GYMNASIUM

INFORMATION DESIGN AND VISUALIZATION FUNDAMENTALS

Lesson 2 Transcript

Visual And Design Principles

ABOUT THIS HANDOUT

This handout includes the following:

- A list of the core concepts covered in this lesson.
- The assignment(s) for this lesson.
- A list of readings and resources for this lesson including books, articles and websites mentioned in the videos by the instructor, plus bonus readings and resources hand-picked by the instructor.
- A transcript of the lecture videos for this lesson

CORE CONCEPTS

1. The best information graphics are engaging, should speed comprehension, reveal patterns and show relationships. In order to do this, information designers rely on a universal visual language.
2. The components of a universal visual language explored in this chapter include: Size, Position, Proximity, Similarity, Color, Boundaries, Orientation, Contrast and Connectivity.
3. Information visualizations can take many forms and in order to find the right one you should consider using Alberto Cairo's "visualization wheel". A system for planning visualizations.
4. Every designer and information designer will have their own particular approach but here is the model used in this chapter:
    a.) Choose the Right Story
    b.) Report the Story
    c.) Separate the Signal from the Noise
    d.) Choose an appropriate form
    e.) Collect Data and Assets
    f.) Create a Hierarchy
    g.) Sketch
    h.) Design
    i.) Produce

ASSIGNMENTS

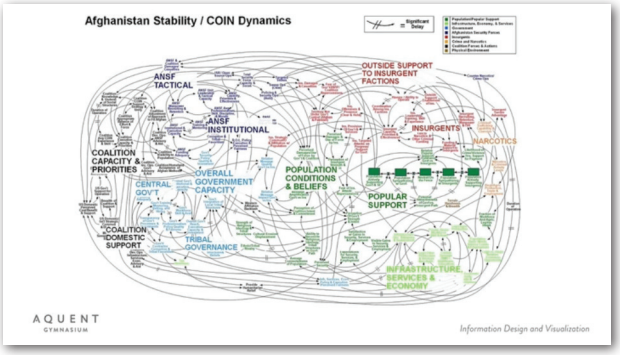
1. Quiz
2. Using the principles and methods you have learned in this lesson, create a sketch for an information graphic or visualization detailing one or more things you did regularly over the past week, or record for the next week.
   For example, it can be a graphic about what you ate, or where you traveled, who you talked to, or what you wore, the key criteria here is to have enough data to work with. As part of your assignment find a thread that one of your classmates has posted and add your feedback to the conversation.
   IMPORTANT NOTE: THIS ASSIGNMENT WILL FORM THE FOUNDATION OF THE NEXT LESSON'S ASSIGNMENT SO BE SURE TO TAKE YOUR TIME AND HOLD ON TO THE RESULTS!

INTRODUCTION

This is lesson two of Information Design and Visualization Fundamentals, an online course developed by Aquent. In the previous lesson, we defined information design and visualization, explored some examples to get a better sense of the wide array of forms that the discipline can take, and laid out some tenets through which to approach this kind of work. These tenets span the variety of approaches toward thinking about information design, from perceptual concerns, to design concerns, to moral concerns.

Now that we have this foundation, in this lesson, we will focus on the visual design principles you'll need to know, and think about, to create effective projects. So, let's get started with the basics. But first, it might be best to demonstrate where we don't want to end up.

Here is a graphic whose ultimately failed intention is to map out the intricacies of stability during the war in Afghanistan. Information design writer, and thinker, Ronnie Lipton, once showed this slide at a talk we shared to great effect. She also included General Stanley McChrystal's reaction, which was, to quote, "When we understand that slide, we'll have won the war."



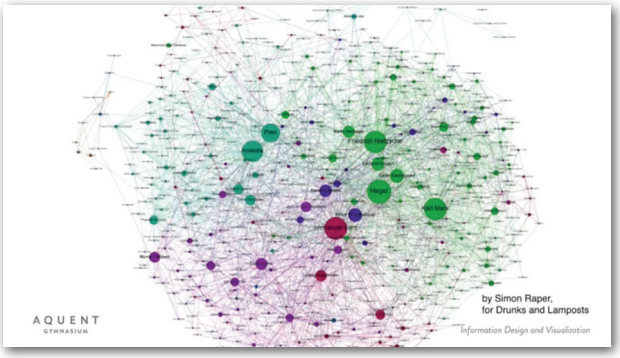
Now, I hope that your intuition in seeing this visualization, was that this is not effective information design work, even if you can't pinpoint all of the reasons why. Through this lesson, we will look at the best practices when designing, and how our minds process what we see, in order to have a clear understanding of why this is poor information design. After all, the best graphics should be engaging, drawing us into the subject matter, even if we aren't preternaturally drawn to it.

They should help speed comprehension, acting as a tool to take what was difficult to understand, and then clarify through visual language. They should reveal patterns, using the power of visuals to show to us what would otherwise be invisible. And, they should show relationships, allowing us to make comparisons, and from this glean new understandings. The war graphic truly fails on all accounts.

So, onto some visual comprehension basics. As we learned in the previous lesson, we must always consider our audience. And so, understanding how our audience will interpret our designs is paramount.

There are universalities to how visual language is interpreted, and it's important to speak this language before anything else. So, let's consider size. First, we tend to interpret things that are bigger, whether this is type, or an image, or a data point, to be more important.

