Creative Suite Skills Workshop

Summer 2014 Boston Architectural College Distance M. Arch. Intensive Peter M. Gruhn

#### esources

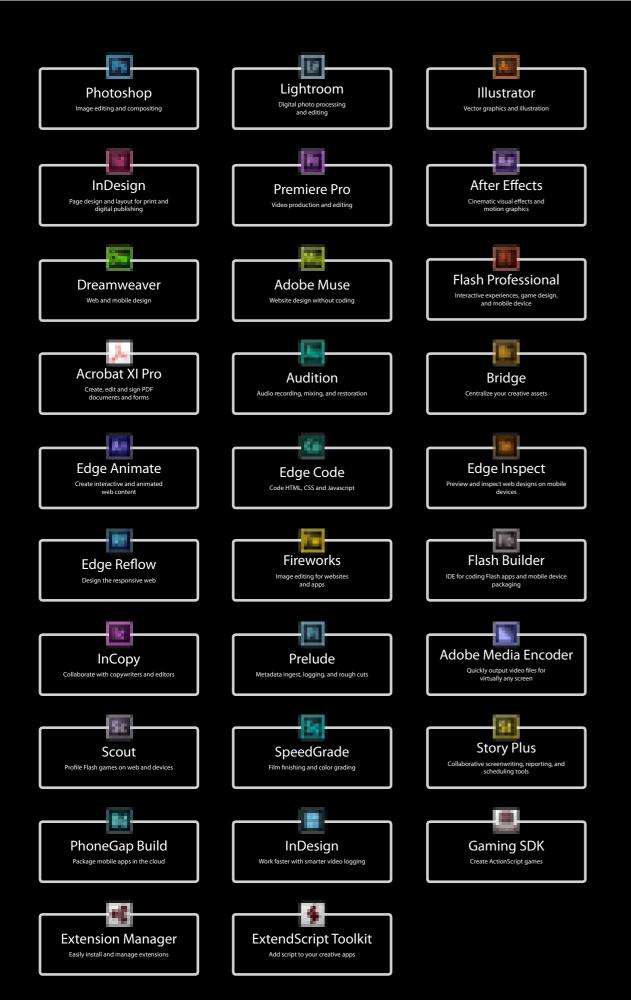
There are a lot of good tutorials on the web, YouTube, Adobe TV, smaller blogs. I usually just Google my question "InDesign less hyphenation". Indeed, Google is usually better at finding the right official Adobe documentation than the Adobe documentation search engine.

I have some more extensive books and pamphlets at <a href="http://www.hwb.com/gruhn/howto/workshops/">http://www.hwb.com/gruhn/howto/workshops/</a> Since this document is not done yet, it is not on the web yet. I'll try to get it there within the day.

I like Robin William's "Non-Designer's" books.

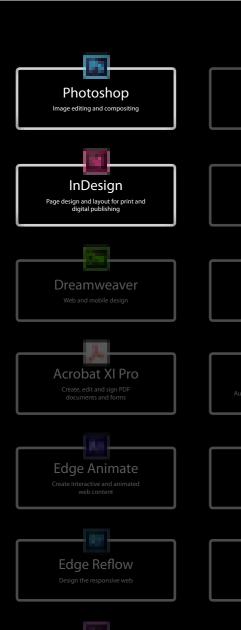
#### ot Writ in Stone

We are going to touch on rules of thumb, general guidelines, things to get your feet wet. As you use the software and learn you will find different ways to do things and you will begin to break out of these training wheels. That's okay.

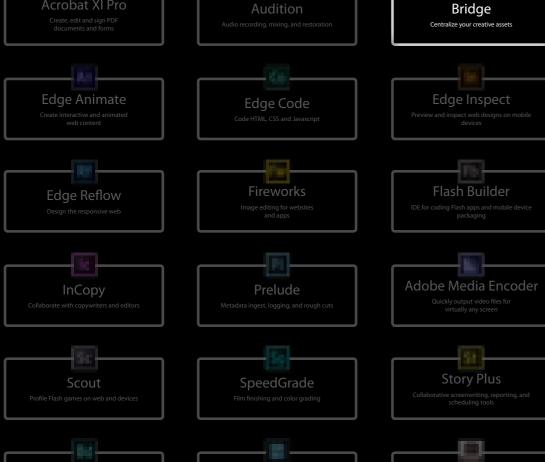


#### So, what is Creative Suite?

A bunch of computer programs produced by a company called Adobe. They focus on a broadly defined field of creative arts. They have offerings for audio recording, film effects, photography, web design...



PhoneGap Build



Illustrator

Vector graphics and illustration

Flash Professional

#### **Fortunately**

We only need to look at a handful of those.

























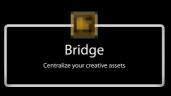
























#### Photoshop



Illustrator



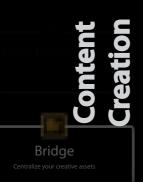
Bridge



## **InDesign**







Content

Document









**Bridge**Like Explorer or Finder



**InDesign**Text and graphics on pages



# **Content Creation**



#### Photoshop

Bitmap/raster graphics

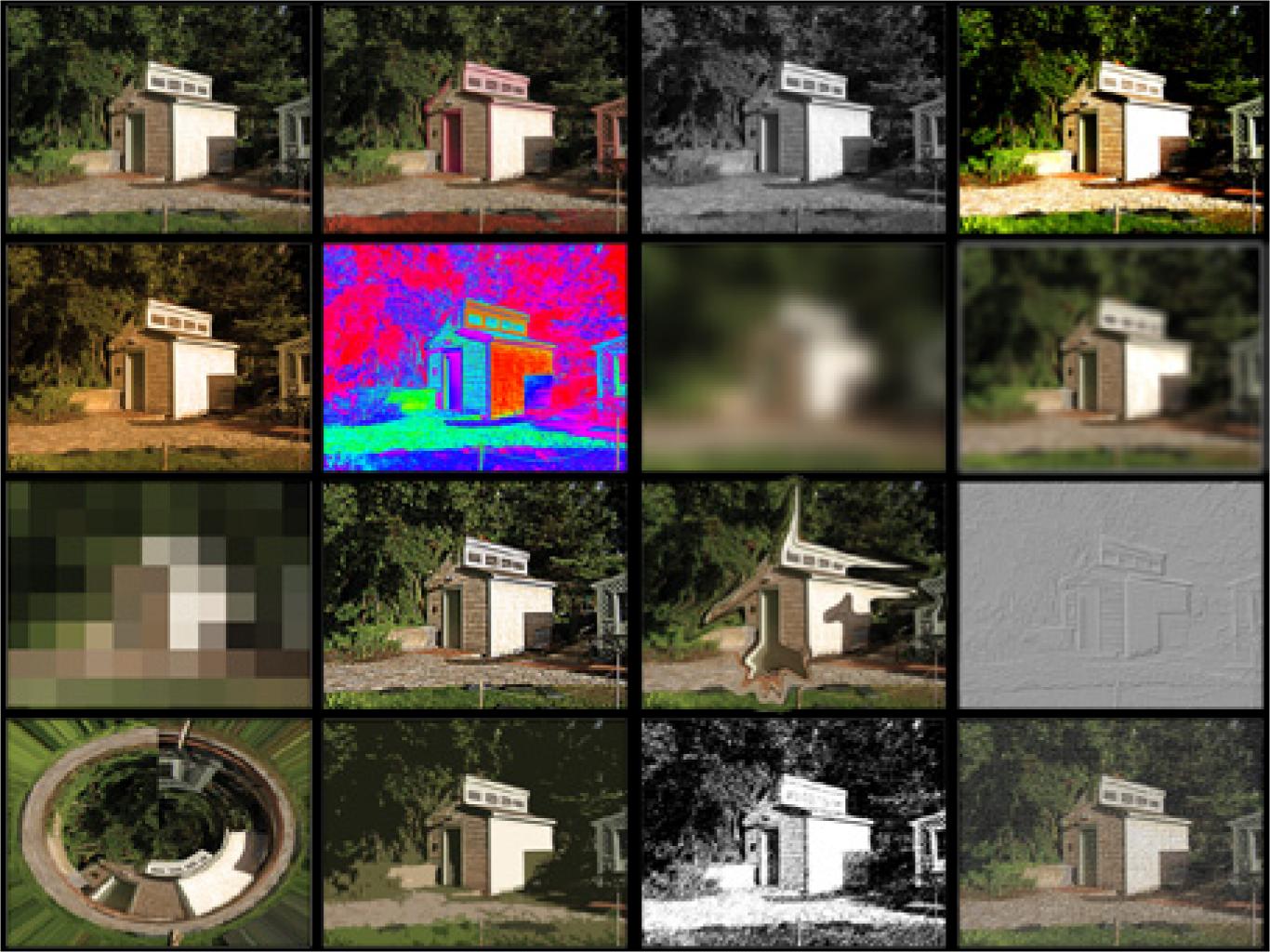
Idon't think we tend to draw brand new art in Photoshop that much. We use it to manipulate existing art. Not that you can't draw from scratch.





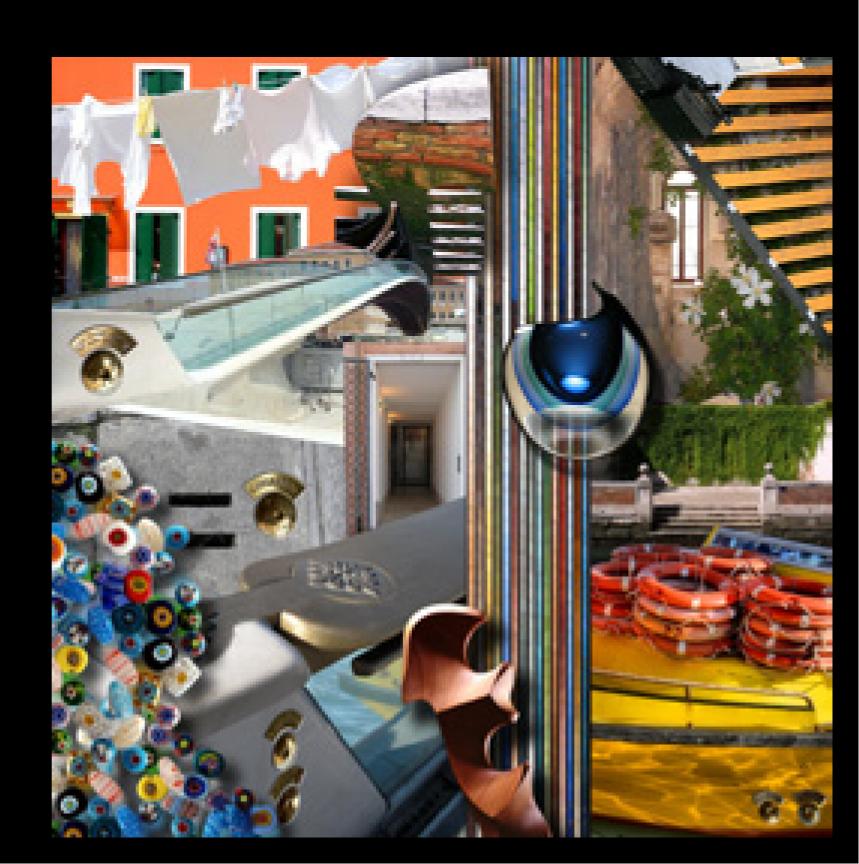
## Modifying

Photoshop has a number of tools for altering color, tone, text, blurring, sharpening, applying artistic effects...





Collage also covers things like adding people to models, adding models to site photos...







#### **Fixing**

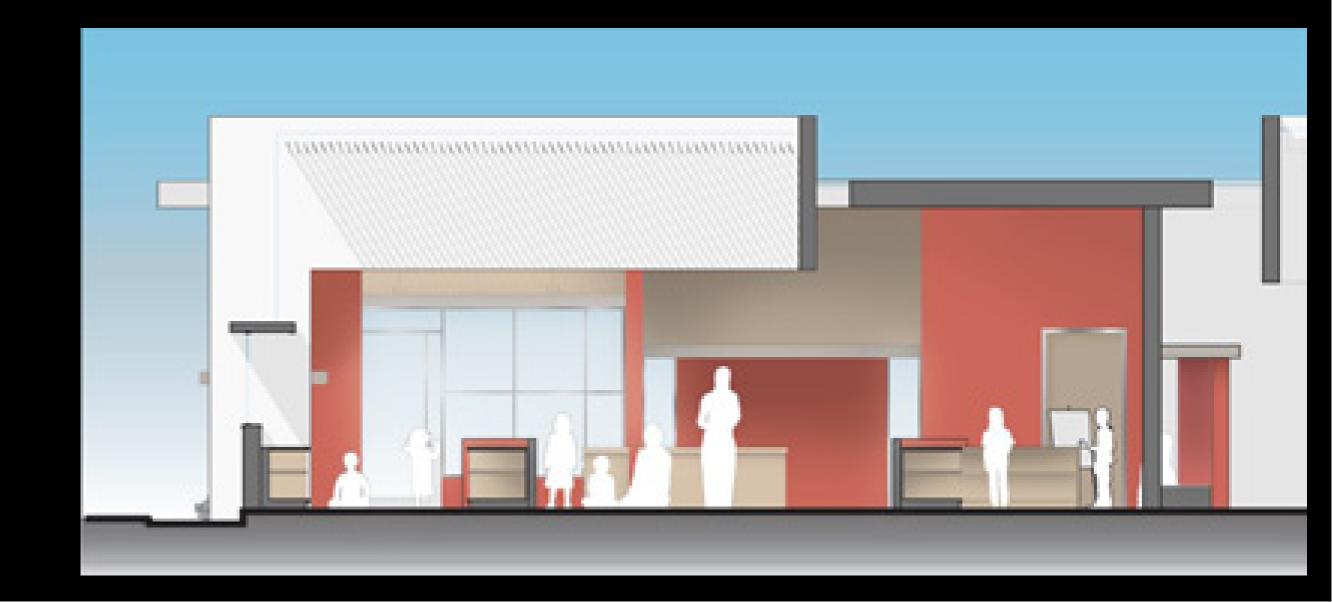
Photoshop is very helpful for cleaning up scans. From simply making the tone even and erasing dust to making something hand drawn look a little more crisp.





#### Rendering

There was once a time when "rendering" meant elaborating with colored pencils. Photoshop's good at that too.





## It's all about pixels.

A mosaic of individual squares of color. Enough of them together looks like a picture.





#### **Brushes**

Photoshop has a lot of different brushes for making marks on the page. Some simple. Some fancy.

