Data-driven health care reporting

... or, Becoming a Better Watchdog



Sarah Cohen
Walter Cronkite School of Journalism
with thanks to Meghan Hoyer of the Associated Press

What is data journalism?

da·ta

/'dadə, dādə/ •)

поип

facts and statistics collected together for reference or analysis.

synonyms: facts, figures, statistics, details, particulars, specifics; information, intelligence, material, input; informal info

"a lack of data on the drug's side effects"

COMPUTING

the quantities, characters, or symbols on which operations are performed by a computer, being stored and transmitted in the form of electrical signals and recorded on magnetic, optical, or mechanical recording media.

 PHILOSOPHY things known or assumed as facts, making the basis of reasoning or calculation.

1

Transla

What is journalism?

Journalism is the activity of gathering, assessing, creating, and presenting news and information. It is also the product of these activities.

DATA JOURNALISM AWARDS 2017 WINNING PROJECTS







Open Data

Database of Assets of Serbian Politicians, Crime and Corruption Reporting Network – KRIK, Serbia

Data Visualisation of the Year

The Rhymes Behind Hamilton, The Wall Street Journal, United States

Investigation of the year

Unfounded, The Globe and Mail, Canada

News Data App of the Year

Electionland, ProPublica and The Electionland Coalition, United States

Data Journalism Website of the Year

Rutas del Conflicto, Rutas del Conflicto, Colombia

The Chartbeat award for the best use of data in a breaking news story, within first 36 hours

Fact Check: Trump And Clinton Debate For The First Time, NPR / NPR Visuals & NPR Politics, United States

Best Individual Portfolio

John Burn-Murdoch, Financial Times, United Kingdom

Best Team Portfolio

Berliner Morgenpost Interactive team, Germany

Student and young data journalist of the year

Yaryna Serkez for portfolio, New York Times et al, Ukraine

Small newsroom

Crime in Context, The Marshall Project, United States

Small newsroom

Ctrl+X, Abraji – Brazilian Association for Investigative Journalism, Brazil

Public choice

"Researchers bet on mass medication to wipe out malaria in L Victoria Region" by Nation Media Group in Kenya

Storytelling with data

- Writing about data
- News applications / data as journalism
- Data visualization

Reporting with data

- Precision journalism / empirical journalism
- Computer-assisted reporting
- Analyzing documents and records at scale

Why data?

Because you want better questions for your sources



Because officials won't engage or answer your calls

CDC cracks down on communications with reporters



SE

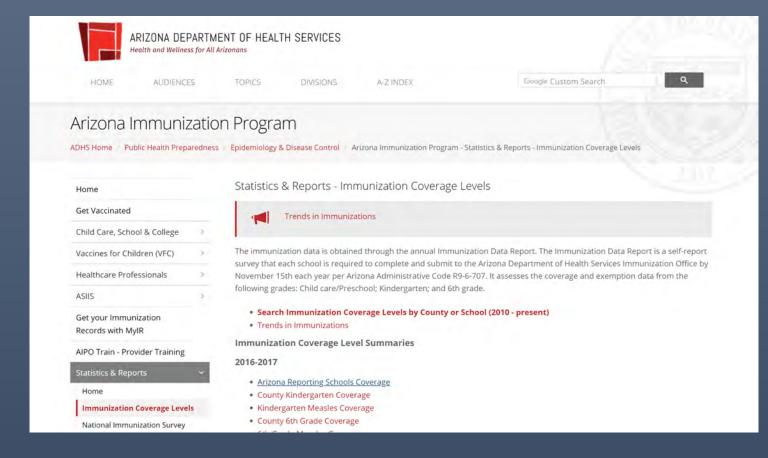
Because you want anecdotes AND evidence



Because records are contemporaneous and don't forget



Because government is good at vacuuming information with no time to analyze it



Because no one else will count

JOURNAL SENTINEL





A JOURNAL SENTINEL WATCHDOG REPORT

Deadly Delays

The nation's newborn screening programs depend on speed and science to save babies from rare diseases. But thousands of hospitals fall short, deadly delays are ignored and failures are hidden from public view - while babies and their families suffer.