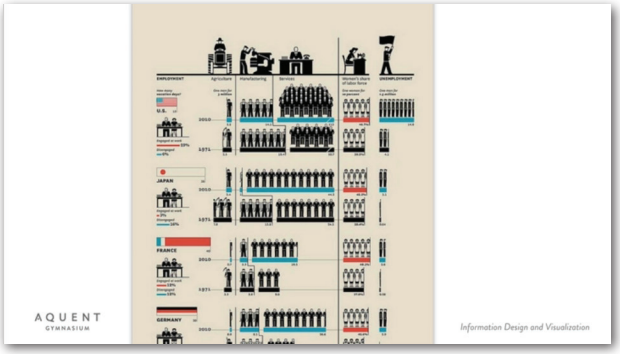
Notice how, in this graphic that graphs the history of philosophy, your eyes are automatically drawn to the larger circles representing the more important philosophers.



Position. We expect things that are higher to be more important, whether higher on the page in a design, or higher in a display of information.

Proximity. Things that are closer together are perceived as being related to one another, or grouped.

Similarity. Objects that look similar to one another are perceived as having similar meanings and at the same time, objects that look differently are perceived as having different meanings. In this graphic by Italian designer Francesco Franchi, different looking icons immediately clue us in to the different meanings they represent.

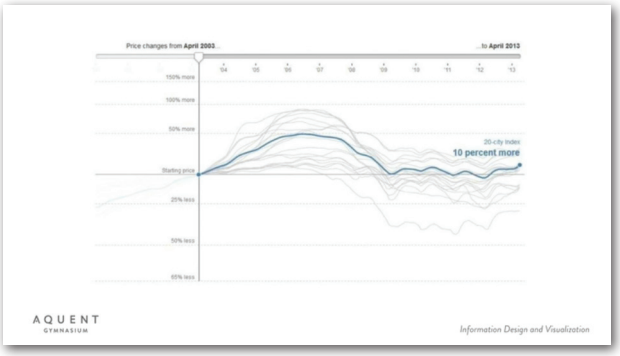


Color. Brighter-colored objects tend to draw attention to themselves, more than muted-color objects and a brighter-colored object in a sea of lesser-colored objects is perceived as having a particular meaning that we should pay attention to. In this New York Times graphic about changes in New York, across Mayor Bloomberg's tenure, color makes it easy to direct attention to different areas of change in the city landscape.

Boundaries. Objects enclosed within a shape, or colored area, are perceived as being related and part of a set. A graphic from the New York Times about inflation, demonstrates well, how boundaries help relate parts together.

Orientation. Objects that are oriented in a similar fashion will be perceived as related to one another, and different from those in other orientations.

Contrast. Higher contrast things will draw focus more than objects of lesser contrast. Contrast also helps us separate foreground from background. In this New York Times interactive graphic about the rise and fall of housing prices, contrast helps us perceive each individual line in the chart against the noise of all of them together.

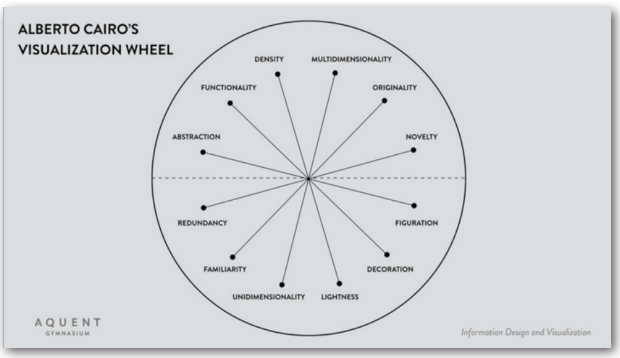


Connectivity. Our mind interprets connections more clearly with smooth lines than with angular ones. Smooth connecting lines are used in this graphic, by Scientific American, called "The Flavor Connection" which maps which flavors can go pleasingly with which others.

So, to recap, designing with a universal visual language in mind will help us communicate to our audience, by tapping into the innate ways we process visual information. Understanding how basic visual cues are understood, like size, position, color, proximity, contrast, et cetera, is a great place to start in thinking about information design. In the next chapter, we'll examine what we should consider when choosing the form for our graphics.

LEARNING TO CHOOSE THE RIGHT FORM

Now that we know some basics of speaking the universal visual language, how do we use this information to choose the best forms for our information designs? In this chapter, we'll examine what we should consider when choosing the form for our graphics. We saw in lesson one that information designs take many forms. Now, we will focus in on how to choose the right one.



A great place to start the discussion is through the visualization wheel, in essence, a meta visualization, a visualization for planning visualizations, as it is described by Alberto Cairo in his book, "The Functional Art". Alberto Cairo's wheel is, in turn, an expansion on a similar wheel pictured in Joan Costa's "La Esquematica". So, let's take a look at each axis along this wheel, along with some examples to help picture their meaning.

Density verses lightness. Information graphics can be full-page affairs, like this one about the rebuilding of the Bethesda Fountain in New York Central Park, or small charts, like this one on unemployment. But, overall size of a graphic, and the information contained are not a one-to-one relationship. This metric helps us think about how much information we want to display in a graphic.

