Profile 3

Steve Duenes and Xaquín G.V. (*The New York Times*)

All the Infographics That Are Fit to Print

Steve Duenes is the graphics director at *The New York Times*, a position he has held since 2004. He manages a team of visual journalists who report and execute all of the print and interactive information graphics for the newspaper, website, and other platforms. He has spent time on the faculty at the School of Visual Arts in Manhattan and has been a contributing cartoonist at *The New Yorker*.

Xaquín G.V. has been a graphics editor at *The New York Times* since the 2008 Beijing Olympics. He started playing with graphics at *La Voz de Galicia* in 2000, while still an undergrad. In 2002, he moved to *El Mundo* (Spain), and three years later was heading the online graphics desk and having fun blurring the lines of interactive graphics and multimedia. In 2007, he worked as assistant art director at *Newsweek*.

Every morning, at around 7 a.m., a muffled thud on my front door announces the arrival of the print edition of *The New York Times*. The beginning of my day is organized around that moment. I usually wake up at 6.45 a.m., take a shower, prepare some coffee and, if the delivery person is not late, by the time I have completed those rituals, the newspaper will be waiting for me on the grass. I have kept that routine since the first day I lived in the U.S., back in 2005. When I had to give it up for two years—because I was in São Paulo, Brazil—I yearned for it.

Everybody in information graphics and visualization professes an almost religious reverence for *The New York Times*. I include myself in that crowd. When a big story breaks anywhere, say the killing of Bin Laden in Pakistan, the Deepwater Horizon oil spill in the Gulf of Mexico in 2010, or the earthquake and subsequent nuclear crisis in Fukushima, Japan, the eyes of many thousands of journalists and news designers focus on what the team led by Steve Duenes and Matthew Ericson does.

That team has become the standard for this industry. But what are its secrets? How are they able to maintain such a high and steady quality level? Why do they excel in almost every single project they undertake, both traditional infographics and complex visualizations of quantitative data? I conducted this interview with Steve, and with Xaquín G.V., one of the *Times's* graphics editors, to answer those questions.

Q Steve, how does someone become the graphics director of *The New York Times*? I think this is something that intrigues many of our colleagues, as you are in a position to be one of the most influential people in this business.

Steve Duenes In 1999, I came to *The New York Times* as the graphics editor for the Science section, which I still think is one of the best jobs in our field because science coverage is so visual and the *Times* is ambitious in the range of scientific disciplines it covers.

I was quite happy in my niche in Science. I could take on as many graphics as I wanted, and I got to work with a pretty incredible staff of reporters and editors, plus I was collaborating with people on the graphics desk like Juan Velasco and Mika Gröndahl and Hannah Fairfield. It was a terrific time.

