with a master in a trade. The master provided food, clothing and lodging while teaching the trade. The guilds also watched over their own by helping the ill and destitute of its ranks (Gies 90). This might be further illuminated by drawing comparisons between jobs today that require some kind of apprenticeship and by discussing organizations that provide the same kind of service to its members that the Medieval guilds did.

What was life like for a middle class merchant living in Florence? Since space was at a premium, the streets that the merchants' homes were built on were narrow and the stone houses were built close together. Most often all the merchants of one kind would be together in the same part of the city. The ground floor housed a kitchen and guarderobe and living quarters and bedrooms were on the second floor. Furniture at this time consisted of handsome (and costly) benches, trestle tables, and cupboards. Tapestries decorated the walls. Families were large and extended—servants and apprentices who also lived in the same house swelled the ranks to forty or fifty people living together.

People dressed in colorful clothing which is not surprising, knowing that the Florentines were producers of fine cloths. They dressed in woolens, silks, damask and embroidered fabrics. Fur was used for trimming. Since a person dressed according to his rank, there were laws forbidding a person to dress beyond his station. A person who overstepped his or her boundaries might be fined (Unstead 12). This is an interesting concept and it would be interesting to hear students' views about this.

School at this time was still primarily for the well-to do and, of course, only for boys. There was a Cathedral school for poor children, financed by the Wool Guild, which provided housing for the teachers and money to students. Books were still manuscripts at this time and it would not be until 1474 that printed books appeared in Florence. The instruction was in Latin and the scarcity of books meant instruction emphasized oral recitation and memorization (Gies 155). Subjects studied include writing, spelling, composition, literature (Classical works became very important at this time), rhetoric and logic. Sciences and mathematics were taught also. After the Cathedral school, a boy might go to the university in Florence. While other cities in Italy had well established universities much earlier, it wasn't until 1387 that Florence's university finally got started. Its curriculum offered law and medicine, and also the humanities which were an educational innovation at that time (Schevill 322).

Florence is famous for its many writers, sculptors and painters. Dante Alighieri had already set the standard by writing "The Divine Comedy" more than a century earlier. Petrarch had written his poetry and was considered the first of the humanists (Duffy 264). Donatello was the first and greatest of the Christian

sculptors and examples of his work are in Florence. Leonardo da Vinci was the son of a Florentine notary. We are fortunate, for at the Yale Art Gallery, there is a fine selection of fourteenth and fifteenth century paintings by a variety of Florentine painters. These paintings, along with the marriage cassone (large chest) that is there, are all excellent ways of presenting information about this time period and about the religious beliefs of Florentines at that time.

We move now, forward in time to the very end of the fifteenth century, and south and west in direction to Tenochtitlan, the thriving Aztec city built on an island in Lake Texcoco. This is the site of modern day Mexico City. Much is known about this civilization and it might be worthwhile to ask students how we have obtained the information that we have about Tenochtitlan and the other cities in this unit? For example, we have the written records of explorers such as Cortez and Leo Africanus who tell us about cities such as Tenochtitlan and Timbuktu. We have the information gained from archeological digs—not just in cities like Tenochtitlan but in Europe where archeological digs have shed light on cities and life during the Middle Ages and Renaissance.

As was the case in Florence, Tenochtitlan was a city very much involved with trade, and merchant guilds existed in a few towns in the area. Traders were considered dignitaries who lived together in one part of the city, had their own courts, laws and even gods. This was a profession which was hereditary, in contrast to the merchants in Florence who did not necessarily pass their professions down to their sons. Within the Aztec culture, warriors were especially revered. It was recognized that traders, when out on trips to the south, to the Pacific or to the Mayan hinterland were often called upon to defend themselves in war-like situations against hostile tribes and they received the same honors that successful warriors did.

In Tenochtitlan there were skilled craftsmen, who were a middle class similar to the craftsmen and some of the merchants in Florence. These craftsmen worked in copper and gold and used jade and turquoise in their jewelry and sculptured pieces. There were also feather workers who created costumes, dance dresses and festival garb for rulers to wear during the many religious ceremonies. A questions to ask students might be why feather working was important in this part of the world?