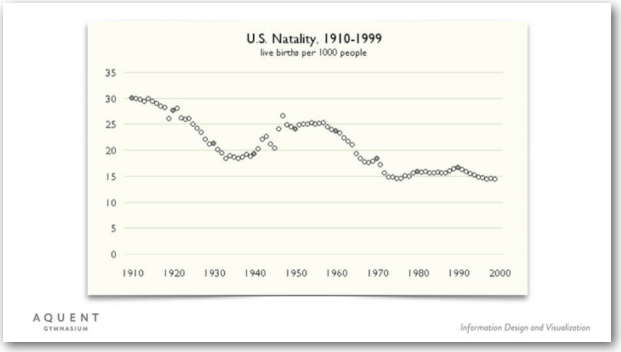
A very dense graphic, like "The Dead Zone," which explains the effect of a deadly algae bloom, represents a large amount of information, given its size. It shows how the algae bloom affects the waters, all of the kinds of fish living in the sea, and areas around the world that are affected, et cetera.

A light graphic might take up a lot of space on the page, but ultimately contains maybe just a few ideas, even though it uses a lot of space. This one, about the Concordia cruise ship is a good example. For the most part, there is no right or wrong here. Think about the purpose of your graphic, and who the audience is, and that will help you determine where along the density-lightness spectrum your graphic should exist.

Functionality versus decoration. In lesson one, we learned that form follows function. And, everything in your graphic should ultimately serve to convey meaning, and enhance your graphic's ability to function as a communication tool.

Does this mean that everything decorative is by definition bad? Not necessarily. This is, maybe, one of the most important moments to consider who your intended audience is. After all, if your graphic fails to engage, and stimulate your audience into paying attention, it's not going to do a great job communicating to them, either.

Consider this graphic by information designer, Nigel Holmes. This would fall further on the decoration end of the spectrum, and this is okay. Fun is still allowed, and is an excellent way to engage your audience and, as a result, communicate with them. On the other hand, this graphic on births per 1,000 people is all business, and would fall more on the functionality end of the spectrum. All elements here strictly relate to communicating the information.

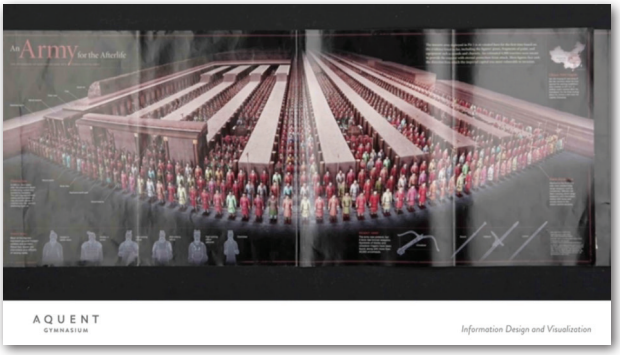


Not all thinkers on this subject think the same on this metric. Edward Tufte, one of the finest authors and thinkers on information presentation, has posited the data-ink ratio. He defines this as ink that encodes data, divided by the total amount of ink used to print the graphic.

By his reckoning, the best information designs will have a ratio of one, and thus use the minimum amount of ink required to convey the information. From a statistician perspective, the beauty is a result of this efficiency of communication. For example, on the left is a chart with a low data-ink ratio, compared to the same chart rendered with a high data-ink ratio.

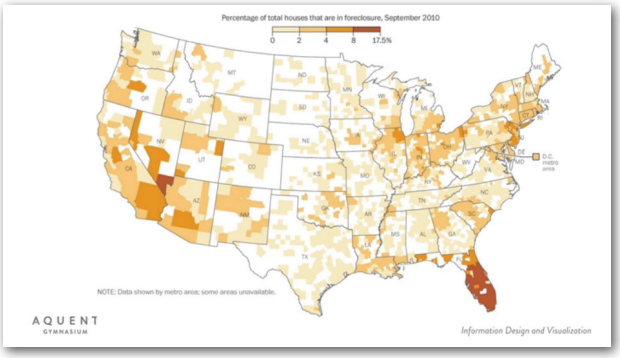
Abstraction versus figuration. Sometimes the purpose of your graphic will be to show what something looks like, or how something works. A graphic like this would fall toward the figurative end of the spectrum. You are discussing a thing, and showing that thing in a very literal way. This makes sense, especially when your object exists, or existed in the world, and you have enough information to recreate it graphically in high detail.

A great example of a successful figurative graphic would be National Geographic's award-winning, "An Army For the Afterlife." Here, they used advanced techniques, including material analysis and high-resolution scanning, to recreate what an army of thousands of terracotta soldier figures looked like when they were first created in China in 209 BC. The point of this graphic is to show all of this information to the reader, and bring to life something that could otherwise never be seen in this way.



Sometimes the purpose of a graphic is to be more diagrammatic, and to convey an idea about a thing, rather than what the thing itself looks like. This moves us more in the direction of abstraction. For example, when I was designing this print graphic about the rebuilding of Ground Zero, I wasn't trying to render the buildings, and the underground layers as they would look, but instead I was trying to convey how all these pieces fit together. To do this, it helped to add a layer of abstraction, and use colors that would separate the major projects into distinct groups. If I was literal, and took an entirely figurative approach, it would have been more difficult to convey this information. On the other hand, the renderings on the left of the graphic are used to show details of the site, and are more figurative in nature.