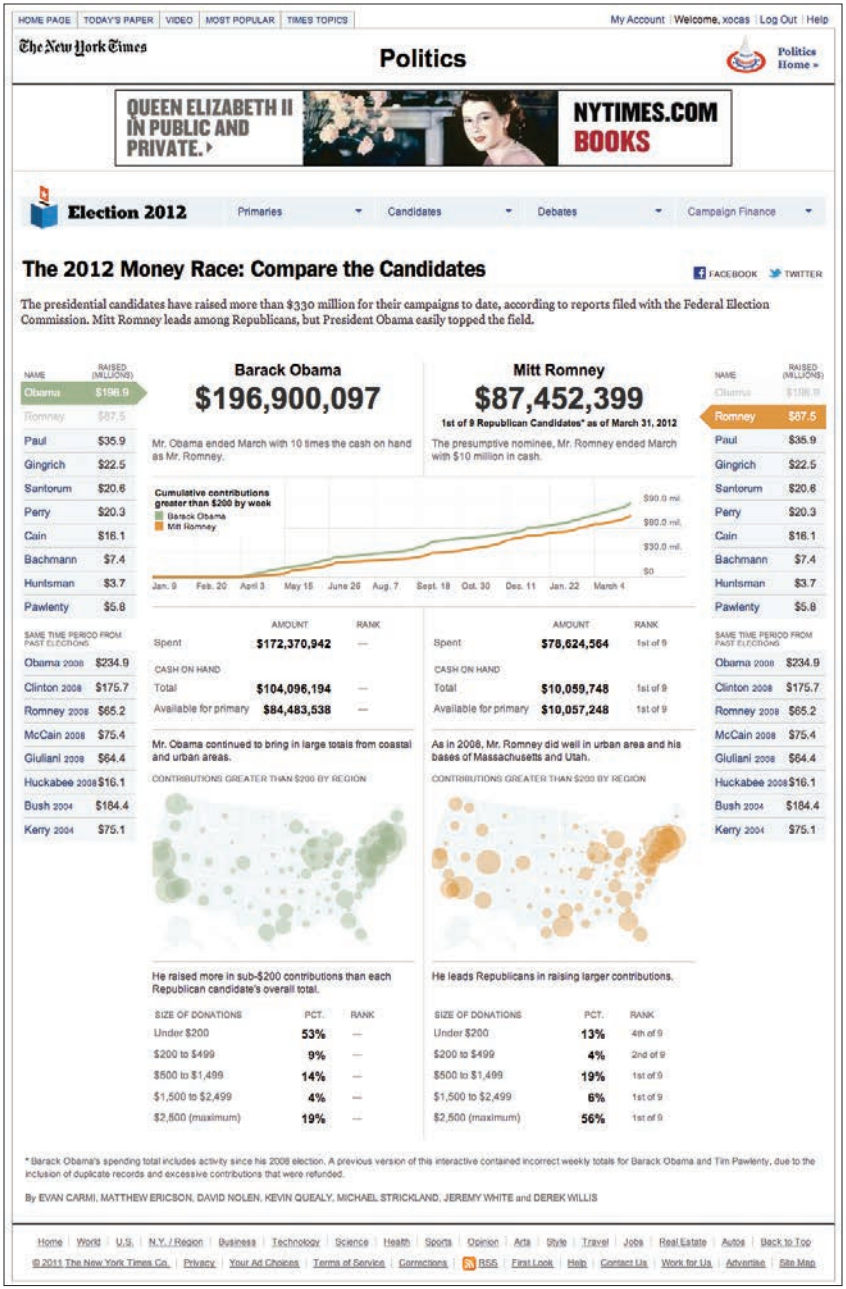

Figure 10.24 "The 2012 Money Race: Compare the Candidates," one of the many visualizations *The New York Times* publishes on a regular basis. http://elections.nytimes.com/2012/campaign-finance. Graphic by Evan Carmi, Matthew Ericson, David Nolen, Kevin Quealy, Michael Strickland, Jeremy White, and Derek Willis. (Reproduced with permission from *The New York Times*.)

Q That sounds like a dream job, but you became a manager. Why?

SD The graphics director at the time was Charles Blow[7] who had been in that role for a while and had done it very well. He asked me to be his deputy in 2000 or 2001. By that time, I was already managing small teams of people in my role at the Science desk, but I was a little reluctant to spend all of my time managing. I enjoyed making my own graphics, and I liked the idea of being solely responsible for my work. If I accepted the position, I would be held accountable for the success or failure of a large group.

So, it took me a little time to wrap my head around what success would mean as a manager. There were people in the department, like Archie Tse, who convinced me that I'd do well. I felt very strongly about the department as a unit, and I decided I could have a positive impact. I realized that I'd have to let go of the control I had over my own graphics. Managing is obviously not about moving the hands of people you work with; it's about creating an environment where the best work gets done, and I had a few ideas about how to do that.

So I became the deputy, and did that for a while. I've been the graphics director since 2004.

Q You both have experience working in newsrooms. What makes the graphics desk at *The New York Times* different from the ones in other publications?

Xaquín G.V. The size of the department is crucial. We have almost 30 people doing information graphics and visualizations here. However, it is not enough to have a lot of highly qualified professionals in a newsroom if they don't talk to each other. If I had to single out a factor that really defines what we do, I would say it's the culture of teamwork, collaboration, and open conversation that Steve and Matt Ericson—Steve's deputy—have instilled in the desk.