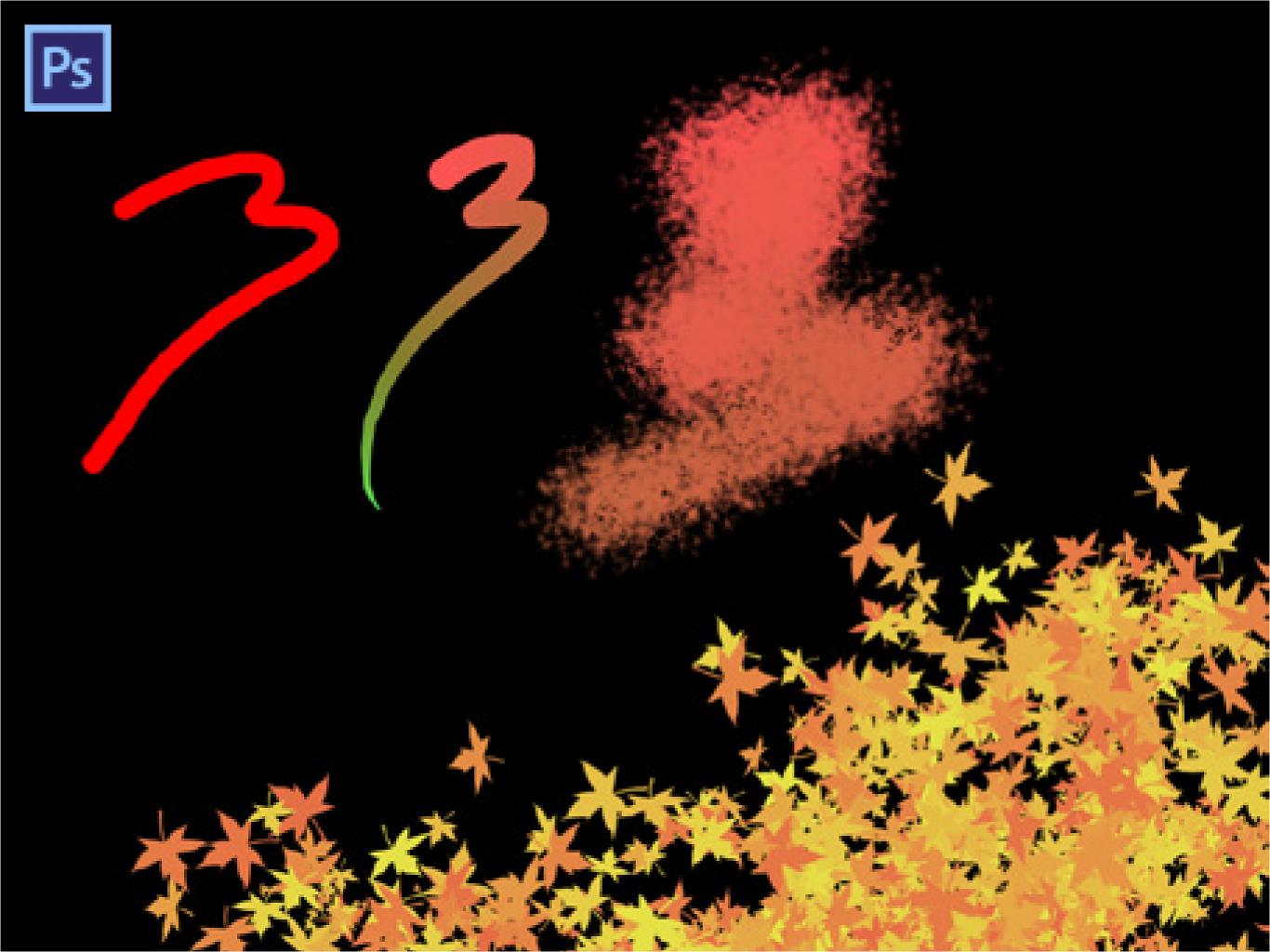








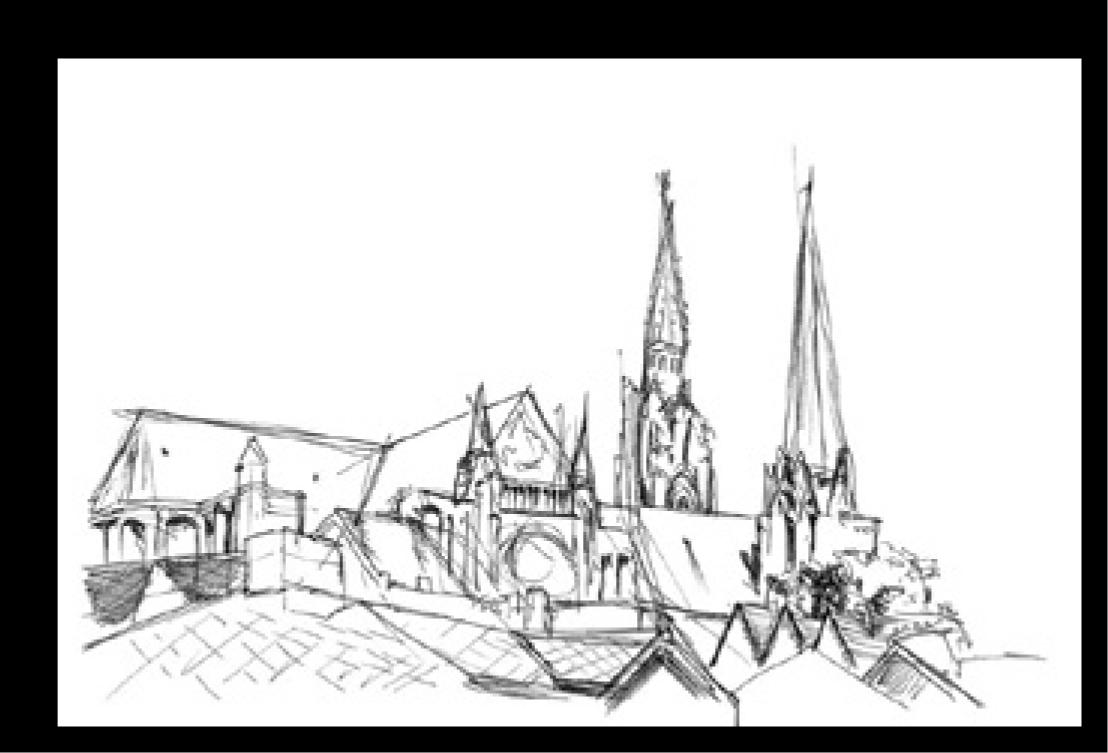






#### Wash

I like to run a brush over a sketchbook scan and make a quick watercolor for pin-up.



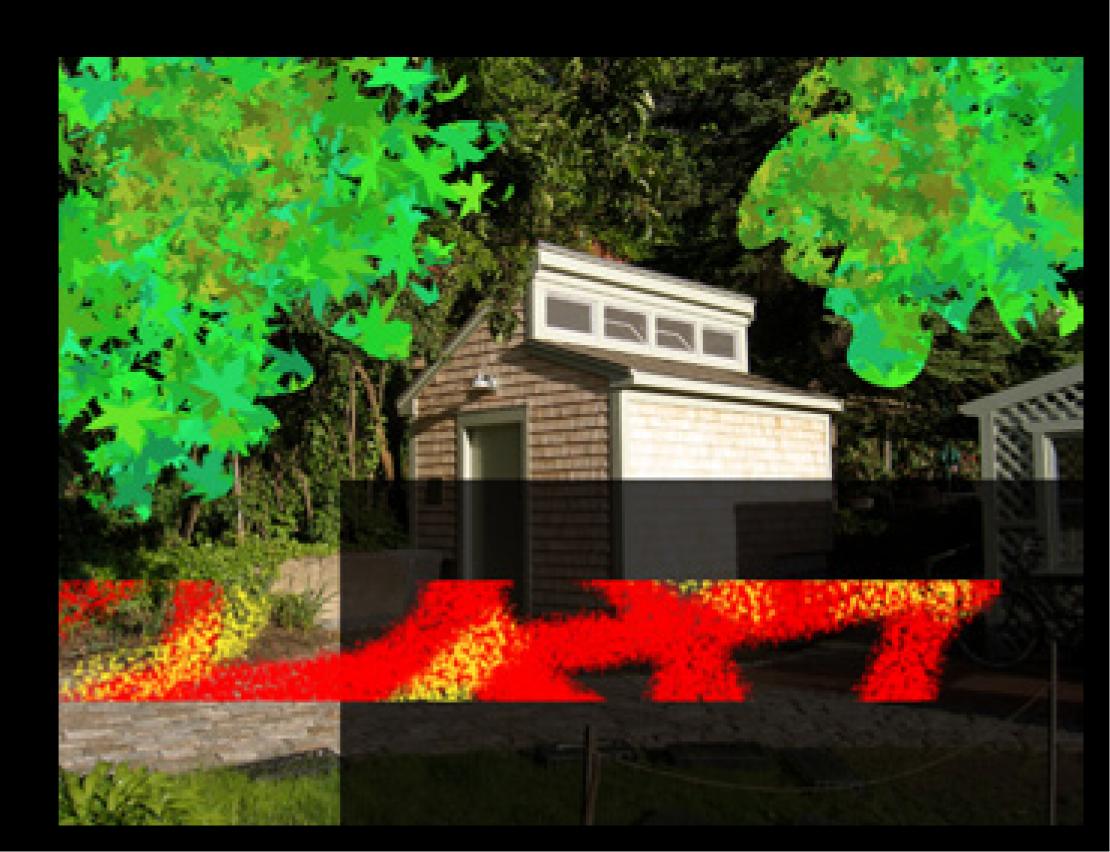






#### **Selection**

There are a bunch of tools that help you select parts of an image to constrain actions. Magic Wand, Lasso, Quick Select, Select By Color... and more.





#### **Selection**

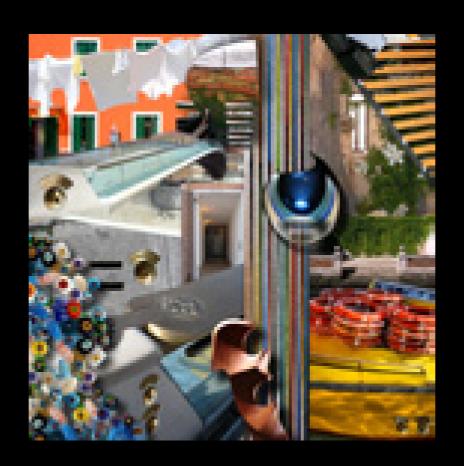
Selections are the starting point for turning parts of an image into layers. And once you've got layers, the sky is the limit.



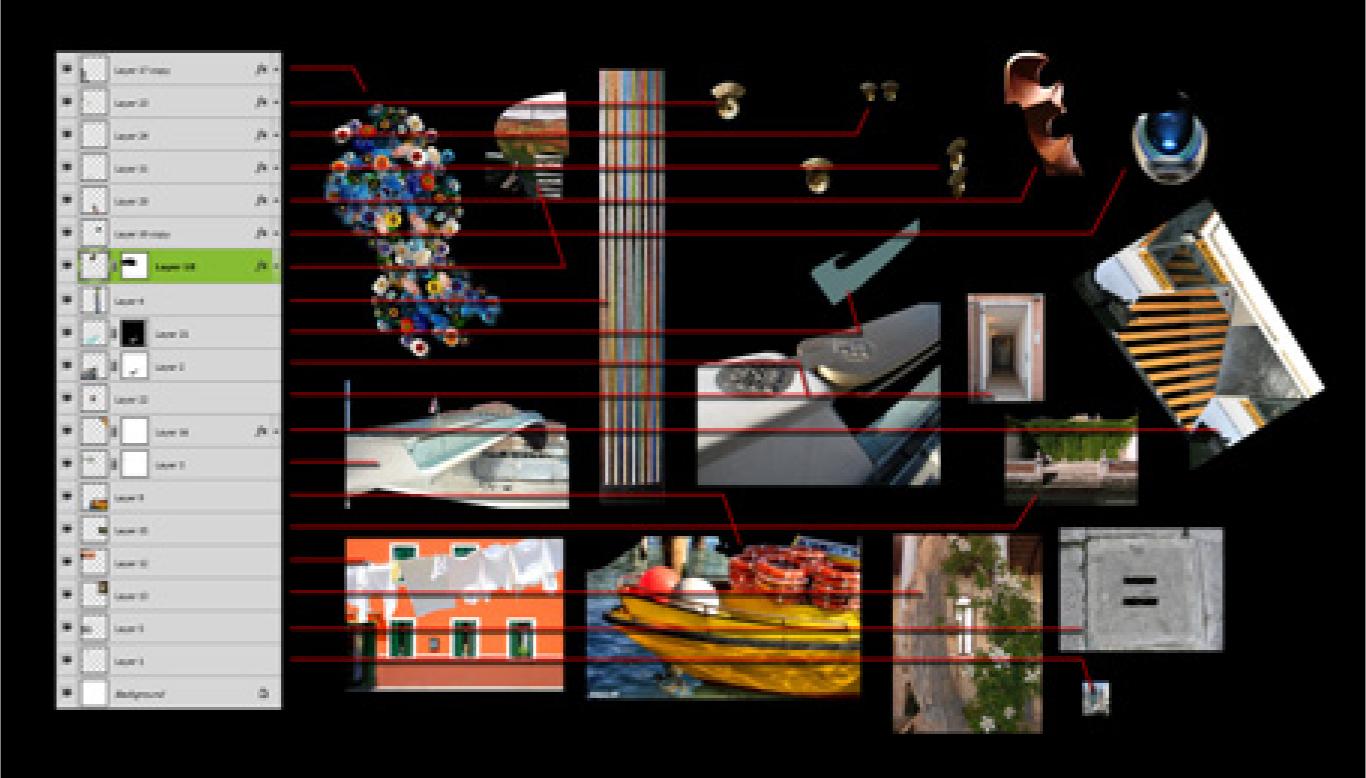


## It's all about layers.

Remember this picture? It isn't one picture, it's 19 of them working together. Each image occupies its own "layer". A collage in Photoshop can be taken apart and rearranged. Here, let me show you...





