CAED College of Architecture & Environmental Design

CAED Visual Collective

Vickie Aubourg, Director of CAED Neel Resource Center

Thomas Fowler IV, Professor and Director of Architecture Graduate Program
The CAED Visual Collective

Presentation Outline:

[Thomas]
- Mission & Aim
- Visual Literacy
- Time Line
- Challenges

[Vickie]
- Overview
- Input / Maintenance
- Challenges
- Live Demo
CAED College of Architecture & Environmental Design

The CAED’s Visual Collective

- The CAED Student Work Archive
- CAED Architecture History Database:
  Ancient, Medieval-Renaissance & Modern Architecture
- CAED Material Sample Collection Database
The CAED Architecture Student Work Archive

The Mission: The Architecture Department (plus other department’s as determined) needs to create a freely available digital repository of important student work in the CAED, by offering high-quality digital images, full-text searching, deep indexing of contents, and detailed descriptive abstracts.

The Aim: The CAED Student Work Archive aims to visually inform perspective and current students, faculty in addition to the World about CAED students’ work.
Visual Literacy

**LEFT BRAIN FUNCTIONS**
- uses logic
- detail oriented
- facts rule
- words and language
- present and past
- math and science
- can comprehend knowing
- acknowledges order/pattern
- perception
- knows object name
- reality based
- forms strategies practical

**RIGHT BRAIN FUNCTIONS**
- uses feeling
- "big picture" oriented
- imagination rules
- symbols and images
- present and future
- philosophy & religion
- can "get it" (i.e. meaning)
- believes
- appreciates
- spatial perception
- knows object function
Visual Literacy

Beautiful Evidence is about the theory and practice of analytical design.
— Edward Tufte

Edward Tufte —
Professor Emeritus (Yale) of political science, statistics, computer science, and sculptor.
Visual Literacy

Edward Tufte’s graphic image for the formation of a cloud (From Visual Explanations)
Visual Literacy [Behind the Graphic or Image]

Tim Brown’s (CEO of IDEO) Design Thinking Diagram
The Need for Visual Access to Students’ Work

As a Teaching Tool —

For Students’ learning:
- Awareness of prior story telling through the range of drawings, models and media use strategies / skills.

For Faculty:
- Demonstration of students’ work.

As an Assessment Tool —

For Department:
- Collective evaluation of student work evidence

As an Promotional Tool —

For The Dean and Department Heads to be able to give visual presentations of the student work to:
- Alumni, Prospective students and faculty
- Fund raising events
Time Line

- Database Started 10 years ago

Hannah @ 2 Years

Hannah @ 12 Years
Time Line

- Database Points of Contact
  - Web Accessibility Group
  - ARCH Dept. Head
  - CAED Network Support
  - CAED Dean & Assoc. Dean
  - 10 Years worth of student helpers
Challenges

- Work collection
- Quality & resolution of images
- Project prep time for database (not plug and play)
- Educating students on copyright issues & packaging work to tell complete story of project outcome and design process
Database Overview

**CAED-OWNED**

**File Maker Pro**
[DEVELOPED]

→ Export as Excel tab delimited file

**CAED-FUNDED**

**EmbArk**
[DEVELOPED]

→ convert to AREA OF NEED

**CAED-FUNDED**

**Web Kiosk**
[UNDEVELOPED]

**STUDENT STATION**

**STUDENT STATION**

**STUDENT STATION**

**SINGLE-USER STATION**
[UNRC Director]
Logistics of implementing image databases

1. CAED Students’ Works Archive
2. All three CAED Visual Collective databases

- photoshop editing digital files submitted by students—many hours & specific skills (between 20-30 hours per project)
- customizing desk top software (EmbARK) to conform to file and field names for architecture & student works
- importing desk top version of EmbARK into WebKiosk (web version).
- conforming WebKiosk version with Drupal and Cal Poly’s Web Accessibility Guidelines.
Gallery Systems: EmbARK Cataloguer & WebKiosk

EmbARK is a user-friendly suite of software tools designed to catalog and manage collections. Whether you use Cataloguer or Collections Manager, you’ll find that EmbARK’s solutions are the optimal way to document your collection. And with WebKiosk and the Authoring Tool, the virtual world can enjoy your collection.

EmbARK Cataloguer

Educational organizations, visual resource libraries and private collectors across the globe use Cataloguer to effectively manage images, and record scholarly and technical information about objects. Cataloguer supports multiple digital media files per record and automatically generates reference thumbnails. Group records into themed portfolios, or sort them through comprehensive search options. Import/export tools allow you to easily migrate data in or out of Cataloguer, and the report writer lets you design elegant reports and labels.

EmbARK Collections Manager

While incorporating the standard features of Cataloguer, Collections Manager also tracks all aspects of an object’s history and use. Manage such activities as acquisitions, conservation, exhibitions, loans, shipping, valuations and more. Customize default EmbARK reports to create wall labels, incoming and outgoing receipts, checklists and letters.