The Times encourages open conversation and sincere, constructive criticism. If someone is working on a project on a subject you care and know about, you must feel free to stop by and give your advice. On the other hand, you have to be open-minded enough to accept that same advice for your own projects and, moreover, be able to ask for suggestions from the people you know can help you. Say that you are working on a very complex data visualization. You should never publish it without getting input from Amanda Cox,[8] who has a master's degree in statistics.

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7 Charles Blow is today an opinion writer at *The New York Times*. See http://topics.nytimes.com/top/opinion/editorialsandoped/oped/columnists/charles_m_blow/index.html.

8 To learn more about Amanda Cox: http://amandacox.tumblr.com/.

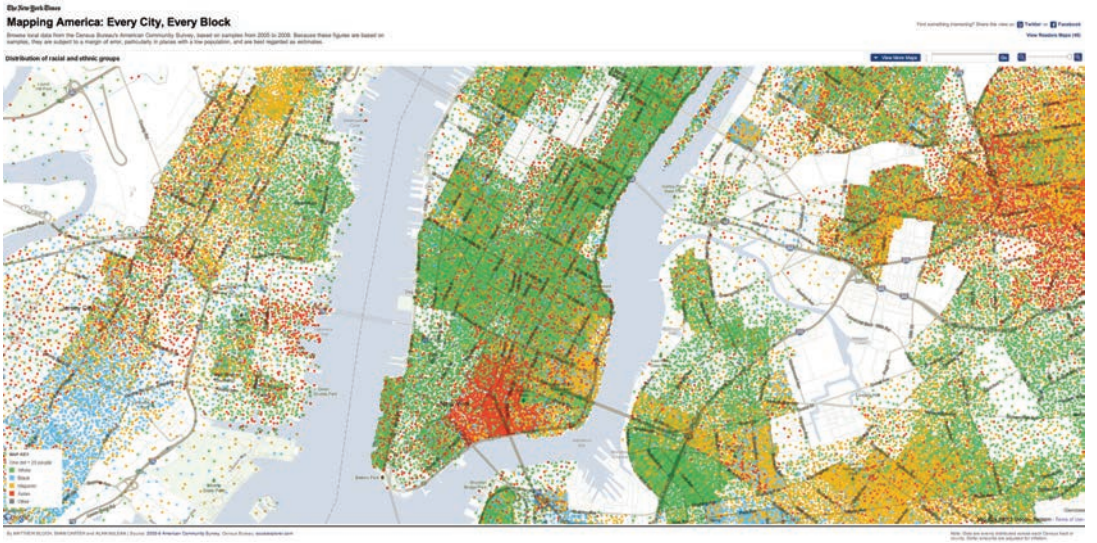

Figure 10.25 "Mapping America: Every City, Every Block," an immense map-based visualization based on data from the Census Bureau's American Community Survey. See http://projects.nytimes.com/census/2010/explorer. (Reproduced with permission from *The New York Times*. Map source: Google.)

Q What are other factors that benefit your group?

SD There are many other factors, but two basic ideas stand out. A serious graphics group should be capable of high-level reporting, and everyone on the desk should have an impulse toward journalism. These are simple ideas, and they aren't unique to the *Times*, but we have explored them fairly deeply.

When I worked at the *Chicago Tribune,* there was real reporting going on within the graphics department, and it was an incredibly useful thing for me to witness and absorb. But the department was structured so "artists" and "graphics reporters" were separate. In some ways, it was an efficient structure, but it didn't allow people to cross over and really get better at things they couldn't already do. It was never a perfect fit for me.

At the *Times*, there is a lot of reporting that goes on, but it can come from anywhere. For example, Shan Carter is an exceptional developer and designer, but he's also a good reporter. He initiated and reported an interactive piece on Steve Jobs's patents last year. Why? Because he has those instincts and he knows how to find information, and there's an expectation that everyone on the desk will be involved in content—in gathering it, analyzing it, organizing it, and presenting it. Obviously, there are a few exceptional reporters in the department, but it's a

desk full of curious people, so there's no reason to limit the kinds of questions they ask or the answers they pursue.

XGV Let me tell you a little story about that. When I was hired at the *Times*, I had a conversation with Rick Berke, the assistant managing editor. He told me that some of the best reporters in the newsroom were in the infographics desk. He was referring to people like Hannah Fairfield[9] and Archie Tse[10], who went to Lebanon in 2006 to cover the war with Israel and spent several months in Iraq in 2003. He is the only designer I know who got firsthand information when Saddam Hussein was captured in Tikrit. He actually entered Saddam's hole to take notes and draw an accurate sketch of it.