Data visualizations are usually the most abstract in nature. While they are depicting ideas about the real world, they are abstracted into charts and maps that rely on the universal visual language ideas we learned earlier, to reveal and communicate elements of our world. For example, this interactive from the Times that displays recent IPO values by year.



Familiarity versus originality. This refers to how original, or familiar the form is that your graphic takes. For example, presenting data on a map of the US, as in this foreclosures graph from the Washington Post, contains a high level of familiarity, because most people are right away familiar with the shape of the US, and most of us are also familiar with the choropleth map form, in which a darker or more saturated shading means more of a thing, and vice versa.

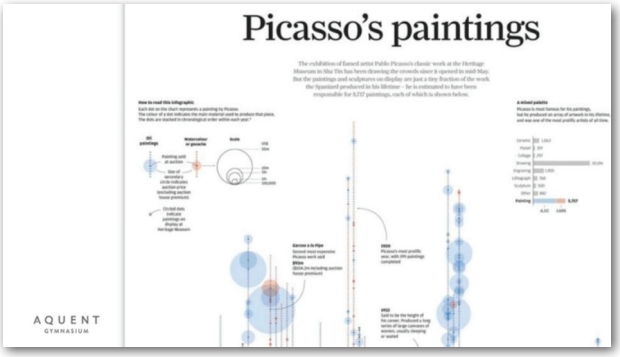
On the other hand, and this comes especially with the growing community of people creating data visualizations, experimenting with new, more original forms that our audiences has maybe not seen so much before, is becoming more common. Take for example, this graphic on box office receipts. This stream graph is less familiar to most people, but the hope of the designer is that it will nonetheless be intuitive to understand.

With originality, you must rely more on fundamental visual communication cues, and strong design to communicate successfully. It's wise to be careful to not choose a more original form, just to be different. Always choose the form that best communicates the idea, and then decide if a more original form is still the way to go.

Redundancy verses novelty. With this metric you'll want to consider how many new ideas your graphic presents, novelty, versus how much the same idea is reinforced, redundancy. It may be helpful to consider the previous axis, familiarity versus originality, when considering how to handle this element of your graphic.

If you are choosing a more original form you may want to lean toward using more redundancy to make sure that your audience is understanding. This can come in the form of extra annotation that even though something's clearly being visualized, it can help to point it out with additional language that guides your reader.

Multidimensionality versus unidimensionality. How many different dimensions of information do you need your graphic to convey, simultaneously? This is the idea behind this axis of the wheel. This Picasso paintings graphic that you'll remember from the previous lesson, shows a variety of dimensions of data simultaneously. It displays the year the painting was sold, for how much, and what kind of a painting it was, all at once.

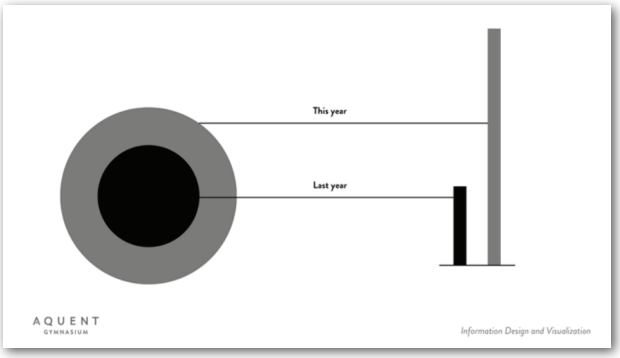


Considering the purpose of your visualization, along with the audience you intend to reach, will help you decide where, on each of these axes, you should be. And that, in turn, will guide you in how to design your graphic most effectively.

In visualizing data, there are many forms to choose from and this is a topic of considerable breadth. A course in statistics is probably your best bet to understand this area deeply, but we can take a look at some basics to get you started.

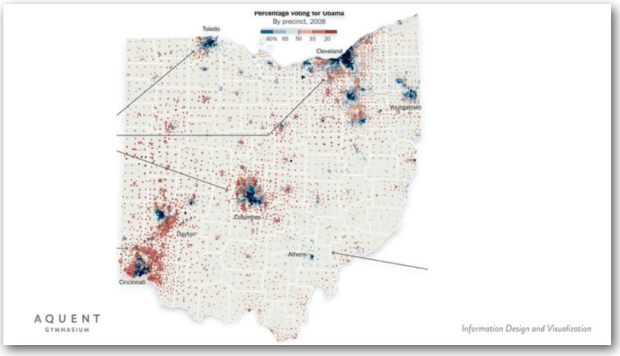
A lot of the ideas here relate back to choosing the form that creates the least resistance in conveying information to your audience. If your data concerns geographic locations, it likely wants to be represented on a map. If you want to represent change in value over time, it may want to be a line chart. If you want to make comparisons between two or more things, it may want to be a bar chart.

To get you thinking about this some more, let's imagine we work for a company, and we need to represent how much better the company is doing from the previous year. What if we were to choose circles to represent this idea? Here are two circles showing the increase in revenue. How much would you guess revenue had increased by looking at these circles? Somewhat hard to say.



Well, what if we represented the exact same data as a simple bar chart? A much different story. With the bars, it's much easier to grasp the excellent growth of the company quickly. We are better at understanding one dimensional changes, as opposed to the two dimensional representation of the circles. The point being, even if we think the circles look better, we shouldn't choose this form in this case, because it's a less clear way of communicating the information.

