INTRODUCTION

Though I believe human identity, both personal and cultural, reveals symbolism deeply rooted in historic civilizations, I often observe my middle school art students drawing symbols, neither the meanings nor origins of which they comprehend – they only like the way the symbols look. For hundreds of years societies across the Americas have often appropriated symbols of Amerindian origins for their civic identities, as well as for commercial usage. Civic or socio-political and commercial aspects of our own culture continuously envelop us in appropriated symbols from diverse sources. Such examples that might be familiar to middle school students include the Amerindian images or names on the Indianhead nickel, the New Mexico state flag, and the Ford Cherokee automobile. As some appropriated names and symbols are “living” representations of deeply held beliefs and identity even today, many Amerindian peoples are now seeking through the courts to stop the unethical misuse or unauthorized appropriation of that which is held sacred to their ancient, but still vital identities.

A more positive facet of appropriation is seen in the efforts of people who wish to reconnect to lost heritage – to establish a sense of legitimacy and continuity, or to rekindle embers of ancestral recognition and cultural or spiritual esteem. The appropriation of ancient symbolism to support societal or political change can be explored and compared in diverse art traditions. However, my focus is to explore Latin American artists who have consciously structured their art by infusing them with potent symbols of ancient Amerindian ancestry to expressively invoke continuity from lost ancestral cultures to their own time in the 20th Century – modern artists such as Joaquin Torres-Garcia and the members of El Taller Torres-Garcia. A comparison of the essential socio-political focus of appropriation practiced by El Taller artists can also be made to the corresponding metaphysical search for universality that informed the art of many modern abstract artists influenced by Amerindian art, such as Piet Mondrian, Adolph Gottlieb, Josef Albers, Anni Albers, and Paul Klee.

As my school’s student population changed in the last few years, its make-up becoming increasingly Hispanic, I have sought ways to learn more about artists of Latin America beyond Diego Rivera and Frida Kahlo, with whom most of my art students are somewhat familiar. After participating in the Museum of Fine Arts, Houston’s Latin American Art 101: Summer Seminar, 2004, I have endeavored to introduce Latin American artists and artworks into my art curricula. I want students to not only perceive these artists as part of the cultural time and period in which they lived, but also to see correlations with North American and European artists. Indeed, many Latin American artists studied in Europe and participated in universal art movements – movements they individuated and personalized with the stamp of Pre-Columbian ancestry, thus contributing to a shaping of contemporary Latin American cultural identity in the 20th century that continues to evolve and in turn influence artists of the Americas today.
This seminar on *Latin America Before the Spanish: Pre-Columbian Art, History and Culture* builds on the Latin American foundation I began at the MFAH and has deepened my understanding of Pre-Columbian civilizations, as well as the Amerindian sources of influence on modern constructive and abstract art. My purpose is to encourage in my art students an understanding of the connections among various abstract and constructivist artists of the 20th century and the symbolism these artists used – either in search of the universal in all art or to re-connect and revitalize their heritage, both of which has had an impact on contemporary culture in the Americas. The middle school level art unit I will introduce will incorporate some of these 20th century artists and related Pre-Columbian art, including the art and writing of Mesoamerican Codices and Andean textile art. The Mesoamerican codices, like the diverse usages of Andean textiles, weave the vibrant threads of ancient daily life, rites of passage, belief systems, socio-politics, art and history into a lively tapestry revealing symbols of these lost cultures and mythic tales of historic personages – ancestors whose wisdom was venerated by successive generations.

**UNIT OBJECTIVES**

**Students Explore Symbols and Issues of Identity**

My focus on exploring issues of personal identity through art is based on a belief that the qualities of expression and dialogue that create art will support the growth and development of middle school students as culturally grounded individuals. Learning about both ancient and modern symbols, and how they are used, will connect students to both their own ancestry and the contemporary times in which they are learning to live. Through similarities students will be able to perceive in symbols – the universality informing much 20th century abstract and constructivist art can be recognized.

A study of symbols and issues of identity can both spiritually enrich middle school students and productively influence citizenship, encouraging tolerance and inclusiveness. Paul Duncan points to various research conducted by H. Gardner, E. H. Erickson, B. Wilson, and M. Wilson on adolescent drawing that strongly supports a view of the prime developmental preoccupation of this age group being the establishment of identity, embedded in a search for competency through such socialization skills as cooperation, friendship and mastery of rules, while revealing that the themes of struggle predominating in adolescent drawing are recycled from myths, legends, fairytales or popular media (Duncan in Kindler 111-112). This research supports not only the emphasis I am placing on issues of identity but also reinforces my choices of small student working groups, “Free-Choice” sketching, symbol development, and a focus on Mesoamerican codices to engage my art students in this unit.

**Students Connect Similarities and Universalities**

In my own school, there has been a burgeoning growth in students of varied Hispanic heritage, and I have found many of these students to be receptive to that which touches on their prior experience – symbols and art from Latin America, both contemporary and Pre-Columbian. My goals include demonstrating possible similarities of spiritual and cultural interest among modern artists – whether working in Paris, New York or Montevideo – and facilitating opportunities in the art room for a development of both self-awareness and self-esteem in my students, who are experiencing the vulnerability of their physical and developmental age, of their own times in the 21st century, and for many, the harsh realities of upheaval from their traditional languages, family ties and homelands.

Perceiving and analyzing connections among artists or between modern abstract art and Pre-Columbian art will ultimately build visual and cognitive skills that the student will assimilate in both the creation of artworks and in the written or verbal evaluation of artworks – skills transferable in turn to creative academic endeavors. Kerry Friedman proposes that group
activities in which art students discuss interpretations, reflections, and student responses to visual culture will aid student cognitive understanding and growth (Friedman in Kindler 104). Even though the very practice of drawing blends visual perception and the cognitive analysis of connections – perceiving similarities, noting details or comprehending relationships, and making critical decisions – student awareness of these cognitive aspects is usually not achieved without engagement in active self-reflection and open discussion.

**Students Explore Creative Expression and Dialogue**

I want all my students to achieve an awareness of art as a voice of self-expression and an act of dialogue by which individuals and peoples may reach out to each other, even across great divides of time and culture. If they can learn to perceive what an artwork would say to them about the maker and the maker’s intentions, then they will be far more open and receptive to diversity in their own globalized world and among the diverse people with whom they must live. Students who develop perception and analytic skills in the making, deciphering, and discussing art will carry these skills into both their academic and their daily lives, which is where I will be asking them to look for their own prior experiences with art.

The educational emphasis on art being used to solve the problems of daily life was practiced through the functional aesthetic of “form follows function” in the Bauhaus (Efland 218) and advocated in the constructivist aesthetic in El Taller, where desire to integrate the arts with crafts was strongly reflected in the philosophy, if not as extensively in the curricula as in the Bauhaus (Ramirez, *El Taller* 123, 151).

Efland points to the view of art as experience in daily concerns as traceable to John Dewey’s return to the common ideas of Rousseau, Pestalozzi and Froebel: teaching and learning based on the natural development of children and grounded in real experiences related to social life in the community and preparation for active engagement in social change (189, 193, 203).

“What is art? Where is art?” These are questions I will ask my students to encourage them to find the art that surrounds them in their everyday life – not just the personal expression, but also the creativity and dialogue. Recognizing connections, inferences, and associations to be discovered in the symbols embedded in diverse human endeavors reveals art in everyday life. Architecture, automobiles, clothing and shoe fashions, industrial design of appliances, tablewares, furniture and merchandise packaging, as well as landscaping and garden design, interior design, publication design, and political cartoons are a few of the venues in which we may engage with art permeating our daily life – art that communicates through discernable symbols.

