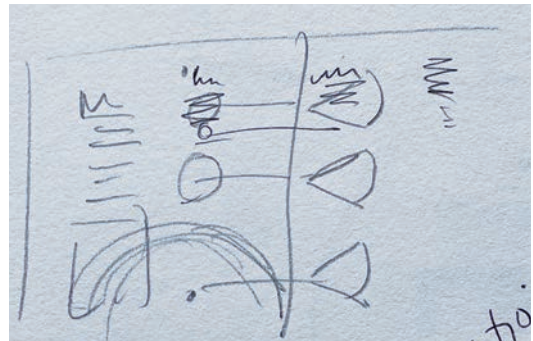
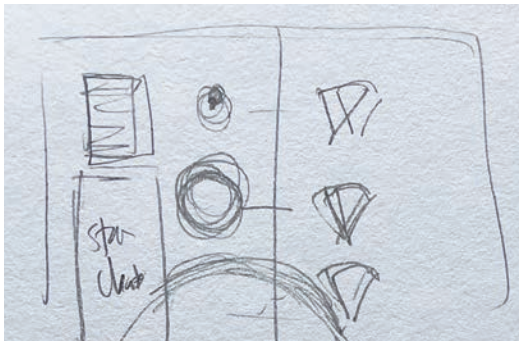
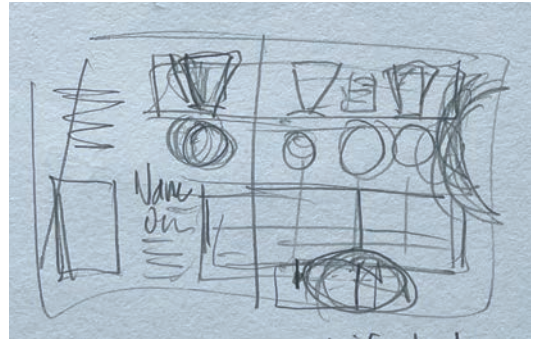
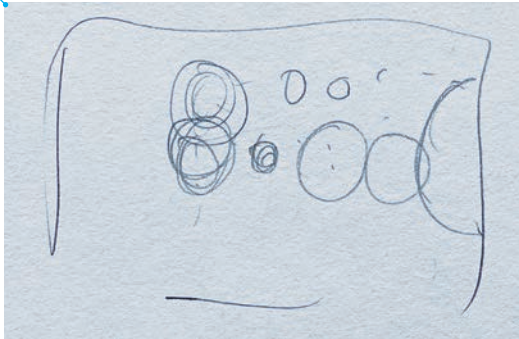


CHAPTER 7

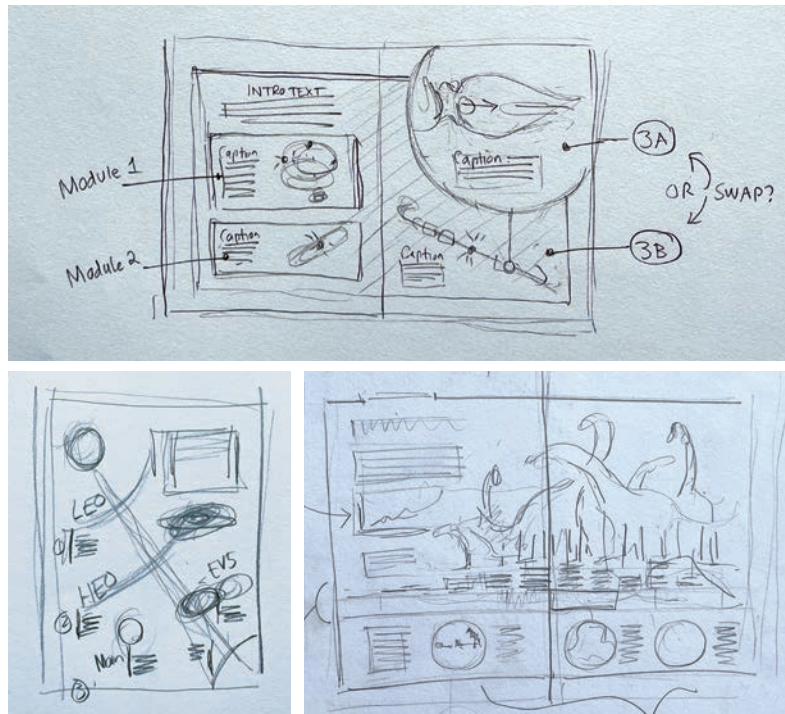
Organization and Emphasis

MY FAVORITE PART OF WORKING ON A GRAPHIC is when I draw a series of small frames in my sketchbook and start scribbling in the possibilities. How should the information be partitioned? Where will the reader's gaze enter the space? What piece of information do they need first, second, and third? How can I direct their attention through that series in an intuitive manner? How can the position of the elements reinforce the story I'm trying to tell?

Brainstorm doodle series
for a graphic about stars.



Examples of preliminary sketches that are focused on the task of how to organize information within a set space. These (and the sketches on the preceding page) are in the spirit of discovery drawings: Sketches that I do for myself as I'm problem solving.



After years of working on graphics, these sorts of decisions become second-nature. But it can be helpful to pause and think through organization and attention-guiding strategies one at a time, rather than falling back on the same solutions over and over again. This chapter outlines the fundamentals.

Composition

In design and the visual arts, composition refers to how elements are organized on the page, or within a frame. It's about the relative position of points, lines, shapes and objects: When designing graphics, it's where form meets function. How you place objects within a space directly impacts the path your audience takes when reading through a graphic, and can reinforce the main point of the graphic.

When dealing with quantitative information, chart form carries this burden. Datapoint coordinates are predetermined by their underlying values: Choosing a chart form becomes the primary decision related to composition. Different chart forms are appropriate for highlighting different types of relationships. For example, line charts

are good for tracking changes over time. Bar charts are suited for comparing discrete categories. There are lots of references to help you sort this out when it comes to quantitative information.¹

Things are more nebulous when organizing qualitative information on a page. But here are some helpful guidelines. Think about taking a reader by the hand, and walking them through your graphic, one step at a time. What information do they need to encounter first, in order to understand the rest of the figure? What information should they encounter second? How can you help the reader follow the correct path effortlessly on their own, if you aren't there to walk them through it?

Audiences who read written languages that are oriented from left to right have been trained to start at the top, left corner of the page, and then will tend to read from left to right, and top to bottom. Audiences who read written languages that are oriented from right to left may be more likely to start in the top right corner.

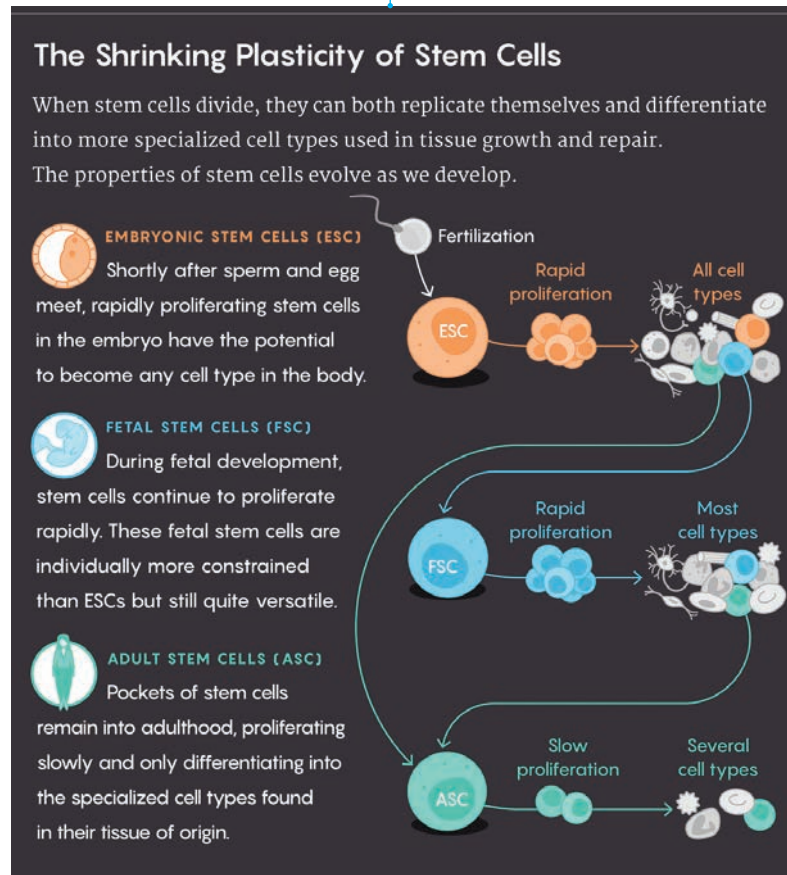
"How mRNA COVID-19 Vaccines Work" public service announcement posters from the CDC (Centers for Disease Control and Prevention) in English (*left*) and Arabic (*right*). Image Credit: CDC; National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases (*content source*); Downloaded October 10, 2021.



