

APRIL-JUNE 2018

# ChildArt

## Dimensions of ARCHITECTURE





## Guest editor's corner

Creativity is at its most Seussian period during childhood. For some, this time of exploration, imagination and whimsy continues into the teenage years and later into adulthood. Of all the arts where one may use their ability to transcend traditional ideas, rules, patterns, relationships and create meaningful new ideas, forms, methods, interpretations - architecture is the most complex to execute. It requires an understanding of economics, history, engineering science, construction, human behavior, visual perception in addition to drawing, color theory and composition. This issue of ChildArt Magazine is devoted to covering the multi-dimensional aspects of this profession, from its training to its application. It is also intended to articulate and illustrate the power of building design to affect our senses, our memories and our well-being at any age.

The authors who have written the articles you are about to read are a distinguished group of people whose accomplishments are briefly noted in the Credits section of this issue. They are still kids at heart and it was their intention to pass on their experience so that you would learn to appreciate the importance of having a built environment that is compatible with nature, aesthetically beautiful, and functional. Architecture comes in all shapes and sizes, and you will be exposed to projects of all scales from a single room to an urban center. You will also become aware of the value of saving and preserving our heritage, and the importance of making good architecture available to everyone.

It is a privilege for me to serve as guest editor of this special edition of ChildArt in my capacity as a member of The American Institute of Architects. Special thanks needs to go to the International Child Art Foundation (ICAF) who concluded that there would be valuable lessons for its magazine readers if the subject of architecture was presented.



Frederick Marks  
Founding Member & President-elect  
Academy of Neuroscience for Architecture  
ANFA



INTERNATIONAL  
CHILD ART  
FOUNDATION

Published since 1997, *ChildArt* is a commercial-free arts learning, self-discovery, and global education periodical expressly written for 10 to 14 year-olds, but useful as a teaching tool for educators and inspirational for creative individuals of all ages. Subscribe to *ChildArt* online at [www.icafe.org](http://www.icafe.org).

When a child's creativity is ignored, it could be lost forever. Tax-deductible donations support children's creative and empathic development. You can donate online at [www.icafe.org](http://www.icafe.org) or make your check to ICAF and mail it to: ICAF, P. O. Box 58133, Washington, DC 20037.

All rights reserved. Reproduction of the whole or any part of the contents without written permission is prohibited. *ChildArt* (ISSN 1096-9020). Copyright 2018 International Child Art Foundation (ICAF), a 501(c)(3) nonprofit.



AIA

The American Institute of Architects (AIA) was founded in New York City in 1857 by a group of 13 architects to "promote the scientific and practical perfection of its members" and "elevate the standing of the profession." Headquartered in Washington, DC, AIA offers education, government advocacy, community development, and public outreach. It has more than 90,000 licensed and associated professionals as members.

Included among AIA's many programs is the **K-12 Initiatives**. Based on the belief that architecture and design education empowers children with the learning habits and critical thinking skills needed to thrive over a lifetime, this program works to develop strategic partnerships, share instructional resources, and engage architects and educators to help young students gain an early appreciation of architecture.