Another craft, made by women, was cloth, woven, dyed, and embroidered. These cloths, plus food stuff and animals all found their way to the central square where the market was carefully set up. Here is where people came to buy, sell, socialize and gossips. Street like rows contained all the same merchandize—all jewelry was together, all produce, all woven goods, all animals and so on. Trade was by barter (that is, goods were traded or exchanged for different goods without the use of any money), although cocoa beans were used like small change and copper axe blades and gold dust could be traded for more expensive items (Bray 112). This can be compared to the silver coins and later gold “florins” used in Florence at this time and the use of gold as an exchange medium in Timbuktu as will be discussed later. During transactions there were occasions when a person might feel he had been cheated or stolen from, or at one of the city’s barber shops, apothecary shops, or inns, a buyer and seller might become embroiled in a dispute. At the end of the square was a court with three judges who were always there. These judges were appointed by the emperor—half from the nobility and half from the peasant population (Soustelle 50). The case would be presented and the judges would give the verdict on the spot. Fines levied were in lengths of cloth since, as we have indicated, money as we know it was not in use (Soustelle 28).

The buying and selling that took place in Tenochtitlan necessitated a form of writing and counting. The Aztecs kept good records of taxes, lawsuits, maps and registers in books that were made of long strips of cloth or skins (as long as thirteen yards by six or seven inches high) and folded in a zigzag pattern. They wrote in hieroglyphic script which worked well for writing about objects but was more difficult for intangible concepts

and abstract ideas. They counted by 20's using dots or fingers for one through nine. 20 was symbolized by a flag, 400 by a feather or fir tree symbol and 8000 by a symbol of a bag or pouch (Bray 93). It would be interesting to compare this to Roman numerals. I also think students would enjoy learning to read some hieroglyphics and making their own books folded in the way of the Aztecs. (See also Lesson Plan II.)

The ruler of the Aztecs in 1500 was Montezuma II. Elected by a group of town officials, he lived in his palace in Tenochtitlan. Under him was a class of priests and other lesser rulers. Soldiers were honored in this society and as a soldier grew in fame due to his conquests, he was increasingly bestowed with gifts of fancy clothing and land. He became wealthy because he was honored, not honored because he was wealthy (Soustelle 45). These warriors can be compared to European knights in some ways.

Traveling traders, as described earlier, were held in high esteem. Just below them on the social scale were the craftsmen. Then followed peasants and slaves. There were opportunities for the smart and courageous to move upward in society, however, and even slaves could escape or buy out of slavery (Soustelle 74). Conversely, people seeing no other options could volunteer for slavery. This would be an interesting concept to explore with my students.

As in Europe, all people, except slaves and children, were taxed. Different from Europe, however, was that there was no private ownership of land. What was guaranteed was the right of the individual to use the land (Soustelle 79).

Religion governed most of what an Aztec did at this time in history. Aztecs believed the gods ruled a man's fate and were responsible for the good and bad that befell him. The Aztec religion was polytheistic as opposed to the Christian concept of one God. In fact, as Aztecs would conquer new tribes, they would "adopt" the gods of the conquered people (Soustelle 116). This is in complete opposition to European conquerors who made great efforts to convert conquered people to Christianity. The Aztec gods were many and varied. The Lord and Lady of Duality had four sons who created the other gods, the world and the races of man. There was Huitzilopochtli—Hummingbird of the South who was the god of the sun and the national god of the Aztecs. There was Tlaloc, the rain good, whom it was believed, had chosen the Aztecs as his people. Coatlicue was the earth goddess who was the mother of the moon, stars and Huitzilopochtli. These are just a few of the Aztec gods and goddesses but show clearly their close relationship with nature.

The Aztec religion also contained much superstition. The calendar that they followed was passed on to them by Mayan astronomers who calculated the sun's year to within .0002 of the figure we use today (Bray 163). Their year, consisting of 18 months of 20 days, had five "hollow" days which were considered a time of ill will. During this time no festivals or important business was conducted. Children born at this time were considered fated to bad luck (Bray 165). Other superstitions, which were a major part of the Aztec belief system, included putting a child's lost baby tooth in a mouse hole so a new one would grow and the belief that if a girl stood to eat her meal, she would be married a long way from home. They believed that if a man stubbed his toe on the hearth, he would be unable to fight or flee in battle because his foot would became numb. Bad luck omens included a woman's tamale sticking to the side of a pot meaning she would be unable to have children. Bad luck would come to one whose path was crossed by a weasel or whose roof beams cracked (Bay 180). These superstitions sound absurd to us, and an interesting activity would be to identify and compare our superstitions to those of Aztecs. Perhaps the Aztecs' are not so far fetched after all!