Q So you are not an "art" department. You don't consider yourselves just "artists."

SD Certainly, there is an "art" component to what we do, but we are not "graphic artists," and we are not a service group. We want to eliminate the passivity that suggests we should style a dummy headline and wait for the real journalist to fill it with meaning. We want to report and present the content ourselves. Very often, we work in parallel with other news departments. We pursue stories in ways that are similar to the Metro desk or the National desk, tasking reporters and organizing ourselves to pursue information. This was the drill, for instance, right after the Virginia Tech shootings, in April 2007 (**Figure 10.26**) and in response to many other breaking-news stories.

Q What would you recommend to a graphics director at a smaller news organization who is interested in reproducing what you have achieved at the *Times* but at a smaller scale? Let's say she can hire four or five people to build an infographics department. What kind of professional profiles should she look for?

XGV The first thing is that those four or five people have to be good journalists, be interested in current events, and be curious. That said, I would hire a good reporter, a good traditional designer, a high-end CGI artist and animator, and one or two excellent programmers and UI designers.

The reason I include a CGI artist in the group is that many people out there think that we at *The New York Times* are focusing too much on data visualization at

9 See Profile 4: Hannah Fairfield.

10 To learn about Archie Tse's experiences in reporting from Iraq, see http://www.udel.edu/PR/UDaily/2004/nytimes031504.html.

