Standpunkte

Medienindustrie neu interpretiert


Computation and Innovation in Journalism: A View from The New York Times

By way of introduction, I'm an American journalist, not a media executive or a digital expert. I've worked as a reporter covering health care and labor in Florida; I've trained reporters around the world on data journalism techniques; I've worked on data journalism projects at two news organizations: the Washington Post, and now the New York Times. And I served for several years as a professor of so-called „computational journalism“, inventing and adapting techniques used in academic disciplines to the practice of investigative reporting. I now lead one of four data journalism teams at The New York Times, a news organization that is changing rapidly to adapt to the new world of media.

The Times for years has been a leader in showing new ways of storytelling in all kinds of forms. For some, our „Snowfall“ series has become a verb – others want to „snowfall“ their stories into multimedia experiences, filled with animations, 3D recreations and compelling narrative. Snowfall, the story of an avalanche and the people caught in it, was among the first to have as rich a mobile experience as that on a full size screen.

In another example, back in 2010, Amanda Cox, one of our most talented graphic statisticians – yes, we have professional statisticians on staff as graphic artists – came up with a brilliant way to present the results of a ski event – by showing the difference between the first and 10th place finishers in sound rather than sight. We’ve also had games (including a machine-learning example of rock-paper-scissors) and even graphic novels as ways of presenting our journalism.

Many of you have heard of the „innovation report“, a months-long effort by a group of newsroom leaders headed by the son of our publisher, who is an accomplished reporter and editor in his own right.

Our editors had been working to change the culture at The Times for quite some time. Our executive editor at the time, Jill Abramson, had „embedded“ in the digital departments before ascending to her job. Aron Pilhofer created a news application team and with it our first efforts at social media.

That report, though, was meant as a wakeup call to the newsroom leadership. It did not address the journalistic con-
tent of the paper. Instead, it had to force us to understand that we had a particular conceit that couldn’t be sustained: we expected readers to come to us, not meet them where they were. We expected people to buy our newspaper or visit our website in order to consume our journalism.

We needed to find a way to go to them. We had to find a way to make the journalism we publish as tempting on our own platforms as on the Huffington Post or BuzzFeed or Vice.

The result is a profound difference in just a year in the way we produce and distribute our journalism.

Gone is the twice-daily „Page One“ conference of top editors to choose which stories will appear on the front page of the New York Times print editions. In their place are twice-daily meetings to plan our digital distribution and priorities, with the Page One decisions being made separately in a smaller group. We now have top editors with responsibilities for audience engagement on the latest platforms. This team launched our Instagram pages, is engaged in Reddit, and has now hosted Snapchat stories. We will soon have newsroom access to analytics about our journalism to help reporters understand what does, and what doesn’t, attract our audiences.

The Times has no plans to let clicks drive our journalism. Top newsroom leaders all have a solid stake in making sure that our journalism remains the top priority. Even our business leaders are as protective of our journalism as our reporters and editors — they know that we need to produce top-notch journalism — arguably the best in the world — to keep our market value. We will never top Vice on attracting clicks.

But for too long, we ignored little changes, from simple search engine optimization of headlines and keywords to the use of new distribution channels that could engage our audience even more.

One of our finest graphics editors was recently promoted to lead the effort that will assure our presentation on mobile is as good as on the bigger screens.

Some of you may think what my students sometimes say when they hear about these changes: well, duh, of course we need to reach our readers in these new platforms. But we have to figure out how to do this in our own way, not copy the Guardian, or Der Spiegel, or Vice or Yahoo! or the Daily Beast.

One early success that came in the wake of the innovation report seems quite simple, but was emblematic:

As the Winter Olympics began in Sochi in 2014, the data scientist in a newly created job of newsroom analytics noticed that The Times’ site was failing to appear in top search results on Google. The answer was simple: we had created a website address that hid our page from Google. A simple change to that URL raised our results to the top few on Google and other search engines. He also noticed that, while algorithms do well to suggest related stories on traditional stories, our interactive graphics had no links to related stories. Changing those two things meant that more people were finding our journalism.

At other times „being found“ means trying new storytelling methods that we’d never thought possible in the past. One example is a recent documentary series called „Our man in Tehran,“ a journal of our reporter in Iran. It ran as a series of videos, but is also a Spotify playlist.

I did some work on a story that ran last week that shows all of the ways we are now interacting with our audience. The story, called „The Price of Nails“, is about exploitation of mainly Asian immigrants in some New York City nail salons. Sarah Maslin Nir spent a year interviewing subjects to get to this story — there was very little done here that involved new techniques.

---

**We had to find a way to make the journalism we publish as tempting on our own platforms as on the Huffington Post or BuzzFeed or Vice.**

---

When we publish a big story now, there are more moving pieces in the process than ever. You may notice that in this story, there are versions in Korean, Chinese and Spanish — the languages most commonly spoken by nail specialists. Translating an investigative piece is difficult — the nuance required to get the right tone and the exact wording takes expert journalists fluent in both languages. It took about a week just to translate the final copy.