The last aspect of the Aztec religion and the most disturbing was their practice of human sacrifice. At the time discussed in this unit, the incidents of human sacrifice were at their highest point. The Aztecs believed that human sacrifice was necessary to keep stability between the gods and men. Estimates of the number

sacrificed vary from 10,000 to 50,000. Some sacrificed had their heads chopped off, others were held down and their hearts were removed. Happily, there were other ceremonies where flowers or ears of maize were offered to the gods instead.

Despite this practice of human sacrifice, the Aztecs beliefs in death were kind and uplifting to the believer. If a man died in battle, he went to “Eastern Paradise” where he lived in flower filled gardens. After four years, the Aztecs believed a person returned to earth as a hummingbird or butterfly. They believed a woman who died in childbirth went to “West Paradise” where she lived until she returned to earth as a moth. This can be compared to Europeans, who believed life was nothing more than preparation for life in heaven after death.

The Aztecs were a clean people. Each day the streets were cleaned and garbage was removed to the edge of the city. (Soustelle 32) This is in contrast to the Europeans whose city streets were full of garbage and sewage. The Aztecs bathed frequently and enjoyed steam baths. They understood about tooth decay and cleaned their teeth with salt and powdered charcoal. However, the rest of their medicine was a combination of magic, herbal knowledge and religious incantations.

Tenochtitlan was a city built on an island. All parts of the city were reached by water and the city was built around a central square that had the temple of the god Quetzalcoatl and the shrines of Tlaloc and Huitzilopochtli. These shrines were on a pyramid that rose ninety feet into the air with 114 steps going up to it. The contrast between this temple and the cathedral in Florence is interesting and would spark a good class discussion. (See lesson Plan II.) Once again, walls enter the picture as this square is surrounded by a wall decorated with serpents’ heads. The purpose of this wall was not as much for protection as for a means of civic control. It was often decorated with the heads of those who had been sacrificed to the gods.

Besides the temples and the palace of Montezuma II, not many lived in splendor. Most houses were made of adobe or stone and only the very wealthy had more than one storey. Peasant houses might also be made of wattle and daub with thatched roofs. This is similar to European peasants’ homes. Roofs were flat and often covered with dirt to make a roof garden. Wealthy houses might have more than one room but regardless of an owner’s station in society, furnishings were sparse: reed mats for sleeping and cushions on the ground for sitting. Houses were mostly for eating and sleeping as many had courtyards for other activities. Clothing and jewelry were kept in wicker crates.

The clothing that was kept in these crates depended on the station of the owner. As was the case in Florence, rank in society permitted certain privileges in dress. For example, gold, turquoise and jade could be worn only by city chiefs (Bray 34). Otherwise, clothing consisted of loin cloths for men and a cloak that was tied at one shoulder. Women wore ankle length skirts wrapped around and tied at the waist with an embroidered belt. Poor women wore no blouse whereas women of a higher station wore a blouse. People went barefoot or wore sandals if middle or upper class. Jewelry dressed up this plain attire—earrings, necklaces and bracelets were worn. Men pierced their noses and the skin beneath their lower lips. Feathers, as mentioned earlier, were very important for festivals and religious ceremonies.

The education of Aztec children began early. At four years old they began helping with chores. Boys went to work with their fathers, while girls began their training for marriage, learning to spin, sew, cook and eventually, weave. Boys learned to fish and canoe. The value of hard work and truthfulness was a concept taught to all children, especially those of nobility who were seldom allowed to be idle (Bray 60).

In addition to lessons taught at home, there was free school for all children, although some only went part time. One school was for the children of peasants and tradespeople and one was for the upper class. There

were always separate schools for boys and girls. This is in contrast to European schools where girls did not attend at all. Also in contrast to European schools was the subject matter taught. While in Florence interest in the classics was at a high, in Tenochtitlan, the subjects taught stressed citizenship and what the state wanted its citizens to know. The subjects taught were Mexican History, religion, and preparation for war. Knowledge for its own sake was unheard of since it was considered unnecessary to teach a common man skills or knowledge he would never use (Bray 52). At the school for the elite, the teaching was done by religious authorities who were training those who would become rulers, administrators, priests and judges.