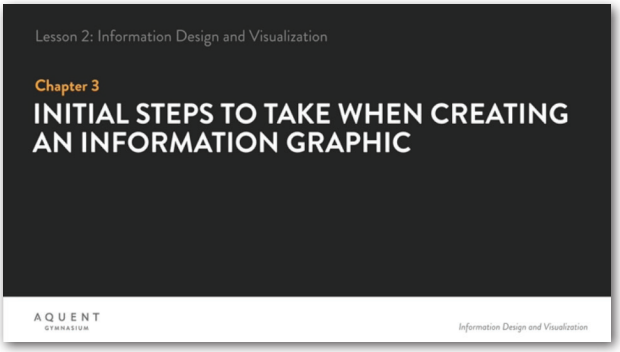
In other cases, circles are just fine. In this Times graphic comparing new voter registrations in Ohio from the 2008 to 2012 election, circles get larger in size based on how many new voter registrations there were. The idea here, is that the reader will see areas of change generally, where voter registration has increased.



So, to recap, it's important to choose the right form when designing an information graphic, there are many metrics to consider when choosing these forms, and the visualization wheel is a good place to start considering where your graphic should fall on a variety of forms spectrums. In the next two chapters, I will show you the steps you should consider taking when creating information graphics, and I'll show you, by example, how I've used these steps in some of my own work.

INITIAL STEPS TO TAKE WHEN CREATING AN INFORMATION GRAPHIC

Every designer and information presenter will have their own particular approach toward making graphics. But, in this chapter, I will show you my general approach, and how I use this approach to create The New York Times rebuilding of Ground Zero graphic. I believe each of these steps are good to follow, no matter what kind of graphic you are making, however.



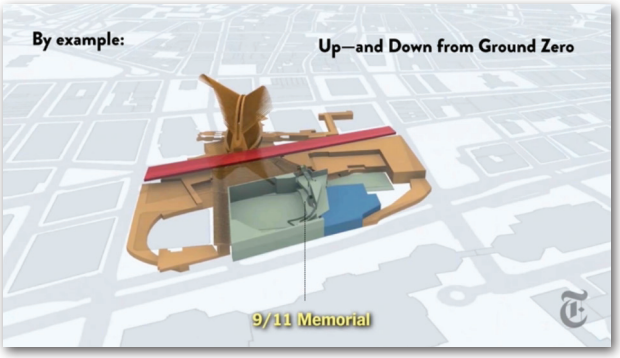
The first step is simply to choose the right story. This may be an obvious beginning, but one that should be considered carefully. Choosing the right kind of story for your graphic is key. Not every story, after all, will lend itself to visual explanation.

Consider whether or not the event or data set you are exploring can be best expressed by visual explanation. Make sure that by showing, you aren't just adding flare, or eye candy to a story, but that the story requires, demands, a visual presentation to be fully revealed. In other words, if the story can't be fully comprehended without your visual explanation, you're on the right track.

At the same time, and this may sound counter-intuitive, file away any visual ideas. Don't discard, but also don't get too attached. You may have some potentially great ideas about how you want to present your story visually, at this stage. But, at the same time, you don't want to jump too early to make the graphic you think you should make. I find it is best to wait until you have fully reported a topic, and let this reportage guide what direction you will ultimately take.

As I mentioned, I'll reference the graphic called, "Up and Down From Ground Zero" that I created about the rebuilding of Ground Zero in downtown Manhattan to demonstrate how I use each of these steps in my own process, and how I made the necessary decisions to arrive at the structure of the final piece.

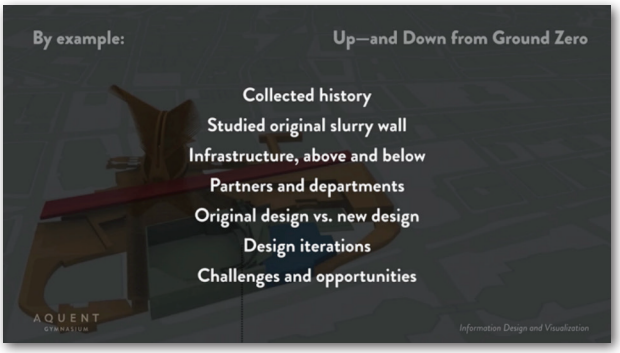
For example, in choosing a story, this project lends itself well to visual communication in that it includes a great deal of visual complexity, and need of a clear explanation. The story that needed to be communicated about this culturally significant event, demanded a visual treatment to be fully understood.



Once you feel confident in the visual nature of your chosen story, the next step in creating your graphic is to report your story. Keep in mind that the beginning stages of your reportage will likely be non-specific to the form in which you are going to tell that story. The same kind of general collection you might do for a written piece.

Try to learn everything you can about your topic, and only then begin to consider the kind of more specific reporting you will need for a visual approach. You may ultimately need a more complete data set to do a comprehensive visual display of the information than you might need in comparison to the kind of data you might use for a written piece. If you're going to be working with diagrams, you may need to collect reference photography that goes beyond the kind of traditional photography coverage a news photographer might consider, especially if you're going to use photos as reference for recreating a scene.

