The Exchange, Destruction and Reconstruction of Architectural Signs and Symbols in Mexico-Tenochtitlan: A History of Order and Power

Curriculum Unit 93.01.08
by Luis Recalde

The idea of building Tenochtitlan came to me after talking with my fifth grade class about the breathtaking discovery of Troy by an amateur archeologist who, according to tradition, went to a spot on the peninsula of Anatolia and said: “Here, dig!” The different layers of architectural findings fascinated the students in the class, and more so when they found out that before that day, Troy was only a myth. Their astonishment came to even a higher pitch when they started to learn about the Trojan Horse and the story of the apple of love and war. Their interest gave me the idea of working with the history, geography and mythology of the North American continent. I couldn’t find a better example than Mexico-Tenochtitlan. The city underneath the modern metropolis of Mexico City lost hundreds of years ago in a cloud of legends, myths, half-truths, symbols, mysterious signs and a myriad of songs, gold and massacres, was to come to life again, little by little, with the help of their hands and imagination.

Indeed, in order to be able to build, or to rebuild this particular indigenous metropolis, we need very much the participation of the students’ hands and imagination. We need their hands because it is an intense job demanding a constant dedication, energy and dexterity with certain materials, together with the understanding of archeological and architectural concepts. Mathematics come to play in a myriad of ways: geometry, scales, estimation of populations and city configurations are some of practical and palpable applications. We also need their imagination because it makes things more fun and consequently more easy to work with, and because of this, results would have more profound undertones. All the work of reconstruction that we could see and consult about the physical aspect of the city of Tenochtitlan has been done, since the conquest, on the basis of a few reports of people who were there. It takes much imagination, for example, to draw, or build the Templo Mayor, out of descriptions of people who had a pressing urge to destroy it. The conquistadors who saw the actual city described it in one way or another. The most famed to be the one rendered by Bernal Diaz del Castillo in his way to Tenochtitlan: “and when we saw so many cities and villages built in the water and other great towns on dry land and that straight and level Causeway going towards Mexico,” he would wonder in great amazement looking at the view around his army, whether this sight was really “enchantments they tell of in the legends of Amadis...” Our imagination is needed in order to reconstruct a past that was apparently so sumptuous, and that was destroyed and left almost nothing of it. This is specially true when we are talking about Tenochtitlan: the city famed for its invincibility, its beauty, power and grandeur; a city protected by divinity.
God fashions the turquoise pillars, He fashions the pillars of heaven.
It is god who supports the city, and carries in his arms Anahuac [the world] in the immense lake.

Tenochtitlan and Troy, somehow, have a parallelism in the imagination of my students of the fifth grade. We could imagine how they felt when they discovered the adventures of Ulysses and his crew. They visualized the sharp end of the trunk of a tree going through the vital eye of a Cyclops; we could understand the thrill caused by the ruse of the giant sheep where the Greek soldiers hid to scape out of the cave under the nose of the blinded Cyclops. Sagas and adventure of this nature could only be the beginning of an adventure of their own that, if guided properly, would spark their imagination in the right direction and, hopefully, would lead students to come out with their own contributions. When we are dealing with the reconstruction of the past we are actually dealing with that aspect of human existence that we identify as culture. It is important that we should talk a little about the basic concepts and foundations of culture.

Culture is the sum of institutions that make up a society, or a civilization. As an example we had taken the founding of the first nucleus of European power—Vera Cruz in Mexico, established by Hernan Cortes, bypassing the authority of Diego de Velazquez in Cuba. So we have that this original act of founding a city, the polis is in itself a cultural act that generates a myriad of relationships within its institution, and with other institutions as well. It is an institution which was brought in the ships by the Spaniards and was transplanted in the soils of this vast continent. We could even visualize this concept of the power of this first founding by envisioning the Castilian castles as centers of the force of culture in central Spain, a center that expanded in all directions until it was shipped in the vessels of conquest of the navigators. Columbus is the first example of it. Navidad, the fort, the “castle,” even though it was not successful, was built from a ship—the Santa Maria. Castle, ship, Navidad, Vera Cruz: they are all different faces of the same coin.