Fortunately, we have been left with many examples of Aztec art. As with European art work from this time period, much of it is religious in nature. Sculptures of the many gods give us information about the Aztecs' beliefs as well as knowledge about their dress and customs. For example, the Sun Calendar is the largest known Aztec carving at 24 tons in weight and 12 feet in diameter and depicts all of the Aztecs' universe. In addition, there is Aztec poetry that has been translated from Nahuatl, to Spanish and to English. While some of the poems are religious in content, others are historical and dramatic (Moctezuma 164). One of the poems, "Life Passes: We must Live," points out the very different views about life between the Aztecs and Europeans at that time. "We do not come to earth twice, O Chichimec Princes./ Let us be merry and have some flowers tonight./ To the kingdom of Death! We are only passing through:/ In truth, in truth we shall die." Further in this poem, the poet states "Only here, only on earth,/ Do beautiful songs and lovely flowers exist:/ This is our wealth, and our ornaments:/ Let us enjoy this!" (Moctezuma 167). This poem, along with several others is in The Aztecs by Eduardo Matos Moctezuma. This book is also full of color plates and drawn illustrations which will assist in presenting layouts of Tenochtitlan; drawings of houses and temples; and pictures of excavated ruins; and plates of masks, sculptures and pottery. It also gives information about the archeological excavation of Tenochtitlan. While not written for children, its text and illustrations would provide any student with in-depth information about the Aztecs. The poetry, from which I have quoted, can also be read and discussed with students of this age.

We move now to northwestern Africa to the city of Timbuktu (also spelled Tombouctou) in what today is the country of Mali. Timbuktu is also located on the banks of the Niger River. Students might be asked to predict what effect its location on the Niger might have on the city's development and growth and to compare its location on water to the locations of Florence and Tenochtitlan and the role their bodies of water played in their development. Timbuktu's geographical latitude is 16.46°N. The latitude of Tenochtitlan is 19.2°N while Plorence's is 43.47°N. Using a large world map to locate each city, first by identifying the continent it is on, and then by using the latitudes for each, students should be asked to predict Timbuktu's climate based on their knowledge of Florence and Tenochtitlan. Timbuktu developed where it did because of its location on the Niger River. While the flatness of the land made it hard to defend from attacking tribes, its climate was not as hot and dry as the land to the north or as wet and vegetative as the land to the south (Melezer 36). It is located just below the Sahara desert in what is referred to as a "Savanna Wetland." It receives between twenty and forty inches of rainfall annually. The soil is sandy and palm trees and grass grow in this humid area. Other crops that were grown were cotton, millet, rice and watermelon. Cotton was a most important crop because it also encouraged manufacturing and trading (long distance and local) once it was woven into cloth (Davidson "W. Africa 1000-1800" 151). Students, provided with atlases, can be challenged to investigate the rainfall, vegetation and topography of both Florence and Tenochtitlan once they have been familiarized with these different kinds of maps during their introduction to Timbuktu.

This discussion of Timbuktu looks at the city primarily during the latter half of the fifteenth century. During this time, control of Timbuktu had passed in 1464 from the Tuareg, who were a group of white nomads, to the Songhai, who were a black tribesmen, loosely Muslim, and lead by Sunni Ali. The Tuareg were known to be

skilled caravan-drivers who were involved with the salt trade from salt mines to the north.

At this time in history, Timbuktu was a thriving city for two main reasons: the first was the establishment of Islam as the official religion of Timbuktu and the second was its locations on the Niger River, which made it an important link in the sub-Saharan trade routes. Because it could be reached by both water and land, it became recognized as a commercial as well as cultural center.

Mansa Musa, a ruler from the Mandinka tribe, is credited with making Islam the official religion of Timbuktu over 100 years before Sunni Ali took power. Islam is a religion which worships one god, Allah, as opposed to the polytheistic religion of the Aztecs. Mansa Musa allowed the religions that were already in existence to continue and because of Islam, people of the black and white races were able to live together peacefully. Musa traveled to Mecca, the spiritual center of Islam, and upon his return brought many Muslim scholars back with him. These scholars, with his backing, settled in Timbuktu to help spread the religion. Thus the city became a center for Islamic learning (Davidson "W. Africa 1000-1800" 50).