Overall, educate yourself fully on your subject so that you will have a broad context for whatever approach you may take later. You'll also want to consider at this point the kind of expert sources, technical sources, and data sources that can later provide the level of detail you will likely need for your visual explanation.



So, by example, in "Up and Down" I collected information on the history of the site, and the plans going forward for the site, in order to understand where it had been, and where it was going. This included learning about the original slurry wall, and how that interfaced with the planned museum space. What kind of infrastructure would need to be built underground, versus above ground? What kind of partners and departments were involved with the construction? What kind of influence would the original World Trade Center design have on the new design? What kind of iterations had the designs gone through? And, more generally, what were the challenges, and opportunities?

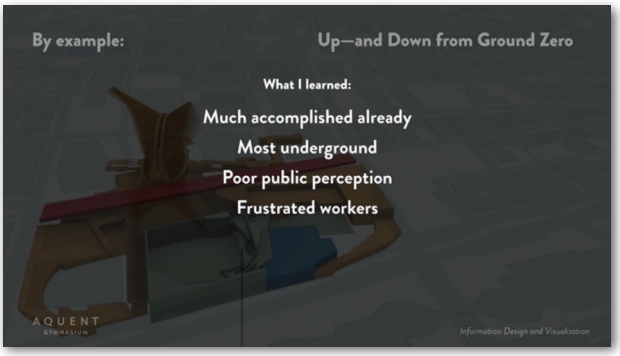
I took many photographs from as many different angles as possible to have good visual reference to tap into later. I also pursued sources that could provide me with, in the best cases, architectural models of elements of the site, and short of that, architectural plans that I could use to create my own models, if necessary.

The next step is to look at what you've collected, and begin to do what can be called, separating the signal from the noise. Having taken a broad look at your subject, it's time to hone in on the most interesting aspects that you'll want to highlight. Showing everything, and anything will likely, not be the most revealing way forward, and any story will have a number of angles, and approaches.

So, find the best angle for your explanation. What specific elements of the story can be best illuminated through the use of a visual explanation? Think of ways to make your presentation visually exciting and engaging. This will be your best opportunity to demonstrate your unique vision.

It's possible your story has been covered visually in some way or another, already. You should try to find the unique and clarifying way to organize your presentation. But, at the same time, always focus on clarity. Your explanation should always have clarity of understanding as its highest goal. Avoid choosing forms that are different for difference's sake. You've likely collected a large amount of information. Your job now, is to bring to the surface out of that noise the signal, or all of the points that matter, that are revealing, and that are interesting.

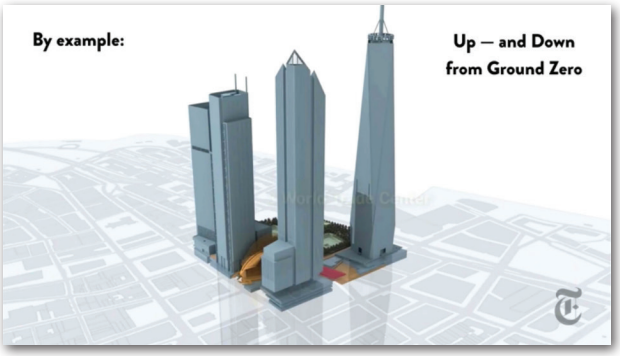
Back to our example. After learning everything I could about the Ground Zero site, I was struck by how much work had actually been accomplished there, most of it underground. The general public perception at this time seemed to be, having not seen towers rise from the site, that not much was going on. I sensed that this was a point of frustration for the people working on the site, as well as for New Yorkers who wanted to feel that progress was being made.



I also learned how challenging it was to weave a museum, subway system, commuter train system, and many other elements together, into such a small area. Projects controlled by entirely different companies, and organizations, forced to work together by circumstance.

Next, you will want to choose the appropriate form for your graphic. Will it be figurative, or abstract? A data visualization, or an illustration? Who is the audience you are trying to reach? What form will best communicate the ideas to them?

In the case of the Ground Zero graphic, I decided that since I was trying to show how many elements needed to be fit together that the most powerful way to show this would be through an animated information graphic, where I could literally show these pieces coming together. Many highly detailed, figurative renderings of what the new skyline would look like, in reality had already been created by this point. So, what would be the best explanation for what was going on there? On top of that, what would be a fresh approach?



Despite the great level of detail and reference I had in some cases, I decided that rather than create slick photo realistic renderings, I would instead, try to convey how complicated the project was, both below, and above ground. The challenging, and intricate way that all of these disparate projects fit together reminded me of the 1980s classic game, Tetris. Taking a look again at the visualization wheel from the previous chapter, I've added some data points that represent where I was finding my graphic would fall along these axes.

With this as my influence, I devised a visual language, in which simple colored blocks, each representing a major distinct element of the project, would fly together, slowly building up the site. To help understand below, and above ground, and to see both at once, I designed the street grid as a transparent glass-like surface representing ground level.

So, to recap, when we begin the process of creating an infographic, it's important to choose the right kind of story, report that story fully, and then analyze that reportage to determine what elements of the story we will want to draw attention to. Then, we want to choose the best form that will illuminate these elements.

In the next chapter, we'll learn some remaining steps that we can take to produce our graphic.

