COMPUTER GRAPHICS ART IN ARMENIA

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The Chair of Computer Graphics and Web Design at the Yerevan State Academy of Fine Arts was created in 2001 on the basis of the New Media Center and animation studio.

The first admission of students for the major of computer artistic projecting took place in 2001. There are 3 main specializations: computer graphics artist, web designer, artist of advertisements (commerce, business, TV and animation).

Each student has a personal computer connected to the Internet. 4 Doctors of Sciences, 5 docents (senior lecturers) and professors and 3 computer graphics specialists are working at the New Media Center. Scientific research on the issues of computer symbolic – creation of a database of graphic images (ideograms, pictograms, rock carvings) is carried out at the Center. A graphic editor of basic old Armenian ideograms (symbols) has been created. These images laid out the basis for hieroglyphs of old civilizations (Egyptian, Indian).

One of the main directions of activities of the Chair is restoration of the techniques of design of the old Armenian clothes (costumes). A CD-ROM has been created – a model for a website of the Armenian Taraz (based on Flash technology).

Using 3D MAX and Flash technology there have been the following digital (multimedia) projects implemented at the Chair: CDs on spreading of Christianity in Armenia, 1700 years of adopting Christianity as the state religion in Armenia, animation movies ("Revival of Armenia" (Tsitsernak)), cartoon clips (satire, parody, etc.), CDs on Armenian arts, Armenian ornaments, miniatures, and rock carvings. It is planned to demonstrate these projects and CD-ROMs at the Graz conference.

In general, the human brain is capable of more than one type of mental processes. Nevertheless, representatives of different cultures are different depending on what types or processes of thinking (image processing) and to what degree participate in development of certain nations, of their traditions and cultures.

Works on decoding of rock carvings, old Armenian musical writing (khaz), and pictographic system of writing are being carried out at the Chair. The results create an opportunity to restore and reconstruct the models of development of human mental ability (visual comprehension, processing of images, storage of speech (textual) and image information and to find out their influence on the development of the two hemispheres of the brain, creation of a perspective model of the surroundings of human beings and projection of a new communication language (human – nature – society). That is to say the relationship between human beings and between one human and the society is based on that of human beings with nature.

Restoration of the algorithms of alphabet creation and sign system projection (fonts) and processing them by a human being, taking into account musical and other

multimedia opportunities, will enable to create effective algorithms of programs and systems of artificial intelligence – computers that will work in an interactive mode creating symbols and images not comprehensible for the human creative imagination on the basis of synthesis of speech, graphics, color and symbolic that will waken genetically programmed human abilities.

For a better understanding of the East-West Vision, we need to have a clear idea about what is the basis of our ancestors' communication and cognitive language of symbols.

## The History and Culture of Armenia on the Internet

Name of the Project: Rock Paintings of Gegham Mountain in Armenia

"Hayknet" Armenian Scientific Foundation, URL: http://www.iatp.am/ara/sites/hushardzanner
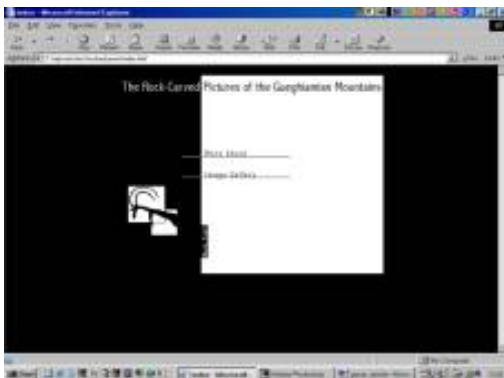
Rock paintings found in different countries of Europe, Africa and Asia are of great interest not only to specialists but only to general public. Many rock paintings have been found in Armenia as well, particularly in the mountains of Jermuk, Vardenis, Syunik. The project tells about the drawings on Gegham Mountain, which were found by a special investigating expedition of the Academy of Sciences of Armenia in 1966-1968. You will get acquainted with unique samples of this art (V – VII millenniums BC), with magnificent samples of drawings portraying humans and animals. Both complete compositions and fantastic separate figures of birds, dragons and fish can be found here. Visitors of the site will be impressed by the collection of 150 samples and will feel they have to search Internet looking for similar information. The project is in English.