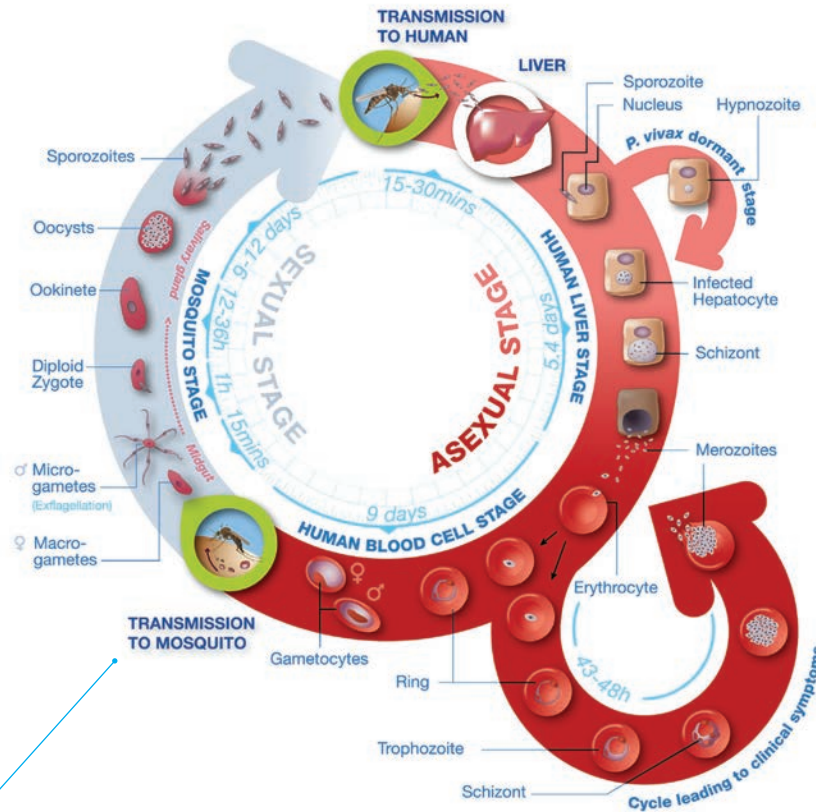
1 Guides include Stephanie Evergreen's *Effective Data Visualization: The Right Chart for the Right Data* (SAGE Publications, 2016), Andy Kirk's *Data Visualization: A Handbook for Data Driven Design*, 2nd edition (SAGE Publications Ltd, 2019), and Jonathan Schwabish's *Better Data Visualizations: A Guide for Scholars, Researchers, and Wonks* (Columbia University Press, 2021).

I often start with that in mind, but also provide a clear path for a reader to follow. Designer Lucy Reading-Ikkanda uses that approach in this graphic for *Quanta Magazine*, reinforcing the sequence of events with arrows, zig-zagging across the page with a clear left-to-right, and top-to-bottom flow of information.

Image Credit: Lucy Reading-Ikkanda/*Quanta Magazine*, as published in “To Heal Some Wounds, Adult Cells Turn More Fetal,” by Jordana Cepelewicz, *Quanta Magazine* (August 29, 2018). Reproduced with permission from *Quanta Magazine*.



That composition works particularly well when showing a step-by-step process. And it's a good default position. But you can also use the position of objects on the page to help highlight second-level points you are trying to make. For example, if the process is cyclical, reinforce it with a cyclical composition, as in this example on the topic of malaria, by Pierre Chassany. Here, a natural entry point into the cycle is the mosquito highlighted in a contrasting color (green) at the “noon” position at top, with arrows reinforcing a clockwise flow for the main cycle.



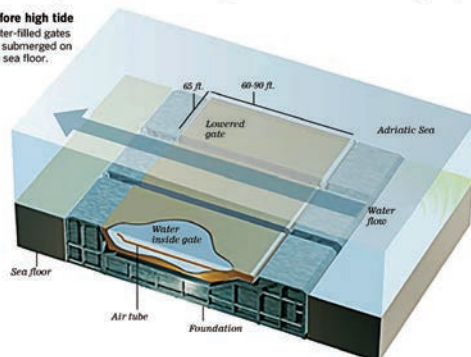
The lifecycle of *Plasmodium falciparum* (the parasite responsible for malaria) is often presented using a circular composition, with sub-cycles blebbing out, and stages that occur within the mosquito vector and human host demarcated, here with gray for the former and red for the latter. Image Credit: Pierre Chassany, Comstone (design), © Medicines for Malaria Venture (MMV).

When comparing and contrasting variations on the same process, it can be useful to keep the orientation of each vignette exactly the same, and aligned. When the objects are presented in this way, you've set up the reader to quickly spot the differences between the scenarios, as with this before and after view by Raoul Rañoa, for the *Los Angeles Times*.

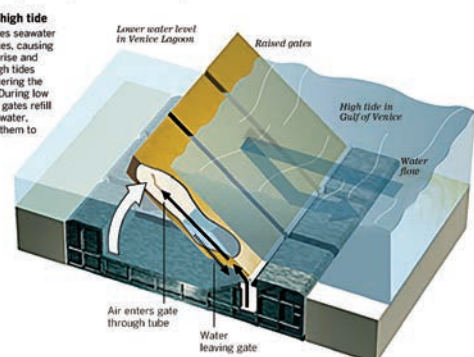
Image Credit: Raoul Rañoa; Graphics reporting by Robert Lee Hotz; Source: Venice Water Authority (December 11, 2005). Copyright © 2005, *Los Angeles Times*. Reproduced with permission.

The MOSE Project calls for 78 underwater gates at three inlets to rise during heavy rains and tidal surges an expected five times a year.

1 Before high tide
Water-filled gates lay submerged on the sea floor.

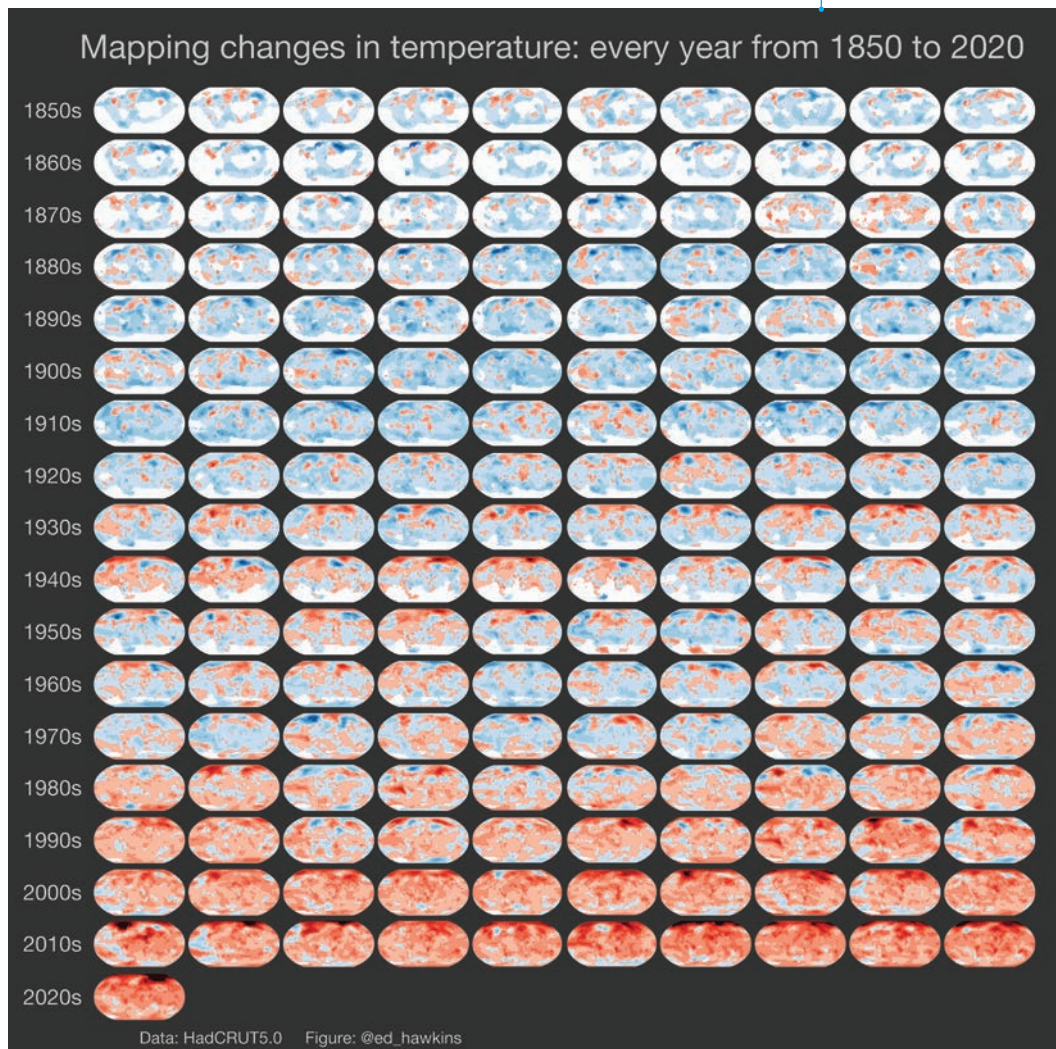


2 During high tide
Air flushes seawater from gates, causing them to rise and block high tides from entering the lagoon. During low tide, the gates refill with seawater, causing them to drop.



Multiply that concept many times, and you'll create a *small multiples* composition (a term popularized by Edward Tufte). The audience learns how to read one element, then can efficiently apply that knowledge to the other elements. Per Tufte, "as our eye moves from one image to the next, this constancy of design allows viewers to focus on changes in information rather than changes in graphical composition."² It can be used to great effect, as in this example by Ed Hawkins, in which he displays global changes in temperature over time.

Image Credit: Professor Ed Hawkins (@ed_hawkins), National Centre for Atmospheric Science, University of Reading; Data: HadCRUT5.0.



² Edward R. Tufte, *Envisioning Information* (Graphics Press, 1990)

That said, if the series of objects you're presenting don't share a variable that you're trying to compare directly, things can feel a bit overwhelming in this sort of grid. Lots of elements of the same size presented in a block without a compositional anchor may cause the reader's eyes to glaze over. It's akin to trying to read many pages of running text without paragraph breaks, subheads, or chapter breaks. Sometimes your eye just needs a break, or a natural place to re-enter the scene.

Which brings me to the sections below. I'll start with grid systems, then move on to how you can introduce negative space, visual hierarchy, and other visual cues to help guide the reader's attention through your graphic.