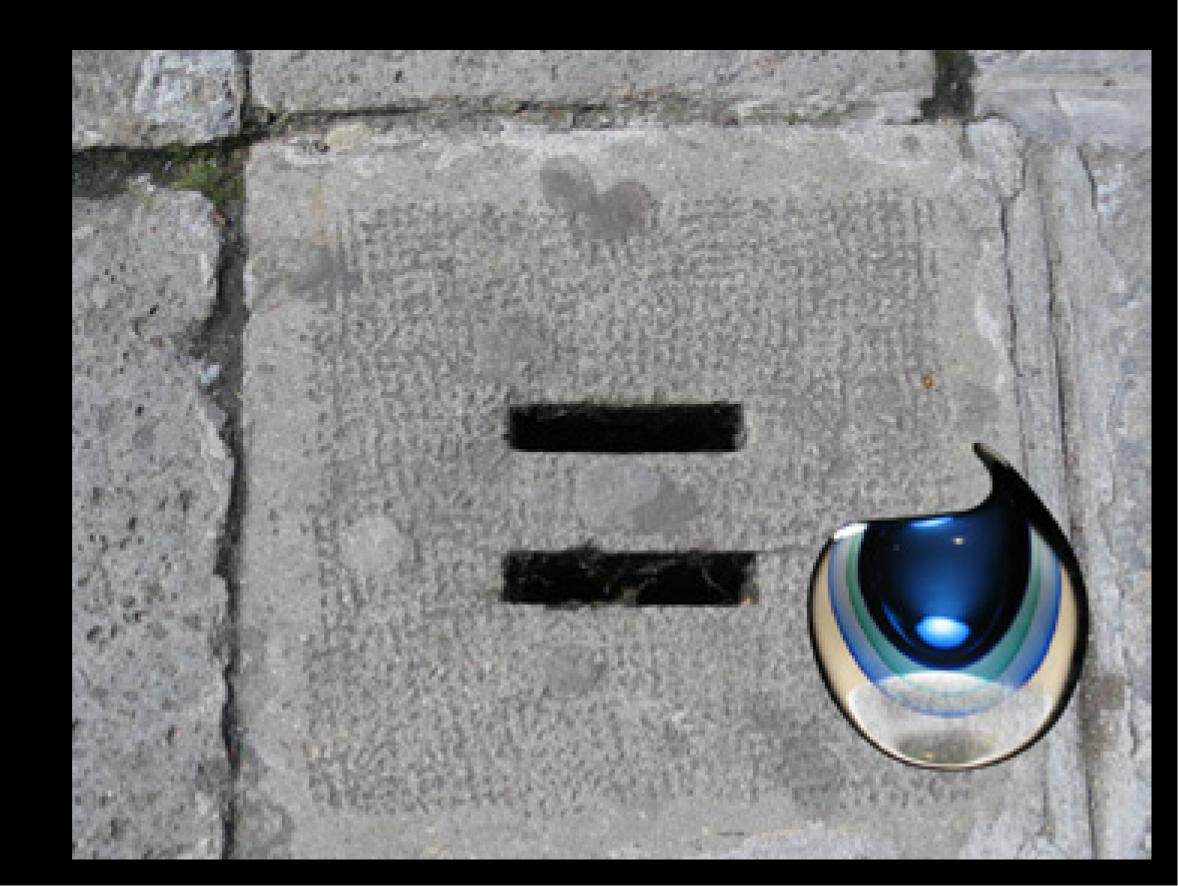




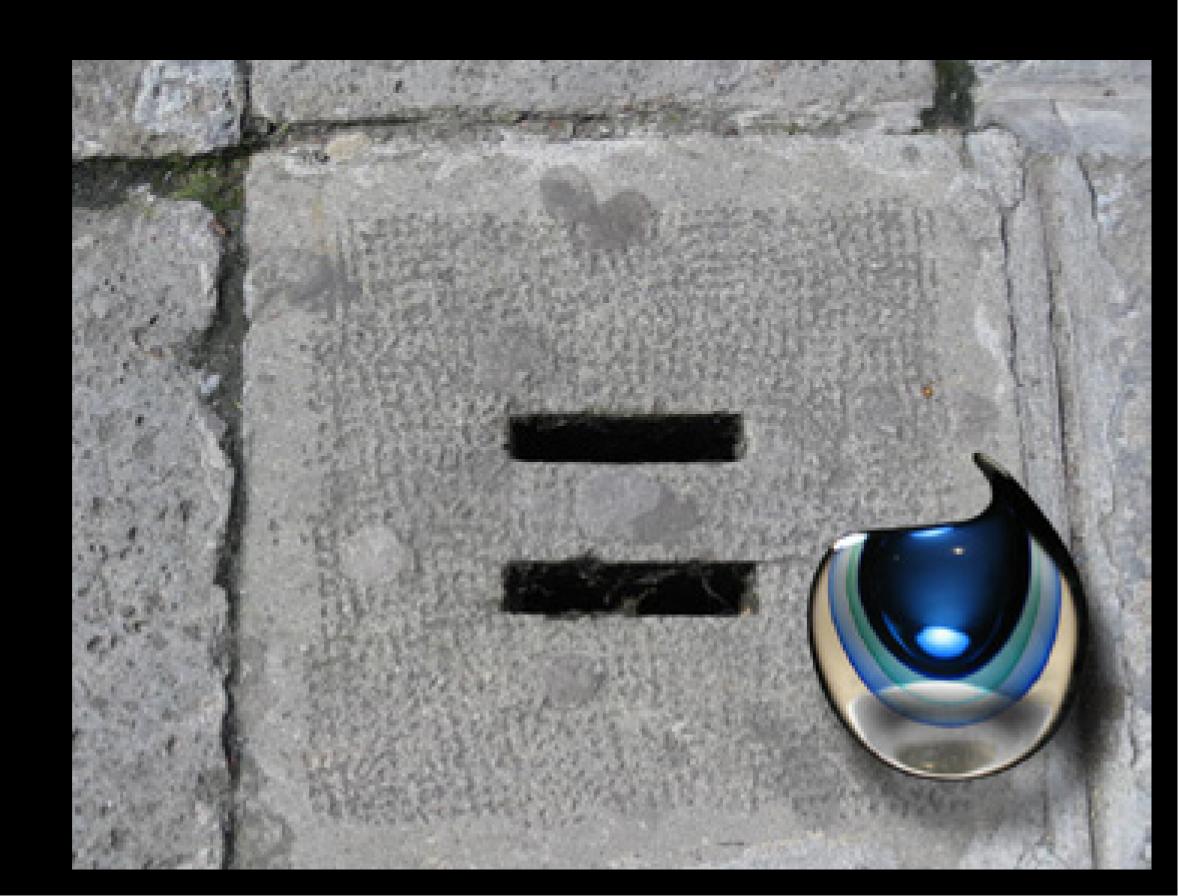










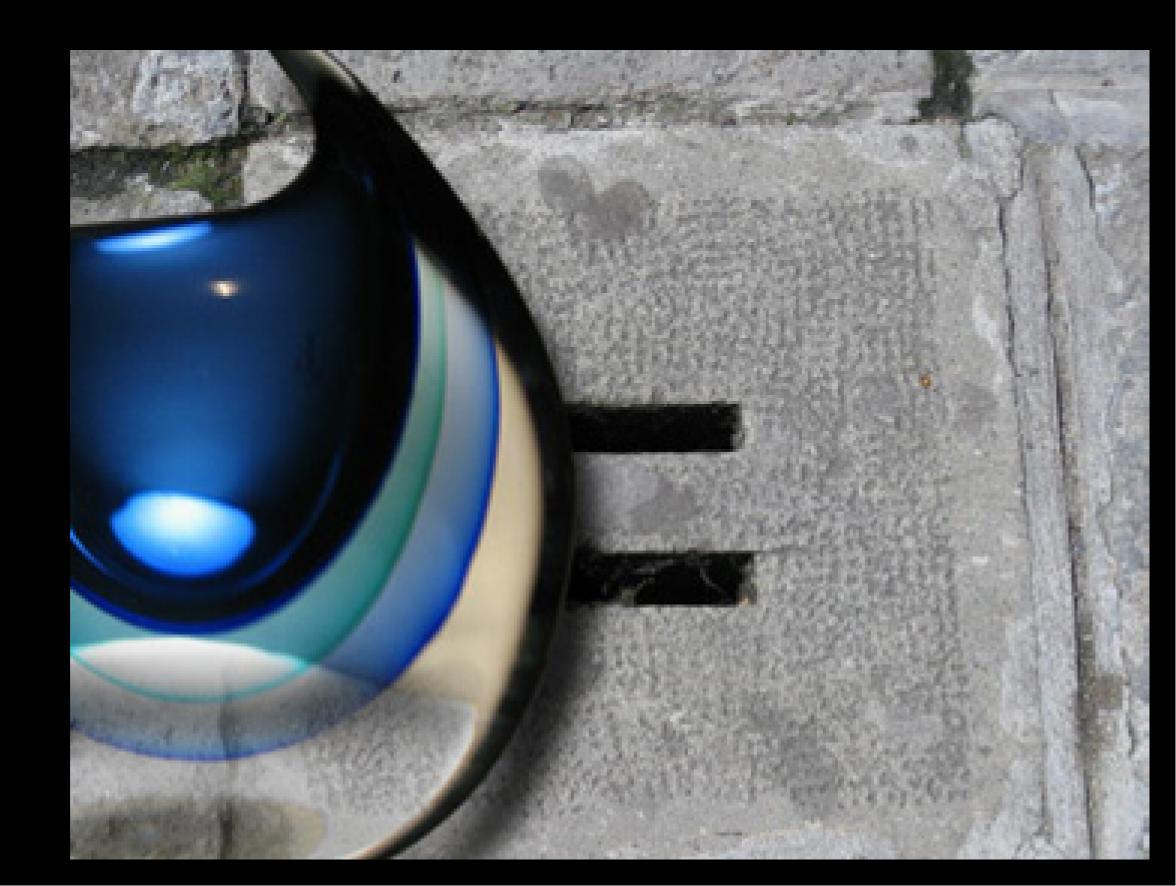


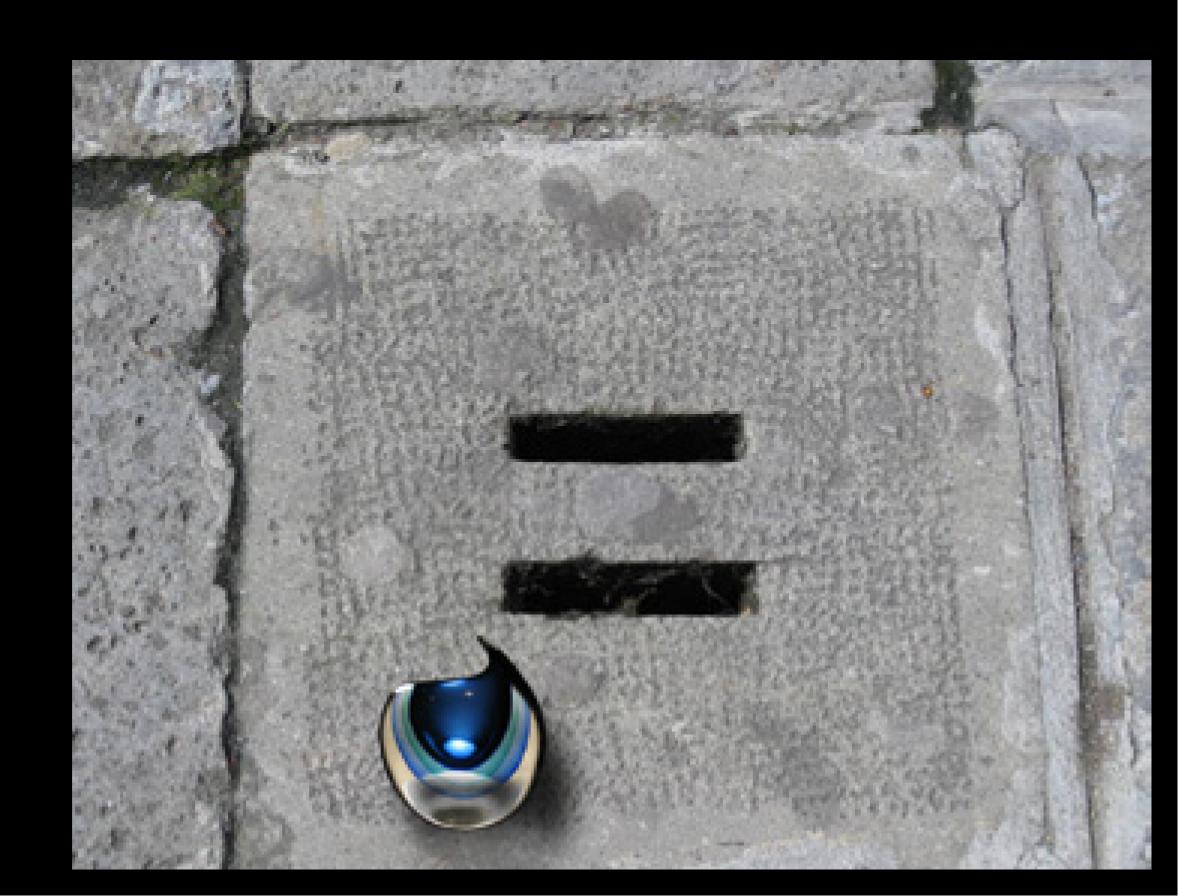


... and move it around. The background does not get destroyed. The vase can be partly transparent.

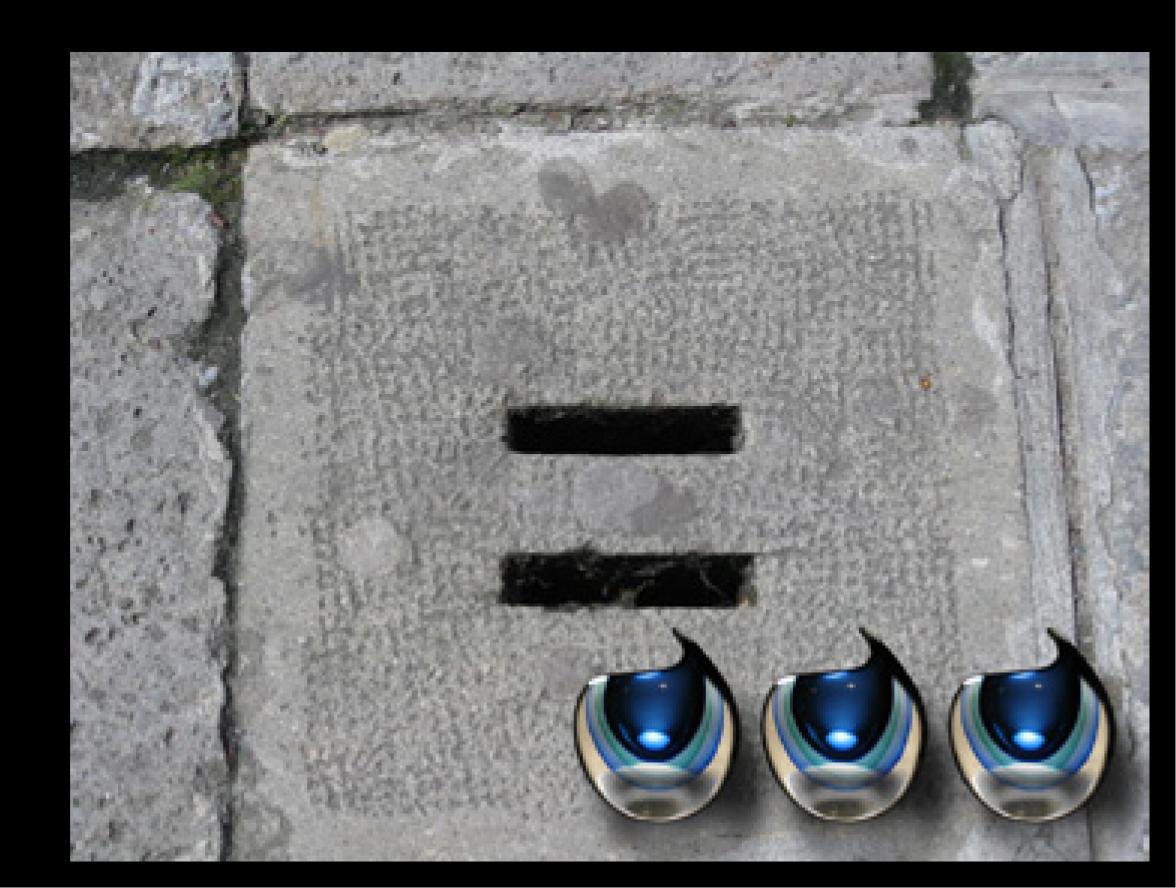














#### Masks

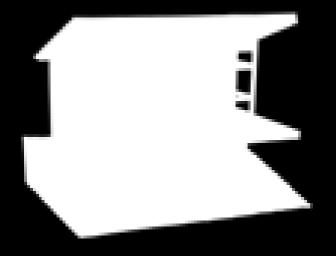
Layers can have masks that control the visibility of an image. It's like erasing except you can selectively unerase a week later.



