## Name of the Project: Treasures of the Armenian Church

"Hayknet" Armenian Scientific Foundation, URL: http://www.concourt.am/1700/echmiadz/Treasure/
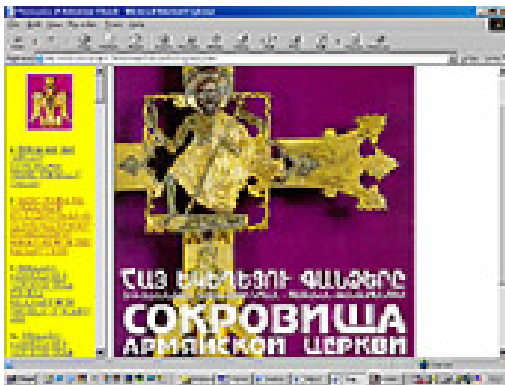
This project holds a special place among various resources created for the celebration of 1700 years of adoption of Christianity as a state religion in Armenia. Connoisseurs of art have an unprecedented opportunity to see the treasures of the Armenian church, including: the hand a disciple with his relics, the hand of St. Hakob (Jacob) the Nizibinite, a cross with the relics of St. Karapet (John the Baptist), incense trays, khachkars (cross stones) and many other things. The site includes about 90 unique images and is available in 3 languages (Armenian, Russian, English).

Name of the Project: 1700 Years of Adoption of Christianity in Armenia

"Search" Armenian Animation Center, URL: http://www.iatp.am/1700/
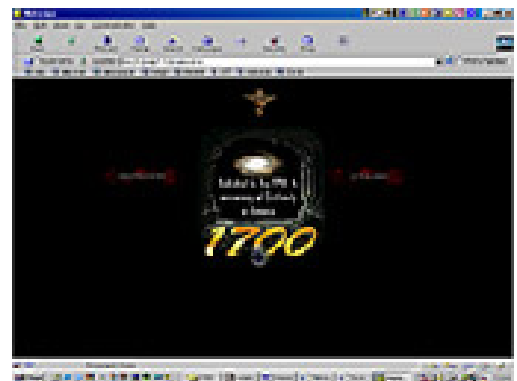
The project, which was implemented under the IATP Small Grants Program, presents in the form of animation the history of adoption of Christianity as a state religion in Armenia. The graphic part of the project is rich with images that use 3D effects and animation, whereas the text of the project represents the history of religion, spreading of Christianity, churches of Armenia. The site contains maps, video materials and a photo gallery and is available in Armenian and English. The project can be used in the educational process, in schools and universities.

Name of the Project: Old Armenian Letters and Writing
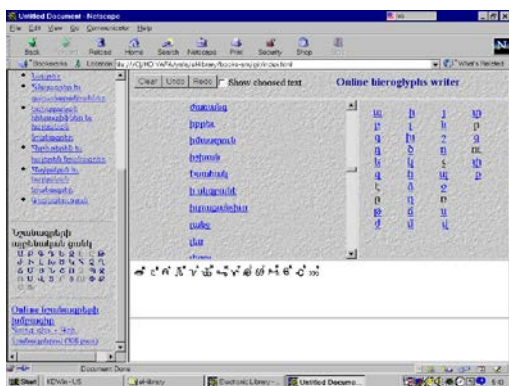
Yerevan State University, URL: http://www.iatp.am/yafa/el-library/books-am/gir

A great historical and scientific value is attached to the universal electronic word processor of hieroglyphs and ideograms created on the basis of A. G. Abrahamyan's book "Armenian Letters and Writing." Here is what the author of the book writes in the resume: " In 406 Mesrop Mashtots created Armenian letters and writing, due to which a lot of literature, both original and translated, has been preserved until the present. There are numerous unique samples among the memorials of this literature, which are of a great value in terms of researching economical and political history and history of culture not only of the Armenian nation, but also of other nations of the Near East. This literature, written in the old Armenian language (grabar), is currently being studied historians of a number of countries. The project presents comparative tables of Egyptian, Hetit, Indian and Armenian hieroglyphs, which suggest amazing conclusions about the root meanings of Armenian symbols. The project is accompanied by rich illustrative materials and is a genuine treasure for linguists, historians, and art connoisseurs, archeologists. The project is published in Armenian; the resume is also available in Russian.