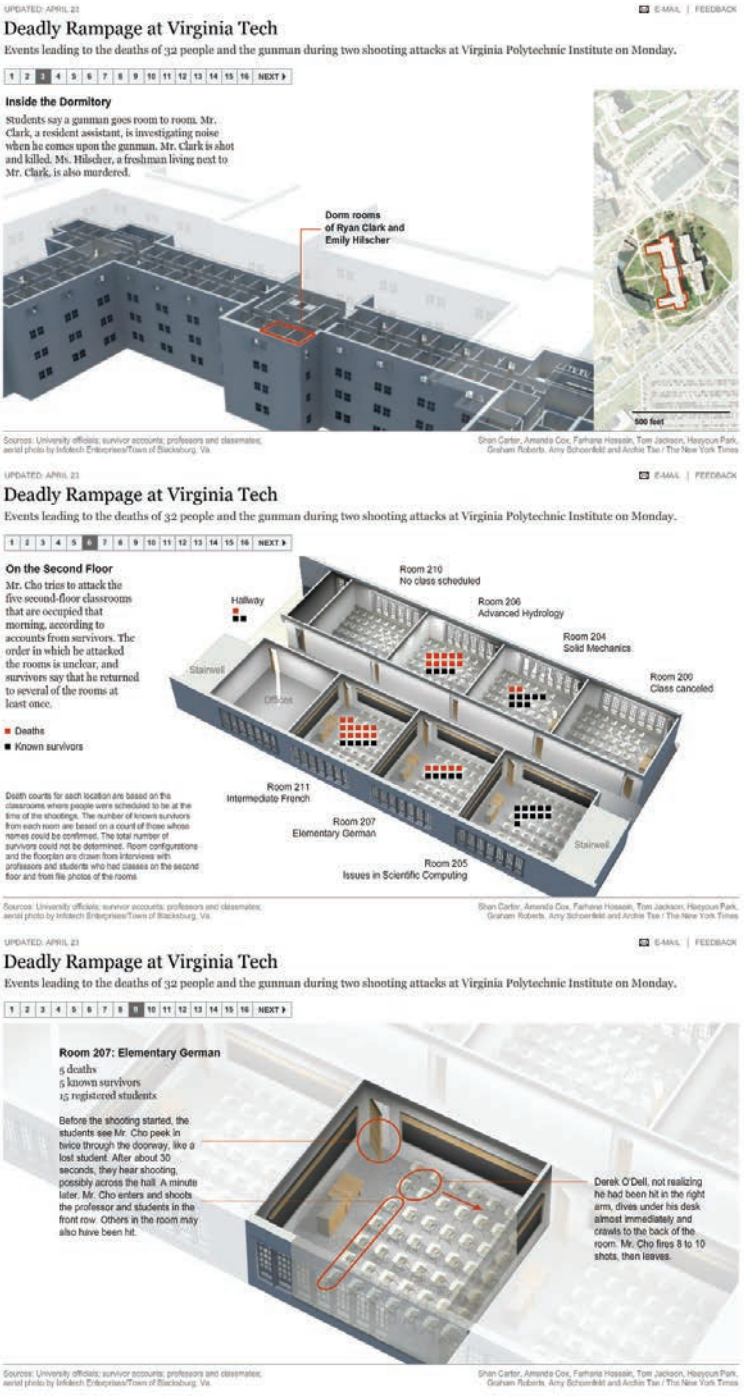

Figure 10.26 "Deadly Rampage at Virginia Tech," a breaking-news visual reconstruction of the shootings at Virginia Polytechnic Institute, in April 2007. Thirty-three people died, including the gunman. http://www.nytimes.com/2007/04/17/us/20070417_SHOOTING_GRAPHIC.html. (Reproduced with permission from *The New York Times*.)

the moment, and that's not true. In the past couple of years, we have done plenty of traditional linear explanation graphics, mixing 3D animation with video. I would mention one on Roger Federer, the tennis player (**Figure 10.27**), that reveals why his game is so precise (**Figure 10.28**). The best of our recent explanatory animations is one on baseball star Mariano Rivera (**Figure 10.29**), which won the Best of Show award at the Malofiej International Infographics competition in 2011.

Q On your team, you have people who specialize in a particular area, such as statistical charts and cartography, and others, such as Xaquín, who have a more comprehensive knowledge of all the components of information graphics. Would you say that the right balance between generalists and specialists in a news graphics desk is half and half?

SD You need a mix of generalists and specialists for sure, because there are different kinds of problems that desks will have to solve. Sometimes the solutions demand thinking that often comes from a person who has invested a lot of time focusing on development or cartography, or both. But there are other kinds of problems such as reporting challenges or situations that require a kind of visual improvisation. These solutions can come from anyone, but generalists tend to have a little more experience in the field and wider familiarity with what works and what doesn't.

Q Can you give an example of a graphic in which the role of a generalist was decisive?

XGV There are many. I can give you a fun one. A while ago, Steve told me to take a look at a story by Stephanie Clifford, a reporter at the Business Day desk. She was working with Dylan McClain, one of my colleagues, who is a specialist in charts. They were trying to show something that is common knowledge: Every fashion designer and every clothing chain has its own standards when it comes to sizes. There's not really a fixed standard.

What they had found out during the research, mainly at designers' websites, was that the disparities can be huge. If you are used to buying size 8 clothes from one store and you switch to a different store, it's likely you won't fit into size 8 anymore. Even within a single group of brands, such as Gap, which owns Banana Republic and Old Navy, there are shocking differences. For instance, a size 8 hip at Banana Republic equals a size 2 hip at Gap. More interestingly, a particular designer can use a double standard, and have slightly different bust, waist, and hip measures for her main line and for her mid-price line.

Figure 10.27 Frames from "Federer's Footwork: Artful and Efficient," a motion graphic on Roger Federer's technique. http://www.nytimes.com/interactive/2009/08/31/sports/tennis/20090831-roger-graphic.html. (Reproduced with permission from *The New York Times*.)