**Texas Essential Knowledge Objectives**

The four art lessons designed for this unit will consistently cover multiple skills within all four categories of the TEKS for 6th, 7th, and 8th grade visual arts, as well as some interdisciplinary connections, such as science (environmental construction, tools, weaving fibers and dyes), social studies (religious and socio-political cultural comparisons and development of writing), language arts (written autobiographies and reflective journal writing), math (geometry, plane and volume dimensional construction and measurement), and Spanish classes (Hispanic influences on artists and post-contact issues in Amerindian art and culture).

**Perception**

In all four lessons students will be illustrating themes initiated from personal experience or imagination either in their creative activities or in daily Journal/Sketch book entries. Students will also be analyzing, comparing and using various Art Elements (line, shape, form, space, texture, value, color) and Principles of Design (balance, variety, harmony, emphasis, proportion, movement, rhythm) in their artwork and in various comparative investigations and evaluations.
Students will be practicing use of art vocabulary, as well as focusing on new interdisciplinary vocabulary words in each lesson as they develop comprehensive glossaries and conduct evaluations.

**Creative Expression and Performance**

Students will be expressing ideas based on personal experience and on imagination as they create and work with personal symbols in each art lesson and as they work in their Journal/Sketchbook entries everyday. Students will demonstrate an application of design ideas in artwork for use in everyday life when designing murals, flags or maps. Students will practice and demonstrate technical skills creatively and effectively through working in mixed media (graphite pencil, color pencil, water color, tissue paper painting or collage) with which they are familiar. In the fourth art lesson they will experiment creatively with textile techniques and develop competent weaving skills. For those students who will collaborate on a school mural for the science garden, they will experiment with mural and art installation techniques.

**Historical and Cultural Heritage**

Students will be comparing artworks and use of symbols from a variety of cultures and analyzing cultural contexts in all four lessons. Students will also be identifying and analyzing diverse cultural influences, such as Pre-Columbian Amerindian, in both modern art and contemporary culture.

**Response and Evaluation**

Students will be conducting analysis and practicing a variety of critical and evaluative techniques in all four lessons on various aspects of art making: in-progress artwork; usage of formal properties of Art Elements and Principles of Design; historical and cultural contexts and influences.

**IMPLEMENTATION STRATEGIES**

To vary the presentation of information and accommodate various learning styles, I will facilitate a variety of learning opportunities: a display of posters showing a selection of artworks; an “Extra Activity Center” for an individual student to intimately view and handle actual artifacts, or to use a small slide viewer with slides; a student computer for exploration of pre-selected websites; various teacher prepared Power Point presentations (some of which will be allowed to cycle through out the class period for visual inspiration); a camera to project book illustrations via the television set; art books or related craft and archaeology books borrowed from libraries; a “Draw Me Box” of pre-selected objects that students may choose to sketch; “Friday is Film Day,” when art films borrowed from the Kinder Foundation Teacher Resource Center of the Museum of Fine Arts, Houston will be presented primarily for enrichment as students work on their studio projects. Other strategies include brainstorming, comparative/contrast critical evaluation, evaluation games, Venn diagrams to organize information, and fifteen minute daily Journal/Sketchbook entries that include a variety of alternating prompts, assignments, written reflective evaluations, and “Free Choice” sketching.

Synthesizing their knowledge and exploration of Pre-Columbian art, various modern artists and geometric abstraction into studio exploration, students will apply weaving, bookmaking, mixed media and pencil techniques in developing creative artworks ranging from personal flags or maps, to autobiographical codices cradled in companion boxes, to painted or woven murals. The older students may collaborate with science classes to design and paint a portable mural that could be exhibited indoors or outdoors in the science classes’ garden. These various artworks will be designed by students to significantly incorporate meaningful symbols – symbols based on their personal daily life or heritage. Development of symbols will be conducted in systematic steps,
demonstrating a progression from realistic to geometric abstraction. Art making processes, in-progress work, and finished student artworks will be guided by prepared rubrics to scaffold the successful development of production techniques and assist the student in both individual reflective and group evaluations.

This unit of four lessons will cover a period of approximately 8-12 weeks in block-scheduled classes. My art classes usually comprise a mix of 6th, 7th, and 8th grade students representing a multiplicity of experience levels in art. Individual two-week lessons may need to be extended to allow for individual, as well as small group research, exploration, creation and self-reflective or group-interactive evaluations. Opportunities to exhibit will be sought in the community among our past exhibition hosts, including the local Subway Restaurant, the public library branch, and a nearby senior citizen living facility. Student artworks will also be exhibited on the televised Power Point presentations of the school’s morning announcements and my e-board (with related curricula links to Pre-Columbian and artist websites) that can be accessed through the school webpage by both students and parents.

BACKGROUND

Systems of Communication

How do people learn to write? Some ancient and most contemporary cultures have developed written alphabets, yet others have practiced symbol writing. The Chinese and Japanese peoples developed kanji character writing from pictographs. The Egyptians used hieroglyphs, whose code was not broken by European scholars until the 19th century. Donald McVicker described the Maya hieroglyphic system as so advanced, as to require the use of computers for modern archaeologists and linguists to crack their code, while the Aztecs and Mixtecs used pictographs and rebus signs with such success, that they continued the practice for generations after introduction of European alphabetic writing (4-5).

Abstract Geometric Symbols

Is it possible that abstract geometric symbols originally developed in the weaving of baskets and textiles later evolved into written script in some cultures? Did they continue to be substituted for an alphabet in the symbol-based writing of other cultures, such as the ancient Mesoamerican peoples, as Cesar Paternosto describes in his quest for the roots of abstraction in non-Western cultures (Abstraction 28-33)? To explore this idea, I thought about having students experience changes in a single geometric pattern through usage in four different media: a small woven basket; a small flat woven textile; a painted basket; a painted clay pot. Could each medium sustain the original pattern, or would the pattern react to the independent demands of these diverse media and be forced to change or evolve? Could an artist purposefully choose to maintain the original pattern, regardless of media, so that a painted image would still look like the woven one? What would happen if an artist tried to record the activity – paint or sculpt a human figure making a basket or textile, clearly showing the geometric pattern employed? Would this pattern become more abstracted or stylized? Would this experiment in diverse woven and painted media enlighten the student about how an artist creates within the demands and limitations of the particular medium being used? As an extension lesson, I think the abstraction or stylization of a geometric symbol within the demands of diverse media would be an interesting experiment. For this lesson though, students will make observations based on some of these questions as we look at various artifacts brought into the classroom, seen on selected websites, or viewed in posters and books.

Communicating in Symbols

First, what is a symbol? What is a geometric symbol? What does abstract or stylized mean when we look at a symbol? Why is there so much geometric abstract symbolism in Amerindian
art? To facilitate student discussion of symbols, and keeping in mind the idea of a possible media-mandated change in the abstraction of a given symbol, I will display samples of the same geometric symbol woven in baskets and textiles, painted on pottery, and written in both script and symbol-based writing.

What does a symbol communicate? Students will be asked to look at context, as well as to discern both simple and more complex layering of meaning in a given symbol. The way a symbol is portrayed creates its meaning – the message. The artist, teacher and theorist Joaquin Torres-Garcia believed symbols synthesized idea and form, not just to represent, but to be the very embodiment or essence of an idea, especially as used by Pre-Columbian peoples, such as the Aztec, Maya and Inca (Ramirez, El Taller 5, 7). To encourage analysis, students will brainstorm examples of writing with which they are familiar, such as hieroglyphs, rebuses and secret codes and compare usage, while determining if these symbols are geometric, pictographic, stylized or abstracted. Students will record symbols in their glossaries or Journal/Sketchbooks, along with vocabulary words and definitions.