Name of the Project: Armenian Hieroglyphs as a Universal Language of Symbols

Yerevan State Academy of Fine Arts, URL: http://iatp.r.am/grants/rockart

The site "Armenian Hieroglyphs as a Universal Language of Symbols" is a valuable investigation in the world art. Starting from the
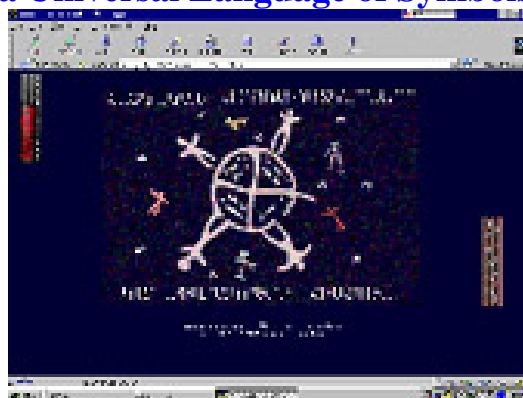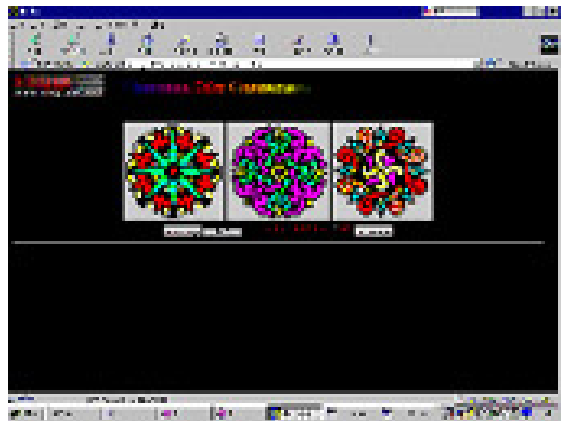
Middle Ages, numerous hieroglyphs have been known in Armenia, the evidence of which can be found in the works of Armenian linguists. The project is a huge storehouse of Armenian hieroglyphs. It includes the results of a comparative analysis of various ideograms used in the culture of nations that represent ancient civilizations (ancient Armenians, Hetit, Indians, Egyptians). The material of the site suggests astonishing similarities between the forms of many Armenian, Egyptian, Hetit and Indian hieroglyphs. An interesting question arises: which of these nations was the first to create these hieroglyphs? The site contains evidence, which suggests the conclusion that hieroglyph writing was based on the rock drawings. There is no doubt about antiquity of the rock drawings, which date back more than 10 millenniums.

Name of the Project: Ornamental Art of Armenia

"Hayknet" Armenian Scientific Foundation, URL:
**http://www.iatp.am/ara/sites/ornaments**

Ornamental art has always been highly appreciated in Armenia and has been widely used both in architecture and in applied arts such as carpet-weaving, embroidery, wooden architecture. The collection of the site, comprised of different samples, illustrates how developed this art was and what complicated ornaments were used by our craftsmen. The site contains 3 parts, which include: ornamental art in modern design, multicolored vs. black-and-white ornaments. Ornamental art in modern design in its turn is broken to themes: "a man and a woman," "animals," "the space." The site is available in Russian.

## Name of the Project: Armenian National Costume (Taraz)

Yerevan State Academy of Fine Arts
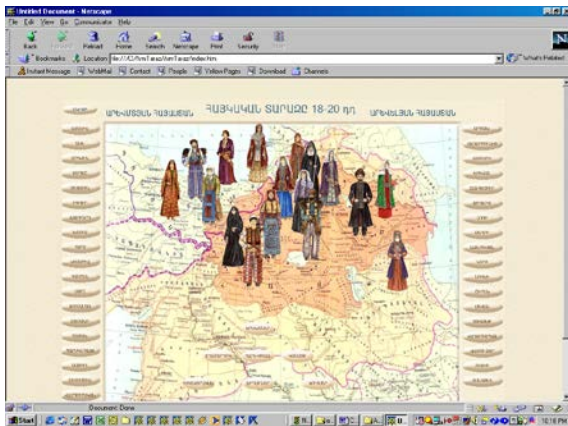
 The history of the Armenian national costume dates many centuries back. As the time went by, many samples of this unique art have been lost. A PhD student of the Yerevan Academy of Fine Art Vahe Gasparyan has created a project of a great historical and cultural importance. It contains a collection of the national costumes and various accessories used by our ancestors as adornments. It's a real constellation of directions of the applied art – embroidery, knitting, cloth painting, outline, etc. It's remarkable that the site presents samples of works of different regions of Armenia, both Western (currently the territory of Turkey) and Eastern Armenia. Musical accompaniment and Flash animation effects make viewing more interesting and rich. The site is available in Armenian.