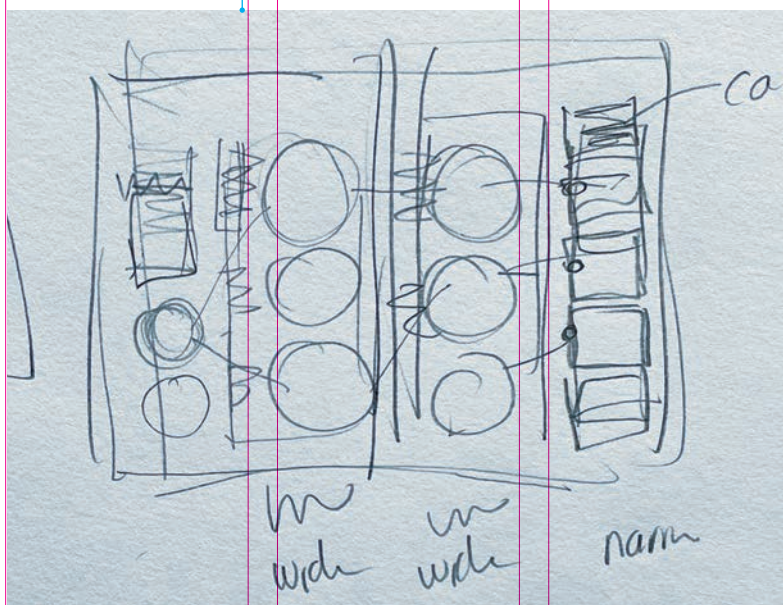
Grids and Alignments

The concept of a grid in design is probably familiar to you: Books, newspapers and websites are often organized according to them. The larger plane is divided into smaller boxes, with clear bands (or gutters) running between them. Those gutters of negative space prevent images or text from colliding into each other. The overall effect is logical and modular. Alignment lines are built into the structure. The grid lines don't exist as marks on the final product. Rather, they are temporary lines that help in the planning stages.

Although simple and straightforward in concept, grid system discussions can get incredibly detailed and complex. For our purposes—designing graphics within a defined space—I think we can keep it pretty high-level. But please keep in mind that this is a simplified glimpse at the topic. There's a lot more to grid systems, including the mathematics behind them, careful accommodation of different fonts in terms of column widths and letter heights, setting up multi-page documents or consistent grids for branding purposes, and design solutions that both honor and destabilize the form.³

³ For an incredibly detailed and strict guide to grids, see Josef Müller-Brockmann's *Grid systems in graphic design: A visual communication manual for graphic designers, typographers and three dimensional designers*. (Niggli Verlag, Bilingual Edition 18, 2021; originally published in German in 1981). For a great broader introduction to the topic—including non-Swiss histories and examples that push its boundaries—see *The Swiss Grid* virtual exhibit and online learning tool hosted by Poster House in New York City (<https://swissgrid.posterhouse.org/>). One of my favorite examples of a grid system that unifies publications across an organization is from the U.S. National Park Service. Read more about their award-winning and long-lasting Unigrid System at <https://www.nps.gov/subjects/hfc/a-brief-history-of-the-unigrid.htm>.

On this page, I've made the grid visible. This pattern of guidelines was used throughout this book, made visible to me while organizing pages. Many programs (like Adobe InDesign, the tool I used to design this book) allow you to set up custom guides, or choose from existing templates. The guides can be made visible or invisible easily, and aren't set up to print. But you don't need assistance from a program to use grid-system thinking in your work. My sketchbooks are filled with aligned shapes, as I map out content in a rudimentary hand-drawn modular grid of sorts.

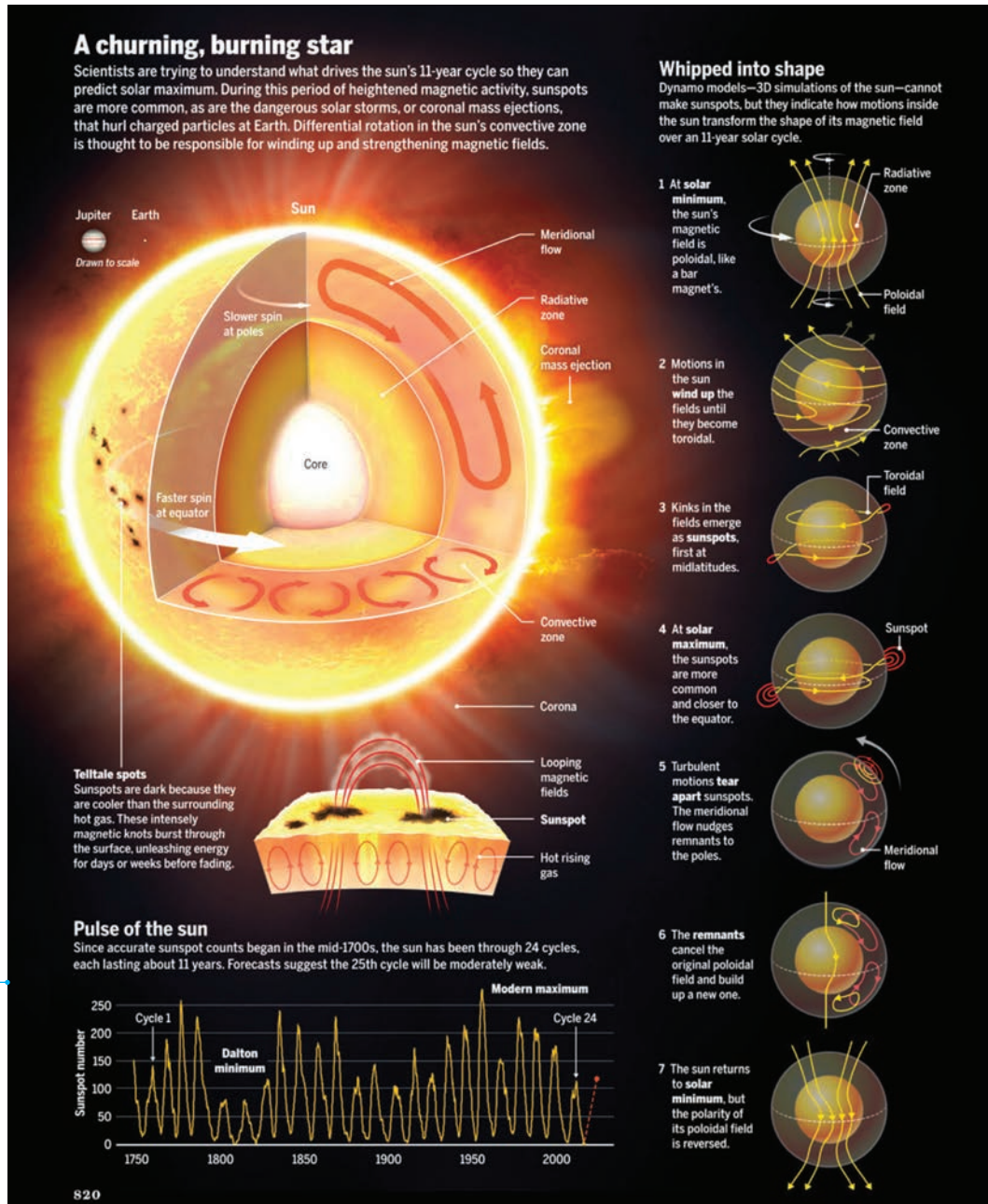


Some grids are symmetrical and quite dense, allowing for a wide range of solutions while still maintaining a clean structure throughout designs within a series. Others are a bit less dense, and perhaps not even symmetrical, but still provide clear guides for image modules and alignments.

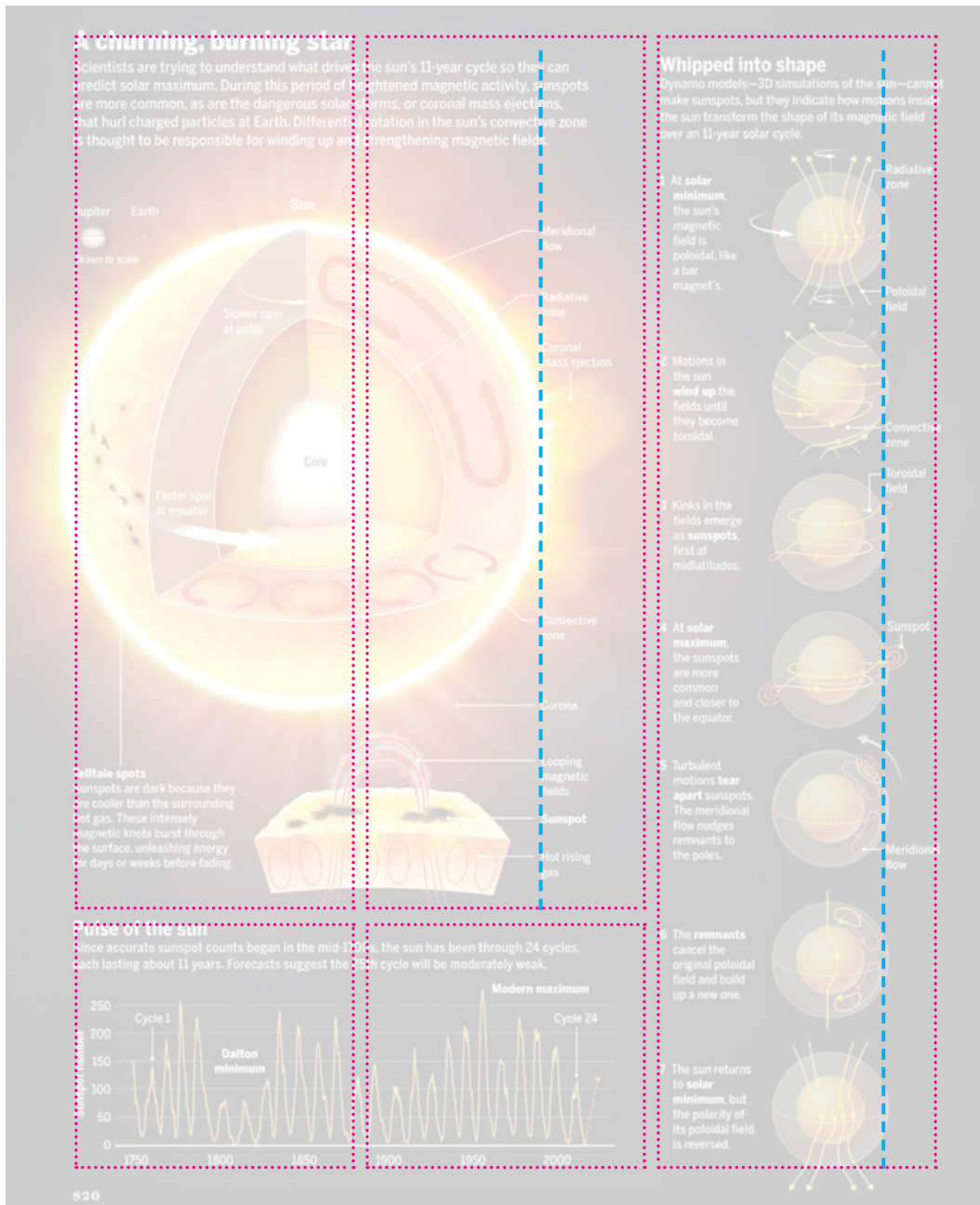
As a cold reader of this graphic about the sun by Chris Bickel for *Science*, it's clear to me that a grid system is in play. The material is chunked up and organized in a logical manner. Sub-sections are easy to distinguish. I have a clear sense of which captions are associated with each image or group of images. Labels are also aligned. It's possible that the labels are not positioned according to the primary grid, but the regularity of their positions make them easy to find, and reinforces an overall sense of clarity.