The city also was able to gain recognition in the Islamic world because Musa was very wealthy and able to build mosques in Timbuktu and other cities. In contrast to the university in Florence and more closely similar to education in Tenochtitlan, students were trained in traditional Islamic studies at the mosques where Islamic scholars would surround themselves with students. These scholars were both black Africans from the interior and whites from Northern Africa and the Middle East (Oliver 93). The Koran, the sacred book of the Muslims, was the basis of higher education in Timbuktu and the subjects students studied included syntax, rhetoric and jurisprudence. Each scholar had a reputation in a specific area and students went to them accordingly. Once a student had mastered the material of a scholar, he was provided with a certificate which allowed him to teach this subject to others (Oliver 418). Our own students would be interested in knowing that Muslim scholars were wealthy (Timbuktu was, in fact, a very affluent city) and they owned land and slaves and received gifts from local merchants (Oliver 420). Learned Muslims also took pilgrimages which helped spread and reinforce Islam in the region.

The rise of Islam in Timbuktu was very much tied up with the trading that was taking place in Timbuktu. As stated earlier, Timbuktu's location on the Niger River made it the Southern base for the sub-Saharan caravan trade (Oliver and Page 72). It could be reached by both land and by water. Gold, salt, ivory, cotton and miscellaneous trinkets made their way back and forth through Timbuktu on camel back. Because gold was mined to the west and south of Timbuktu, it was available in quantity and helped make the city wealthy. Also, Timbuktu's conversion to Islam helped its economy because Muslims traded with Muslims. Muslim pilgrimages and the fact the people of Timbuktu could pay for their goods with gold, helped foster its reputation as a very wealthy city (Dillahunt 49). Two items of interest that were traded profitably in Timbuktu were handwritten books from north Africa (Stride and Ifeka 172) and salt, which was as important as gold because it didn't exist in all areas of northwestern Africa (Melezer 56) and because of the hot climate.

There is not much information available to students about the daily life of the people who lived in Timbuktu but it is important to attempt to piece together some information for students to use to compare to Florence and Tenochtitlan.

At the time we are looking at Timbuktu, two groups in particular, the Tuareg, and the Songhai, had vied for control of the city. The Tuarag succeeded in 1433 and then lost control in 1464 to Sunni Ali. Sunni Ali was reputed to be a tyrant and to dislike the Muslim rulers who challenged his authority by not believing that he possessed magical powers (July 67). He ruled effectively, however, by appointing his own officials to help him and by establishing a professional army (Page 89).

As in both of our other cities, Timbuktu also had different social classes. They were the aristocracy, free men and slaves. Birth status determined a person's class, but there was some mobility.

The aristocracy consisted of those related to the ruler. Freemen were the high ranking merchants, artisans who made weapons and consumer goods, and bureaucrats. They paid taxes to the ruler and the mosque for their freedom. The lowest ranking social group was that of slaves. Conquered people were often enslaved, but enslavement was up to the discretion of the conqueror. These men could work their way out of slavery or marry their owner's daughter (Melezer 64). Conversely, a person experiencing difficulties could donate his labor to slavery. This gave protection to those who were weak or disabled (Dillahunt 31). This is similar to the status of slaves in Tenochtitlan.

As in Florence and Tenochtitlan, men did the work associated with agriculture and commerce while women worked mostly at home (Melczer 67). Muslim women in Timbuktu had more freedom than Muslim women in more northern Africa (Stride and Ifeka 57). Elders were held in high esteem and held leadership positions in social and governmental settings. As was the case in our other two cities, marriages were often arranged when couples were children and the wife was paid for with clothing, money and animals. The family structure up to this time in Timbuktu was very different from that which we know today. A woman lived with her husband's family until the couple's children reached puberty. Then all but the husband went to live with one of the wife's uncles. Therefore, people had two families of which to be a part (Melezer 69).

The government under the ruler, as mentioned earlier, consisted of assorted administrators and war chiefs. Men were called up from time to time to serve in the army as the situation necessitated (Dillahunt 71). Students might be asked to discuss how troops are raised in our modern day time? The court was also under the jurisdiction of the ruler. The city of Timbuktu and its inhabitants had a reputation of being very fair due to the Muslim influence. Theft was a crime punished by death or enslavement. This gave security to foreign traders, and, with safe trade routes, the city grew even more (Oliver 372).

In Timbuktu, taxes were also levied. Salt was taxed as it traveled in and out of Timbuktu and as mentioned before, freemen paid taxes to the ruler for the privilege of freedom and slave ownership (Melezer 64). Fines were issued for those breaking the law and the administrator in charge of a case received a percentage of the fine.