Published Nov. 16, 2013

Delays at hospitals across country undermine newborn screening programs





Interactive: See how states compare and search for problem hospitals



Colton Hidde: Testing delay puts newborn's life in jeopardy



Lack of weekend lab hours adds to delay, putting babies at risk

Because it sometimes really isn't a few bad apples



Because we want to report on what officials and institutions do, not what they say



One by one, nearly all the state psychiatric hospitals were boarded up or bulldozed, but Massachusetts leaders broke their promise to replace them with something better — or much of anything at all. The failed mental health care system has led to a public safety crisis, including scores of murders by disturbed people, police shootings, and embattled institutions from courts to hospitals confronting a tidal wave of mentally ill people.

Because, well, dogs

The Yorkie's Dominance: We Analyzed Every Dog Registration in New York

Downtown poodles. Uptown pit bulls.

A Xoloitzcuintli on the block. To understand
New York real estate, follow Fido.

By STEFANOS CHEN FEB. 10, 2018



As old as the republic

THE FOUL CHARGES

OFTHE

TORIES

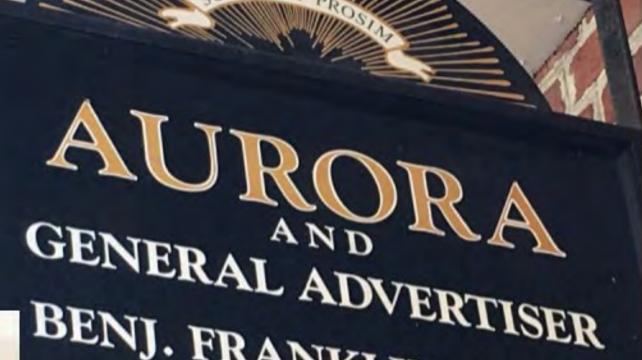
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EDITOR of the AURORA

REPELLED by POSITIVE PROOF and PLAIN TRUTH

SASE CALUMNIATORS PUT TO SHAME

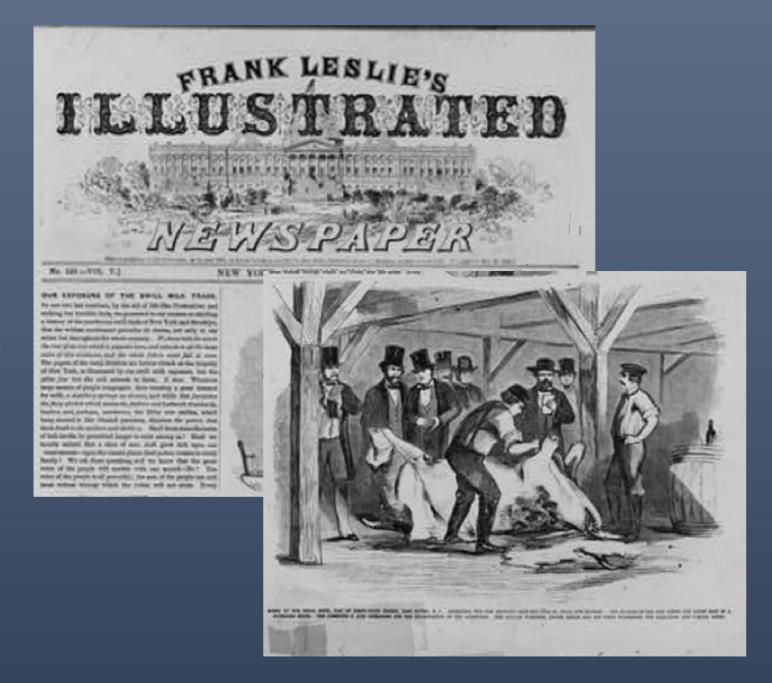
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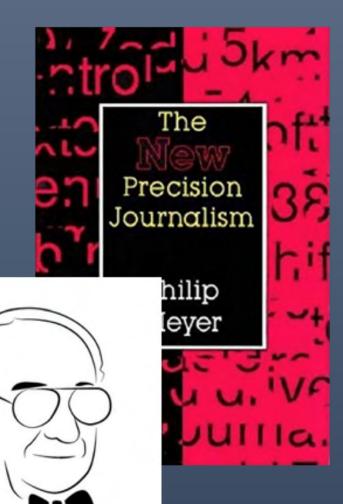
BENJ. FRANKLIN BACHE PUBLISHER