Using a favorite image, such as a butterfly, students will develop a personal symbol. Focusing on how simplified or exaggerated a geometric abstraction they can achieve, students will develop a progression of at least four abstractions towards a final simplified mark or script-like sign. A reverse abstraction might also be developed – taking, for instance, the letter B through a progression of more detailed geometric symbols ending in a realistic sketch of a butterfly. After which, students might make a comparison to motif transformation seen in artwork by M. C. Escher or in a kanji pictographic character from Chinese or Japanese calligraphy.

**Mesoamerican Codices**

Presenting the Codex Nuttall as an example of the ancient codices of Mesoamerica, I will have students analyze for both geometric and stylized symbols, deciphering the screen fold pictorial drawings to reveal the story and meaning of the symbols. According to Arthur G. Miller in his introduction to the Dover edition of the Codex Nuttall, originally there were probably thousands of these books consisting of long, narrow handmade pages of animal skin or bark, connected and folded accordion-style into manuscripts, and drawn and painted with ritualized symbols and human figures. These codices were mistakenly banned as evidence of idolatrous worship and burned by Catholic priests during the Spanish conquest, with only a few surviving to be sent to Europe along with other curiosities, relics and treasures only to be forgotten, hidden away for centuries in private library archives. With eventual rediscovery and scholarly study, some of these codices were found to recount genealogy and socio-political events that recreate the dynastic histories of ancient Mesoamerican peoples. The codices may have been opened and displayed as painted mural backdrops for the ceremonial enactment and recitation of the encoded genealogical history (Miller in Nuttall viii – x).

Students will be asked to make comparisons with other symbol writing with which they are familiar, such as Egyptian hieroglyphics. Visual qualities will be discussed, touching on similarities and dissimilarities in style, method of drawing figures, symbol usage, composition and consistency of repeated shapes. Along with these visual comparisons, students will explore cultural questions, such as: What can we interpret about cultures from comparisons of their art? What can be discerned about the role of art and the artist in a culture? Can the identity of the artist or artists be determined – is an individual’s identity important in these cultures? If individuality is not important, what can we interpret about these societies in comparison to 20th- 21st century culture? How does the practice of religion and spirituality affect the role of art and artist?
The School of the South and Torres-Garcia

The Construction Paradigm

El Taller Torres-Garcia was established like other 20th century avant-garde workshops, such as the Bauhaus in Germany, to reunify the fine arts of painting and sculpture with the applied or craft arts of designing in architecture, furniture, ceramics, textiles, and publishing. El Taller, however, did not focus on techno-industrial aspects of modern culture, but on experimenting innovatively with indigenous materials and studying Pre-Columbian cultures, thus conceptualizing an avant-garde Latin American aesthetic informed by Joaquin Torres-Garcia’s Universal Constructivism theories and teachings that would come to influence the art and architecture of modern Latin American artists (Ramirez, El Taller 1 – 4; Ramirez, Inverted 74-76, Paternosto, Abstraction 74-75).

Operating in Uruguay from 1944 to 1962, El Taller benefited from the legacy of the group of established artists who had rallied in 1934 to Joaquin Torres-Garcia’s call to promote his principles of Constructive Universalism in the ardent formation of a new Latin American modern art, unifying constructive elements of diverse modern art movements, such as Cubism’s concepts of concrete form and geometric planes, Surrealism’s referencing of the subconscious, and Russian Constructivist’s focus on the collective – elements which essentially reflected Pre-Columbian principles of universality embedded in the constructive geometric abstraction of cosmic symbolism practiced by ancient Amerindians (Ramirez, El Taller 1-2, 7; Ramirez, Inverted 75; Paternosto, Abstraction 74-75). El Taller’s committed pursuit of constructive principles aimed to not just reunify fine and applied arts, but to reposition the production of art by the artist in historical and tradition contexts, thus refocusing the role of the artist in the social collective and restoring art to its ancient Pre-Columbian conditions (Ramirez, Inverted 76). To explore issues of identity that were a primary focus of El Taller, students will study Torres-Garcia’s Inverted Map of South America (1936) as a starting point to discussing appropriation of Amerindian symbols. How does the inversion of the South American Continent express issues of identity? How can heritage be lost? Can appropriation re-establish lost heritage? Do the peoples of all the Americas have a common heritage?

Our school cafeteria ceiling is hung with row upon row of large colorful flags from around the world incorporating a diversity of color, geometric and motif symbols. Since I have noticed a perennial interest among my middle school students in flags, as well as maps, and the students can use the cafeteria flag display for research and inspiration, I would like to pose an exercise for students to construct personal flags or maps incorporating geometric abstraction and symbols reflecting their own identity. This exercise would combine research, genealogy, draftsmanship and geometric abstract symbolism in a functional object that could be used everyday.

Textile Art: Weaving Communication

Weaving is a universal functional art form practiced in many cultures only by women and in a few only by men. It serves as a conduit of cultural heritage through the use of traditional designs and symbols or motifs, which are often geometric. Abstraction, symmetry, positive/negative design contrasts, and symbolism all help create powerful visual meaning. The immediate ancestor to textile weaving may be basket weaving, which, though it creates a three-dimensional object, still engages the textile grid (Paternosto, Abstraction 30 – 32). In the Andes evidence of 10,000 year old textiles predate fired pottery by thousands of years and the fragments provide evidence of techniques already developed (Stone-Miller 17-18).

In developing earlier lessons on geometric planes, I have been intrigued by the grid controlled development of abstract geometric symbols in textiles and the similarity they have to those seen in other media. Paternosto discusses archaeological studies that seem to confirm symbols.
transferred to other media retain the forms mandated originally by the textile grid – indicating geometry as the basis of humankind’s first designs seen in ancient examples of petroglyphs and woven textiles or baskets – squares, diamonds, triangles, zigzags, checkerboards, meanders and points (Abstraction 28, 32, 217-218, 222; Stone 68, 160). Similarities in symbols among cultures indicate shared values and beliefs, such as sacred cosmic directions, duality, and the cycle of life and death (McVicker 10; Paternosto, Stone 68, 160, 172; Stone-Miller 15-16). Students will apply abstract geometric symbol construction in weaving repetitions, patterning, symmetry, and positive-negative designs. Our exploration of Pre-Columbian textiles will be grounded on an understanding of how geometric shapes were used to create symbols.

Weaving can be an extremely satisfying mental, spiritual and physical activity integrating mathematical skills and planning, as well as intuitive, spontaneous choice making during the weaving process. Though traditionally a functional art, it may be successfully practiced as a multi-media or fiber media expression of the purely visual arts and examples will be shown by modern artists such as Picasso and Miro, including a short video, Femme/Woman: A Tapestry by Joan Miro, documenting the creation from artist’s sketch to specific loom construction and finally the challenge of transporting and installing his monumental tapestry for the National Gallery of Art in Washington D.C. The creation of this tapestry is awe-inspiring, as this is not the kind of weaving they have ever imagined or experienced seeing.

LESSON ONE

Communicating in Symbols

Mesoamerican Codices

To investigate how symbols may have been used in Pre-Columbian civilizations students will first be introduced to ancient Mesoamerican codices. Class discussion will be guided by a teacher developed Power Point highlighting pages from the ancient Mixtec epic, The Legend of Lord Eight Deer in a link to John Pohl’s Mesoamerica website. Students will compare a few symbols in the codices with those in artifacts and architecture, such as warrior helmets and shields, calendar stones, and temple staircases. A set of printable pages will be selected to download from the website and students will use them, working in small groups, to identify and interpret symbols as they individually develop a written and illustrated glossary of meanings, names and dates.