In expanding our view of culture, “We recognize as cultural all activities and resources which are useful to men for making the earth serviceable to them, for protecting them against the violence of forces of nature, and so on.” Thus far, it is comprehensible that the founding of a nucleus of European power, a municipality, is an act of protection against potential forces of destruction. It is an act of self-preservation, from the point of view of the invading forces in this new land (again, “new” from the point of view of the European). But, this single act is complex; Cortes, by founding this first asiento, is really creating and generating power for himself, vis-a-vis Diego de Velasquez. His real objective was to reach the emperor, Charles V, ignoring the power of the former. Furthermore, we must consider the technological angle of this action. The destruction and reconstruction of Tenochtitlan gives us some great opportunities for understanding the technology of building at the time both in Europe and in Mexico.

Giedion writes about the building of cities in the Europe of the quattrocento. The star-shaped town was the ideal structure in the minds of the architects and artists of the time. This was a polygonal city protected by towers and walls with a center in the form of a rectangle. Streets would stem out from the center radiating the various structures. This was the citta ideales. There was a variation of this city in Renaissance Europe. In 1490 Francesco di Giorgio and Leona da Vinci conceived of a city, polygonal and crossed by a river. This was the constructed on the gridiron. It is interesting to note that many of these conceptualizations did not materialize in Europe until the seventeenth century. Tenochtitlan was built on the gridiron and Cortes was the first leader to take this construction on a very grand scale. This was nothing new to the native Mexicans. “It was easy to lay out; it was known to Indian builders in such pre-Conquest cities as Tenochtitlan and others.
We recognize that founding a city is an exercise of power that generates power, specially in this continent in the XVI century. Nonetheless, it is difficult to understand the nature of this power if we don’t take into account a basic underlining structure that gives sense and significance to this act. This new underlining structure is writing. To be sure, “Writing is bound to the founding of cities and to punishment.” Cortes could not have attempted the founding of Veracruz without being able to keep contact with Europe. The founding of a city means for the European a certain type of legitimacy in a foreign land. It also gives Cortes the legal instrument where he could actually generate power and order: in the city he could create courts and a governing body that could legitimize a legal system, Spanish style, that could actually regulate all types of behavior, not only for the European himself, but also for the native population as a uniform entity and force, to be dealt with in a frame of mind that would ensure the perpetuation of brand new system. To be sure, Writing gives meaning and coherence to his adventure, and writing gives a different dimension of the implications of culture. And in this sense, writing is one of the institutions that make up the complex tissue of culture. Writing opens up windows to many other cultural dimensions. And writing is essentially work. The Europeans wrote to keep track of information and to be able to remember things that they deemed important to them.

The Europeans wrote in order to shape this new experience at their image and advantage in the eyes of history and posterity. What they did not know is the semiological value of their writings. They were not in the knowledge that the language that wrote had profound structures and connotations that rendered the signification of the conquest from a different point of view than the one they struggle so hard to leave behind. So we should say as Lotman that culture is essentially work and information. In effect, we would like to visualize culture as information and architectural culture is also a form of information. And this text of architecture is talking to us with a loud voice. Therefore we are faced with a series of texts that would generate information. Furthermore, in Meso-America writing is a form of architecture (or shall we say, architecture is a form of writing?). But what do we do in a place where complete libraries, the amoxcalli, or house of the books, were burnt and destroyed and only 20 codices survive? What do we do in a place where all its buildings were leveled? This is when the emergence of the city from the bottom of the lake, its pieces nonetheless, become so important and architecture takes a new signification. It becomes information and language; a language of stone but eloquent. A language of durability. Columbus wanted his name casted in marbles so that his deeds would permeate to eternity. More over, not only do we have a myriad of archeological texts to be read as open books full of information but also we have a few texts written by the local population.

The role of information in the process of the conquest of the continent is a phenomenon of culture. Henceforth we could depict the utmost importance of information and its control in the path of conquest in the continent. Columbus, Cortes and Pizarro utilize information in different ways, but for similar objectives: to conquer and to get the wealth of the land; to get power and land; to found cities and build the culture of Europe, as in the beginning, in illo tempore, as an act of mythological dimensions.