#### Rich

There's so much to show about Photoshop and no time to show it. But I have to at least mention...



## **Photomerge**

Take a bunch photos and Photoshop will put together a single panorama for you. You may want to get a bigger memory card for your camera.







## Healing

The clone stamp, healing and content aware tools. You can remove a speck of dirt from a scan, a boat from the harbour or whole buildings from.. where whole buildings shouldn't be.





## Content Creation



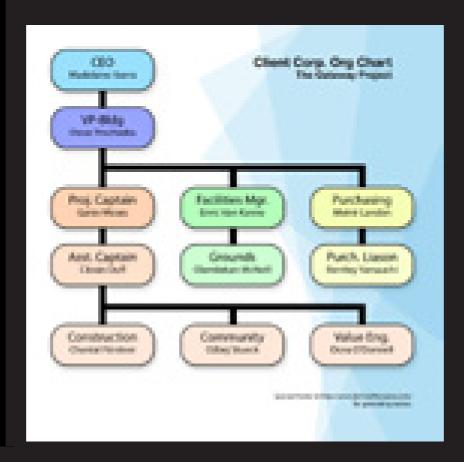
### Illustrator

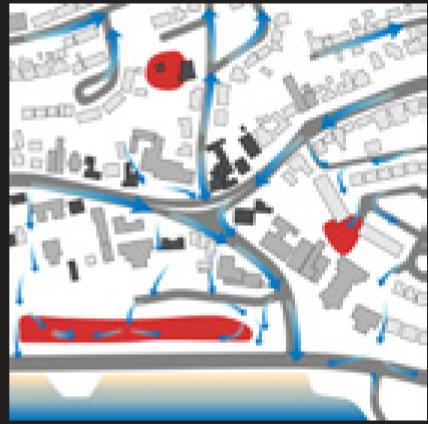
**Vector graphics** 

Illustrator can be used in a great many ways but for our purposes it is easiest to think of it this way - use Illustrator to make diagrams.