Distribution sometimes begins before „publication.“ First there was an email alert sent to our subscribers, something that happens with most major exclusive reports. Reporters and editors review Twitter cards to make sure that the main points are accurately and engagingly displayed. Our audience development team helps us write tweets and messages that will pull out the most interesting 140 characters without misleading our followers, and helps us find the images to attach to them.

On Instagram, our photographers can highlight some of the images that didn’t make it into the main page, and help us interact with readers there on the story. Yesterday, Sarah held a Facebook chat with readers to help them understand the problem.

All of these things may have happened before the Innovation report, but they were not as well organized nor institutionalized.
Standpunkte

Behind the curtain, we're also making changes in the way that we report and research our stories. I have always been involved in what is called „computer-assisted reporting”, the old term for a branch of what has become known as „data journalism” in recent years.

I'll warn you – much of the information that I'm about to show would be impossible to obtain in Germany. Your privacy laws are so much stricter than almost any other country's, that much in-depth journalism – including journalism that would hold government accountable – is simply impossible.

Our job is to make sense of the mess of information that is available, and put it into some kind of perspective. Our sources have become so varied, that we no longer can assume it will come through documents obtained through government, or even „open” datasets – which, in the States, are largely useless for meaningful reporting. They appear to be more useful for propaganda or to support businesses hoping to make money on „big data”. The anonymous, self-serving statistics can be used as background to other, more serious, stories. But we still must fight for inside information.

I'm going to give you, though, a few examples of using the newer techniques to find and assess stories around the country, not just from the New York Times.

A story I did a couple of years ago on „officer-involved domestic violence” was virtually impossible to prove using traditional sources. Women don't complain, and when they do, they are putting their husbands' livelihood at risk, while the officer who comes to the scene is likely a colleague. So no amount of data work would tell us how common the problem is.

Some of the material used in this set of stories were the hard drives obtained from the author of „behind the blue wall” website; procedures collected from dozens of departments; disciplinary records from a handful of cities; emergency call recordings and recordings of police interrogations.

Some methods we're beginning to use were invented in academia and are used in other industries, but are new to news reporting: categorization of stories collected by our activist using a standard form of machine learning. Voice and video recognition is getting better (more on that later); we even conducted an old-fashioned survey of departments. All of these methods helped tell a story bigger than one case or any series of interviews can.

Sometimes we have to invent new ways to collect data. After a massacre at a school in Connecticut, we were interested in how people can amass collections of guns without being caught by the authorities. We decided to use the site called „Armslist”. The problem was, only current ads could be linked to a seller, who was usually anonymous. Griff Palmer of my staff collected copies of the site every night, and was eventually able to use natural language processing techniques to identify hidden addresses and phone numbers in the ads, helping us find people who were trying to sell and buy guns, possibly illegally.

In another story, our staff was interested in Chinese art forgeries, particularly of the famous artist named Qi Baishi. We used algorithms that compare images of different sizes and shapes to identify hundreds of copies of the same paintings sold on auction sites simultaneously – a good sign of forgeries.

More news organizations are also using social media – the digital fingerprints we all leave behind (except in Germany!). A Reuters story in 2013 investigated the practice of abandoning babies adopted from overseas after the children turn out to be troubled or imperfect in some way. Part of the way the reporters found their subjects was by collecting the public postings of a few listers. They never lied, and never hacked into anything that wasn't public. But they were able to contact people who agreed to talk with them.

In another story, two staffers at The Times helped identify where Marco Rubio was on certain days using his penchant for posting frequently on Instagram and Facebook. (Another congressman recently resigned after reporters from the associated press questioned his expensive tastes, as shown in his Instagram feed). Rubio, who is a presidential candidate, was riding on a billionaire's jet to some of his events, and repaid him at commercial rates – something that is allowed but often questioned.

Last, I want to talk a little about what we’re beginning to call „streaming news”, something that the Los Angeles Times has become quite adept at. There, they were able to send alerts to readers' phones at the beginning of an earthquake because they constantly monitor government sites that measure the activity. Ben Welsh, has invented algorithms for the Los Angeles Times, for what he calls „reporter-assisted reporting”, in which he sends alerts to reporters when famous people are arrested, and sends alerts to the crime reporters when government data suggest a changing pattern of crime.

These are the kinds of things that we will become better at in the future – using data, often streaming data, to suggest stories for people to investigate, or to take away the drudgery of reporting on sports scores. We’re almost there in some industries (business and sports in particular).

So digitization and computation takes a lot of forms at the New York Times and across the country in the U.S. It’s moving in that direction around the world, with some remarkable work being done in the UK, in Spain and Scandinavia - places with fairly modern open records laws.

For me, I am quite excited about some of the new techniques being mastered in the academy for digital humanities, law, medicine and other disciplines that we can apply to our research methods. I’m also excited that we can now decide the right medium for the right people for our stories.