## Name of the Project: Children's Armenian Virtual Art Museum
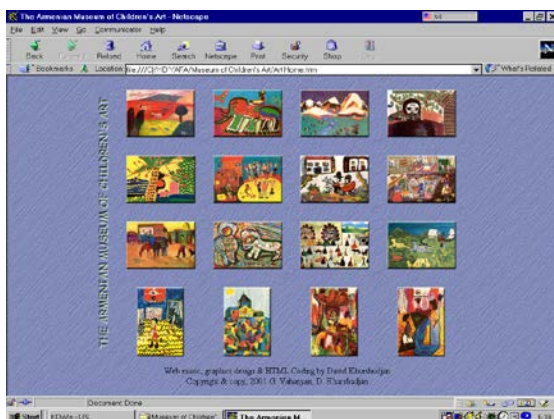
Yerevan Syate Academy of Fine Arts, URL: http://iatp.r.am/sites/child-art

Armenia's young painters' works have always been remarkable for richness of colors and interesting themes. Children's creativity has been fostered by careful and sensitive teachers and parents who take an active part in the children's cultural life. A site about the Children's Art Museum has an important educational meaning both for the young generation and for adults – as we say, "the truth is spoken by children." Bright colors, the desire to express oneself in a drawing

– in other words the children's creativity leaves a great impression on the visitors of this virtual museum. The project is available in English.


Name of the Project: Armenian Miniature
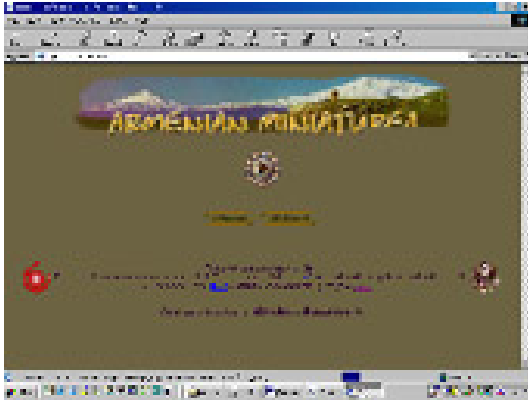
Secondary School #25 of the city of Gyumri; URL: http://iatp.r.am/miniatures

This site, created under the IATP Small Grants Program, is dedicated to children's contemporary miniature of Armenia. Students of the art club of the Gyumri Secondary School #25 created the site. It's encouraging that the students were so knowledgeable in history and culture of Armenia. The project is available in Armenian and English.

Name of the Project: Gallery of Animated Movies
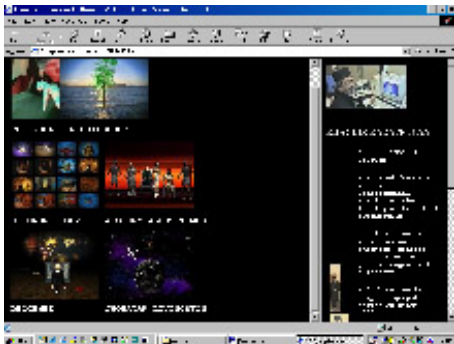
Republican Animation Center "Search", URL: http://www.iatp.am/resource/artcult/ar/___AN_INFO.htm

The site represents a collection animated movies by Khachik Karapetyan (these movies were among the first ones in Armenia), such as "The Soul," "Childhood," "Eleanor Rigby," "Jonathan Livingston," etc. Author's computer graphics and movies include extracts from classical works. The author is reflecting on philosophical issues that have always been an inseparable part of the human life. The project is available in Armenia and English.

Name of the Project: Macromedia Flash Animated Clips

Yerevan State Academy of Fine Arts

The clips created by designer N. Mendelyan with the use of Macromedia Flash technology are interesting not only in terms of execution techniques but also in terms of the themes. The clip based on the scenes of rock paintings is particularly remarkable. It contains deep philosophy; each element makes one realize where we came from and question where we are going. It's hard to stay indifferent looking at the colors and composition of images created by the computer artist.

Name of the Project: Studying Western Armenian

University of Venice (Italy), Yerevan State Academy of Arts

A unique multimedia project, comprised of 3 CDs, creates an opportunity for effective study of Western Armenian. It can be used in the educational process both in schools and institutions of higher education by both Armenian and foreign students. The project is comprised of several parts, which include: the alphabet and letters, grammar, vocabulary, etc. The student can choose which part to start studying with; he can watch a movie, use an electronic dictionary. The project is available in Armenian.

Name of the Project: Armenian Fairy Tales

"Internet" Gyumri School Club (the city of Gyumri), URL: http://www.iatp.am/armtales

The site, created under the IATP Small Grants Program, represents a collection of Armenian folk tales designed by schoolchildren of the city of Gyumri. The site contains about 30 fairy tales and is available both in English and Armenian. This work is of great interest not for kids, but also for teachers, representatives of the Armenian Diaspora, etc.