Intentionally breaking the "rules"—in this case, the grid—can be used to great effect to draw attention, or to create drama or an additional level of hierarchy. This is particularly effective when a grid is otherwise clearly established. This paragraph, for example, breaks from the grid. Yes, it's a circle. But more importantly, it defies the defined boundaries, spanning more than one column (but not extending to two), and extending into the margins.

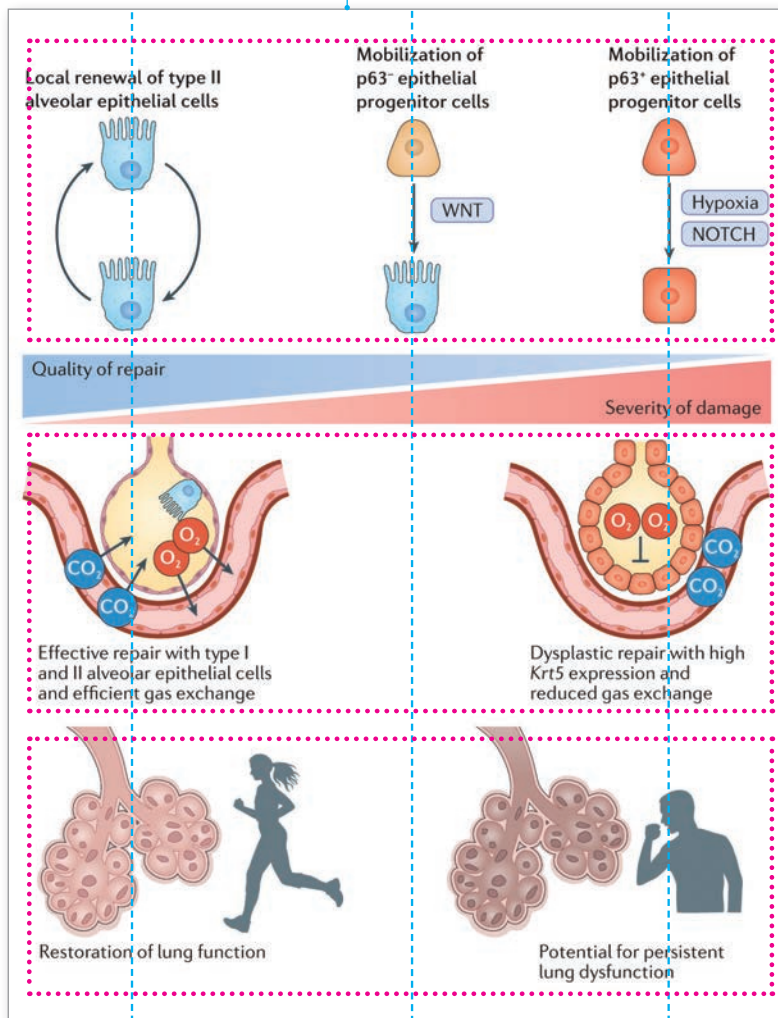
The content in this multi-part graphic is organized into clear modules. There are a range of possible underlying grid structures that led to this design solution. I made a guess at one possibility, shown on the following page. Image Credit: C. Bickel/Science; From "The Calm before the Storms," by Sarah Scoles, *Science*, Vol. 364 (May 31, 2019). Reproduced with permission from AAAS.



A possible organizational grid (dotted, magenta), with labels aligned with a secondary-level guides (dashed, cyan). Magenta and cyan lines are not in the original image file. They are added here to highlight alignments. Image Credit: C. Bickel/Science; From "The Calm before the Storms," by Sarah Scoles, *Science*, Vol. 364 (May 31, 2019). Base image reproduced with permission from AAAS.



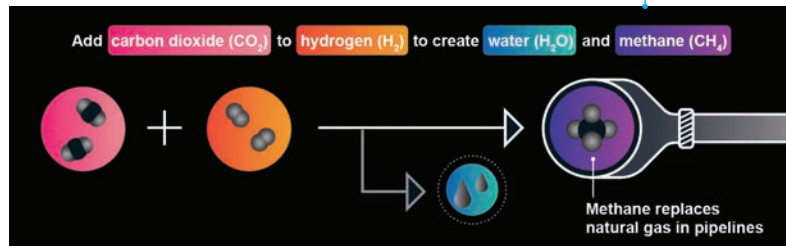
Smaller graphics—or graphics that don't include a lot of sub-sections or elements—may not need much compartmentalizing at all, and a complex grid system may be more than you need. But the concepts of alignments and clear organization of objects on a page still hold. For example, here's a less dense graphic that appeared in *Nature Reviews*. Each element is defined by the empty space around it, and those elements are aligned in a way that reinforces the content. Here, I added an overlay of dashed cyan lines to highlight the vertical alignment connecting different views of the same condition, and magenta dotted boxes to highlight the horizontal alignment that connects information that can be compared across conditions.



Magenta dotted rectangles and cyan dashed lines are not in the original image file. They are added here to highlight alignments. Image Credit: Reproduced with permission from Springer Nature: as published in "Influenza Virus and SARS-CoV-2: Pathogenesis and Host Responses in the Respiratory Tract," by Tim Flerlage et al. *Nature Reviews Microbiology* (April 6, 2021); © 2021.

Even in an example with fewer elements, a clear horizontal alignment axis makes for a clean and clear flow of information.

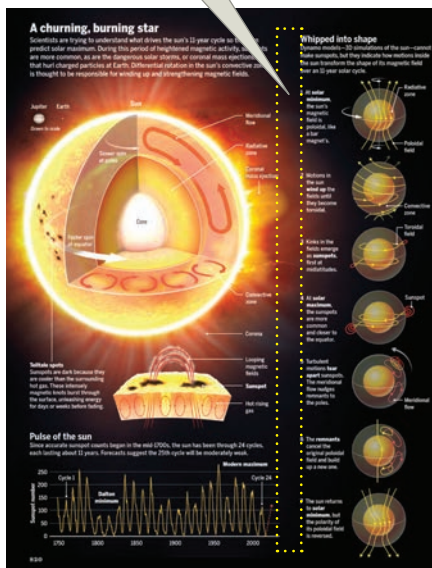
Image Credit: Datalands and Jen Christiansen, as published in “Can Natural Gas Be Part of a Low-Carbon Future?” by Michael E. Webber, *Scientific American* (April 2021). Reproduced with permission. © 2021 Scientific American, a Division of Springer Nature America, Inc. All rights reserved.



As you can see with all of the examples above, using a grid system doesn't mean that your graphic is dominated by a series of squares printed on the page, with each square holding a bit of the content. Rather, it's a way of thinking about how to divide up and organize your information in a way that feels cohesive and clear.

Image Credit: C. Bickel/ Science; From “The Calm before the Storms,” by Sarah Scoles, *Science*, Vol. 364 (May 31, 2019). Reproduced with permission from AAAS.

Negative space (delineated here with a yellow dotted box)