At the center of Timbuktu were its major mosques and its marketplace (Melczer 38). In its prime, Timbuktu had seven mosques, a major university, library and palace (Meltzer 49). The placement of the mosque and marketplace in the center of the town further emphasizes the importance of both Islam and trade. Around the center was a ring of houses and the outer ring consisted of fields for crops and animal grazing, castles, cemeteries and shrines (Melezer 40). Obviously the Niger River was important not only for trade and transportation but for crop irrigation and water for drinking. Water for drinking was sold because it was scarce (Melezer 50). In fact, Timbuktu had a reservoir that was thirty to forty feet deep (Melezer 44).

The last topic to be discussed is the architecture of Timbuktu. Students, having learned what the climate, topography, and crops of Timbuktu were, might be asked to predict what materials were used to build houses and other buildings. They could be asked, based on their previous knowledge, to predict which city Timbuktu would most be like Florence or Tenochtitlan? Would the Sankore mosque more closely resemble the shrine of Huitzilopochtli or Brunelleschi's cupola? (See Lesson Plan II.) Timbuktu, as were our other cities, was surrounded by a low mud wall. In fact, houses and mosques were mostly built of mud although in the mid fourteenth century Mansa Musa, mentioned earlier, introduced building in brick rather than clay (Davidson "Africa in History"), flat roofs, and the tall, thin tower attached to a mosque called a pyramidal minaret (Stride

and Ifeka 52). Houses, made of clay, had thatched roofs and extended outward to accommodate the extended family that was the norm at that time. A typical house had two inner courtyards and no windows or chimney. This is similar to the description of an Aztec house. In Florence houses were built upwards to as many as three stories because of lack of space whereas houses in Timbuktu and Tenochtitlan were able to take advantage of space and remain primarily one story buildings.

This unit is intended to provide only the very basic information that is needed to begin a comparative study of these three cities. Obviously, there is room for more information and this can be added as student interest demands. In time also, as the demand for more multicultural information increases, especially as pertains to Africa, information will become more readily available to teachers and students.

The learning opportunities within the framework of this unit are many and varied. Not only can the cites be compared and contrasted every step of the way, but comparisons can be made between the time then and the time now. It is my hope that by the end of this unit, my students will have a understanding of three important cultures in existence over 500 years ago. In addition, I hope they will see that while we enjoy the benefits of modern technology, human beings, regardless of what part of the world they live or lived in, have common needs and desires. These are our links with the past and our links with each other today.

Lesson Plan I—What is a City?

Lorenzetti's Allegory of the Good and Bad Cities

As stated earlier, the purpose of this unit to study three different cultures that existed during the late fifteenth century, and to examine similarities and differences in city life then and city life now. One interesting way to stimulate discussion and promote learning about life in Europe during the Middle Ages is to use a painting done by Ambrozio Lorenzetti in 1337 to 1339 now called "The Allegory of Good and Bad Government". This painting was done on the walls of the "Hall of Peace" in the Palazzo Publico in Siena, Italy. While not specifically about Florence, it is representative of art, and presents the issues that concerned people during the first half of the fourteenth century. The room these paintings are in is rectangular, and is entered through a door directly facing the painting of "the effects of Bad Government on the city and country." That wall must be looked at first when entering the room. The wall with the door has the "effects of Good Government on the city and country" painted on it. Adjacent to these walls is a short wall on which is the painting of "Good Government." The opposite wall has the only window in the room to illuminate the painting. Since the paintings show the effects of government on both the city and country, these paintings can be used during initial discussions to define the city as well as used to learn about clothing, architecture and customs of the time.

Included with this unit are slides of the paintings. These are on file at the Yale Teachers Institute. The slides show the entire walls as well as details of each wall. Using these slides, students should first be asked to describe what they see. Good Government shows Justice with her scales in balance. Wisdom floats over all. The angels administer justice. A figure representing Common Good is seated on a throne and is bound to Justice by a cord that also goes past a figure representing Concord and twenty four townspeople. The painting of the "effects of Good Government" shows merchants in their shops, dancing maidens, workmen beautifying and maintaining their city. More information about this painting can be found in "A Distant City" by Chiara Prugoni and it will be up to the teacher to present information about the paintings dependent upon the grade and level of the class.