FINAL STEPS TO TAKE WHEN CRATING AN INFORMATION GRAPHIC

Now that we've learned what steps to take to get started, let's take a look at some final steps to take when creating an information graphic. In the last chapter, we left off with choosing the right form. Once you've determined the best form for the graphic, have it well reported, and figured out the interesting things to reveal, you'll want to collect all of the data, and assets your visual explanation will require.

Determine what you will need to create your project. If you are working with an architectural scene, for example, can you work with photo reference to build models that may not be billed accurate, but still tell the story? Or, do you need a level of detail that requires architectural plans, and elevations, or even CAD models? If you are collecting a data set, will you be working with a specifically narrow timeframe, or will you require data across all time?

Collect and organize your data and assets, and if necessary, clean up your data or assets into a usable format. In our "Up and Down" example, working with an architectural project, in this case, my ideal assets would be CAD or architectural models of the various structures received directly from the builders. This was possible in a few cases. But, because of the nature of the project, which involved a wide range of old and new structures, and a tight level of security around the specifics of the site, architectural models were only available in a limited capacity. Additionally, the models I did receive were so highly detailed, as to become a burden. While architects want to know where every screw and bolt will be, the kind of detail I would require for the story that I wanted to tell made these kind of assets difficult to work with. And so, a great deal of cleanup was required to get these models into a usable form.

I think, if you're working on this kind of a project, you will find this happens more often than not. For the rest of the buildings, I used the reference I'd collected, including photos I had taken on-site, and renderings produced by various partners of the project.

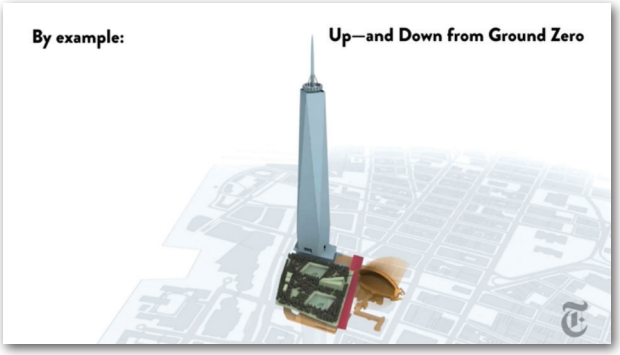
To create the underground elements, I collected plans and elevations from my sources that, when combined with renderings and photography, could be used to guide a modeling of the site in Autodesk Maya.

As we discussed, deciding the angle you will focus on will help you decide what level of detail you need to collect. So, in this case, having decided to tell this story as an overall comprehensive view of the site in total, I knew I wouldn't need to worry about the smallest details, and instead, could focus on creating more generalized shapes from plans.

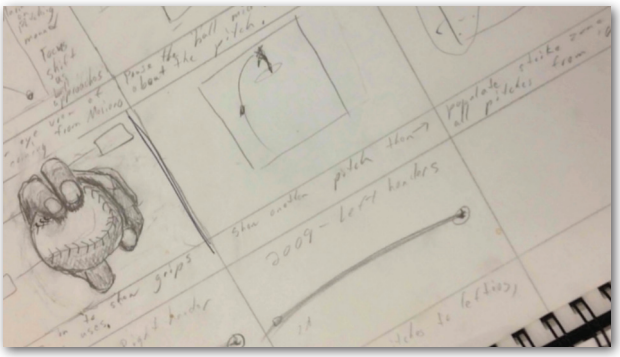
The next thing you should consider is creating a hierarchy. Once the materials you will need are in hand, and you've decided what points to focus on, you should structure your story by creating a hierarchy of importance to help direct attention. Decide what is most important. It is unlikely that everything you have collected is notable, or of equal importance in telling the story, you want to tell.

Create an organizational structure. The points you will make will all benefit from a clear organizational structure, and order, and from being carefully considered in the context of one another. You don't want to say to your audience: "Here are some data. I hope you find something interesting".

Curate the information. Your graphic should be a thoughtfully curated presentation of data and story, organized through a clarifying flow and structure. Think carefully about the way you build up the story visually. Is there continuity? Are you drawing attention to everything flatly, or do you have a clear hierarchy that is easy to follow, and that is revealing?



In "Up and Down", the main point to convey was the difficulty in fitting everything together, and how much had to happen beyond the most visual and public aspect of the project, which, of course, is the towers. I decided to focus on elements that people would most interact with like public spaces, transportation, and museum space, or that would have the most impact on the site. I found that by stripping everything away, and then slowly building everything back together, piece by piece, I could convey the great complexity of the underground work, and how important that was to the site overall.