The destruction of Tenochtitlan by the Europeans raises serious questions about the recording of history in the continent. Scholarship indicates that it was imperative to be selective in the writings about the destruction of the native civilization so as to maintain order and the power of the invading forces. The manipulation of autochthonous icons, symbols, myths and architectural structures proves to be a greater and more profound weapon against the resisting forces than any dog, or horse, or canon could ever hope to be. This manipulation translates itself into psychological effects that not only would contribute to the destruction of Tenochtitlan but
would be decisive in maintaining a defeated population in order, demoralized, and completely out of touch with their own culture and background. In this curriculum unit I want to explore some of the most outstanding elements in this change of power, and hopefully I would like to bring to light the relationship between architecture and power. For this I have found that building a model of Tenochtitlan in the classroom has been a good motivator for the students in the exploration of symbols, structures, grammars and significations. The building and rebuilding of Tenochtitlan takes a twist when we consider the mythology of the buildings of the city itself in precontact times. The mountain, the sacred mountain, is recreated in the Templo Mayor as the center of the universe and as the stage of a cosmic drama of the gods. Therefore, the destruction of pyramids and shrines is telling of a need to conceal a power structure of the native people and to erect, literally, a new structure with a new pantheon. In a religious world as in the one in Mexico-Tenochtitlan the end of the line is genocide. History proves this.

In the texts of the conquest of the continent called America the presence of Tenochtitlan creates an alluring power in the minds of the Europeans. They get drawn to the site of the marvelous city with excesses of infectious actions that only show the reader the degree of seduction they suffered in the face of an imperial city worthy of the highest dreams of the highest monarch. Columbus was looking for that city. The gold that he so badly wanted was piled inside the palaces. But are we not faced with the same force that drew Columbus to go around the world? Indeed it is the same force! Gold, power, riches, women, slaves, land, fame, myth, fantasy, curiosity, immortality are some of the components of this relentless force. And it seems, looking through the window of time, that the Europeans, perhaps without knowing it, went to Tenochtitlan to stay. They went there to be swallowed up by this massive metropolis built on water. They went there to be swallowed by the gold and the Mexica women to create a new world, a new ethnic world.

In the myths of the people of Meso-America one of the most important and benevolent of gods is Quetzalcoatl. Cortes was taken for Quetzalcoatl, so say the texts written by the Spanish, during the conquest and afterwards. These texts also talk about the religion of the Mexicans before the arrival of the Europeans. At one level these texts tells us that Cortes was really confused by the natives, in an element of fortune for him, as a god! It just happens that Quetzalcoatl was the god who built cities. Quetzalcoatl is the protector of buildings and of builders; he is the patron of architecture and urban civilization. It is an irony that the so called god, or this alleged god, was to do exactly the opposite of what Quetzalcoatl was supposed to do. The problem of the destruction of Tenochtitlan, more so than the confusion of the perception of the natives, is our central interest here, since our project is the reconstruction of the city. But it is difficult to attempt to build something as complex as a city of Non-Western origin without knowing how it really looked. Therefore the importance of the imagination of the students that would facilitate the reconstruction of this marvelous city. No one will never know exactly how this city really was, but the uncovering of some of the areas of the sacred precinct, gives as a better picture of the arts and coloration and configuration of symbols of power and order in Tenochtitlan. This also gives as an idea of how large the central, religious area was and how we could use it in the classroom situation. I am including a draft of this central area where the icons of religion and power are ostensible.

(figure available in print form)

This central area was the sacred area of the Mexican world. It is a kind of temenos, a rectangular area of 1,148 ft. by 984 ft. (350 m. by 300 m.). The templo mayor is the tallest building reaching about 100 ft. Its two temples on top of this great pyramid were dedicated to the gods of life and death: Tlaloc and Huitzilopochtli respectively. This sacred place was recreating Coatepec, or “Serpent Hill.” The place where Huitzilopochtli defeated Coyolxauhqui and the power of the god of war of the Aztecs is consolidated. In this
building is where we could see clearly the symbols of power of the Aztec world in motion. Butterflies, skulls, stars, colors of sorts depict the power and the structure of the aztec pantheon. On the one hand we have Tlaloc the god of rain and fertility, life, plants, etc., depicted as the day in light blue and white. The colors of the sky. and on the other we have Huitzilopochtli, the god of war and night. The colors are black with white skulls inserted in it, on the roof of the temple, like a starry night. It also gives a great opportunity to create a lesson based on architectural norms where mathematics comes to play a central role. Symmetries are part of this vision of the Aztec world. And the pyramid is a metaphor of cosmos and power. These dimensions gives us an idea of the scale and proportions that ought to be used in the creation of a model of the city. One of the students in the class, once one of the pyramids were built, placed a church on top of it with a cross. This is a clear example of the exchange of power icons: a butterfly by a church.