NO. 112, MARKET-STREET

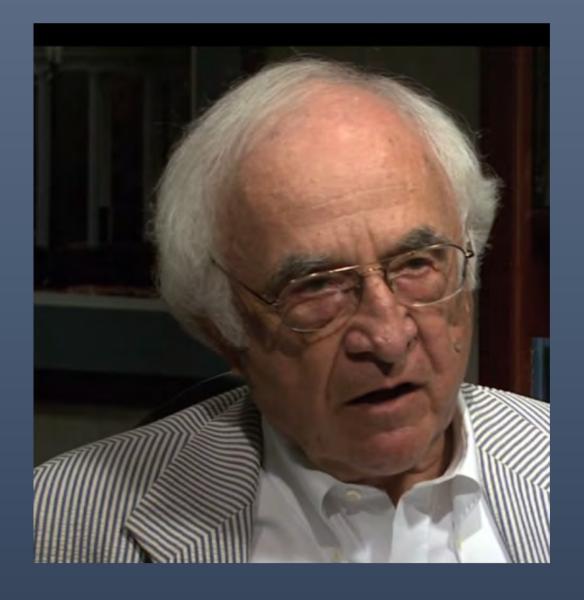
Frank Leslie's
Illustrated Weekly
swill milk
investigation, 1858



Precision journalism



Philip Meyer Award



Original reporting with data

The old way

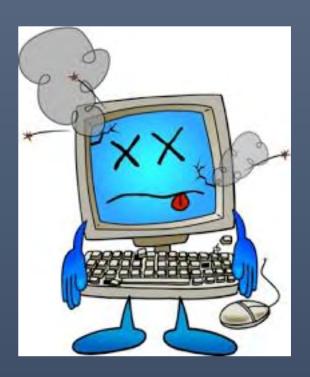
What computers do

- Store stuff
- Give you back stuff you stored
- Sort, count and match
- Repeat your instructions over and over
- Help you with some math



What computers don't do

- Ask questions
- Get ideas
- Think
- Feel
- See
- Understand right from wrong



(They also don't complain when you ask too many questions)

Three kinds of data sources

• Direct observation / surveillance / testing

People

Documents and other records

TECH

GHOST FACTORIES

An invisible danger in our yards

A USA TODAY Investigation

In hundreds of neighborhoods across the United States, children are living and playing near sites where factories once spewed lead and other toxic metal particles into the air. The factories, which melted lead in a process called smelting, closed long ago but poisonous lead particles can still be found in the soil nearby. Families interviewed were unaware of the dangers posed by their yards - and the government has done little to warn them, a USA TODAY investigation has found.



PHOTOS



DANGER

An invisible and ignored danger

FAILURE

A failure to protect the public

TESTING

USA TODAY's soil test findings

CASE STUDY

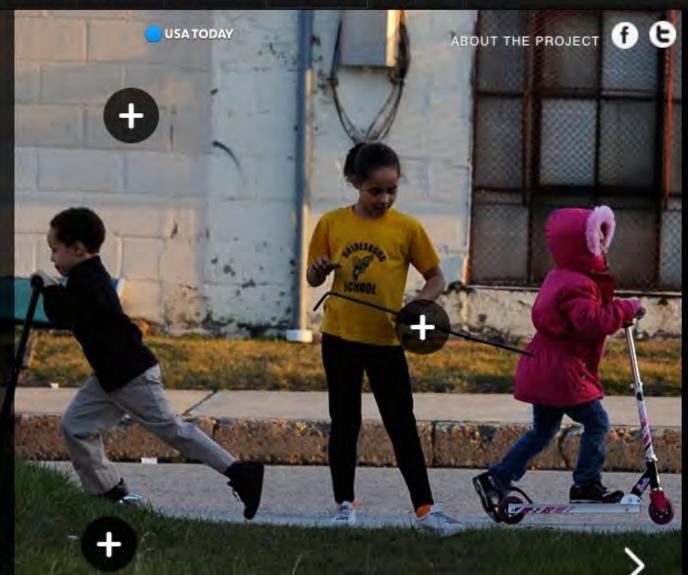
Tyroler Metals, Cleveland, OH

TAKE ACTION

How you can make your home, yard safe

EXPLORE

More than 230 former factory sites



THE JUDGE CLUB

Friday justice

Despite a big backlog in cases, several criminal court judges play golf or go home early on many Fridays.