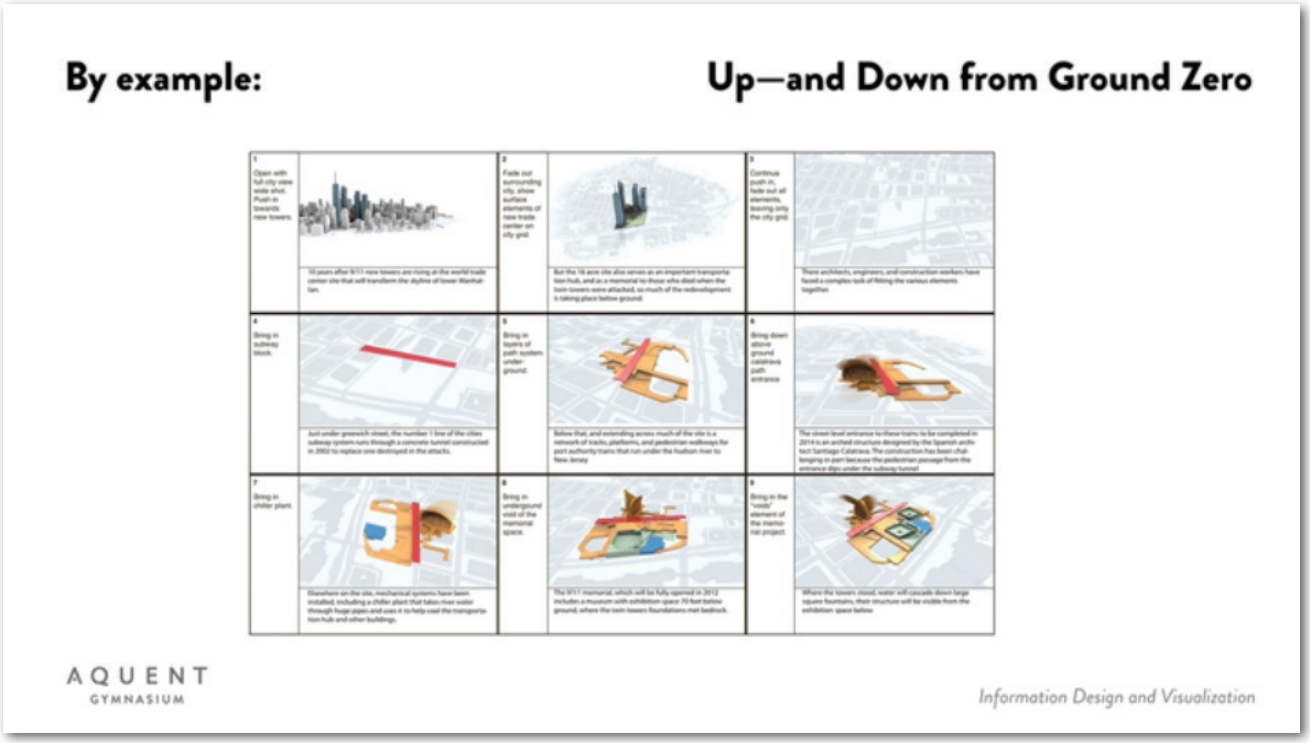


The next step is to create some sketches for your ideas, or storyboards. Having collected all of your data and assets, decided on your angle and approach, and chosen an inappropriate form, it can be tempting to jump in, and just start creating. Don't do it. I fight against this impulse with many projects, myself, but sketching is an absolutely essential part of the process, and will serve you well in the long run.

Consider the flow of the piece. The flow you established in this step will help you find out if the hierarchy that you established earlier is working, or not. Sketching, more often than not, influences me to go back to earlier stages of the process, and make changes to suit the way I'm presenting the information. If it's a static graphic, how will the eye progress through the piece? Where will the reader look first, and where should they go from there?

If it's an animated graphic, like our example, consider what shape the arc of your narrative should take. Does it want to bring an idea full circle, or is it a compare and contrast, between two or more ideas? Maybe it has multiple threads that should ultimately converge, or perhaps it should build cumulatively, until it reveals a final whole. It'll help you to have an overarching structure in mind, as you begin to sketch.

In "Up and Down", since I was working with an animated piece, my sketch was a storyboard, which I organized into a grid of nine panes to a page. In addition to the image, each pane includes the visual preview, a space for visual description down the left side, and a space for the corresponding bit of script. I like to use the term "sketch" loosely. It doesn't need to mean pencil, and paper. In this case, I'd already set up my scene in Maya, and had done some style test renderings. So, I worked with these tests to organize my storyboard. For this project, this is what worked well for me. But, it is entirely up to you, how you like to sketch.



Next, you'll want to consider design. What kind of fonts, colors, grids, et cetera, do you want to use in your graphic? Consider the context of your graphic, and make sure that it will make sense within that context. Are the design decisions you are making improving the clarity of communication, or are they merely decorative?

Lastly, we produce the graphic. Take all of the assets you have collected along with your sketches, and design decisions, and if they aren't already, move them to the digital world of the computer, and you're on your way to creating a compelling information graphic.

So, to recap, there is no one correct way to approach creating an information graphic or visualization, but following some of the steps I've demonstrated is a good place to start. The final steps, again, are to collect data and assets, create a hierarchy, sketch, design, and produce.

In the next lesson, we'll take a look at the growing area of interactive information design, the various forms this can take, and some principles for designing interactivity into your graphics, effectively.

Homework, the first assignment is a quiz. Each lesson in the course has one, and it's designed to help you reinforce the concepts covered in the lesson. Quizzes are available on the classroom site after this video is done.

For assignment two, using the principles and methods you've learned in this lesson, create a sketch for an information graphic, or a visualization detailing one or more things you did regularly over the past week, or record for the next week. For example, it can be a graphic about what you ate, or where you traveled, who you talked to, or what you wore; anything that will have enough data to work with.

As part of your assignment, find a thread that one of your classmates has posted, and add your feedback to the conversation. After you have finished your assignment, post a link to it in the classroom, and then, find one of your classmate's assignments, and take some time to look it over, and offer feedback.

That's it for now. I'll see you in the next lesson.