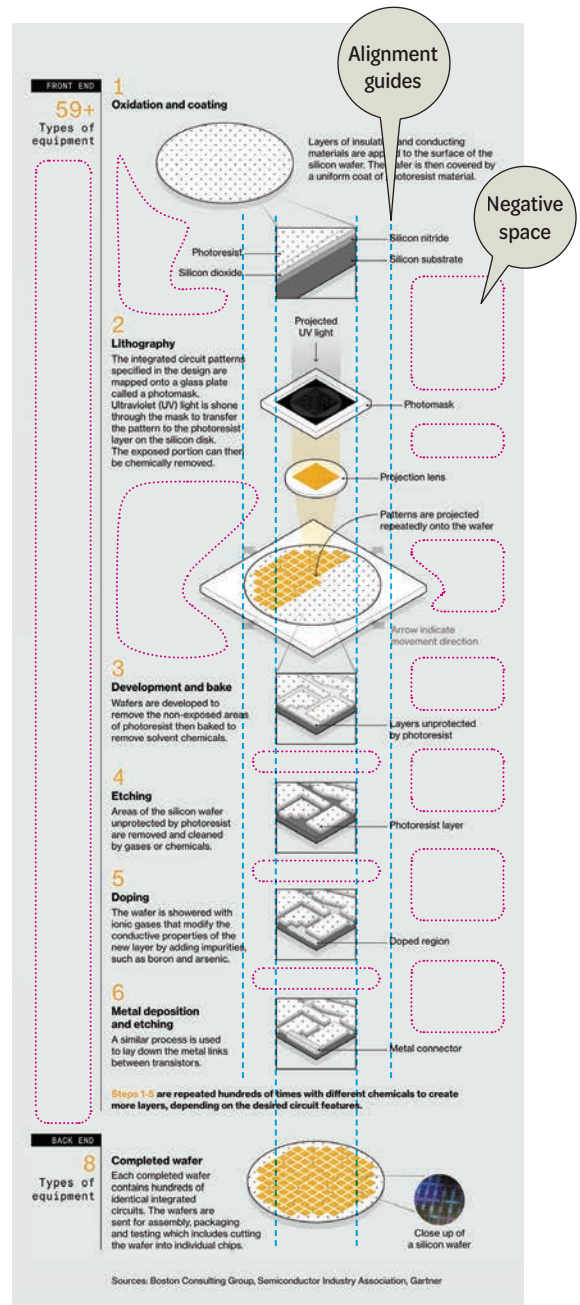
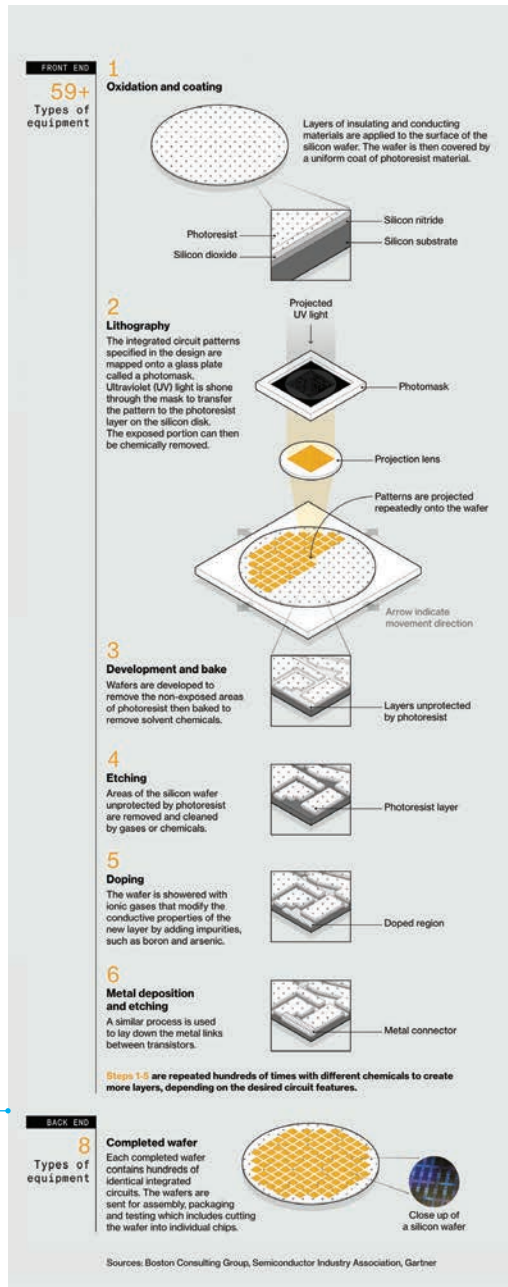
Negative Space

Negative space (the empty zones around elements) can be used to frame objects and create groupings, as in the sun example. Although the imagery spills out a bit in the background in this case, the text blocks define “positive” or active space, leaving gutters of apparent negative space between them. You may be tempted to use a line as a square frame around a set of objects to define them as a unit. If so, stop and try using

a buffer of negative space instead. Lines and frames can be useful, especially if you're cropping in on a detail within a larger scene. But if you're simply hoping to corral objects together, negative space may do the trick without introducing additional visual noise. Remember the Gestalt law of proximity? Items that are positioned closely together tend to be perceived as a group. Thoughtful use of space buffers around those groupings can help reinforce their proximity.

Negative space can also serve as a break for the eye. Consider this graphic by Adrian Leung for *Bloomberg*. The imagery and text is given some space to breathe. There's a lot of negative space on the right side in particular. But the label alignments make it feel intentional, and not haphazard. Every bit of space in this graphic has been considered, but not activated with marks.

Cyan dashed alignment lines and dotted magenta negative space shapes are not in the original image file. Image Credit: Illustration by Adrian Leung, as published in "The Chip Shortage Keeps Getting Worse. Why Can't We Just Make More?" by Ian King, Adrian Leung, and Demetrios Pogkas, *Bloomberg.com* (May 6, 2021); Sources: Boston Consulting Group, Semiconductor Industry Association, Gartner. Reproduced with permission from Bloomberg L.P. Copyright © 2022. All rights reserved.



Objects are not positioned to fit as much as possible into the space. Rather, objects are positioned along a few strong vertical guidelines that help retain balance and reinforce the flow of information, from top to bottom.

Visual Hierarchy

As Ellen Lupton and Jennifer Cole Phillips put it in *Graphic Design: The New Basics*, hierarchy can be:

*...conveyed visually, through variations in scale, value, color, spacing, placement, and other signals. Expressing order is a central task of the graphic designer. Visual hierarchy controls the delivery and impact of a message. Without hierarchy, graphic communication is dull and difficult to navigate. ...Hierarchy can be simple or complex, rigorous or loose, flat or highly articulated. Regardless of approach, hierarchy employs clear marks of separation to signal a change from one level to another.*⁴

Some commonly used “marks of separation” that can help delineate changes in levels of importance are the focus of this section, starting with **position**. As discussed above, readers of written languages that flow left to right and top to bottom are trained to start in the top left portion of an image frame. It’s often handy to include your graphic’s title and introductory caption in that spot. All other things being equal, it’s the information that your reader is most likely to encounter first. Following that logic, it’s also a handy spot for setup imagery that applies to the rest of the graphic.

Here, for example, a broad-level caption and a brain illustration span the full width of the graphic, in the dominant position at the top of the page. That band includes the takeaway point of the graphic, in words. It also includes a visual that acts as a locator map for the rest of the graphic: The information that’s represented in that detail applies to all of the content below. When taken together, the title, introductory caption, and brain illustration prime the reader for the more detailed information to follow. When material is positioned at the top of the space, spanning the content below like an umbrella, it visually reinforces its role as the first thing that readers should absorb.

Small variations in position can also draw attention to particular el-

⁴ Ellen Lupton and Jennifer Cole Phillips, *Graphic Design: The New Basics*, 2nd edition (Princeton Architectural Press, 2015). Quote republished with permission of Princeton Architectural Press, LLC, © 2015. Permission conveyed through Copyright Clearance Center, Inc.

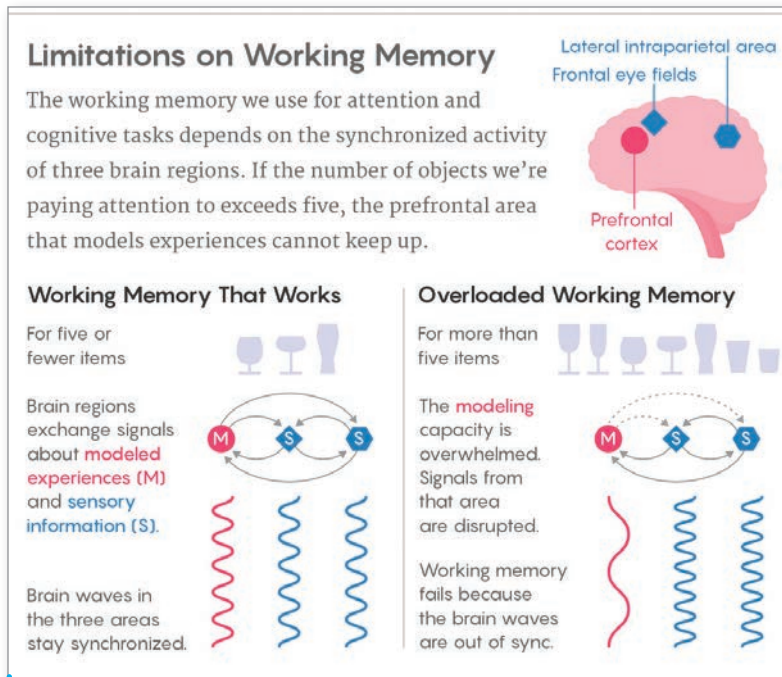
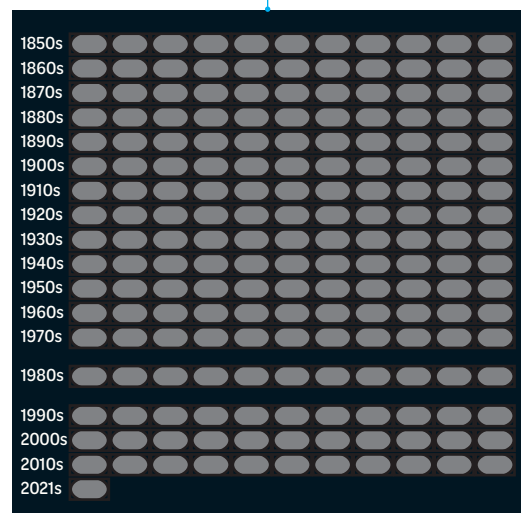
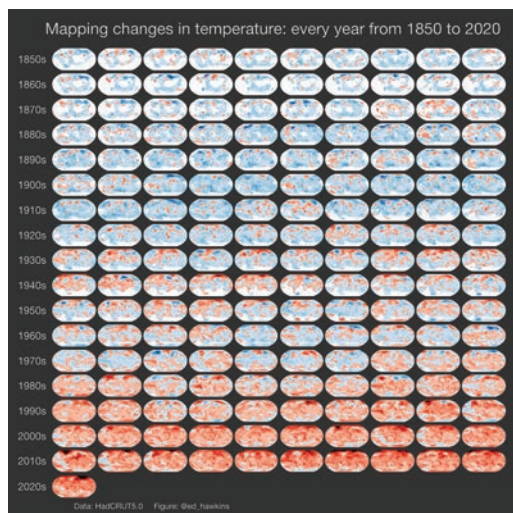


Image Credit: Lucy Reading-Ikkanda/Quanta Magazine, as published in "Overtaxed Working Memory Knocks the Brain Out of Sync," by Jordana Cepelewicz, *Quanta Magazine* (June 6, 2018). Reproduced with permission of *Quanta Magazine*.

elements within a graphic. For example, if you wanted to draw attention to a specific decade in the small multiples example introduced on page 74, a slight offset of that set of globes attracts the eye. In the panel on the right, the 1980s panel is elevated to a position of prominence. This sort of position trick only works when a clear structure is in place for

Image Credit: Professor Ed Hawkins (@ed_hawkins), National Centre for Atmospheric Science, University of Reading; Data: HadCRUT5.0 (left); Jen Christiansen (right).



the rest of the graphic, and when used sparingly. The critical underlying idea being that our eyes are drawn to areas of contrast. It works in this example because there's a clear pattern in play, and then a distinct break from that pattern. When it comes to science graphics, it's generally a good idea to also clearly indicate why the position of prominence is warranted. This may be a mention of the 1980s in an introductory caption, or—even better—with an annotation that addresses the significance directly linked to the highlighted area.