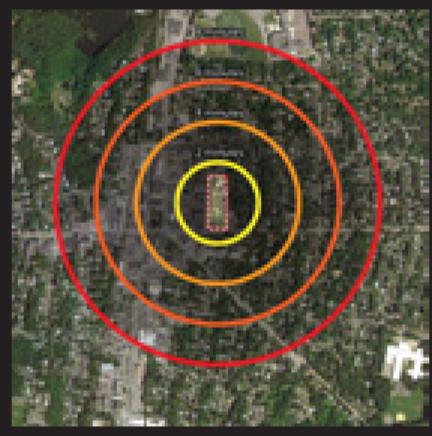


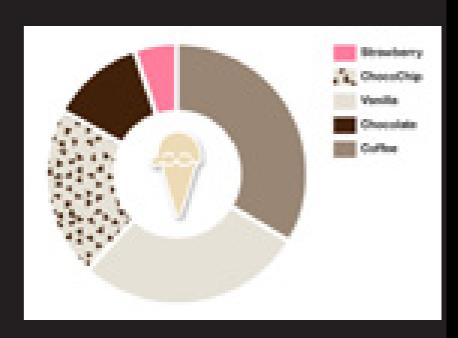










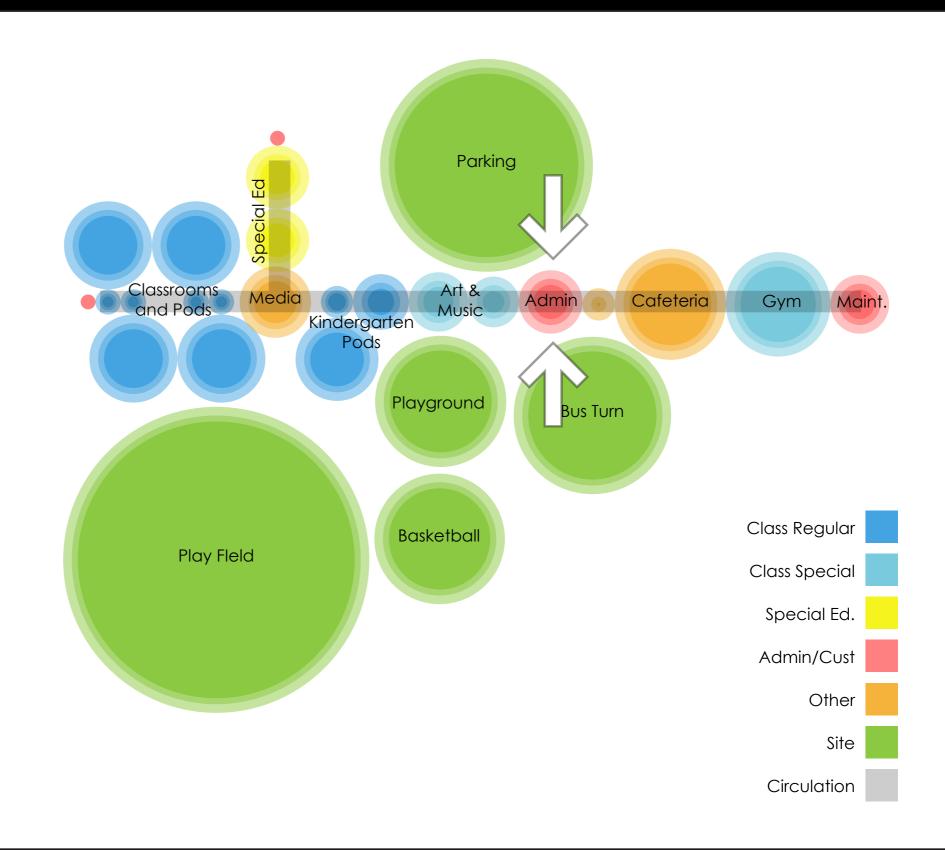


**Walking Radius** 

Pie Chart

**Walking Radius** 

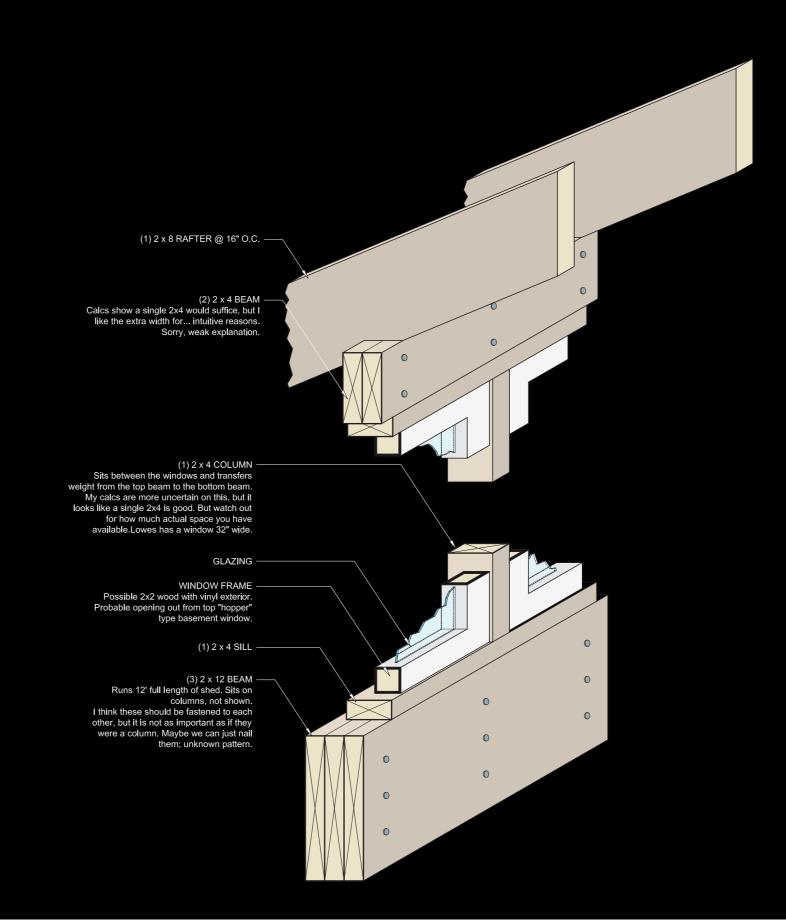




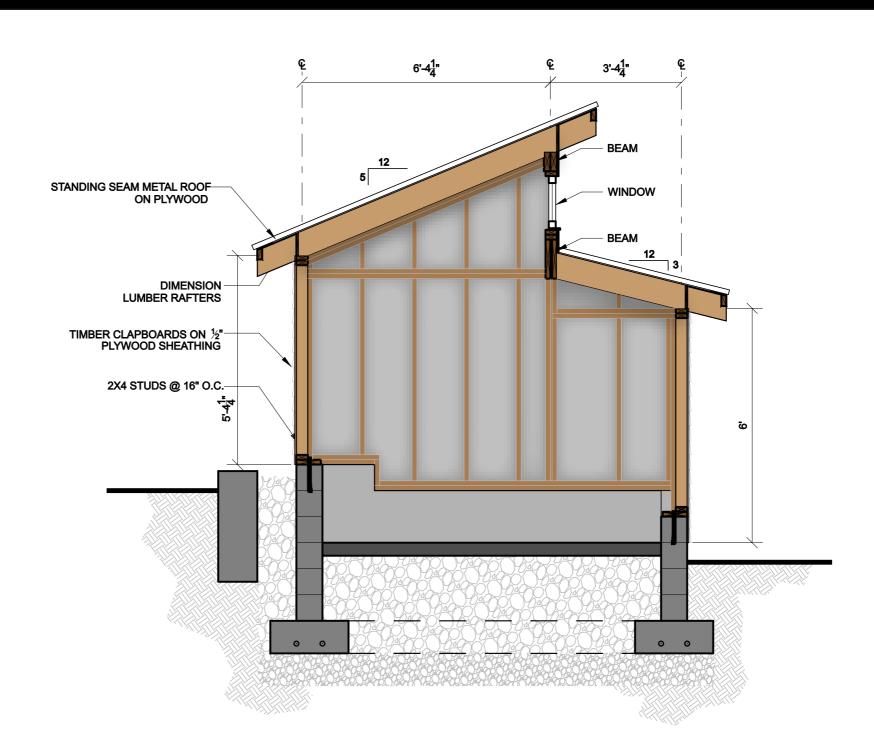








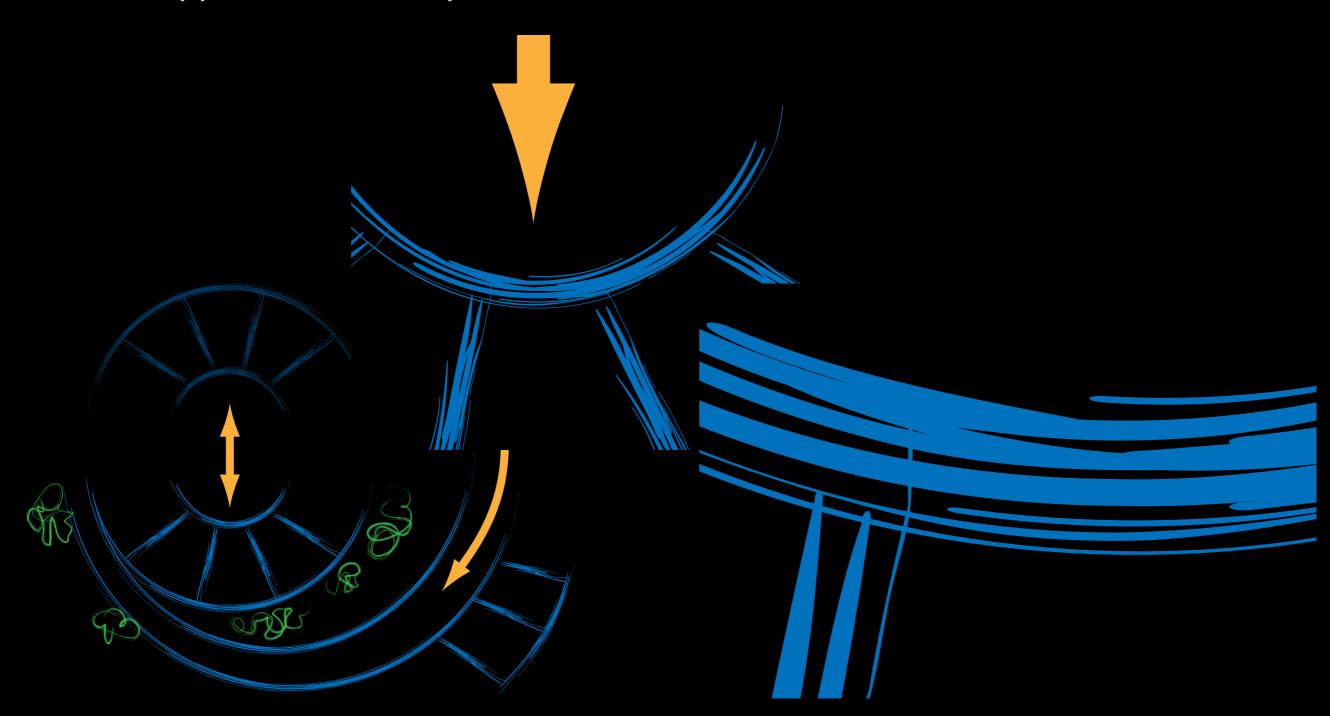






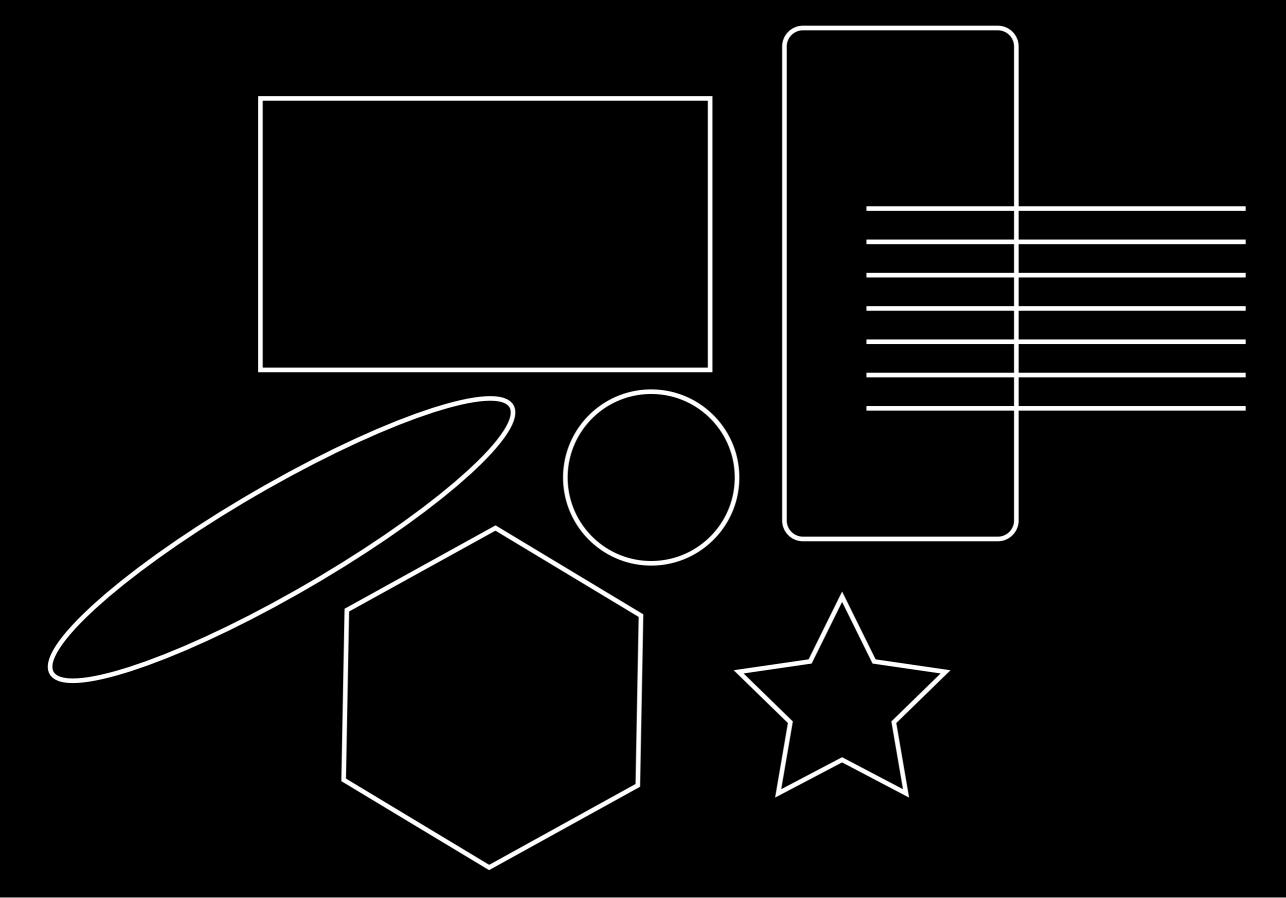
## It's all about Shapes

When you zoom in with Illustrator it does not turn into big square pixels. Edges stay sharp, corners stay pointed, curves stay smooth.



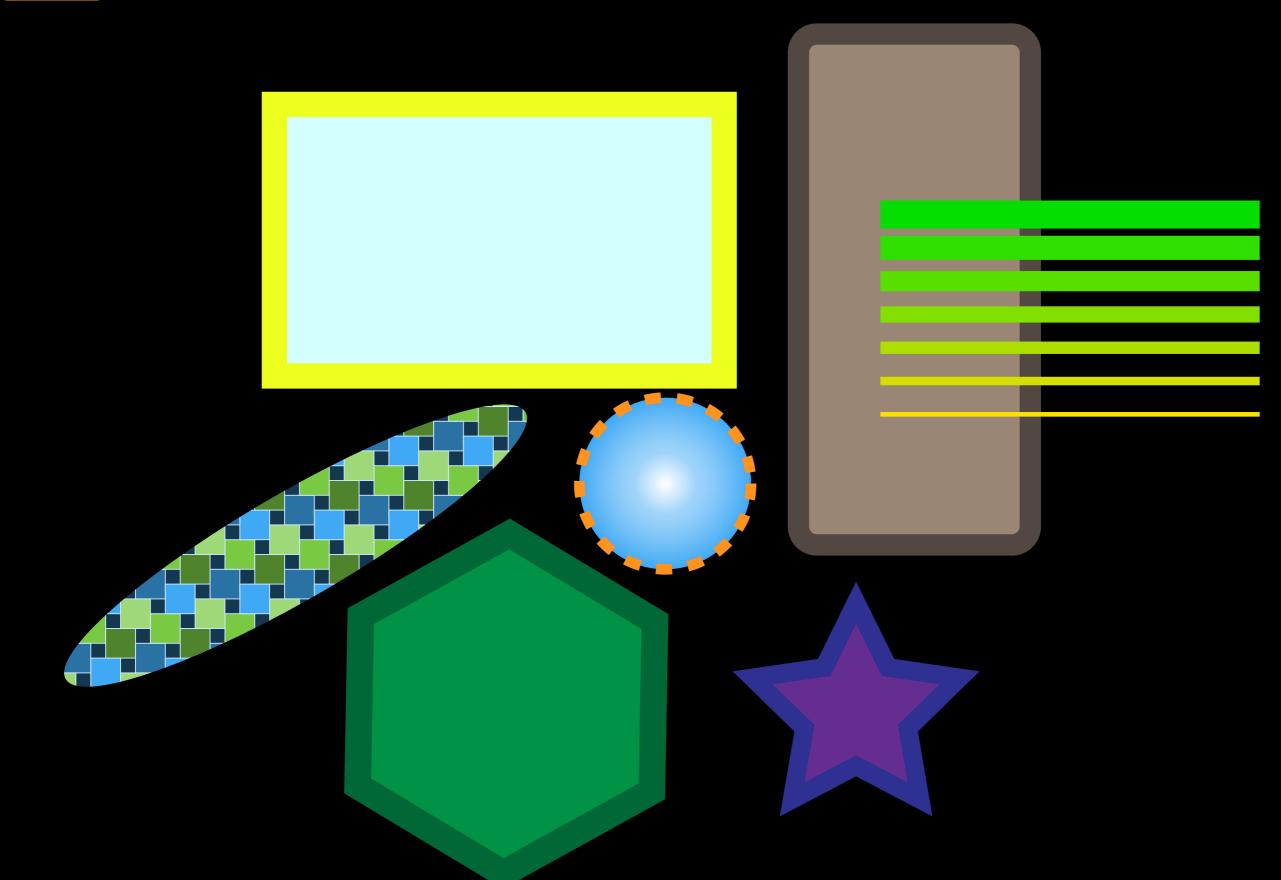


Simple Shapes
You can make simple geometric shapes.





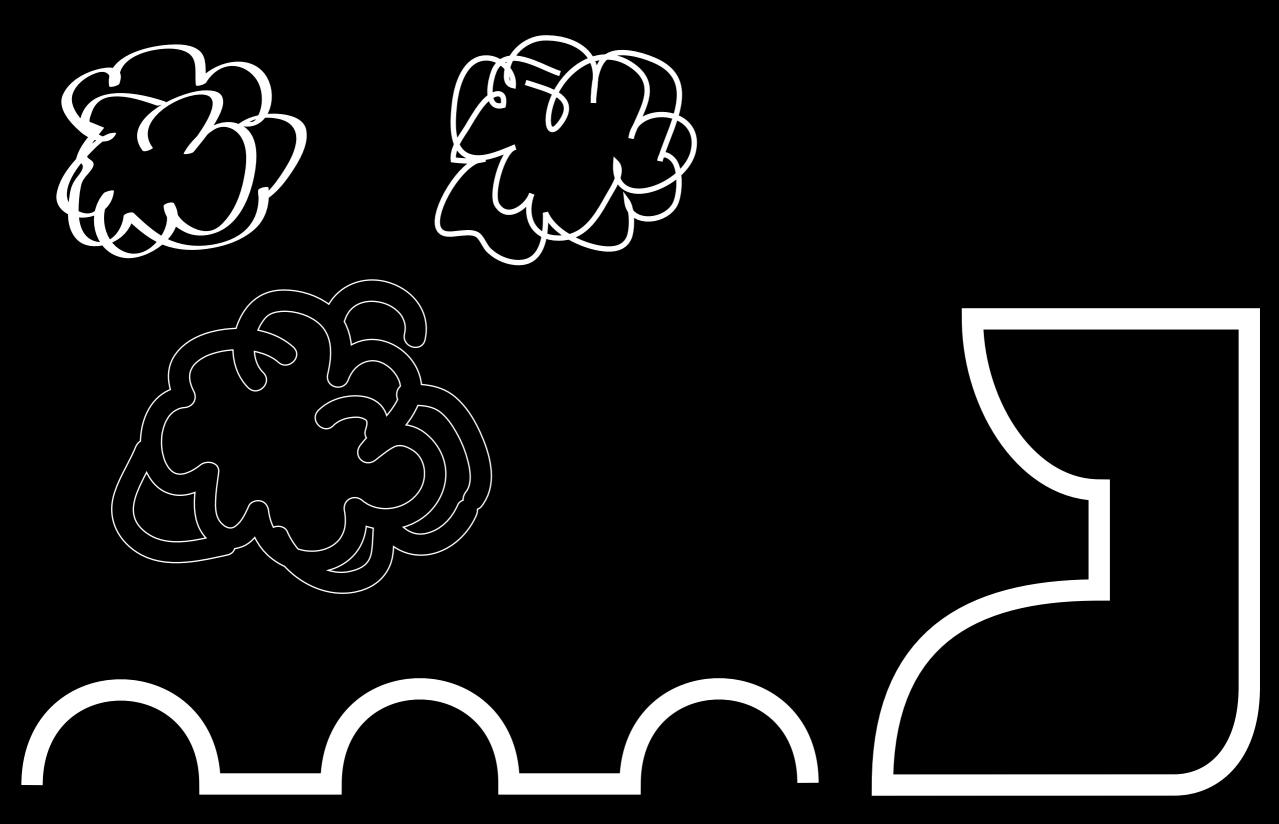
Appearance
It wouldn't be fun if you couldn't make them pretty.





## **Pen and Brush Tools**

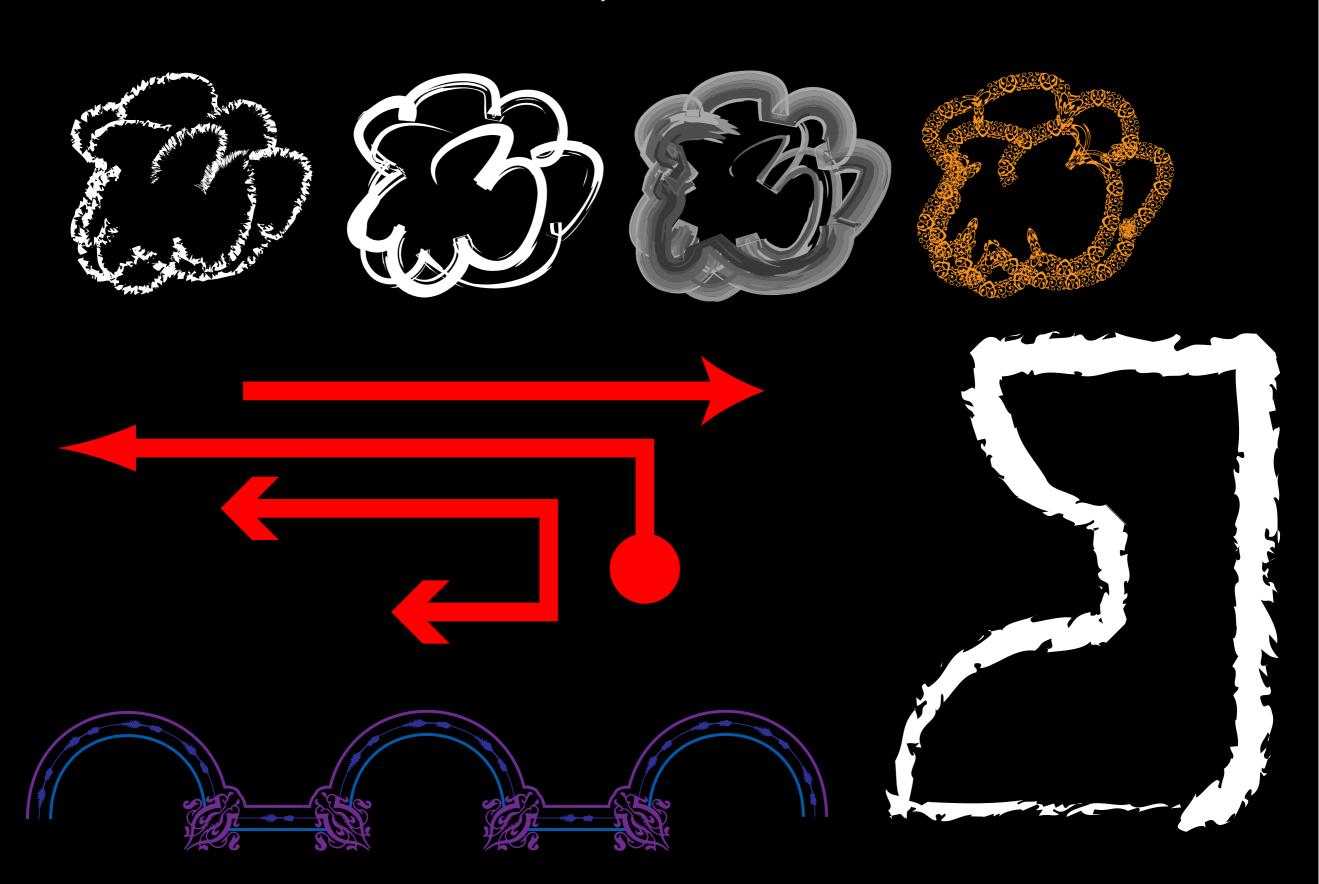
Pencil, Paintbrush, and Blob Brush tools allow fluid shape creation. The Pen Tool allows precise efficient shape creation. It's hard but powerful.