The students in the classroom have seen many versions of the city. Perhaps one of the best illustrated is the text by Manuel Lucena Salmoral who gives us a very clear picture of the main structure of this central compound. This site is massive and spectacular. Students love to work with it. And this is one text that is equipped with decoration and mathematical propositions. The chinampas were all over the land, constituting an ancient art developed for thousands of years. Teotihuacan could not have survived without this art of agriculture.

The planning and building of a model of a city is a wonderful idea to exercise and practice in the classroom. It embodies a myriad of skills and disciplines much needed by students at the elementary levels. The modeling of a structure, with rich and meaningful elements—a microcosm of where we live, or would like to live—is an extremely valuable method of teaching students skills and attitudes for a better understanding of history and society. To be sure, the planning and building of a model of New Haven in the classroom, a couple of years ago, was one of the most rewarding and, at the same time, most challenging experiences to be undertaking by both students and teachers. It took a few months, and the integrated efforts of a few classrooms to bring the project to completion. Sometimes it felt as if the city had its own life and was going its own way, taking us with it. But taking a look at New Haven itself was always a sobering experience. We had to put a limit and we had to draw the line to decorations and detail. Life was particularly difficult to depict, but children have a fascinating way to express themselves that goes beyond the rigor of adults. An example of their vision was the modeling of a bus stop where people interacted with each other in the midst of a bustling town with bicycles and vehicles and even animals around. What gave the impression of movement was the posture of the people. They had a certain air; flashing colors designed with clay. Dogs where caught jumping in mid air. People were not erect, but rather in motion: they were where they were supposed to be. At the end, when we thought the project was ready, we took the “city” to Gateway for the pride and satisfaction of participating students, and the curiosity and admiration of the community.

In this seminar I am interested in refining these concepts and techniques through the interpretation of several texts dealing with the destruction and reconstruction of Mexico-Tenochtitlan in the XVI Century. One of my aims is to get a better understanding of the role that signs and symbols played in the interpretation and building of power and order in the new society of the time. It would be interesting to study the interpretation of signs and symbols by the native population and the European counterpart. The curriculum unit will have 10 lessons, five of them would deal with the study and interpretation of texts of the period; three lessons would explore and study the symbolic language of architecture; the final two would incorporate skills and methods necessary in the construction of a model of the city of Tenochtitlan.

I am convinced that students benefit greatly from an experience where several academic disciplines are incorporated and implemented. Students enjoy undertaking a project of this nature. Experience has showed
me that students, if given the opportunity and the medium to explore and discover, would bring excellent results to the classroom, and, as in the case of our “city” at Gateway, they would have no difficulty in expressing their innermost feelings and aspirations to the outside world.

**Lessons for the student in the classroom**

The student in the classroom in many instances needs, or would like to have a theme that could be carried on throughout a great part of the academic year, or during the entire year. Tenochtitlan is a theme and a rich subject that could be adapted to the different needs and tastes of a class and faculty. There are many activities that could be pursued. For this we need to organize the subject matter in lessons and exercises appropriate to the realities aforesaid.

**Lesson I**

Students are going to learn the history and legends of great cities in the cultures of the world. Troy has some wonderful possibilities in terms of illustrating history and myth within a given culture. There are many other cities that could give the student a perspective of the power of the urban setting in the broad picture of civilization. This is good opportunity to introduce to the student the concept of the significance and meaning of symbols. Let’s take as an example the apple of discord as an object of rich symbolic value that just about any student could understand. Indeed, Eris, the Lady of Discord, who was not invited to the wedding of Achilles’ parents took revenge by rolling “upon the table a gleaming, heavy apple of solid gold.” This deed is the origin of war between Troy and the city states of the Greek peninsula. Paris takes away Helen opening up a torrent of violence, suffering and destruction and the subsequent end of Troy. The story itself should be relayed to the students with some detail so that they could grasp it and enjoy it.