Variation in **size** adds visual interest to a graphic. In science graphics, the largest element should be chosen wisely, however, as it plays a few roles. It's not only an anchor for the composition, but it also suggests some sort of prominence in terms of content. Here, illustrator Daisy Chung draws your attention to a mechanism that changes carbon waste into usable graphene. The object is large and detailed, helping to underscore that the graphic is about a flash heating system

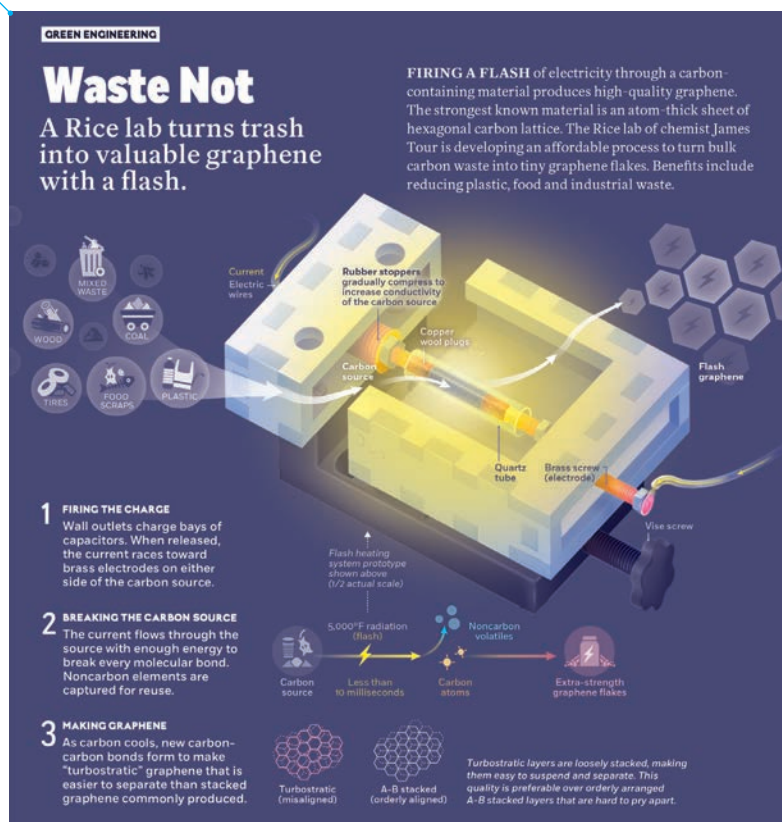


Image Credit: Daisy Chung, *Rice Magazine* (Office of Public Affairs, Rice University; Spring 2020).

that is in development. The page isn't about theory. It's about transitioning from theory into technology; that bit of technology dominates the graphic, primarily due to its scale. Supporting information follows with smaller schematics, helping a reader to more fully understand the process and output.

Variation in size also applies to line thickness. Here, Katie Peek uses thick lines to emphasize telescope baselines on a globe. Geography details provide background context in thinner lines. If all line thicknesses were the same in this illustration, it would be difficult to distinguish telescope connectors from the latitude and longitude lines.

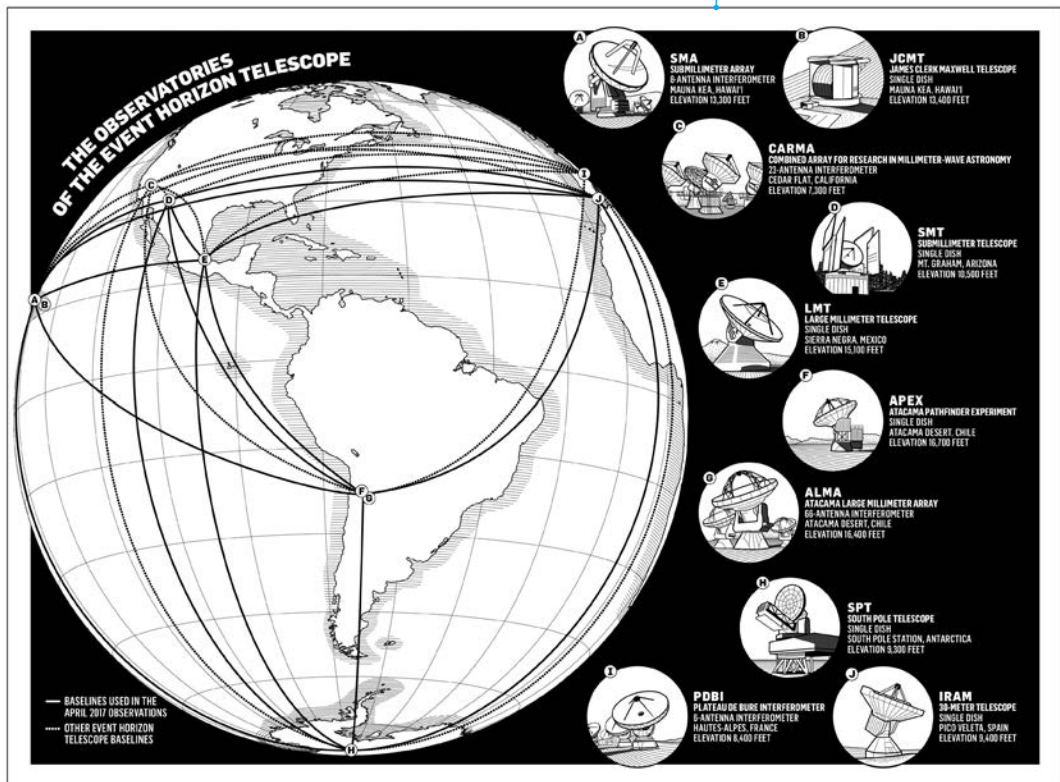


Image Credit: Katie Peek, from *Einstein's Shadow* by Seth Fletcher (Ecco, 2018). Published with permission of the artist.

Color variation is a powerful and elegant way to introduce contrast—and therefore multiple levels, or hierarchy—to an image. For example, in an article on visualization in science-policy, the authors include a graphic that presents six ways that interactive displays can allow the audience to explore a dataset. They use tints (lighter versions of a color) and shades (darker versions of a color) to draw your attention

to the critical elements. The lighter elements provide critical context for the emphasized details, but they don't fight for attention. Further emphasis is added with a blue glow, underscoring that the highlighted zone-of-interest has been selected. It's not a static inset,

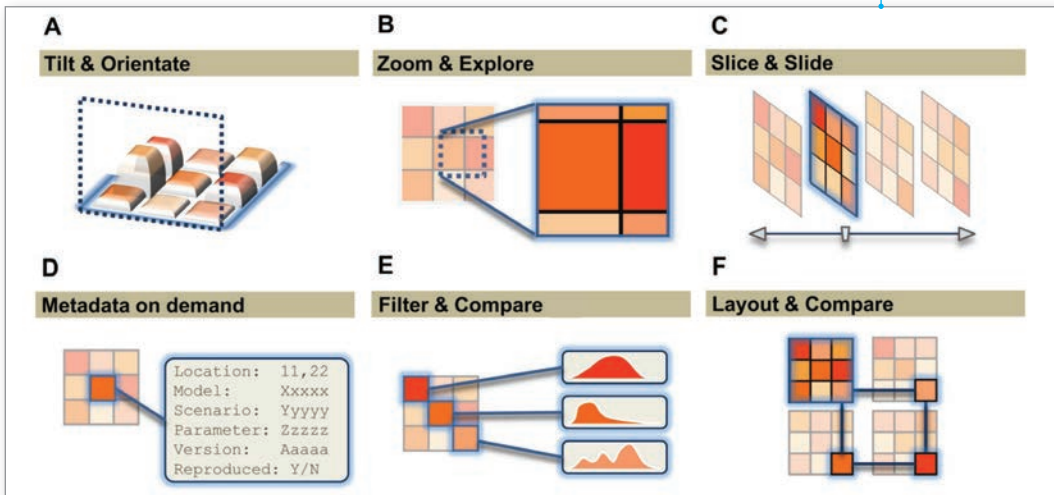
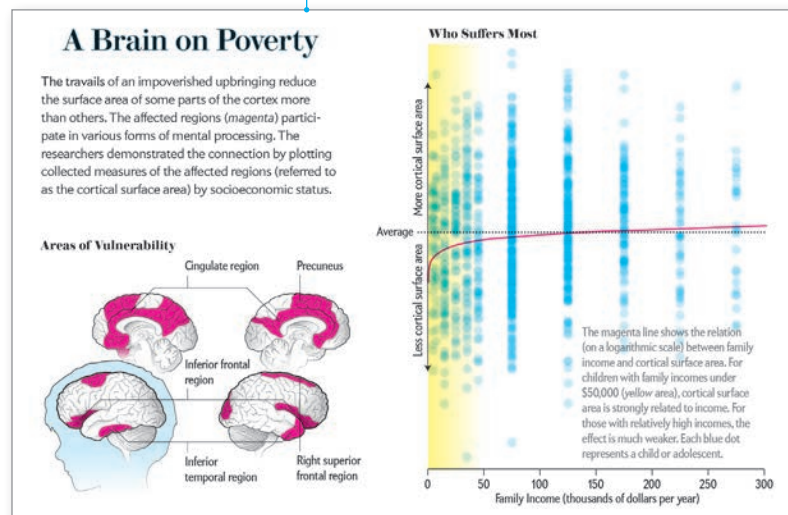


Image Credit: Reproduced from "Information visualisation for science and policy: engaging users and avoiding bias," by Greg J. McNerny, et al., in *Trends in Ecology & Evolution*, Vol 29 (March 2014), © 2014—with permission from Elsevier.