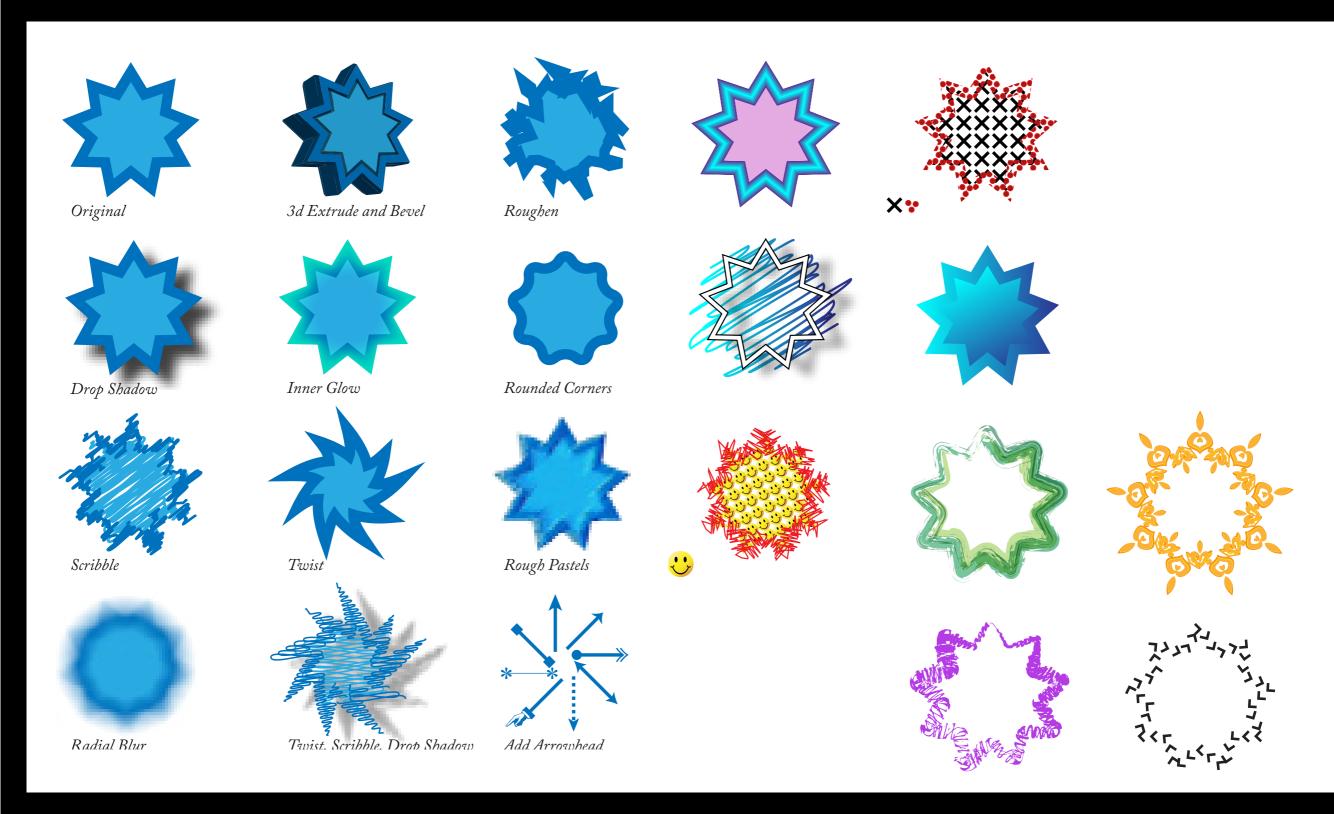


## **Brush Strokes**

Then there are Brushes which offer a great variety of artistic effects. You can also make your own.

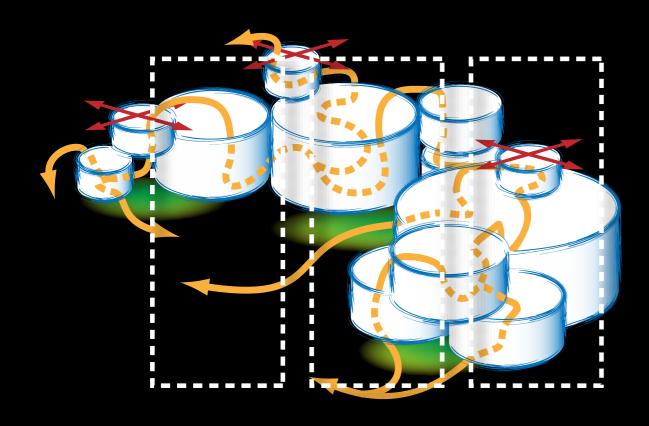


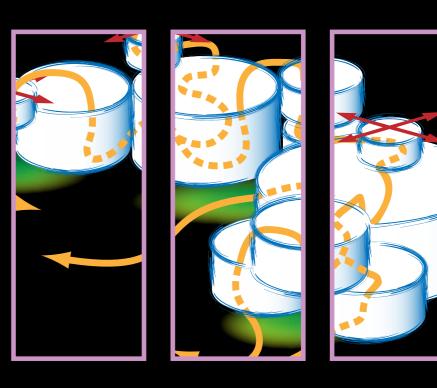






Clipping Mask
You can use one shape to limit the visibility of other shapes.

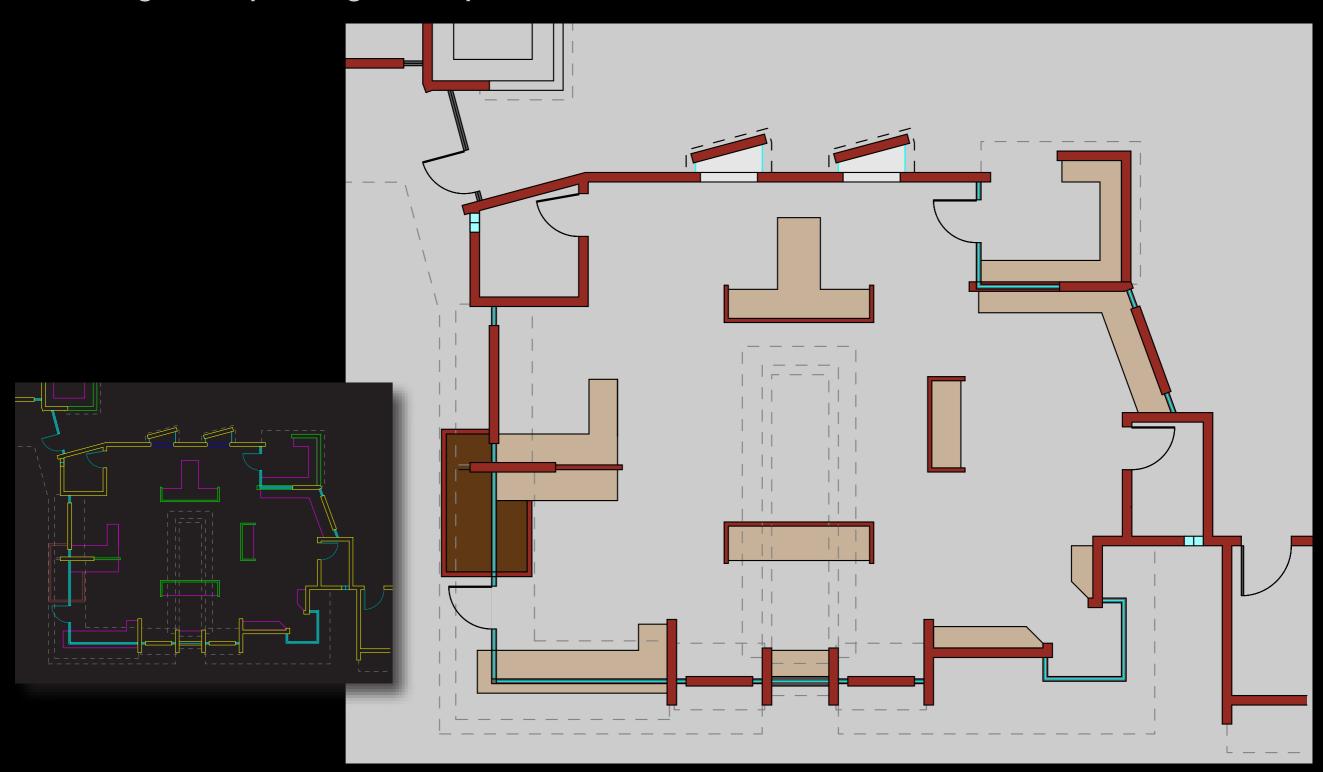






### **Live Paint**

Live Paint is similar to the paint bucket in Photoshop and other pixel based programs, but it makes vector objects that can be selected and edited later. The painted areas also respond to edits to the base geometry. It's a great way to color in CAD.



### Content Management



## **Bridge**

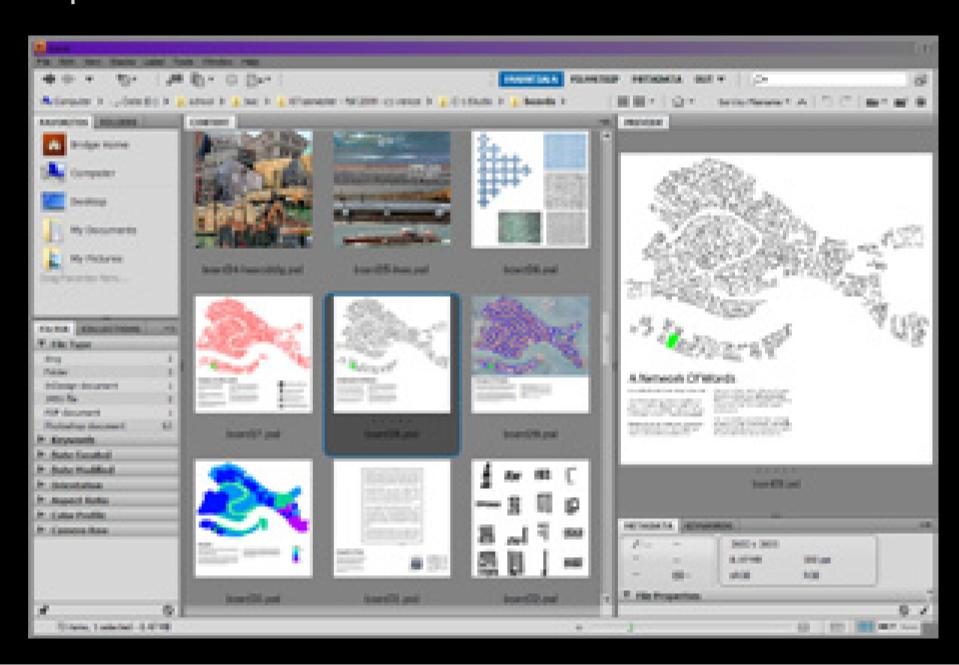
Like Explorer or Finder (or File Manager if you're that old).





### **Thumbnails**

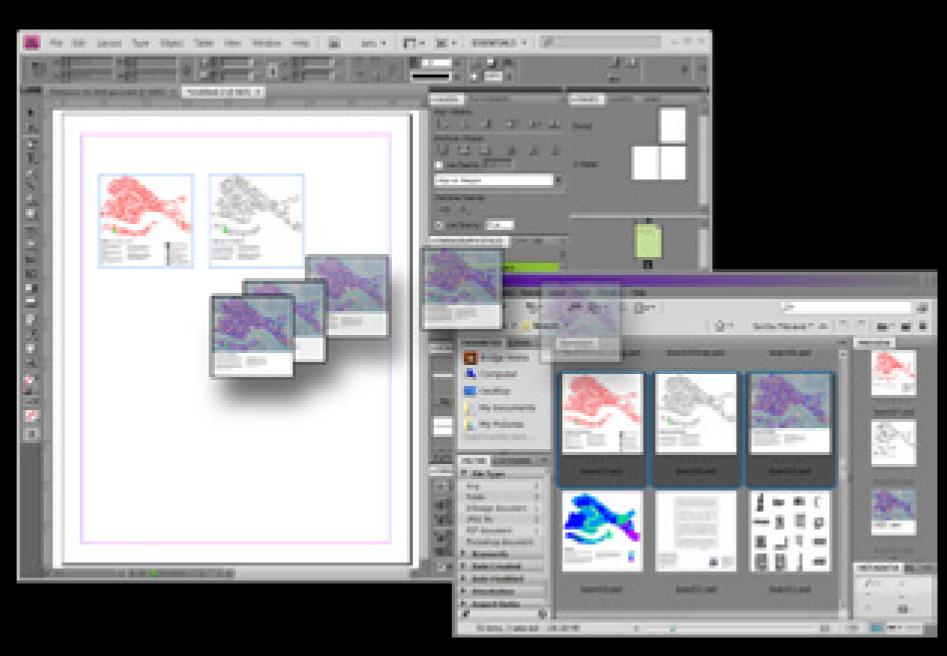
Bridge is just a way to browse your files but it shows resizable thumbnails, nice previews, you can filter by file type, you can group files to help make a ton of pictures managable. You can run Photoshop scripts on a batch of images. I have a twenty year old thumbnailer that I usually use, but Bridge does a much nicer job with PDF and Illustrator files; especially multi-page or multi-artboard files. And the single click filtering is helpful.





### **Drag and Drop**

When you find a file you like, you can drag and drop it right onto a page in InDesign. For me, this is a great way to work. Use Bridge to get related files grouped into folders (Studio B1, The Simpson Residence...). Then use InDesign to create some empty pages. Then drag and drop files from Bridge onto the pages and watch the document come together as you think about how to organize your story and how to tell it.

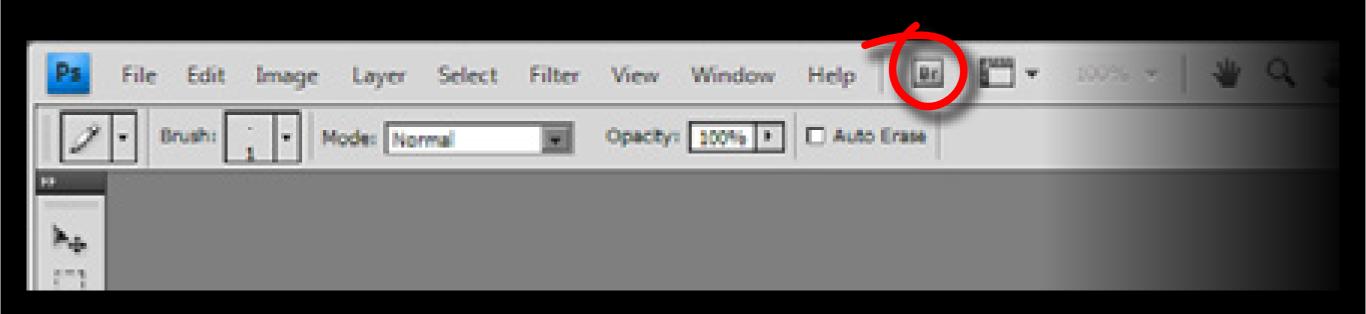




### **The Button and More!**

Photoshop, Illustrator, and InDesign each have a button up by the menu to launch Bridge. You can also run it like a normal program.