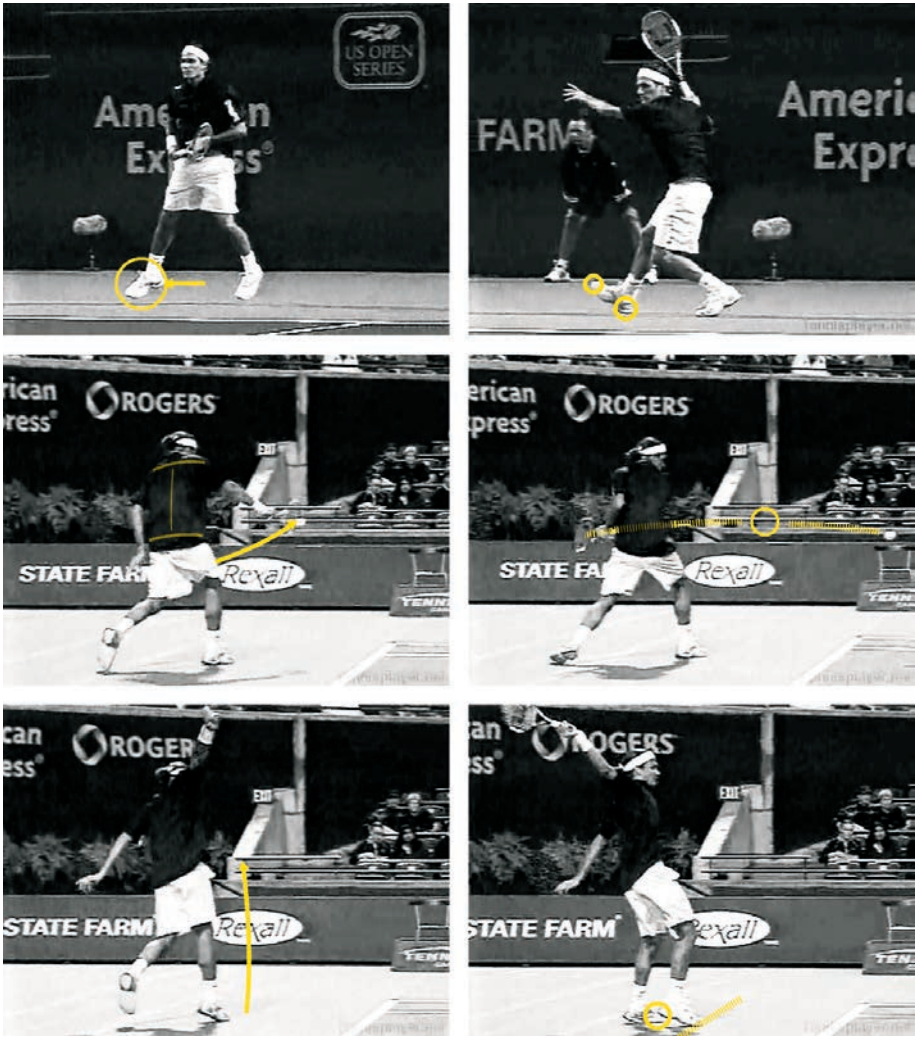

Figure 10.28 Before creating the 3D animation, the designers at *The New York Times* watched hours of footage of Federer's games. Then they drew arrows and lines on many frames to unveil the secrets of his game. (Reproduced with permission from *The New York Times*. Images obtained from Tennisplayer.net.)