Students will extend their individual glossary of symbols to include a calendar and will take turns in their small groups to visit the Aztec Calendar website to calculate their birth dates in Aztec date names and symbols. This glossary activity could be further extended, at the “Extra Activity Center” in the front of the art classroom, to include additional research in Bruce Scofield’s Day-Signs: Native American Astrology from Ancient Mexico with contrasting entries from both Classical Western and Chinese astrology. Additionally, I would like to read sections of the book by John Pohl, The Legend of Lord Eight Deer - perhaps during students’ preliminary Journal/Sketchbook exercises for the first fifteen minutes of each class. I will also make it available, along with other library book selections, such as Tim Wood’s The Incas and Leroy H. Appleton’s American Indian Design and Decoration, for students to reference as we cover the unit.

Ancient Alphabets – Symbol Writing

Following the initial exploration of Mesoamerican codices, I will introduce various ancient alphabets and symbol writing examples to help students gain a perspective on how writing may have developed from symbolic marks, perhaps first woven in baskets and then in textiles, before being painted. Then a teacher produced Power Point presentation exploring similarities of just a few symbols across diverse cultures in various media, including baskets, textile weaving, pottery designs and painted codices will be presented along with a display of posters illustrating a variety
of basket, textile and painted symbols. Guided classroom discussion will invite comparisons, including similarities and dissimilarities in other historical cultures, such as Egyptian hieroglyphs or Chinese and Japanese calligraphy.

Students will choose a favorite image to become a symbol with personal meaning and develop it in a sequence of sketches. This exercise would be developed and exploration continued over a few days as an extended Journal/Sketchbook entry, followed with discussion among students, working in their small groups, of the success of the abstraction, its style and identifiable historic or artistic influences.

**Student Procedures – Reading Codices**

Working in small groups, students will investigate a set of pages from the *Codex Nuttall*, preparing personal glossaries of symbols, meanings, dates, and the names of places and individuals they decipher in the saga of Lord Eight Deer.

Students will visit the *Aztec Calendar* website in their small work groups to convert student and family birthdates from the Gregorian to corresponding Aztec dates, recording both the names and symbols in their glossaries. Students will then research their Aztec date of birth in *Day Signs: Native American Astrology from Mexico*. Optionally, they may compare Aztec with Western and Chinese astrological signs for their birth dates.

Students might make Journal/Sketchbook entries of their own family births or marriages in the style of the codices and using their glossaries for reference. These Journal/Sketchbook entries should begin to introduce abstraction and geometry in creating personal symbols. The name of a birthplace might be written as a rebus using pictures that can be progressively simplified and abstracted, before being placed within a structure that represents a town, city, or country.

**Student Procedures - Symbols**

Students will first fold paper into six areas, outlining each. Then students will sketch a chosen symbol of personal meaning, such as a butterfly for transformation, developing consecutive simplifications from the first detailed representation towards a simple condensed abstract geometric shape, to a final stylized script-like sign. Students would continue this exercise in the reverse to show a duality – a cycle of progression and regression, such as seen in artwork of M. C. Escher.

Students may, as an optional extension activity, create a “stamp” of their symbols (using flat dry sponge, foam or rubber eraser) to stamp patterns on blank paper for use as bookmarks, book covers or to use in their Journal/Sketch books.

Students will share their work-in-progress with the class, alternating daily between the working groups. I will first model evaluation etiquette and students will use their rubric to guide discussion and response during reflective critical evaluation.

**Resources**

**Artists**
Modern Artists: M. C. Escher; Joaquin Torres-Garcia.
Contemporary Artists: Ji Lee.

**Art images**
Astrology:
- Chinese Year-Signs;
- *Day-Signs: Native American Astrology from Ancient Mexico*;
- Western Astrology.
Pre-Columbian Art:
Artifacts: baskets, textiles, pottery, warrior helmets and shields;
Aztec Calendar Stone;
Aztec Temple Stone;
Marriage: Exchange of Wedding Vows, Codex Mendoza;
Murals: Malinalco, Temple 1
Myths: Tree of Origin, Izapa Stela 5.

Writing Examples:
Calligraphy with kanji development;
Codices: Nuttall, Vindobonensis or Vienna;
Hieroglyphs and Rebus;
Ji Lee’s Three Dimensional Alphabet;
Petroglyphs and Pictographs
John Pohl’s The Legend of Lord Eight Deer;
Joaquin Torres-Garcia’s Alfabeto, 1938.

Books
Codex Nuttall;
Day-Signs: Native American Astrology from Ancient Mexico;
The Incas;
The Legend of Lord Eight Deer;
South and Meso-American Mythology A to Z
Three Dimensional Alphabet.

Websites
Aztec Calendar
< http://www.azteccalendar.com/entry2.html >;

John Pohl’s Mesoamerica

Power Points – Teacher Designed
Mesoamerican Codices and Lord Eight Deer;
A Symbol by any Other Name, is a Symbol.

Videos
The National Geographic Video Lost Kingdoms of the Maya.

Materials List
Drawing: Sketching paper; graphite pencils; color pencils; erasers.
Stamps: Foam or dry sheet sponge for stamps; tempera paint; brushes.

Worksheets – Teacher Designed:
Glossary form;
Printable web pages (John Pohl’s Mesoamerica).

Vocabulary
Art: Abstract; duality; geometric; glossary; stylized; symbol; textile; transformation.
Cultural: Amerindian; genealogy; Mesoamerican; Pre-Columbian.
Writing: Calligraphy; codex; hieroglyph; kanji; petrography; pictograph; rebus; saga.
LESSON TWO
Maps and Flags: Symbols of Identity

Cosmos – The World View

Various religious and cosmic symbolisms have been explored by avant-garde artists in constructivist and abstract artworks. Many early 20th century artists immersed themselves in the study of “primitive” art, seeking to connect with universal principles and introduce spirituality into their artworks. The broad term “primitivism” was used to identify all the arts of diverse ancient cultures not based on Western art traditions. “Primitive Art” included the highly developed arts of ancient civilizations of the Americas, as well as the varied indigenous tribal arts from Africa and Oceania. Artists like Piet Mondrian, Isamu Noguchi, Adolph Gottlieb, and many artists of the Bauhaus, as well as of El Taller Torres-Garcia were influenced by Amerindian art that was created to not just represent, but to embody the cosmic worldviews of these ancient peoples.

Abstract geometric symbolism can be found in artworks of diverse cultures, such as ancient Amerindian, India’s Tantric and Tibet’s Buddhist traditions, European Christian traditions or Islamic cultural traditions found in Spain, North Africa and the Middle East. A few constructive, religious and cosmic symbols, such as the square, triangle, circle, cross, and spiral have been appropriated from the arts of these ancient cultures to inform the artwork of artists searching for universal principles to instill in modern art (Paternosto, Abstraction 33–37, 84; Ramirez, El Taller 12).

Issues of Appropriation and Hybridization

As people have always blended the new with the old, are there any “pure” non-appropriated symbols? How can we determine if a symbol is in its most organic or constructive state – embodying not just representing? Students will brainstorm and participate in open-ended class discussion to trace Pre-Columbian symbols that may have blended with Christian influences into a possibly hybrid symbol in the Americas, such as the cross.