More recent versions of InDesign also have something called MiniBridge which shows up on a palette inside InDesign.



## Document Creation



### **InDesign**

Text and graphics on pages.

InDesign is for making documents. You can do all of your writing in InDesign and very little of your art creation. The art usually comes from other programs.

A document could be: business card, résumé, term paper, presentation board, portfolio, novel, encyclopedia...

I encourage you to use InDesign to write your papers, résumés and the like. It will help you get familiar with the program so youwill be up to speed when you really need it. Don't say "Oh, I'll use Word for now and worry about InDesign later."



### Sherman Road Montessori

### An Organically Designed Primary School

**Development** 

#### Scharoun



limited and truncated.

Hall and Lobby spaces meet their own





Each adapts to the other

Form found by the interplay of core requirements and elements with responses geared towards the natural desires of the spaces. Form falls from the stabilization of the myriad dia

Of particular importance is the denial of importance to formal systems.

Read one way, Organic Design is nothing more than Good Architecture.

**Harmonious Emergence** 

#### Precedent

peter m. gruhn - boston architectural



I had encountered these images years ago and they impressed me for being masses ar-

ranged to form space rather than pierced boxes; for their attempt to make a school that was driven more by children than by teachers; for the multi-layered interpenentrating space. On learning that I was going to do a school these images immediately came to mind. That they are of the same work by one architect and a Montessori school is an interesting coin-

These precedents inhabit this project not as formal rules but rather a texture flavoring the design. They serve as a reminder of a flavor towards which I wanted to push.

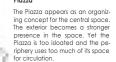
Herman Hertzberger. Montessori School, Delft.

#### Core and Pods

The central core forms as a left over space with no identity of its own surrounded by auxiliary spaces and programs and their

the exterior shows up at the 10:30 position. The outside world make





Generally, the Montessori classroom requires one large area for whole class gatherings which can also serve as general work

area for smaller groups and indi-viduals. Spaces also need to exist outside of this for work or students which want a more stable or re-

moved space. These secondary units can support the introverted/ extroverted needs.

#### Inside/Outside

The inside/outside boundary has to be a weather barried but can it be at a transitional zone rather than a hard de

#### Montessori



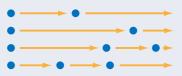
The Child

The individual child as the primary actor



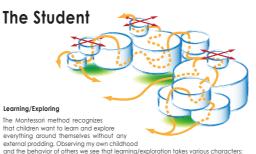
An individual in the classroom (student or teacher) may work on their own, with another individual, with a small group or with a larger - even whole class sized - group. Any given group may be focused on any given individual.

Movement from one grouping situation to another is unpredictable; any option may happen as the student's needs



#### Variable Time Parameters

An individual in the classroom will spend what time is needed for any given work undertaken. A student may select to do some work which is over quickly and then move on to an-other or may become engrossed in some work which takes quite a long time with the full ability to pursue that work until they are satisfied, either at its completion or to continue at another time.



- active across the subject
- static and insular
- stands off and observational

#### Thinking

With the Montessori emphasis on the individual student's role in his own education it is important to look at the student on his own. He won't be just doing busy work to fill quotas or give the teacher some peace. His work will be of utmost importance and involve active thinking/exploration/ learning and that frequently in a solo mode.

There are two general ways that a solo experience can relate to the world:

- · Introverted: turned away from externalities focussing on a smaller world. External stimuli are ignored or even blocked.
- · Extroverted: turned towards the rest of the world for observation and/or interaction. Focus is directional with a block to the rear to prevent swampina.

While most students can usually just occupy any piece of floor, mixing and close proximity with others, they sometimes need more defined spa-

- · Slivers of direct light







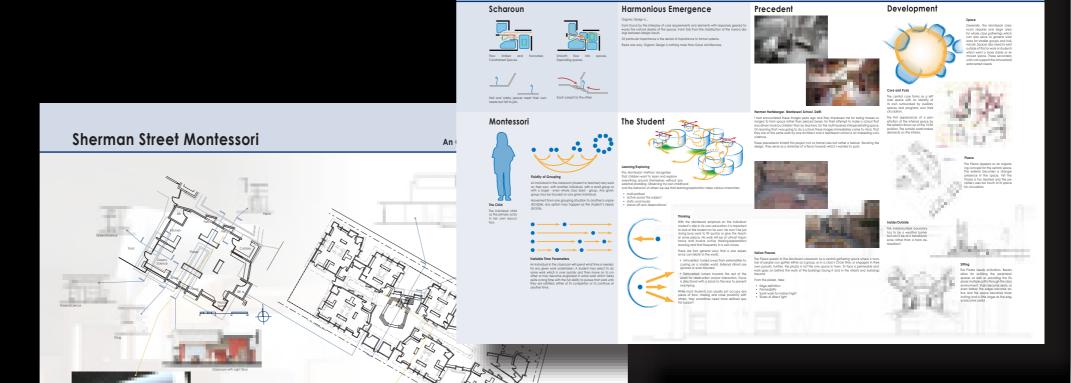
- · Edge definition
- Permeability
   Sunlit walls for indirect light







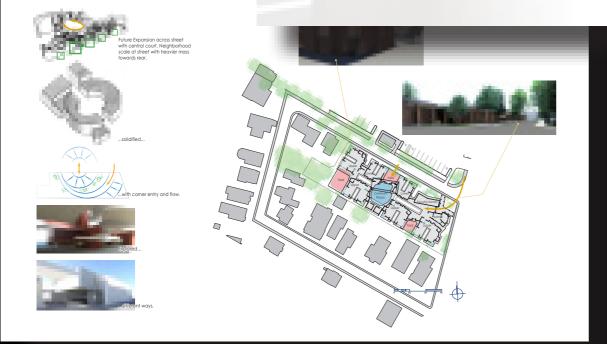




Sherman Street Montessori

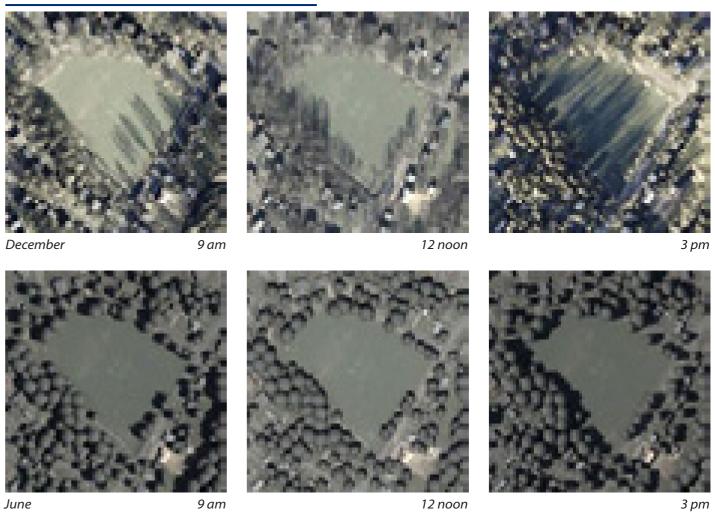
An Organically Designed Primary School

### Sherman Street Montessori





#### Sun and Shadow



The site is broad and open. The forested rise to the south does cast shadow across the site which would make the ground floor close to the hill a little dark on winter afternoons. The upper storey should be fine due to height. Any location towards the center or north receives full insolation throughout the year. The area is open enough that care should be taken to prevent too much solar gain in the warmer months. While the Hillside Ave. frontage is planted with mature trees, they are not frequent or deep enough to create a major shading problem. The corner to the far west of the site is heavily shaded and that it remains so throughout the year is attested to by observations of ground conditions and the accompanying shadow studies showing minimal solar coverage even in the depths of summer.

The woods to the south are an asset to the site and community. The ledge below them is construction issue. They are best preserved for their own right and avoidance of social and physical difficulty. They can be a distinct asset to the new school and care should be taken to distance any new construction properly for the effects desired.

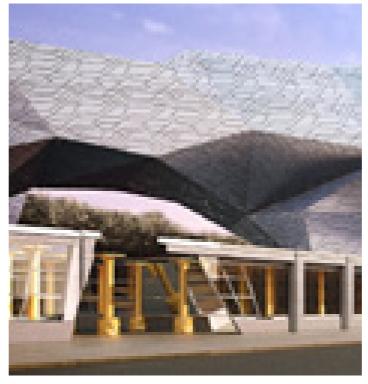
With the size of the site and the zoning of the neighborhood, the roof of the new school will not be overshadowed in the foreseeable future. Preliminary calculations indicate that a 30kW photovoltaic system will serve the electricity needs of the school. Such a system will fit comfortably on the roof of the allowable footprint with adequate space for mechanical and passive solar installations. Such a system is strongly recommended for further exploration.

Hillside Elementary School Peter M. Gruhn

### PROPOSAL

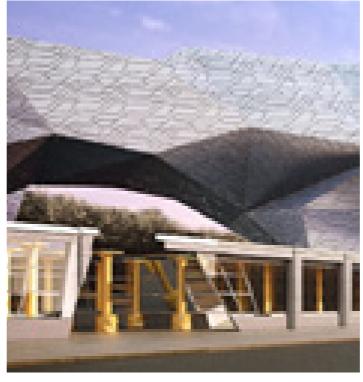
As 3d printing grows a part, our proposal grows up out of the existing factory onto the hill. CNC mills rout material at street level to provide an entry court, activate the sidewalk. and move light deeper into the maker space.

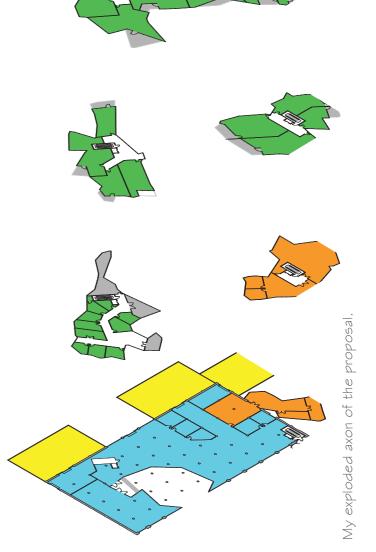
The new construction mostly contains residential units screened by panels that can be created in the facility below to customize according to the occupants needs.



My rendering of courtyard

Residential Office/Support Light Industrial Maker Space Outdoor









#### Peter M. Gruhn

5 Charlesdale Rd., Medfield, MA 02052 508-801-0514 m 508-359-2847 h peter.gruhn@the-bac.edu

#### Education

Team Member

Boston Architectural College, B. Arch. candidate. January 2006 - Present Rensselaer Polytechnic Institute, B.S. Computer Science, minor Architecture. 2005 Scottsdale Community College, A.A.S. Arch. Tech. With Highest Distinction (4.0 GPA). 2005

#### **Design Experience**

#### Charlestown Community Garden Shed (BAC Gateway Project)

Boston, MA

Jan. 2012 - Present

- Created majority of BRA submittal drawings. Currently completing CD set for construction later summer 2012.
- Involved with team in final design redevelopment, site survey, and design presentation tasks.

#### DiMella Shaffer (via Dakota Design Staff)

Boston, MA

Draftsperson

- Feb. 2008 May 2008 Developed responses to RFIs in cooperation with other members of Construction Administration team for high end 750,000 multi-family residential project.
- Prepared sketches, researched code, suggested design changes as appropriate.

#### Stirling/Brown Architects (via Dakota Design Staff)

Winchester, MA Sept. 2007 - Dec. 2007

Draftsperson

- Developed alternates for design problems
- Created new and modified existing drawings for DD and CD phases of projects including 7,000+ s.f. custom home, and 1,700 s.f. columbarium addition. Work encompassed generating roof plans, and elevations, completion of building sections to include existing and modified details, creation of 3d models to generate complex elevations.

#### **Boston Architectural College**

Boston, MA

Sept. 2006 - Present

• Tutor: Structures, AutoCAD, 3DS Max, Photoshop, Studio, Design Principles, and others.

Sept. 2006 - Present

- TA: Workshop: Computing Drawing Space. Create learning materials, tutor computer programming.
- Spring 2012

- Design Principles: Assisted instructor with classroom operations.
- New Student Orientation: Student Ambassador: lead incoming students in introductory design school experiences.

#### Self Employed

#### Consultant

Boston, MA

Ongoing Ongoing

- RAR Architects Create architectural visualizations using AutoCAD, 3ds Max and Photoshop. • VFA, Inc - Check and correct as-builts using AutoCAD.
- Dec. 2006 Mar. 2007
- AppAxis Web development using MSVS, C#, ASP.NET, CSS, HTML, Photoshop.

### Jan. 2006 - Apr. 2006

#### Reece Angell Rowe Architects

#### Assistant

Phoenix, AZ Jan. 2001 - Feb. 2006

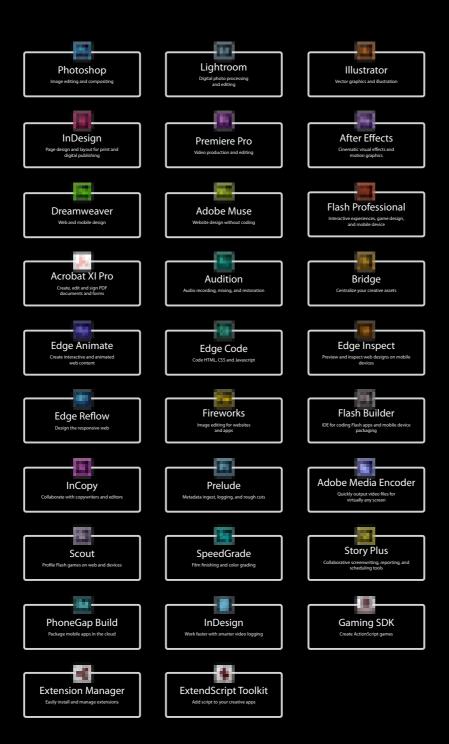
- Field measured existing sites and buildings; supervised architectural interns in field.
- Prepared drawings from site visits using AutoCAD.
- Prepared context plans using site photography, web GIS software and AutoCAD.
- Created colored elevations using Photoshop and AutoCAD.
- Participated in city and client meetings.
- Maintained and updated marketing material using digital photography, Photoshop and MS Word.
- Provide receptionist and general office help services, including phone and typing.

### Other Employment Experience

A. C. Moore Framingham, MA **Customer Framer** May 2010 - Sept. 2011

Software Engineer 1990 - 1999





### So, what is Creative Suite?

A bunch of computer programs produced by a company called Adobe. They focus on a broadly defined field of creative arts. They have offerings for audio recording, film effects, photography, web design...