# Dimensions of ARCHITECTURE

---

**02**

**Intro**  
*Tom Vonier*

**03**

**Mankind Invents  
Architecture**  
*Ewa Struzynska*

**04**

**Architectural  
Education**  
*Tom Fisher*

**08**

**Why Buildings  
Remain Standing**  
*Henry Petroski*

**10**

**Drawing as  
Thought**  
*Steven Holl*

**14**

**Creativity  
+ Place**  
*Donald Rattner*

---

**16**

**Preserve  
Conserve  
Restore**  
*Ashley Wilson*

**18**

**Unifying a  
Museum**  
*Ian Bader*

**22**

**Supporting  
Environmental  
Sustainability**  
*Mary Ann Lazarus*

**26**

**My Life as an  
Architect**  
*Billy Ming Sing Lee*

**28**

**The Rooms of a  
House**  
*Angela Brooks*

**30**

**Your Ideal Town**  
*James Logan Abell*

---

**34**

**Themed  
Architecture**  
*Michael Lingerfelt*

**36**

**Citizen Architect**  
*Emily McGlohn*

**38**

**Architecture  
Without  
Architects**  
*Michael Crosbie*

**40**

**Sacred Spaces**  
*Fred Marks*

**43**

**Learning  
Resources**

**44**

**Credits**



# Helping youths learn about ARCHITECTURE

---

## INTRO:

**An educated citizenry is our profession's best friend . . .**

---

**THOMAS VONIER**

**T**he International Union of Architects (UIA) is the only global organization representing the world's architects, who now number some 3.2 million in all. When the UIA's founders established the organization in 1948, they outlined three basic missions: to unify professionals around the world, to improve international policies affecting human settlements, and to elevate the global stature of architecture.

At the time of the UIA's founding, the world was recovering from the devastation of World War II, particularly in Europe. The founders saw promise in the ideals of international cooperation, and sought wide support for building new communities and better, more modern urban environments.

People everywhere take pride in their buildings and communities, especially when they are distinguishing or historic. Architecture—like music, food, language, clothing and customs—can be a distinctive element of national and ethnic culture. Architecture can be part of national and local identity. Buildings

and villages in France differ from those in Mexico or the United States, just as a town in Idaho differs from one in Connecticut. These differences give places their special qualities and unique characters.

Would Paris still be Paris without its unmistakable grands boulevards and the Eiffel Tower? Would New York City still be the Big Apple without its remarkable skyscrapers? Would Istanbul be a great and memorable place without its gracious minarets and amazing souks? Would Washington DC be as great a national capital without its monuments and edifices? Would Bilbao be as widely known without its striking museum?

Buildings and their relationship to an urban environment make places what they are. Many architects believe that people who may never become architects should learn about buildings and cities; that the public should want to preserve great monuments and well-designed buildings; and that all people should support better urban design. There is a simple reason why architects support programs that teach young people about architecture:

We want everybody to love it as much as we do!

Appreciation for architecture very probably begins early in life. Our environments affect us as infants, and that which surrounds us probably shapes our very ability to perceive—to see, to hear, to sense, and to interpret. We know that infants and young children receive great stimulation from colors, sounds, shapes, textures, spatial volumes, lights and movements—from the full range of sensations and stimuli that we experience as adults, and from the very things that constitute architecture.

The UIA recognizes excellence in efforts to teach children about architecture through the international Golden Cube Award, and by holding conferences among people from all over the world who work on childhood education. Japan, the United States, Germany, France and many other countries have won awards. We are working to ensure that many more people benefit from exposure to architecture at a young age. ●



# Mankind “invents” architecture

**EWA STRUZYNSKA**

Nothing is more hostile and uncomfortable to human beings, or more lacking of protection, than the infinite emptiness of space. Think of yourself standing in an open field unable to see any signs of human settlement in all directions.

Based on how we have been able to exist over thousands of years, our gaze instinctively identifies natural places of shelter as a means for physical and psychological survival. We remain naked and susceptible, otherwise. We need shelter against rain, snow, hail, wind, cold, sandstorms, heat, wild animals and pure danger—some of it from other humans. Today’s modern comfort has made us lose sight of how vulnerable, homeless, and unprotected we actually are. It often takes natural disasters like

hurricanes and fires to remind us of how the loss of any shelter—natural or built—can leave us unprepared and open to harm.

Between the vastness of space and the vulnerable human body is architecture, a complex set of systems that must adapt to the site provided by the natural environment and the multiple needs of a fragile creature (like yourself).

Architecture is made by architects.

Architects master several disciplines, particularly two: first, construction, in the broadest sense, encompassing techniques and data; and second, the plastic art that includes the creation of forms and their combination to create harmonious relations.

Today, most humans live in cities. Tomorrow, that means in 2050, the

populations in most cities will double.

The architect’s work is becoming much more complicated. He has to deal not only with construction and beauty but with social, political, economic, religious and ecological factors.

Temperament, experience, culture, the ability to listen, and to transcend technique—these characteristics are what determines talent for producing the “good” architecture that is meaningful and purposeful for individuals and for society.

We can say that buildings give humans security and protection, but it is architecture that has the capability to provide us with a healthy, improved and appropriate quality of life. ●

*UIA WP Architecture and Children Program*