Alternatively, students might focus on the appropriation and vulgarization of ancient symbols. Students, working in small groups, would search magazines and newspapers for examples of ancient symbols appropriated in commercial, political, religious, music or sports venues, and then compare this contemporary usage with that in traditional cultural, spiritual or artistic realms. Students would then take sides to argue ethical issues involved when a culturally living symbol is adopted and used out of context, such as the use of the stylized sun symbol in the flag of New Mexico. One strategy would be to structure the “arguments” using a deck of cards printed with the ethical issues that surfaced in guided class discussions. The individual student or the small student group would present the side of the argument listed on the card and selected at random.

Joaquin Torres-Garcia

A teacher developed Power Point presentation will introduce the Uruguayan artist Joaquin Torres-Garcia, one of the European artists who influenced him, such as Piet Mondrian, and a few identifiable Pre-Columbian influences, such as tectonic rock constructions by the Inca, that form environmentally site-specific sculpture or asymmetrically walled temples. Links to pre-selected websites will permit students to view both the artworks of Torres-Garcia and Mondrian, as well as ancient Inca sites. Photographs and reproductions from the book El Taller Torres-Garcia: The School of the South will be projected on the television screen via camera. To investigate the constructivist ideas of Joaquin Torres-Garcia that led to his development of The School of the South, the students will identify Amerindian symbols appropriated by various artists of the school.
and Torres-Garcia, such as the sun, cross, stepped motif, snail, snake, or the inverted triangle “hourglass.”

**Student Procedures - Geometric Tectonic Construction**

Students will participate in guided class discussion about tectonic structures, Constructivism, symmetry, and geometric shapes or volumes, referring to either displayed posters, the PowerPoint presentation, or camera projected images.

Students will work in their small groups to first make their own constructions using small squares, triangles, trapezoids and rectangles and then sketch them. These geometric forms might first be pre-printed on paper to be cut and assembled as needed, or students might just use small wood or plastic forms (counting units borrowed from a math teacher) and masking tape to construct temporary models. This exercise could be repeated and further developed as Journal/Sketchbook entries to be worked on over two or three days, while students view assorted Constructivist artworks displayed for inspiration, such as Torres-Garcia’s *Abstract Structure with Geometric Forms*, 1935 and Horacio Torres’ three pieces from a modeled brick mural done in 1965 for the Church of the Archdiocesan Seminary: *Apse, Pez*, and *Trinity* (Ramirez, El Taller 34, 130).

As a possible lesson extension, students might develop larger tectonic constructions using cardboard and finishing the surfaces with either papier-mache or tempera paint. This could be an individual or group project.

**Student Procedures - Flag or Map**

Students will activate prior knowledge by discussing flags that are hanging in the school cafeteria, before participating in a guided class discussion focusing on various artworks incorporating flag or map features, such as Xul Solar’s *Tlaloc, Aztec Rain God*, 1923 or his *Drago, 1927* (Ramirez, Inverted 23, 24), Gonzalo Fonseca’s *Map of South America*, 1950 and Joaquin Torres-Garcia’s *Inverted Map of South America*, that he designed in 1936 as a call for a modern constructive abstract art based on indigenous heritage and a centered world view (Ramirez, El Taller 2, 53, 203; Ramirez, Inverted 73) or his 1941 *Native America* painted on cowhide (Ramirez, Inverted 34).

As a possible variation on the theme of a map, students might view photographed examples of constructed games, assemblages, and scrolls from an exercise in making creative, intimate family or genealogical “maps” done by various participants during the seminar *Latin American Art 101*, led by Victoria Burke Ramirez at the Museum of Fine Arts, Houston in the summer of 2004.

Students will refer to a rubric and synthesize previous learning to creatively design a flag or map, incorporating personal abstract geometric symbols representing family, ancestral, or cultural heritage. Students will produce their original designs on large sized paper in mixed media (choosing three: graphite pencil, color pencil, tissue paper, tempera or water color).

Students, upon completion of the design of their flag or map, will write a critical aesthetic evaluation covering the rubric criteria for use of Art Elements and Principles of Design, size, media, symbol appropriation, inspiration of modern artists or Pre-Columbian art, and a minimum number of developed abstract personal symbols used in the artwork. Alternately students could work in their small groups, discuss and evaluate the rubric criteria and then write out their evaluations together.
Resources

Artists
Bauhaus artists: Anni Albers; Josef Albers; Wassily Kandinsky; Paul Klee.
El Taller artists: Francisco Matto; Horacio Torres; Joaquin Torres-Garcia.
Modern artists: Adolph Gottlieb; Isamu Noguchi; Piet Mondrian; Xul Solar.

Art Images
Bauhaus Artists:
Klee’s Double Tent, 1923; Polyphon gefasstes Weiss, 1930.

El Taller Artists:
Torres’ untitled cut brick mural, 1962; Apse, 1965; Pez; 1965; Trinity, 1965;
Torres-Garcia’s America Native, 1941; Construction in White, 1931;
Torres-Garcia’s Inverted Map of South America, 1936; Pachamama, 1944.

Modern Artists:
Noguchi’s plaster model for a contoured playground, 1941;
Solar’s Tlaloc, Aztec Rain God, 1923; Nana Watsin, 1923; Drago, 1923; emblems and flags c. 1960.

Pre-Columbian:
Inca Constructions

Books
American Indian Design and Decoration;
The Incas;
Mandalas of the Celts;
Native American Mandalas;
Taracea Islamica Y Mudejar.

Websites
Art Museum of the Americas

Power Point – Teacher Designed
Joaquin Torres-Garcia: Pre-Columbian Informed Constructivism.

Videos
The Incas Remembered.

Materials List
Drawing paper; cardboard for stencils; graphite pencils; color pencils; water colors; tempera; brushes; rulers.

Worksheets – Teacher Designed:
Rubric;
Game: Arguing Points of View;
Printed geometric shapes to cut and assemble.

Vocabulary
Art: Architecture; abstract; fresco; geometric; mural; symmetry; tectonic.
Movements: Abstraction; avant-garde; Constructivism; Cubism; Surrealism.
Symbols: Hourglass; spiral; stepped motif; symbol.
Cultural: Appropriate; cosmos; hybrid; identity; primitivism.
LESSON THREE

Codex: Forming a Visual Autobiography

Visual Story Telling

Returning to the Codex Nuttall of the Mixtec epic The Legend of Lord Eight Deer, students will explore, in guided class discussion, codex formatting in an accordion-style folded book. Why was an accordion style folded format chosen instead of a paper roll or a sewn binding of individual papers? What material was used to make the codices – animal skin or bark paper – and did this material necessitate a folded format? What kind of paint was used and where did it come from? How were the codices used – read by an elite few or used in public ceremonies? A comparison might be made to the use of accordion fold bookmaking techniques in middle school art classes – ease of learning the technique, success at transferring the technique out of the classroom, and thriftiness – both financially and in terms of the materials and tools needed. The accordion-fold book, successfully formatted in any size, is also useful for exploring both watercolor and mixed media techniques. Would any of these issues have been important to ancient Mesoamericans?

Symbols

After reviewing story-telling features of the codices, such as how the scenes are organized and how progress of the action is structured, students will refer to their glossaries as we discuss how place, identity and relationship are revealed in positioning of figures and use of symbols. How does color symbolize sacred or status issues?

What do different images or symbols mean to you? Might a symbol have layers of meanings – one personal, one social and another religious, political or historical, just like words often have multiple meanings? When reading a written text, what visual images might arise that could be developed as abstract geometric symbols? Working with Venn diagrams as an aid, students will brainstorm, discuss and contrast symbols in order to identify meanings in various contexts, perceive dual meanings, or trace layered multiple meanings. Students will identify symbols in an assortment of altered books through website links in a teacher prepared Power Point presentation, taking note of mixed media applications, as well.