Depart of the state of the Mark State and Thomas survey of the state o

The series of reports was remarked and written by Manuey



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BEARING ARMS

Seeking Gun or Selling One, Web Is a Land of Few Rules



Heather Charles/Chicago Tribune

Theresa O'Rourke talked about her friend Jitka Vesel, shown at right in photograph behind her. Ms. Vesel was killed by Dmitry Smirnov, who was stalking her and bought a gun online.

By MICHAEL LUO, MIKE McINTIRE and GRIFF PALMER Published: April 17, 2013 ♥ 371 Comments

The want ads posted by the anonymous buyer on Armslist.com, a sprawling free classified ads Web site for guns, telegraphed urgency.

Bearing Arms

Articles in this series examine the gun industry's influence and the wide availability of firearms in America.

Previous Articles:

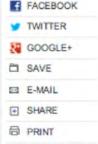
Seeking Gun or Selling One, Web Is a Land of Few Rules

In Some States, Gun Rights Trump Orders of Protection

Feb. 20: " Got 250 cash for a good handgun something.reliable."

Feb. 27: " I got 200 250 cashlooking for a good handgun please let me know what u got."

Feb. 28: " Looking to buy some 9 mm ammo and not at a crazy price."





REPRINTS

FOR SALE: WTS/WTT 300 BLACKOUT PISTOL, 300 BLACKOUT NOVESKI AR, REMINGTON/AAC SD 300 BLACKOUT, AAC MICRO 7

Price: Seller: \$ 2,550

Private Party Listings by this user Saturday, June 29, 2013

Handguns Springfield, Springfield, Missouri - Map

Flag | Edit | Favorite

Contact Seller

Manufacturer Caliber: Action:

Noveske

300 Blackout (7.62x35mm) Semi-automatic

Firearm Type:

As new Noveski factor built 300 Blackout rifle, fired 60 rounds to function test since new, 16" stainless match barrel.

1.Laure front and rear folding backup iron sights

2.BCM gunfighter charging handle

3.AAC 51T flash hider

4. Magpul MIAD grip and stock 5. Troy Single point sling mount

6.Hard chrome bolt/carrier

7. Surefire 900V, LED/IR with white navigation lights

8. Aimpoint T1 micro sight, 4MOA, Larue tall throw lever mount

9.1 P Mag

A CULTURE OF BIDDING Examining the growing art market in China

Forging an Art Market

PART 2 An Art Power's Rise

PART 3 The New Collectors

A CULTURE OF BIDDING

Forging an Art Market in China

By David Barboza, Graham Bowley and Amanda Cox

Additional Reporting by Jo Craven McGinty BEIJING, October 28, 2013

点击查看本文中文版 | Read in Chinese »

hen the hammer came down at an evening auction during China Guardian's spring sale in May 2011, "Eagle Standing on a Pine Tree," a 1946 ink painting by Qi

Baishi, one of China's 20th-century masters, had drawn a startling price: \$65.4 million. No Chinese painting had ever fetched so much at auction, and, by the end of the year, the sale appeared to have global implications, helping China surpass the United States as the world's biggest art and auction market.

But two years after the auction, Qi Baishi's masterpiece is still languishing in a warehouse in Beijing. The winning bidder has refused to pay for the piece since doubts were raised about its authenticity.





Scholars say he was prolific and estimate he produced between 10,000 and 15,000 works in his lifetime. Of those, about 3,000 are in the collections of major museums and some are assumed to have been destroyed during the Japanese invasion in the 1930s or during the Cultural Revolution, when Red Guards looted and occupied his family's home.

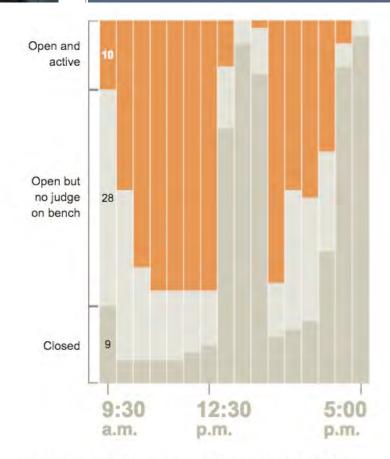
Auction records, though, show that more than 18,000 distinctive works by Qi Baishi have been offered for sale since 1993, an impossible number, if the expert estimates are right.