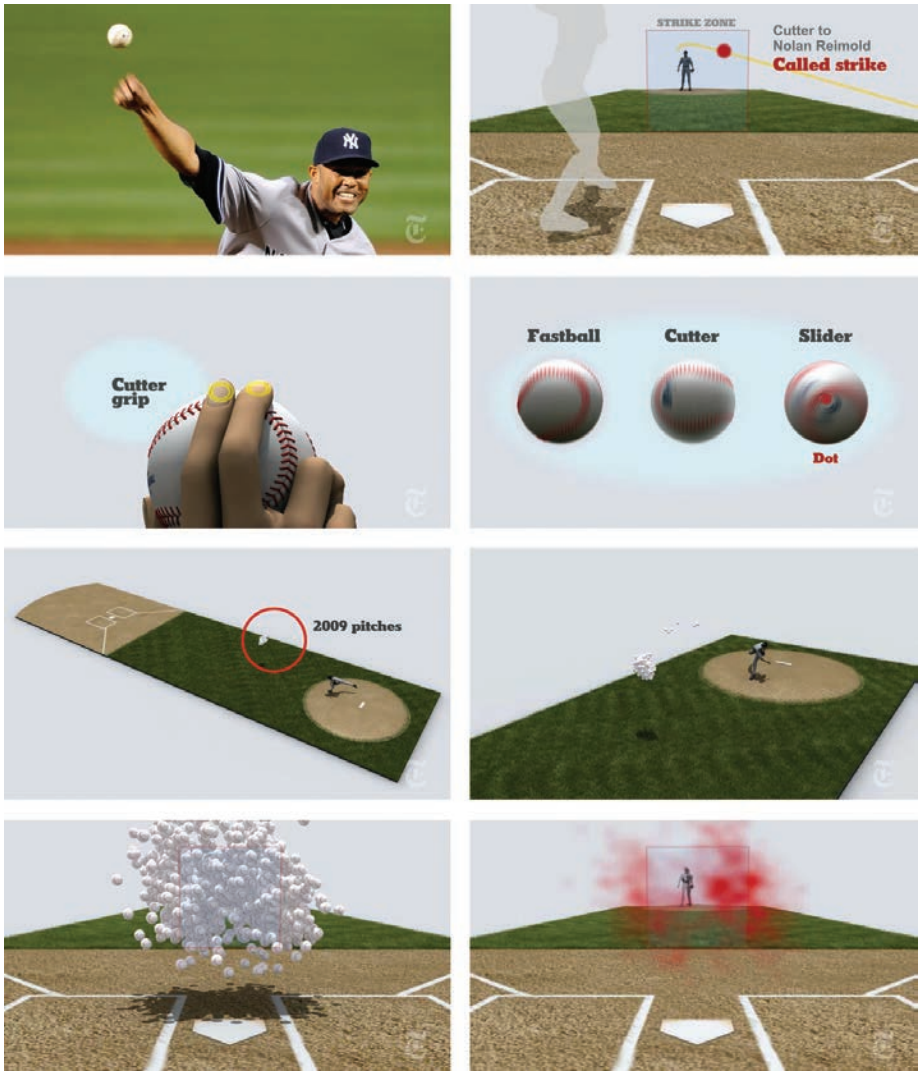

Figure 10.29 Frames from "How Mariano Rivera Dominates Hitters." http://www.nytimes.com/interactive/2010/06/29/magazine/rivera-pitches.html. (Based on motion capture research by New York University. Reproduced with permission from *The New York Times*.)

We wanted to do something engaging with the data. What we had at first was a series of bar charts, which are fine, but we wanted to find another way to present this information that kept the proportions but was eye-catching at the same time. I started playing around with the data in Processing[11] and, at one point, I encoded the figures with lines (**Figure 10.30**). That made the plot look like