Before students write a brief story about themselves, the class will discuss possible subject matter – their family tree and who the people in their families are, a saga about something they have accomplished, or a story about friendship, going to camp, or their coming to middle school from elementary school. Alternately, students could write a dialogue, in which they personally engage with a favorite cultural hero, socio-political figure, or artist – creating a response to the artist’s works that would voice the artist’s or the student’s ancestry.

To structure the project and provide a basis for evaluation, students will be given a printed rubric specifying requirements to follow, such as the dimensions of paper, minimum number of folds, points for the organization of scenes in traditional Western style or in the Mesoamerican codex style, a specified minimum number of developed symbols, and the Art Elements and Principles of Design to be incorporated in the illustrations. The written self-evaluation, which could be a Journal-Sketchbook entry, would cover specific points listed in the rubric. Alternately students might write a critical reflection on the finished book and case, discussing: how personalization was achieved; how symbols were chosen and developed, including plotting of dual or layered multiple meanings; how the illustrated story contrasts with the written short story.

Student Procedures

Students will first write a brief autobiography involving daily life or a family history based on research, including photographs and data on family, ancestors and homeland.
Working in their small groups, students will refer to a rubric to assist each other as they discuss, develop or embellish their individual stories.

Students will divide the written story into scene segments or story frames to assist with pictorial translation incorporating personal symbols. Again, they may wish to use Venn diagrams to work out symbols with dual, multiple or layered meanings. Symbols should be represented in an abstract geometric form and include color, patterning and positive-negative spacing where possible.

In an accordion-style folded format, students will sketch their pictorial story segments and complete in mixed media (choosing three: graphite pencil, color pencil, water color, tissue paper, or magazine cut-outs). A minimum number of pages will be specified in the rubric to be matched to the corresponding breakdown of previously written scene segments and the front and back covers.

Students will brainstorm ways to contain their “codices,” such as an ornamental case or box. A basic container may be brought from home, or a template prepared to use with cardboard or tagboard, and the container constructed and taped. The case or box will then be papier-maché and painted with a design complementing the illustrated book in a unified manner, using the same previously chosen mixed media, colors, and symbols referencing the family tree, saga or story illustrated.

Upon completion, students will display their artwork for the class to view. I will model evaluation etiquette, if review is needed. Students, working in their small groups, will use rubric worksheets to guide aesthetic analysis and evaluation. Groups will then share their favorite “codex” with the class, explaining the artwork’s success in meeting the rubric criteria, such as using Art Elements and Principles of Design and development of abstract geometric symbols or use of symbols expressing dual and layered meanings.

Resources

Artists
El Taller artists:
Gonzalo Fonseca; Francisco Matto; Joaquin Torres-Garcia;
Modern artists: Henri Matisse; Xul Solar.

Art Images
El Taller Artists:
Fonseca’s Map of South America, 1950; Armario, 1950;
Matto’s Cut Brick Relief, ca. 1965;
Torres-Garcia’s Inverted Map of South America, 1936; Magic Graphism, 1938;
Cosmic Monument, 1937-38; “Estructura”, 1935; Tapiz.

Modern artists:
Solar’s Tlaloc, Aztec Rain God, 1923.

Pre-Columbian Art:
Codex Nuttall;
Raimondi Stela and symbols;
Izapa Stela 5’s Tree of Origin.
Books
Altered Books 101;  
American Indian Design and Decoration;  
Codex Nuttall.
Henri Matisse’s Jazz;  
Making Books that Fly, Fold, Wrap, Hide, Pop Up, Twist, and Turn; 
Mandalas of the Celts;  
Native American Mandalas;  
Tibetan Mandalas.

Websites
Jenny’s Altered Books,  

Power Point – Teacher Designed:  
Codex: A Book of My Own.

Materials List
Drawing paper, cardboard, tag board, graphite pencils, color pencils, water color, tempera paint, brushes, tape, tissue paper, white glue, magazines, gift wrap paper, thread, string, ribbon

Worksheets – Teacher-Designed:
Rubric;  
Venn diagram;  
Genealogy: The Roots of My Family Tree.

Vocabulary
Altered, accordion, autobiography, codex, inverted, genealogy, ornamental, saga

LESSON FOUR
Symbols: Weaving Abstract Geometric Symbols

Geometric Shapes – Planes and Patterns
As a warm up to activate prior knowledge, students will brainstorm types of geometric planes (squares, circles, triangles, rectangles, and trapezoids), and identify those to be seen in the art room (window panes, paper, ceiling tile, clock face). After this review students will search through examples of textile weavings (Andean tunics, Anni Alber’s textile designs, Kente cloth, Navajo rugs) to determine how these same geometric planes are combined in diamonds, zigzags, stepped forms, checkerboards, meanders and hourglass motifs woven individually, in repetitious pattern, in mirror imaging or reversals, and in positive-negative space. Students will continue to add to their glossary of geometric symbols to reference when designing their own weaving patterns.

Pre-Columbian Symbolism
Students will view a teacher made Power Point presentation with links to the websites of Woven Voices: Textile traditions of the Highland Maya, Descendants of the Incas and The Josef and Anni Albers Foundation, surveying textile designs that incorporate geometric planes and symbols similar to those collected in their glossaries and focusing on Pre-Columbian artworks, especially those by the ancient peoples of the Andes.

A variety of visual images displayed in posters or book illustrations and photographs to be projected on the television screen via camera, will be used to show artworks of modern artists incorporating abstract geometric symbols from Amerindian sources, such as Joaquin Torres-

**Color Symbolism**

Color symbolism will be analyzed by students in artworks from the El Taller artists and diverse ancient and contemporary cultures, including women’s traditional ceremonial murals painted by Esther Mahlangu of the Ndebele in South Africa (Magnin 138–141), ancient *yantra* iconography of the mystic Vedic religion of India, which relies on fundamental symbolic colors and geometric shapes (Paternosto, *Abstraction* 33–35), traditional woven rugs of the Navajo incorporating symbolic colors and symmetric geometric patterning, as well as ancient textile remnants from Huaca Prieta in the Chicama Valley of the northern coast of Peru.

The symbolic use of color will be added to students’ glossaries as they study how different color combinations might symbolize different emotions or ideas, in guided class discussions. Students will then redraw a previous Journal/Sketchbook entry twice – once with a color scheme representing the emotion of happiness and again with its opposite emotion of sadness.

While they begin drawing their own designs (cartoons) for a small weaving, students will refer to a rubric covering use of abstract geometric shapes, as well as limitations of color to those symbolic colors used in Pre-Columbian textiles or the artworks of El Taller Torres-Garcia – black, white, red, blue, yellow, green, and earth colors.

**Construction and Weaving Operations**

Teacher demonstrations at each step will help students to apply math skills in planning and measuring – using compasses, templates and rulers to develop designs, create patterns or formulate repetitions, as well as construct looms from cardboard. Further demonstrations will be made as the weaving process demands: warping, basic weaving, changing colors, creating shapes, removing from loom, and finishing edges.

**Murals – Focus on the Medium**

Attention will be called to murals seen during this unit that have been made of brick (*Apse, Pez, Trinity, RIT Loggia Wall*), stone (*Cosmic Monument*), and paint (*Tomb of Monte Alban, Oaxaca*), as students watch the development of a monumental tapestry from sketch to loom construction to installation in the film *Femme/Woman: A Tapestry by Joan Miro*.