Faltering Courts, Mired in Delays



Michael Appleton for The

The delays in the Bronx court system are apparent even before entering the criminal courts building. Victims, defendants, witnesses and relatives often face long lines to go through security.



On March 13, The Times visited all 47 courtrooms at the Bronx County Hall of Justice in 30-minute intervals to tally how many were open and actively in session, open but without a judge on the bench, or closed. More than half of the courtrooms were either closed or idle for the majority of the day.

Account

Documenting racial profiling in police work is devilishly difficult, because a multitude of factors — including elevated violent crime rates in many black neighborhoods - makes it hard to tease out evidence of bias from other influences. But an analysis by The New York Times of tens of thousands of traffic stops and years of arrest data in this racially mixed city of 280,000 uncovered wide racial differences in measure after measure of police conduct.

The Disproportionate **K** of Driving While Black

An examination of traffic stops and arrests in Greensboro, N.C. uncovered wide racial differences in measure after measure of police conduct.

TODAY'S PAPER CLASSIFIED

OBITUARIE

€ 80°



News / Speeding Cops

Cops among Florida's worst speeders, Sun Sentinel investigation finds



The Sun Sentinel's 2012 investigation of speeding cops found that more than 700 cops from 12 agencies drove 90 to 130 mph.

By Sally Kestin and John Maines, Sun Sentinel

Weather

Today: Partly sunny, breezy. High 53. Low 30. Saturday: Partly sunny. High 45. Low 29. The Washington Post

DISTRICT 8
MARYLAND
HOME EDITION

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Details, B10

188TH YEAR NO. 122 S DC MD

FRIDAY, APRIL 6, 2007

Mr. Mr. Mr. Mr. Vi. Vi. Vr. Vv.

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Washington (See box in A.

Fairfax Man Whose Son Killed Police Is Arrested

Father Possessed Guns Illegally, Charges Say

By Jerry Markon and Tom Jackman Washington Post Staff Writers

The father of the teenager who killed two Fairfax County police officers outside a police station last year was charged yesterday with illegally helping his son obtain the arsenal of guns used in the rampage, including an AK-47 assault rifle.

Brian Kennedy, 50, who lives in Centreville near the Sully District police station, is accused of lying on federal forms to obtain the AK-47 and illegally possessing the six other guns that his mentally troubled son, Michael, took to the station in May. Michael Kennedy, 18, fired morthan 70 rounds that day before police mortally wounded him.

A 21-page indictment, unsealed late yesterday in U.S. District Court in Alexandria, portrays a family caught up in a world of guns and drugs. It alleges that Brian Kennedy smoked marijuana with his son and his son's teenage friends and that Michael Kennedy's mother, Margaret, took the teens to a shooting range to practice firing assault rifles.

Authorities found guns and marijuana throughout the family's home, and the indictment quotes Brian Kennedy as telling a friend that the 7.8 grams of marijuana police found in a wooden box in the living

room was "chump change."

Kennedy was arrested late yesterday at

HARVESTING CASH | The Many Definitions of 'Rural'



In 2003, the Agriculture Department gave a \$1.95 million loan to help rebuild a Cape Cod pier. Provincetown, Mass., a va with soaring property values and moderate taxes, says that "the business of the harbor is now largely related to tourism

Rural Aid Goes to Urban Ar

USDA Development Program Helps Suburbs, Resort C:

By GILBERT M. GAUL and SARAH COHEN Washington Post Staff Writers backwoods areas that were isolated and poor, struggling to keep their heads above water.

"Provincetown is many things to many



Hussein's Prewar Ties To Al-Qaeda Discounted

Pentagon Report Says Contacts Were Limited

By R. JEFFREY SMITH Washington Post Staff Writer

Captured Iraqi documents and intelligence interrogations of Saddam Hussein and two former aides "all confirmed" that Hussein's regime was not directly cooperating with al-Qaeda before the U.S. invasion of Iraq, according to a declassified Defense De-

"Provincetown is many things to many people, and to USDA, we're rural...We'll take it

Zarqawi, the terrorist killed last June.

"This is al-Qaeda operating in Iraq," Cheney told Limbaugh's listeners about Zarqawi, who he said had "led the charge for Iraq." Cheney cited the alleged history to illustrate his argument that withdrawing U.S. forces from Iraq would "play right into



Thank you!

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