If you start out with EmbARK Cataloguer, you can always upgrade to EmbARK Collections Manager in the future by simply paying the difference in price. We’ll send a new serial number and you’ll instantly have access to the additional functionality.
CAED Architecture Department’s Students Work Archive in EmbARK software.
John Vierra’s Project_ Transformative Learning: An Elementary School for Seattle
Fill text search capability with EmbARK

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<tr>
<th>File:Field</th>
<th>comparator</th>
<th>value</th>
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<tbody>
<tr>
<td>Students Work:Students Full Na...</td>
<td>is equal to</td>
<td>John Vierra</td>
</tr>
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2. Choose file/field to search:

- Students Work
- Student's Last Name
- Student's Permanent Addr
- Student's Phone
- Student's Project Abstract
- Student's Project Descript
- Student(s) Linked file
- Students Full Names
- Style
- Sub-Support
- Subject
- Suite Broken?

3. Choose an operator:

- is equal to
- is not equal to
- is empty
- is not empty
- begins with
- is greater than
- is greater than or equal to
- is less than
- is less than or equal to
- contains
- does not contain

4. Enter a value to search for:

- John Vierra

5. To add another line, choose a conjunction:

- And
- Except
- Or

Records in data set: 85

- Search only current data set
- Add to current data set
- Remove from current data set
- Include InActive
- Open New List Window

Current Search

Untitled

Delete  Load  Save

Search

Revert  Cancel  Display
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Student's Proj Abstract

Architecture, an important part of our environment, has the capacity to affect our experiences, memories, feelings, and the understanding of place. Whether or not this effect is perceived or appreciated, however, is the crucial issue.

The concepts of 'place' and 'space' are more than ever becoming unnoticed. In our everyday lives we encounter countless interactions with architecture that are given little to no critical thought. The most readily examples are the common elements of architecture that we come in contact routinely: windows, floors, stairs, the list can go on indefinitely. Take the door for example. We anticipate the door to function in a particular way and we simply use the door. Doors behave in such a manner that we give them little more than a passing thought on our way through them. We have an intense familiarity with what a door is and how it operates. I know that if I see an architectural element that is approximately 36" x 80" with some type of hand interface on one side that I might be able to go through it. We have become so accustomed to operating these architectural elements that it's only when it fails to operate that we suddenly take notice of it. A locked door or faulty hardware shutter the anticipated operation of the door and refocuses our attention onto what is preventing us from passing through. Our attention is refocused to the door. Yet it can be more substantive than simply the use of the element failing. Wide ranging and deeply rooted social cues direct us to a conclusion; the result being that the door as a physical object recedes to the background facilitating our transition from one space to another. With this example of the physical operation of the door - the separation of users, circulation, and so on - never come to our attention. We simply anticipate a particular outcome. This reducing of architecture to the background is problematic for it makes individuals disengaged from their surroundings and forms the main argument of my thesis.

Throughout which, I will explore how to foreground architecture and use it as a learning development stimulus instead of a passive one. In addition to the issues of familiarity, our perception and awareness of reality is changing. Technology is getting better at connecting and linking us to more environments, information and people all over the world. As people engage more and more in technology they become more globally connected and multi tasking, but in consequence, become more disengaged with their immediate surroundings. This raises the question how can technology and space have more of a relationship between one another? How can we foreground the architectural experience but still utilize the many advantages of technology? Just as architects from the Renaissance created perspective as a new relationship with reality, a mathematical reconstruction of reality through geometry, so today the architect must create a new relationship of reality that is at the same time one of real and one of virtual space. This would allow them both to communicate and interact with the world precisely in the moment when the action takes place.

Engagement and awareness of our surroundings is a deeply significant artifact of human interaction. It is present in every facet of human communication and drives many of our interactions. However, these two aspects are becoming less and less practiced today. Within architecture, countless of these interactions are shifted to the background making us complacent and uncritical of our engagement with our built and natural environment. The effect leads us feeling alienated and disengaged from the world around us. This thesis explores how to foreground and heighten ones cognitive phenomenological experience through a sensorial, changing and interactive environment. This paper is broken into three separate yet complimentary components. The first component will discuss the issues of globalization and how Kenneth Frampton’s critical regionalism and Christian Schulz’s ideas on phenomenology try to discover ways we can create meaning and foreground the architectural experience with relation to place. Second, it explores ways architecture can become an active participation to our everyday lives through sensorial, changing and interactive environments. And lastly, it will move into investigating how architecture can become a heightened experience allowing users to become engaged by exploring skin, light, views and circulation.
Future Developments

- CAED Architecture & Landscape History Image Database
  24,000 images

- CAED Material Samples Database
  6,500 images

- CAED College History and Events Database- in development
Architecture History Image Database

in EmbARK software
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Welcome!

This database documents the material samples contained in the CAED Materials Collection. There are several ways to use the database; see the descriptions below for details.

**Browse Materials**
Click on a button to view materials listed by major CSI category:
- CONCRETE
- MASONRY
- METALS
- WOOD & PLASTICS
- THERMAL & MOISTURE
- DOORS & WINDOWS
- FINISHES
- SPECIALTIES
- FURNISHINGS
- SPECIAL CONSTRUCTION

**Search Materials**
Here you can enter keywords that don't necessarily match a CSI category. This box allows you to search for material types, specific product and manufacturer names, and CSI MasterFormat numbers.

Note: This project is still in "beta" - more materials and additional features still to come!
Please contact us to provide your feedback on the project.
Current Challenges with the Architecture Students’ Work Archive Database Home Page

- Web Accessibility Issues: Skip to Content not working.

- Drupal’s home page Rotator not functioning with WebKiosk image folder.

- Size of Drupal window not conducive for large detailed images and detailed drawings.

- Difficulties adjusting Drupal template to work with third party software like WebKiosk.