Upon completion of their own weavings, students will arrange and display all the weavings side-by-side, as if they were “blocks” in a large tapestry. Guided references will be made to works by El Taller artists and to Inca stone constructions in discussing the “mural” that is created by this display. Each student will then evaluate the success of his or her own weaving using an evaluation worksheet and rubric specifying: use of Art Elements and Principles of Design; geometric abstraction of chosen personal symbols; use of color as a symbol; patterning; and sources of inspiration.

As an alternative to weaving, 8th grade students would again look at several murals by Joaquin Torres-Garcia, before each student designed and painted an individual canvas panel or “block” to be finally sewn together, forming a large portable mural in collaboration with the science classes who will be designing a school garden. Students would decide through a guided planning discussion, whether they wanted to plan the mural with assigned “blocks” or if they would rather each student design his or her own “block” and then the group fit them all together. A full-sized
paper model would be prepared and critiqued before starting work on individual canvas panels. All steps would be documented to accompany display of the finished mural.

**Procedures**

Students will identify, develop, and record in their Journal/Sketchbooks three personal symbols: an abstract geometric motif; a plane geometric shape; a color scheme.

Students will complete several daily Journal/Sketchbook entries using their three personal symbols in designs demonstrating: all over repetition; positive-negative images; mirror-images; a rotation; asymmetrical patterning; and symmetrical patterning.

Students will use their three personal symbols in a sketched design (cartoon) for a small weaving, referring to rubric requirements covering use of abstraction, geometric shapes, symbolic colors used in Pre-Columbian textiles or El Taller (black, white, red, blue, yellow, green, and earth colors), and size of weaving loom. This design should represent personal or family identity and the cartoon sketch should be the same size the weaving will be.

Students will complete a small weaving using rubric guidelines and applying math skills in the planning and construction steps – using compasses, templates and rulers to develop designs, create patterns or formulate repetitions, as well as making looms from cardboard.

Students will use an evaluation worksheet, or alternatively a reflective Journal/Sketchbook entry, and rubric to evaluate influences of pre-Columbian art, use of Art Elements and Principles of Design, and the development and use of three personal symbols in their finished weaving.

**Resources**

**Artists**

Bauhaus artists:
- Anni Albers; Josef Albers; Paul Klee;
- Contemporary artists: Esther Mahlangu;
- El Taller artists: Joaquin Torres-Garcia;
- Modern artists: Gego; Joan Miro; Cesar Paternosto; Pablo Picasso.

**Art Images**

Bauhaus artists:
- Anni Albers’ Untitled, 1924; Two, Pictorial Weaving, 1952; Intersecting, Pictorial Weaving, 1962; Red Meander I, 1969;

Contemporary artists:
- Mahlangu’s Ndebele murals.

El Taller artists:

Modern artists:
- Gego’s Reticularea, 1975;
- Klee’s Double Tent, 1923; Polyphon gefasstes Weiss, 1930;

Pre-Columbian:
- Andean textile burial shrouds;
- Andean textile remnants from Huaca Prieta;
- Andean textile tunics;
- Pre-Columbian back strap looms;
Pre-Columbian textiles portrayed in other media;
*The Sun Gate* motifs;
*Tombs of Monte Albán*, Oaxaca.

Multi-Cultural:
- Ashanti Kente cloth from Ghana;
- Navajo blankets;
- India’s *Tantric* iconography;
- Islamic Marquetry;
- Japanese Family Crests;
- Tibetan Buddhist *mandalas*.

**Books**
*American Indian Design and Decoration*;
*Designs and Patterns from North African Carpets & Textiles*;
*Mandalas of the Celts*;
*The Mayan Design Book*;
*Native American Mandalas*;
*Tibetan Mandalas*.

**Textile Samples**
Guatemalan:
- Friendship Bracelets;
- Bags and small purses;
- Worry Dolls.

Multi-Cultural:
- Bags and small purses;
- Blankets;
- Shawls.

Navajo:
- Rug.

**Website**
The Josef and Anni Albers Foundation
< http://www.albersfoundation.org >

*Backstrap Weaving in Jacaltenango*
< http://iweb.tntech.edu/cventura/haisashes.html >

*Descendants of the Incas*
< http://www.incas.org/SPCinchero.htm >

*Weaving the Heavens: Pre-Columbian Guatemala*
< http://www.womeninworldhistory.com/sample-07.html >

*Woven Voices: Textile Traditions of the Highland Maya.*
< http://www.anthro.fsu.edu/wovenvoices/wv.html >

**Power Point – Designed by Teacher**
*Textiles: Weaving Symbols*

**Videos**
*Femme/Woman: A Tapestry by Joan Miro*;
*Navajo Weaving: Sharing the Technique & Tradition.*
Materials List
Design: Compass; drawing paper; pencils; color pencils; rulers.
Weaving: Masking tape; cardboard for looms and shed sticks; scissors; rulers; yarn needles; yarn for warping; yarn for weaving; recycled plastic bags to store student yarn and loom.

Worksheets – Designed by Teacher
Rubric;
Glossary form.

Vocabulary
Art: Abstract; asymmetrical; diagonal; geometric; grid; horizontal; perpendicular; repetition; positive-negative; organic; symbol; symmetrical; vertical.
Cultural: Mandala.
Weaving: Alternating; checkerboard; interlocking; juxtapose; loom; meander; random; reverse; shed; textile; variation; warp; weft; weave; zigzag.

ANNOTATED BIBLIOGRAPHY
Works Cited

Efland presents the history of art education in the context of educational institutions, evolving socio-political forces and philosophical influences, with an emphasis on the historical issues affecting contemporary concepts of art.

A collection of academic perspectives focusing on the developmental issues of children revealed in their art and various interpretations of cognitive and developmental research concerning children’s performance in creativity, aesthetics, and understanding art.

The catalogue for the exhibition profiles artists working in diverse areas of Africa who demonstrate individual artistic response to traditional tribal art, global art movements, or contemporary socio-political issues.

The exhibition catalogue is bilingual and has color photographs of Mesoamerican pottery and artifacts. Essays cover brief history of Pre-Columbian Mexico, the pottery artifacts and the Aztec conception of the universe.

A color reproduction of a facsimile of the Ancient Mexican Codex belonging to Lord Zouche of Harynworth, England with text by Arthur G. Miller. This codex reproduction has been bound in traditional Western style.

An exhibition catalogue exploring the roots of abstraction in non-Western cultures and especially the abstract geometric development of symbols found in ancient weaving traditions worldwide. Discussion focuses on the Andean and Amerindian influences during the late 19th and early 20th centuries when preoccupation with “primitivism” culminated in the movements of Cubism and Abstraction.

In his study of the abstract geometric symbolism developed in textile and stone arts of the Incas, Paternosto addresses the impact of ancient Amerindian arts on modern abstract artists of the 20th century.

An exhibition catalogue presenting the workshop/school established in Uruguay by Torres-Garcia in the tradition
of the Bauhaus and de Stijl. Catalogue includes selected writings by Joaquin Torres-Garcia, essays, biographical entries, chronology and photographs, as well as reproductions of the artworks in the exhibition.


Stone-Miller, Rebecca. *Art of the Andes from Chavin to Inca.* New York: Thames & Hudson, Inc., 2002. In her authoritative survey of the art of the ancient peoples of the Andes, Stone-Miller emphasizes adaptation to extreme environmental conditions and shamanism as influences. Systematic geometric abstraction is noted in the development of weaving and common symbols appearing in sculpture, pottery and weaving are traced through various cultures.