The important point that we want to make in terms of symbols is that the apple, beyond being just a fruit, becomes the harbor of power and meaning. Three beauties are disputing this apple to be awarded to the most beautiful of them. Therefore, this solid apple of gold becomes the symbol of beauty. Beauty brings admiration, power, love, pleasure. The apple creates a chain of images leading ultimately to the global focusing of the destruction of a famed center of civilization: Troy! The irony of the presentation of the wooded horse to the city is another example of the value of symbols. Although in this case the misreading of the meaning of the symbology of the horse proves to be a lethal act that would determine the fate of the great city. The city in itself signifies security, protection and life; the doors and walls attesting to the value of the symbolic language of architecture.

Books, tales, maps, pictures and even tapes and videos of this venture are available to the student at home or in the classroom. Time: one week.

**Lesson II**

The introduction of Mexico-Tenochtitlan in the context of the power of the urban center as a symbol of order and a structure of power and wealth. This could be the begging of a wonderful and dynamic relationship between students and teachers; subject matter and students. It has to be fun! It has to be interesting! And most important of all, it has to be relevant to the reality of the students. Time: two weeks.
**Lesson III**

Students who show a special interest in the city project and its ramifications, would greatly benefit from a hands-on project. As nasty as this term might sound, the virtues of a practice of this kind has no limits. The imagination, knowledge, techniques, know-how, curiosity, etc., is put to work in the best way possible. We are talking about a model of Tenochtitlan. A model that would be light, versatile, powerful, portable, could be initiated with very limited materials and expenses. Time: one year; six months, three months, it all depends on the dynamics of the class.

**Lesson IV**

The geometry of a model city. This is really fun. This material is great for any kind of student. Draw, paint, paste, cut, put little pieces together so as to make sense and at the same time create, recreate beauty. Time: two weeks.

**Lesson V**

Build the city! Time: again it all depends on the dynamics of the class. See lesson III.

**Lesson VI**

Writing about the project of constructing Tenochtitlan. Time: this is an on-going experience and a process. It should last the entire period of the lessons, from A to Z.

**Lesson VII**

A wrap up experience were students use critical thinking to evaluate the work and to make it his/her own. This is the time when students become teachers and students at the same time. This is the time when students go around showing the product of their scholarship and sweat. This is the time when students are ready for the next step, and also, of course, ready to answer questions. This is a life long experience and is full of surprises. Students of the fifth grade went to other districts to show their city of Tenochtitlan.

**Notes**

1. Balsa wood, paper, paint, cardboard and glue are some of the most basic materials students could use in the reconstruction of Tenochtitlan.
2. Mathematics is also important in the reconstruction of the Mayan world as it would be seen in The Geometry of the Maya and their Rattlesnake Art, by Jose Diaz Bolio.
4. This is an stanza of a longer song for Motecuhzoma the Great, when ill. Pasztory, 1983: 118-119.
6. Sigfried Giedion, *Space, Time and Architecture* (Cambridge: Harvard University Press, 1956), pp. 45-47, 54. Sforzinda is one of these cities. “In plan Sforzinda was to be a symmetrical eightpointed star: “The outer walls should form a sixteen-sided figure...the streets should lead from the gates to the center of the town where I would place the main square...”
15. Todorov 1984, 58-54
19. The temenos is the sacred enclosure for the Greeks. Joseph Rykwert, *The Idea of a Town* (London: Faber and Faber Limited, 1976), pp. 45-46. In Tenochtitlan this center was the incarnation of power both temporal and religious. Thus the largest pyramid was the incarnation of the universe, the sacred mountain where the genesis of the Mexica started, the forces of life and death and more.
BIBLIOGRAPHY:


**BIBLIOGRAPHY FOR STUDENTS:**


**AUDIO-VISUAL MATERIALS:**


**MATERIALS FOR THE CLASSROOM:**

+ A series of transparencies illustrating maps of Tenochtitlan.
+ A series of transparencies illustrating the architectural symbols of power and order in Tenochtitlan and Mexico City later.
+ A series of transparencies illustrating individual aspects of daily life in Tenochtitlan.
+ Balsa wood; construction paper; glue; scissors; paints of different colors.
+ Imagination!