Color is used for a few purposes in this graphic by Amanda Montañez and Tami Tolpa, but most critically, it literally highlights the most important zone of the data visualization. The full chart is needed for context, but the small vertical strip from zero to \$50,000 per year holds the crux. A strip of yellow draws attention to that zone without obfuscating the underlying data. (See Chapter 8 for more on color.)

Image Credit: Tami Tolpa (brain illustrations) and Amanda Montañez (chart) as published in "What Inequality Does to the Brain," by Kimberly G. Noble, *Scientific American* (March 2017); Source: "Family Income, Parental Education and Brain Structure in Children and Adolescents," by Kimberly G. Noble et al., in *Nature Neuroscience*, Vol. 18 (May 2015). Reproduced with permission. © 2015 Scientific American, a Division of Nature America, Inc. All rights reserved.



Flow of Information

Signalling different levels of importance by varying position, scale, or color is powerful in its own right. But things get really exciting when two or more of those variables work in concert. For example, designer John Grimwade intentionally guides the reader's eye through this graphic on cloud seeding by setting up the flow of action in a way that reinforces the flow of information. The thoughtful composition is reinforced by careful use of all three variables discussed above: scale, position, and color. Each important element leads to the next important element, directing audience attention through the information by dialing visual levels up and down as you proceed through the image. Here's a breakdown of some of the strategies in play.

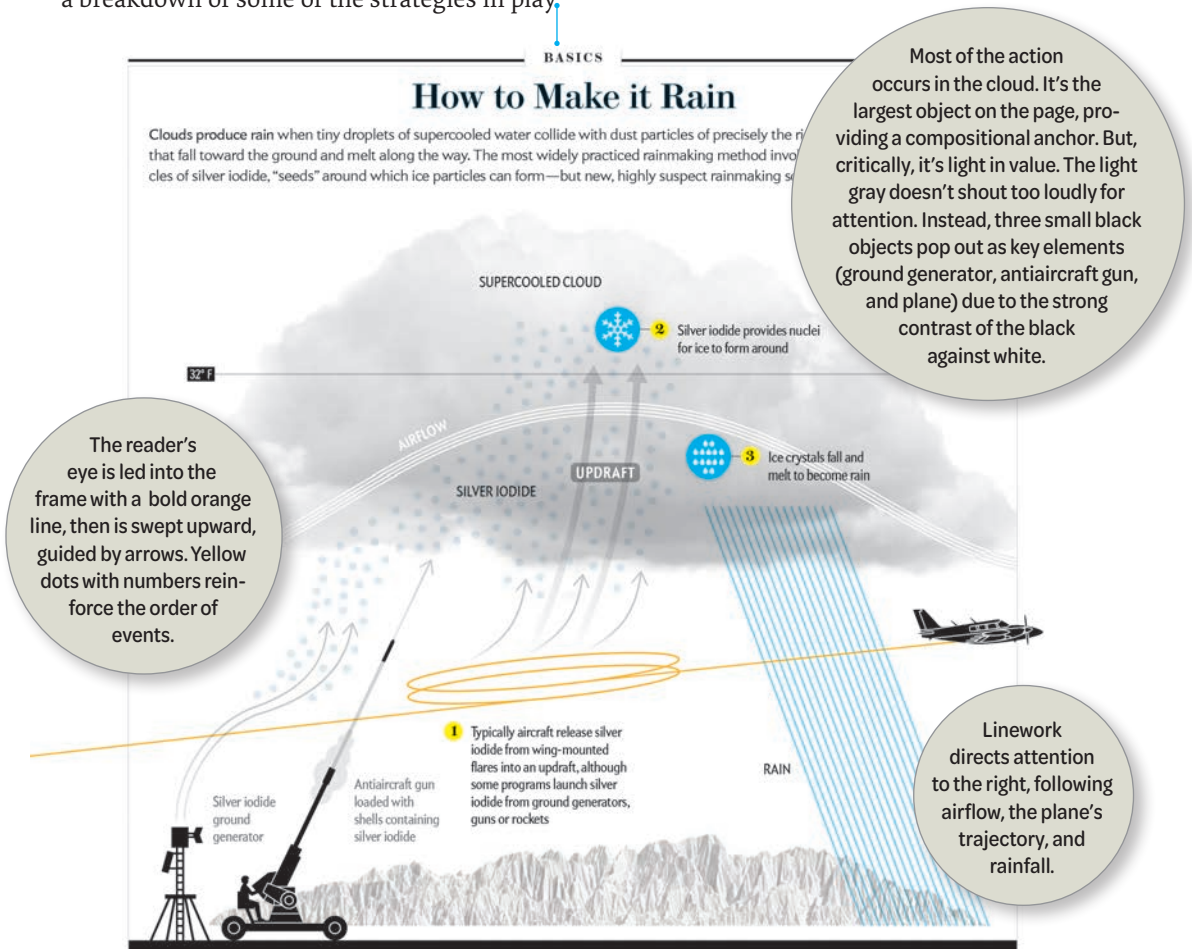


Image Credit: John Grimwade, as published in "Summon the Rain," by Dan Baum, *Scientific American* (June 2014). Reproduced with permission. © 2014 Scientific American, a Division of Nature America, Inc. All rights reserved.

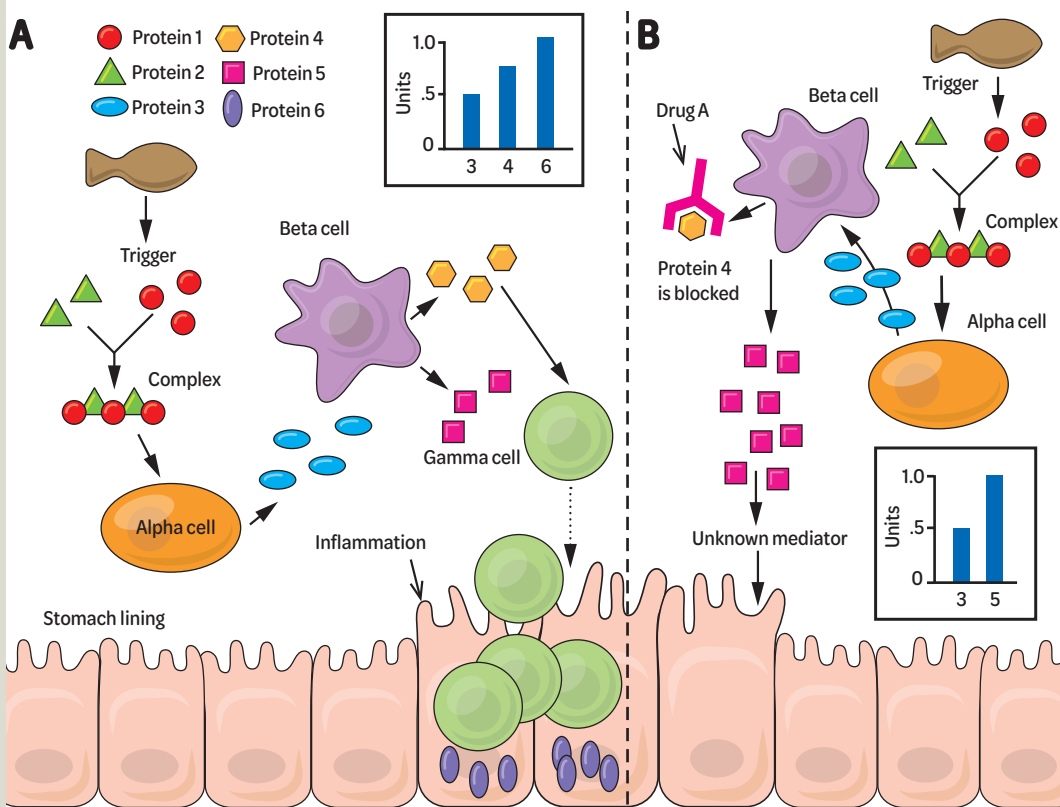
DEMONSTRATION

Composition Makeover (part one of three)

This is the first installment of a demonstration that takes part in three stages. Context and content remain steady throughout the makeover: It's a hypothetical graphic destined for a hypothetical academic journal. The redesigned images are all for the same audience and outlet as the original version. The content is completely made up. (It's a somewhat generic product of my imagination.) The initial graphic includes less-than-ideal design choices that are not

BEFORE

Figure 1. Pathogenesis of classical cat treat disease and paradoxical cat treat disease. (A) Classical: Protein one, which is produced by the gut upon the ingestion of a treat, forms complexes with protein two. These complexes trigger alpha cells to produce large amounts of protein three. Protein three stimulates beta cells, which releases proteins four and five. Protein four triggers gamma cells to start massing in the gut's lining. Gamma cells then release protein six, pushing gut lining cells into a hypergrowth state, resulting in a grumpy cat. This condition can be confirmed by testing for levels of proteins three, four, and six. (B) Paradoxical: The introduction of drug A successfully blocked classical cat treat disease in most cats, by inhibiting the production of protein four. However, some cats were still grumpy. In 1 to 3 percent of cats, paradoxical cat treat disease may arise due to an increase in production of protein five, a side effect of drug A. The full pathway of paradoxical cat treat disease is not yet understood, but can be confirmed by testing for levels of proteins three and five.