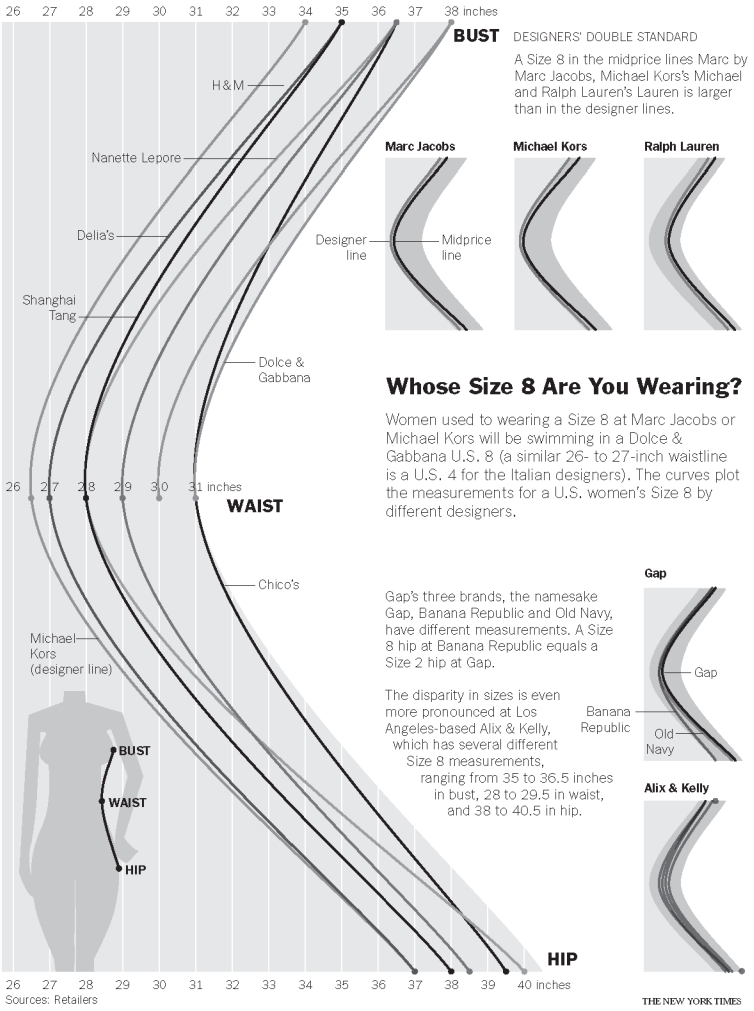

Figure 10.30 "Whose Size 8 Are You Wearing?" a graphic that shows that standard clothing sizes are not really standard. (Reproduced with permission from *The New York Times*.)

11 Processing is a programming language tailored for graphic designers (who are not usually fans of programming languages). Its first version was developed by Ben Fry, a specialist in information visualization: http://benfry.com/.

a woman's midsection. I must admit that clothes measurements are made based on the circumference of the body, not on a linear scale, so I cheated a little bit.

As a funny side note, a freelance designer and Web developer, Anna Powell-Smith, used our graphic as an inspiration for a project called "What Size Am I?" which is a database to find out what sizes fit you better, depending on your bust, waist, and hip circumferences.[12] I really like when people can build on your work and improve it. I recommend you check her tool out. It's fun to use.

Q Based on that story, would you say that infographics generalists are crucial, but that they need to work side by side with specialists?

SD Well, it's possible for a generalist and specialist to be the same person, but that's kind of rare. Are generalists crucial? And is there a way of working that is ideal? I'd say yes, but my answer has to do with our mission at the *Times*. A smaller desk might have three scrappy generalists, and they might do incredible work. That's entirely possible.

Q What does it take to get a job at the graphics desk at *The New York Times*?

SD The answer to that question is something that changes as the desk grows and adjusts, which is a process that shouldn't stop. We have people with academic and professional backgrounds that seemingly have nothing to do with information graphics. Really, the common characteristic is curiosity. It's a curiosity that leads to the pursuit of different methods of creating visual forms or it's a curiosity about current events.

For both students and professionals, we're definitely looking for people who can bring something special to the desk. These are people who excel in one area that helps us create innovative visualizations or people who have demonstrated a resourcefulness, technological or otherwise, in solving the kinds of problems we solve, which includes reporting or data collection, analysis and distillation, and clear, innovative presentation.

It's not hard to gain an understanding of what we do. You just have to look.

12 Anna Powell-Smith's take on standard sizing is in http://sizes.darkgreener.com/

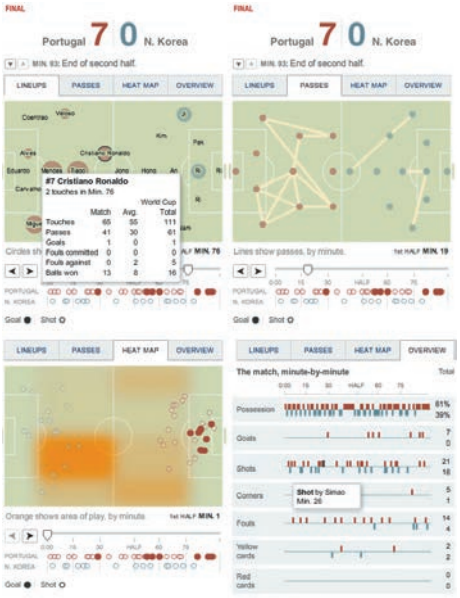

Figure 10.31 "World Cup Live," a series of graphics based on the 2010 Soccer World Cup games. These graphics display the main statistics and facts of each game during the competition, and were updated in real time. One example is at http://goal.blogs.nytimes.com/2010/07/11/world-cup-live-netherlands-vs-spain/. The data was provided by Match Analysis. (Reproduced with permission from *The New York Times*.)

Figure 10.32 A screenshot of Xaquin's desktop while he was working on a "World Cup Live" graphic. (Reproduced with permission from *The New York Times*.)