By contrast, the painting of the "effects of Bad Government" shows Justice imprisoned and tied up at the feet

of Tyranny who is obvious by his devil-like horns. Her scales lie broken and students can be asked what they think the painter is trying to tell his audience. While in the painting of Good Government, the city is bound together to Justice by Concord, in the Bad Government a figure wearing the colors of Sienna (black and white), and holding a saw, is that of Division or Divisiveness. In this painting many of the figures and the soldiers have their swords drawn and are indeed killing towns people. An ugly ancient woman represents Pear. Avarice is represented and is easily identified by her gnarled hand holding her purse which is overflowing with money. In opposition to the Good Government, the houses are burned and streets are littered. The only person at work is the merchant who makes weapons.

There are several activities that can be associated with this lesson. For most fourth and fifth graders, some vocabulary work will need to be done. Words like avarice, tyranny, and concord will need to be defined. The whole questioning process used by the teacher when examining specific scenes and figures in the painting will require students to use deductive reasoning skills. Writing assignments can range from simple descriptive pieces about specific figures or parts of the paintings, to comparing and contrasting parts of the paintings. A final class activity would be to divide the class into two groups, allowing plenty of time for discussion—one to create a mural of a 1992 “good” city and one to create a 1992 “bad” city. Each mural could be accompanied by written descriptions that include comparing and contrasting 1340 and 1992.

Lesson Plan II—Architecture The following lesson compares the architecture of Brunelleschi’s Cupola in Florence, the shrine of Huitzilopochtli (the sun good) in Tenochtitlan and the Sankore Mosque in Timbuktu. The following books contain examples of the three structures:

1) “Grand Constructions” by Gian Paolo Ceserani and Piero Ventura—Brunelleschi’s Cupola and the shrine of Huitzilopochtli
2) “Crusaders. Aztecs. Samurai” by Dr. Anne Millard—the shrine of Huitzilopochtli and the skyline of Timbuktu
3) “A History of West Africa 1000-1800” by Basil Davidson—the Sankore Mosque.

I have also included sketches of these three structures as part of this lesson.

Students should be shown each structure and discuss what each is made of. For example, the cupola is made of stone and wood with wooden beams that are reinforced with iron. The other two structures are made of clay and stone. The shape of each structure should be examined and compared. Students can be asked to discuss how the climate and topography of each area might have influenced what these buildings looked like and of what they were made? Also, why might the shapes of the African and Central American structures, as well as the building materials be more similar to each other than to Florence? Grand Constructions presents additional information about the cupola and shrine which can be shared with students and information about Brunelleschi and the building of the cupola can be found in Brucker’s “Florence The Golden Age 1138-1737.”

There are many possible activities that can be assigned as part of this lesson. One would be to have small groups of students make models of the different structures or even perhaps a model of the centers of Timbuktu or Tenochtitlan. Students could be asked to do further independent research into the life and accomplishments of Pilippo Brunelleschi and present information and sketches of his work to the class in oral

presentations. The same kind of independent research project could be done with other buildings (homes, palaces, other temples or mosques) in any of the three cities and presented to the class in the same manner. Students might be asked to write a short essay comparing the New Haven green and its surrounding buildings to the centers of the three cities. Are there any similarities in purpose that can be seen? How are the purposes different?

Lesson Plan III—Roman Numerals and Glyphs Florence, as stated earlier, was noted for introducing arabic numerals to make the accounting that was necessary in its commercial enterprises easier. Students might enjoy learning roman numerals from I to C or D and then working in two teams—arabic vs. roman—to write numbers and to compute simple math problems. Follow up discussions can center around which method is easier to use. It would be interesting for them to brainstorm all the places they can think of where roman numerals are used today.

Along with this, students can be introduced to the counting symbols used by the Aztecs. As mentioned earlier, theirs was a system based on twenty with a dot or finger for one, a flag for twenty, a feather for 400 and a pouch for 8000.

(figure available in print form)
Students can be broken into groups to try writing different numbers with these glyphs. For example, 101 would be five flags and one dot or finger. Since these symbols were usually counting something they were attached to a pictograph. Students could develop their own symbols for objects (common items found in the classroom?) to be numbered using the Aztec glyphs and shared with their classmates.
(figure available in print form)
Sankore Mosque

Timbuktu

(figure available in print form)
Brunelleschi’s Cupola

Florence

(figure available in print form)
Shrine of Huitzilopochtli

Tenochtitlan

(figure available in print form)
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