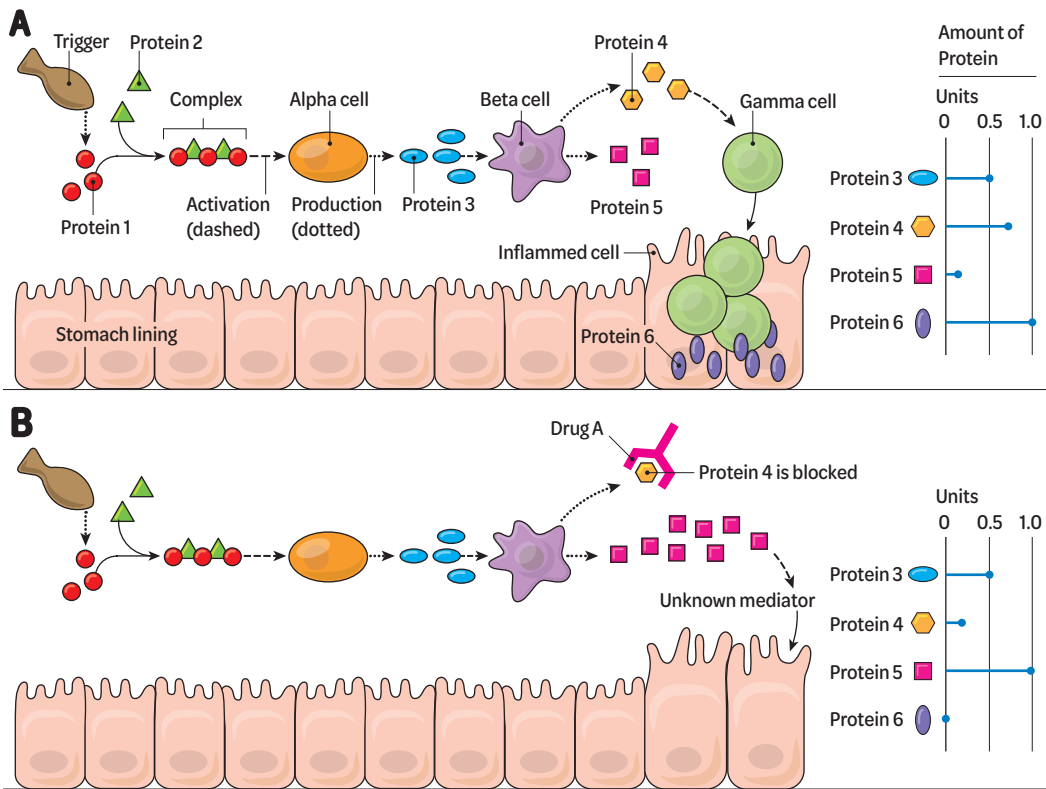


made up. I've seen a lot of figures that are organized in this manner. The makeover stage on this spread is limited to changes in composition. Color and general approaches to type remain unchanged. Stage two folds in color (see pages 110–111). Stage three folds in typography (see pages 124–125). Rendering style is the same throughout—and fairly standard—to avoid distracting from the other core design changes with razzle dazzle.

Composition changes here are primarily in the service of (1) clearly showing the linear flow of the process, and (2) facilitating an easy and direct comparison between each scenario.

AFTER

Figure 1. Pathogenesis of classical cat treat disease and paradoxical cat treat disease. The trigger, which is produced by the gut upon the ingestion of a treat, forms complexes with protein one. These complexes trigger alpha cells to produce large amounts of protein three. Protein three stimulates beta cells, which release proteins four and five. Protein four triggers gamma cells to start massing in the gut's lining. Gamma cells then release protein six, pushing gut lining cells into a hypergrowth state, resulting in a grumpy cat. This condition can be confirmed by testing for levels of proteins three, four, and six. (B) Paradoxical: The introduction of drug A successfully blocked classical cat treat disease in most cats, by inhibiting the production of protein four. However, some cats were still grumpy. In 1 to 3 percent of cats, paradoxical cat treat disease may arise due to an increase in production of protein five, a side effect of drug A. The full pathway of paradoxical cat treat disease is not yet understood, but can be confirmed by testing for levels of proteins three and five.



DEMONSTRATION

Academic Poster Design

Academic conference poster trends and templates come and go,¹ but the ritual of mingling at conferences (both virtual and in-person) to share research—with the help of science-fair-esque visual aids—persists. I encourage you to think of your conference poster as a large graphic. Step back from the frame, and employ the design principles described in this book to the whole poster space, not just the graphics boxes within it. Start with a grid across the whole poster, as a guide for text block and image alignments. Use negative space to help create section groupings. Create visual hierarchy with variations in color, scale, and position of objects. And please spend time carefully considering your typography. Are

- 1 Eva Amsen, "A Graphic Design Revolution For Scientific Conference Posters," *Forbes* (June 2019)

BEFORE

Poster Title in the Space Right Here

This is a faux academic poster that could use some design love.

By Author One, Author Two, Author Three, and Author Four

Affiliation Here



Section One

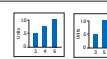
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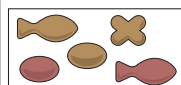
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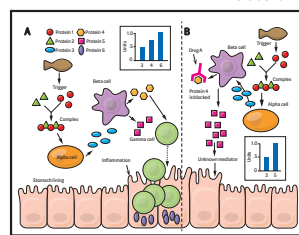
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	CATEGORY A	CATEGORY B	CATEGORY C	CATEGORY D
TOPIC ONE	notes	notes	notes	notes
TOPIC TWO	notes	notes	notes	notes right here
TOPIC THREE	notes in this space	notes here	notes	notes here
TOPIC FOUR	notes	notes	notes right here	notes
TOPIC FIVE	notes	notes in this space	notes	notes in this space



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your columns too wide for the font size you're using? Does a person have to stand very close to your poster and shuffle back and forth in order to read the text? Are you simply trying to put too much information into the space that you have allotted, given the manner in which your audience will encounter it? Remember, your poster isn't a paper that will be consumed by a single person in isolation, under a reading light. It may need to capture the attention of a person striding by many feet away, in the midst of a sea of other posters tacked to room dividers, in a space with unknown lighting. Be kind to your audience. Make the flow of information clear, and the content legible. Here are three poster redesigns to show you how some of the design concepts covered in Chapters 7 through 9 can help you step up your poster game.

Design changes here are primarily in the service of (1) legibility, and (2) delineating a clear and logical path through the information. Note that I eliminated a lot of text. It's okay to dedicate more space to imagery than words! Body text should be at least 24 pts; labels should be at least 18 pts.

AFTER

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This is the redesigned version of a faux academic poster.

By Author One, Author Two, Author Three, and Author Four

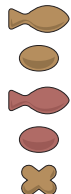


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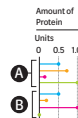
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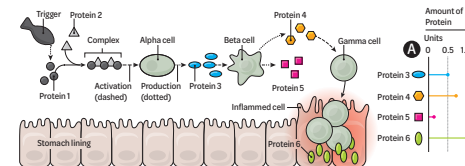
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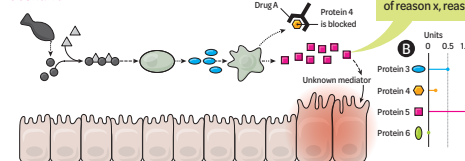
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Scenario A



Scenario B



This was really surprising, because of reason x, reason y, and reason z.



Section Five

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BEFORE

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By Author One, Author Two, Author Three, and Author Four
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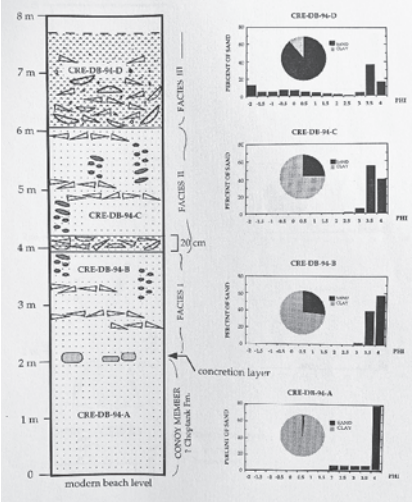
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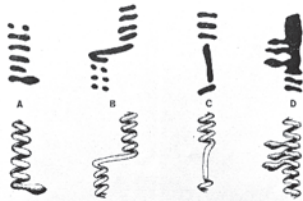
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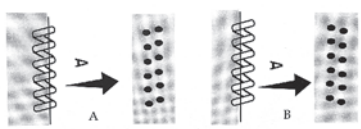
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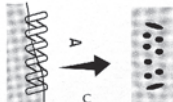
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Adhere to the poster guidelines provided by your conference organizers, and include the information they require. But avoid overloading your poster with too much information. Edit down to the critical bits, and prominently feature particularly pertinent text and images.

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By Author One, Author Two, Author Three, and Author Four

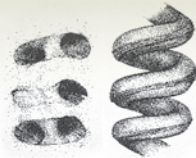
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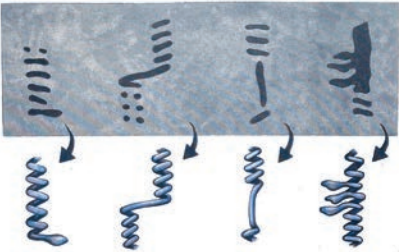
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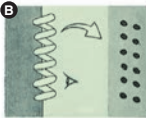
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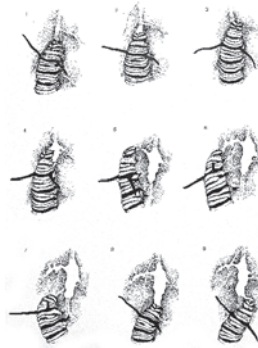
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Engaging photos and drawings can help hook people and give them a quick sense of the subject matter of your poster. But I don't recommend crowding out the rest of your content with them. For academic conferences, make sure that the key take-home message of your research doesn't get lost in the midst of generic imagery.

AFTER

Poster Title in the Space Right Here

This is the redesigned version of a faux academic poster.

Author Name, Affiliation here



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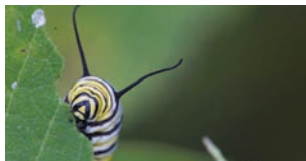
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