**Supplemental Resources**


Bierhorst, John. *The Mythology of South America.* New York: Oxford University Press, 2002. Bierhorst traces myths regionally, as well as from tribe to tribe to investigate ancient origins and post-western contact embellishments, pointing out blends with European and Christian influences. To illustrate oral tradition linked to indigenous artwork, there are maps, black and white photographs and sketches included.


Blau, Tatjana. *Tibetan Mandalas.* New York: Sterling Publishing Co., Inc., 1998. Published as a coloring book with both traditional and non-traditional mixed motifs, each mandala is clearly drawn, identified and explained, so that the book is also a valuable design resource.

Caraway, Caren. *The Mayan Design Book.* Maryland: Stemmer House Publishers, 1981. A collection of documented, line-drawn designs taken from diverse artifacts, relics and monuments of the Maya that may be used copyright free with few restrictions.


This catalogue of the exhibition illustrating Amerindian ways of viewing nature contains images of ancient and modern day artifacts. A section on the Huichol of Northwest Mexico discusses the mystic religious practices that continue today with symbolic votive offerings, describing the ritual placement of votive arrows or symbolic objects.

Published as a coloring book, these serpentine knot work designs are clearly drawn, but there is no accompanying information.

Published as a coloring book, there are 30 designs based on identified traditional motifs and accompanied with Native American spiritual songs or quotes.

A compilation of children’s hands-on arts, crafts and cooking activity projects containing lists of materials, directions and brief historical background information.

The artist introduces a book of visual riddles consisting of his experimental three-dimensional alphabet designed symmetrically to be read from any direction to challenge the mind’s perceptions of traditional linear thinking patterns. The computer font version of the alphabet is available at www.universrevolved.com.

A children’s picture book survey with color photographs of landscapes, ruins, artifacts, sculpture, and textiles.

An authoritative dictionary illustrated in black and white photographs and sketches with detailed bibliographic resources and essays on Mesoamerican cultures, chronology, and religions.

Though the book contains only black and white illustrations and photographs, there are maps and very clear, precise drawings for details of pattern and motifs, various artworks, murals and architecture.

A collection of essays, photographs and reproductions of both drawings and sculptures, focusing on understanding the artwork of Gertrude Goldschmidt (1912-1994), the German-born Venezuelan artist known as Gego, in the context of modern abstract art.

This design book has 300 copyright-free abstract geometric patterns and motif designs especially useful for weaving, as many are illustrated on a gridback ground. Sources include many carpets and textiles from Tunisia.

This exhibition catalogue briefly covers Chimu cultural background information, as known through archaeological materials and has descriptions of many examples of clothing sets (tunic, turban and loincloth). Of interest are the photographs and pottery representing some of the birds, whose feathers are used in feather work textiles.


The exhibition catalogue stresses meaning and weaving construction in Andean textile traditions with color photographs of textiles from the museum’s exhibition.

A calligraphy craft book with both projects and background information on tools and techniques.

This biography of Anni Albers (1899-1994) investigates the historical influence on Germany, the Bauhaus, and both Anni and Josef Albers of “primitivism” and ancient Andean textiles starting in the mid-19th century.
An overview of the Bauhaus covering its pre-history and first years in Weimar, 1919 – 1925, through the Berlin years, 1932 – 1933, the book discusses art courses, workshops and influential ideas of the Bauhaus and its teachers, such as Itten, Kandinsky, Klee, Albers, Moholy-Nagy, Gropius and Breuer with period photographs and reproductions of artworks.

This colorful children’s picture book details the history of life and culture of the Inca civilization in photographs, drawings and 4 see-through scenes.

A bilingual exhibition catalogue with essays discussing the mythical beginnings of Islamic marquetry, as well as a cultural history in the context of Mediterranean legacies and Islamic prohibitions on imitative imagery. Illustrated with color photographs of boxes, frames, chairs and game boards.

**Videos**

*Creating Abstract Art*. Videocassette. Crystal Video.
This 30-minute video follows artist Gerald Brommer demonstrating how to abstract images using distortion, contour overlap, fracturing and simplification.

This short, 15 minute video covers the creation, special loom construction, transportation and installation of Miro’s monumental sized abstract tapestry, *Femme/Woman*.

This is 60-minute colorful scenic video by Peter Jarvis covers the Incas from ancient origins at Lake Titicaca through their conquest by the Spanish, to their descendants in modern day Peru.

*The National Geographic Video Lost Kingdoms of the Maya*. Videocassette. National Geographic Society, 1993.
This video covers historical background with re-enactments of ancient rituals, as well as the modern descendants of the Maya. The work of 20th century archeologists piecing together the story of the Mayan civilization is also highlighted.

A very comprehensive workshop with Navajo weaver Angie Walker Maloney, detailing looms, tools, equipment, yarn, spinning, warping, planning of rug designs, weaving techniques and how to finish and remove rug from loom. For showing in the classroom, it is preferable to choose short segments for selective viewing to provide insight into Navajo weaving traditions and stories.

**Websites**

A resource on modern Latin American artists. The bilingual entry for Joaquin Torres-Garcia contains a brief biography, a selection from his writings on the School of the South and constructive universalism with the inverted map illustration, and an image from the museum’s collection.

*Aztec Calendar*. 31, Jan. 2005. <http://www.azteccalendar.com/entry2.html>.
To convert calendar dates to Aztec dates, you enter a day, month and year from the Gregorian calendar and the calculation appears in color symbols with the Aztec names for the corresponding day, 13-day period and solar year.

Close-up color photographs of a weaver using a backstrap loom with detailed descriptions and examples of sashes woven from 1927-1986, taken from the bilingual edition of *Maya Hair Sashes Backstrap Woven in Jacaltenango, Guatemala*. There are also links for other textile websites.

This is the website of the Center for Traditional Textiles of Cusco, whose purpose is the preservation and study of textiles along with economic support of weavers and their families. Weaving information covers spinning, dyeing, looms, and weaving patterns of Chinchero.

This website has several examples of altered books with close-up views of simply constructed individual pages.
Website covers chronology, archaeological sites, Mesoamerican art and writing and printable pages of the Mesoamerican codices, including the *Codex Zouche Nuttall* from the British Museum.

<http://ndm.si.edu/albers/albers.htm>.  
The Cooper-Hewitt, National Design Museum’s retrospective of Josef and Anni Albers. Website highlights include intimate photographs, quotes, and brief biography with information on the Bauhaus years, and images of a variety of artworks.

**The Josef and Anni Albers Foundation.** 13, May 2005.  
This website covers biographical information, chronology, and an archive of artworks.

This is the unit of the Women in World History website, which includes two interactive lessons on weaving tools informing us about women’s work, and accounts by Maya weavers of Guatemala telling about their lives as weavers.

**Weaving the Heavens: Maya Women in Pre-Columbian Guatemala** is a 52 page spiral bound unit sold through the above website, detailing Pre-Columbian life under King Ah Cacaw for an imaginary peasant girl.

Online essays from the exhibition at the Appleton Museum of Fine Art in 2001, covering weaving traditions in clothing (huipil, headbands, sashes, belts), economics, Pre-Columbian textiles (tribute, cosmology, design motifs: spiny star; sky band; toads; diamond/universe/4 corners; crosses/XX’s; zigzag), materials (agave, cotton, wool; silk; bark cloth), war and uprising in Guatemala, as well as a bibliography.
INTRODUCTION Though I believe human identity, both personal and cultural, reveals symbolism deeply rooted in historic civilizations, I often observe my hti.math.uh.edu.