What can art do?

‘Art can do many things: entertain, instruct, console, inspire, enrage, transform. It teaches us things we can’t be taught in any other way and makes us see things we wouldn’t otherwise see. It allows us the illusion of escaping our daily lives while simultaneously taking us deeper inside ourselves.’

Blake Morrison

writer

How often, on average, you go to art museums to see paintings there?
Factors affect your visiting art Museums/Galleries

- No time: 29
- No interest: 22
- No museum/exhibition around: 19
- Expensive ticket: 9
- Transport cost: 5
- No awareness: 5
- No appreciation skills: 4
- Children-Oriented: 2
- Can't find place: 1
- Lazy: 1
- Online gallery: 1
By April 2013, 82% of mobile time is via mobile Apps (via comScore*)

- Have you drawn something on your phone/tablet? 
  - Yes: 29.10% 
  - No: 70.90%

- Will you take a photo of some paintings when visiting Art Museum/Gallery if allowed? 
  - Yes: 73.13% 
  - No: 26.87%

- Have you browsed painting or other visual artwork on your phone? 
  - Yes: 27.61% 
  - No: 72.39%

- Do you use Data package (Internet Connection)? 
  - Yes: 84.33% 
  - No: 15.67%

- Is your phone with Touch-screen? 
  - Yes: 93.28% 
  - No: 6.72%

*http://www.comscore.com/Insights/Press_Releases/2012/5/Introducing_Mobile_Metrix_2_Insight_into_Mobile_Behavior
• (Audio) Tour guide
• Browse whole collections
• Information about Exhibitions/Museums
• Buy ticket
• Buy copies of pieces
• ...
32,000 years ago, stone-age man painted animals on the wall of caves.
• Image Metric: 40 largest Haar Wavelet coefficients for each color channel of image – signature
• Results in average color of image
• Very fast & simple to implement

Fast Multi-resolution Image Querying

Shape Context

$C_{ij} = \frac{1}{2} \sum_{k=1}^{K} \left[ \frac{h_i(k) - h_j(k)}{h_i(k) + h_j(k)} \right]^2$

Recover correspondences by solving for least cost assignment, using costs $C_{ij}$ (e.g. by the Hungarian algorithm)

A IS FOR ART
User will use App in unexpected ways
It is difficult for the designers to put themselves in the position of a real user who has none of their specialist knowledge.

Please choose one color:
Lessons learned...

• **Feedback** - All interactive elements should provide feedback
  – Always keep users informed about what they are doing and where they are;
  – Ensure full touchable target has feedback;
  – **Customize feedback for system components**;

• **Be consistent** – core experience should be consistent
  – Keep *internal consistency* will make users to use the same way of thinking throughout the interaction;

• **Making good use of users’ prior knowledge**
  – Apply the *existing icons* to make the functions easy to understand, so the *metaphors* could be transferred from other products and experiences;

• **Working on the latest version of Android**
  – Backwards compatibility
• Database
  – Current database (folders on Windows Azure)
    • 748 Abstract
    • 91 Portrait
    • 95 Others
  – RDBMS (artist, title, place, etc.)

• Refine & User Studies

Future work
Thank you!

Digital Engagement in Visual Art

Min Zhang