## **Most Important Stuff**

You can use InDesign successfully, in the end, by just sitting down and creating your document. But you will suffer for your art.

InDesign has some specific strengths that will make your life happy, easy, and fun. InDesign has some tools that strongly support those strengths. You should, I am **BEGGING** you, become familiar with these tools. Use them on your small documents so you can be smooth with them when you have to make a Portfolio.

## The Strengths:

- Consistency it is easy to make all your pages use the same set of layouts, fonts, colors and so forth.
- Modifiability it is easy to change fonts and colors throughout the document with a handful of clicks. [Layout is... let's say "possible."]



## **Three Things**

There are three most important support tools.

- Master Pages
- Paragraph Styles
- Swatches



### **Master Pages**

A Master Page is not a page that prints in your document. It is a template on which you base pages in your document.

This document has four simple Master Pages. One for each program with the right little icon up in the corner. So this screen right here is "based on" the InDesign Content Master Page.

Each of the four content master pages is based on an empty master page that only has some margins and a couple of guidelines that are used to lay stuff out.

Let's look at my portfolio...



## **Portfolio Masters**

These are just mine, you don't have to copy me.

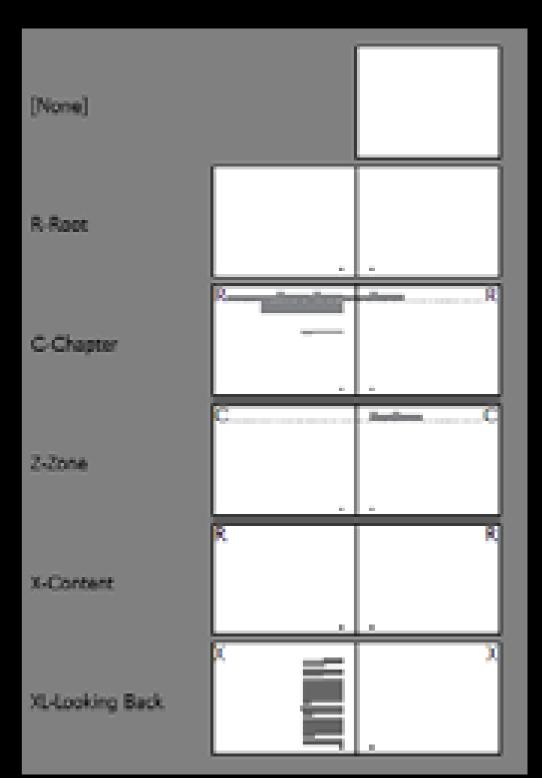
There's a Root master which just contains page numbers and grid lines.

Then there's a master with all the layout for a chapter heading. Each studio project gets a chapter.

I think Zone was for the major divisions: Studio, Other Academic, Practice, etc.

Then each project has a number of pages of content. Since I want a lot of space to put words and pictures, you can see that the content master is pretty sparse.

Then at the end of each project I had a page for me to compliment and critique the project with the advantage of some distance. That's the Looking Back master.





Here is the Master Page for a Chapter. It is all laid out and ready to use. Then when I got to page 43 and needed a new chapter, I just made an instance of this Master and filled it in and it looks right.

### CHAPTER HEADER

SUBHEAD

Instructor

SEMESTER

Instructor Name1 Instructor Name2 Season 9999

This is the purpose. Beautiful porpoise my burpoise. Beatia sus et alis veribus apicaep udaerae voluptatur apici dem aut quame velique pra ernat fuga. Lenimus doluptatios aliaepudis eos evenam que omnis nonsequid ex etumquam voluptatur? Met dolorum eliqui consequatur, qui dolore core sunt fuga. Equiatur milluptas ratio debita quatur, conet a abore nati aborum quae natque nis dolliquis evenbu scipitat.

### DEVELOPMENT

Instructor

HERB KRONISH DAVID STUHLSATZ FALL 2010 Semester

> A new Community Center for the town of Needham. The facility is to replace the existing Senior Center and integrate new facilities catering to the broader population of

### G2 STUDIO





### **Paragraph Styles**

A Paragraph Style is a collection of type attributes that can be applied to a whole paragraph at a time. If you modify a paragraph style, all of the type in your document that uses it will update to match. Say I suddently wanted this whole presentation to be done in Courier New? One click and it all changes. When you are entering text in In-Design, you'll notice that there's this very handy



control bar at the top of the screen to help you change your fonts and your paragraph spacing and all sorts of things.

Never use it. Just don't. If you need a new font or indent or some different style to your current paragraph, make a Paragraph Style for it.

I'm not saying you can't make a document with it. I'm saying you will lose the easy consistency and modifiability. Do you really want to go back over 80 pages and fix all the captions to 8 point Courier New Italic by hand? Or was it 9 point Caslon Demibold?



### Type Power

The typography in InDesign is... as powerful as I need. Here is some plain text. The fanciest thing in there are some tabs to separate out different data items.

Add a few carefully crafted paragraph styles and voila!

The Gateway Project Book Section 1 Problem Scope Fleagle Smith Client Needs Existing Site Neighborhood Meetings Put questionnaires in an Appendix Section 2 Research Beagle Jones Site Sound, Light, Traffic Put these together Materials Timber TerraCotta Rain Screen Bamboo Use Snork's colored pencil studies Technology Geothermal Passive Solar Brown Water Design Development Section 3 Goober Hanson, Fleagle Smith Charette Activity Make this fun Pin-up Not much "pictures of the pin-up" and more "pictures that were pinned up" Massing and Program Program Realization Don't be shy Materiality See if you can use real materials for the official office copy of the Bringing It All Together Sketches Final Presentation Line pin-ups, show a few of the presentation and a lot of direct ma-

terial - same as used on boards



There is no drawn art on this page. It's all carefully styled text.

The Gat	eway Project Book	
Section 1	Problem Scope	Fleagle Smith
CLIENT NEEDS		
EXISTING SITE		
NEIGHBORHOOD	MEETINGS	
Put ques	tionnaires in an Appendix	
Section 2	Research	Beagle Jones
SITE		
Sound, Light,	Traffic	
Put these	together	
MATERIALS		
Timber TerraCotta Rai Bamboo Use Snor	in Screen k's colored pencil studies	
TECHNOLOGY		
Geothermal Passive Solar Brown Water		
Section 3	Design Development	Goober Hanson, Fleagle Smith
CHARETTE		
Activity		
Make thi	s fun	
Pin-up		
Not muc	h "pictures of the pin-up" and more "pictures that were pinned	d up"
MASSING AND P	ROGRAM	
PROGRAM REAL	IZATION	
Don't be	shy	
MATERIALITY		
	a can use real materials for the official office copy of the book	
Bringing It AL	L TOGETHER	
Sketches		

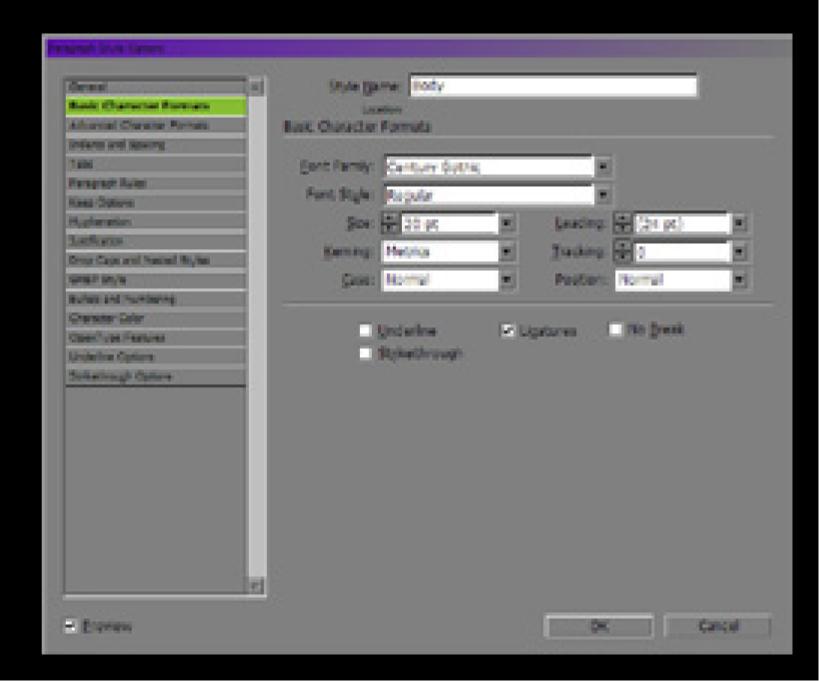
Line pin-ups, show a few of the presentation and a lot of direct material - same as used on boards

FINAL PRESENTATION



### There's So Much!

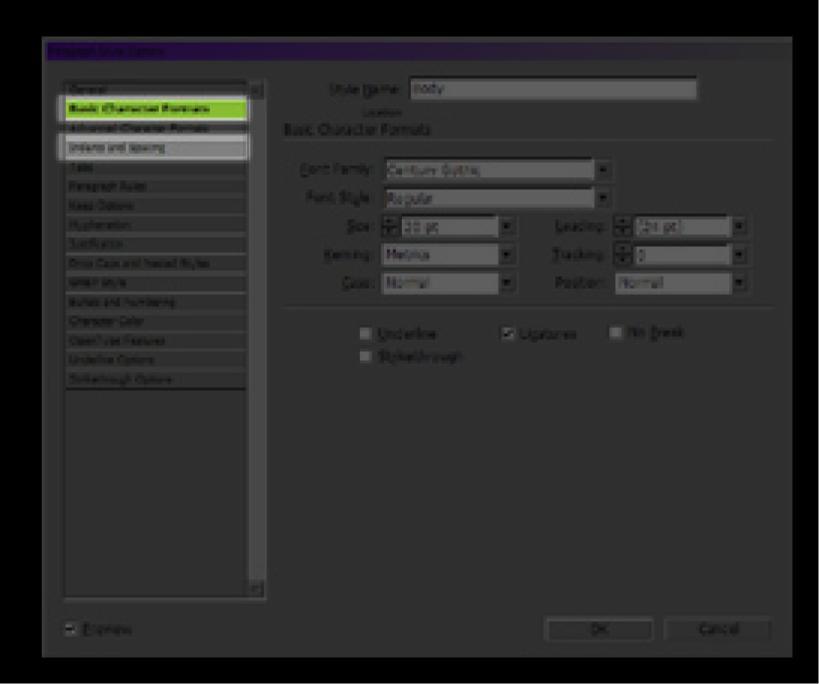
When you look at the Paragraph Style options it looks pretty daunting. There's 16 topics and 12 items on this topic alone so there's probably well over a hundred buttons and knobs to play with. Having that much power is cool, but to begin with you don't need to juggle that much.





### There's So Much!

You can get going with "Basic Character Formats" and "Indents and Spacing." And you won't need everything on those.





### **Swatches**

A Swatch is just a color definition. You can give it a cool name. For instance, this text is "It gray". I made that name up all by mself.

By setting up a selection of swatches for the colors you will use in a document you support consistency. "Oh, I need to make a blue thing on this page. I will use 'Studio Blue'." The next page or board will use the same blue and you will look organized and competent.

It gets better.

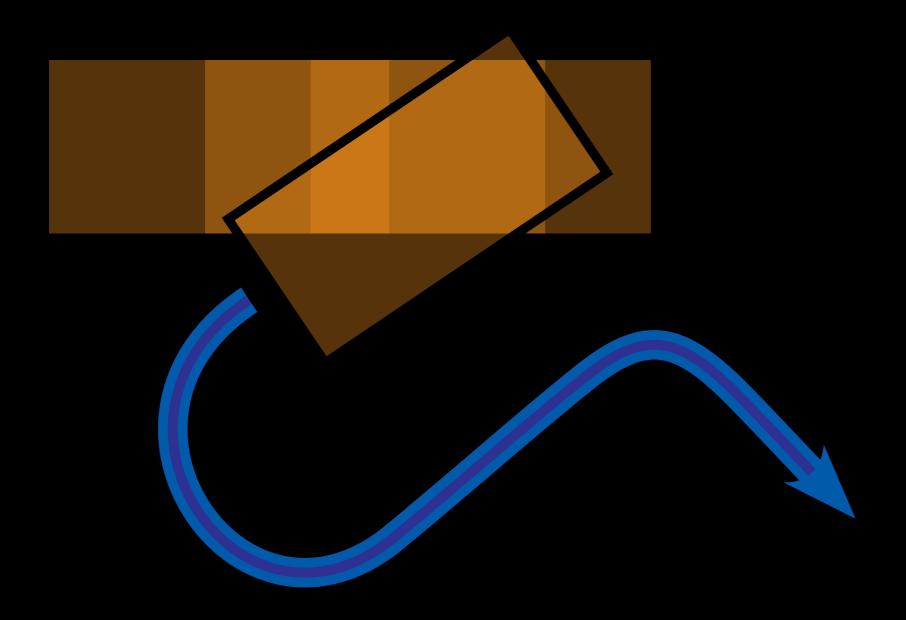
Later when you decide that your blue needs to lean a touch more green and brighten up just a bit you change, not the 347 pieces of art in your document, but just the one swatch and all of the blue updates.





### Art

InDesign has some tools for making vector art right there at your fingertips. If you need to make some pretty colored rectangles or arrows or something relatively simple, go ahead and use them. But they are a limited toolkit and anything more interesting will probably drive you to Illustrator.



# d

### **Linked Art**

Usually your art in InDesign is linked to an external file. Like an XREF in AutoCAD. The InDesign document does not hold the full picture, it just holds a pointer to it. "Here, on this page show House.jpg."

This is good because it keeps the InDesign file from becoming huge.

This is good because it lets you edit your images with programs meant for the task.

This is a little bad because if you move your InDesign file you have to remember to bring the supporting linked files with you. If you don't, InDesign will show a low resolution thumbnail so you can keep working.

If your files are all over the place, you can use the Package command to bundle everything up into one place.

You can link all sorts of files. JPEG, Photoshop PSD, PDF, Excel, Illustrator, and more.

To show CAD in InDesign the best results come from plotting, from CAD, to PDF. That preserves your lineweights and everything.



### **Editing Linked Art**

If you change a linked file when InDesign is not looking it will raise an alarm. Just to let you know. You can go to the Links panel and relink and everything will be fine.

If you see a need to edit a linked file while you are working in InDesign you can Edit Original and InDesign will open the program associated with that file type on your computer. Then you can edit it. Save and close. When you get back to InDesign you'll see that your changes have already been updated.

If the default editor for a file on your computer isn't what you want to edit with, you can Edit With... and select the proper program. Sometimes it's worth changing the association in the operating system if you are going to be doing a lot of InDesign work.

### **Thank You**

This is page 78 and since we only have 50 minutes together I'd better be done.

Hopefully there is a little time left for you to open a program and play with it a little and/or ask questions.

