

BUSINESS INSIDER

These Hilarious Charts Will Show You Exactly Why Correlation Doesn't Mean Causation

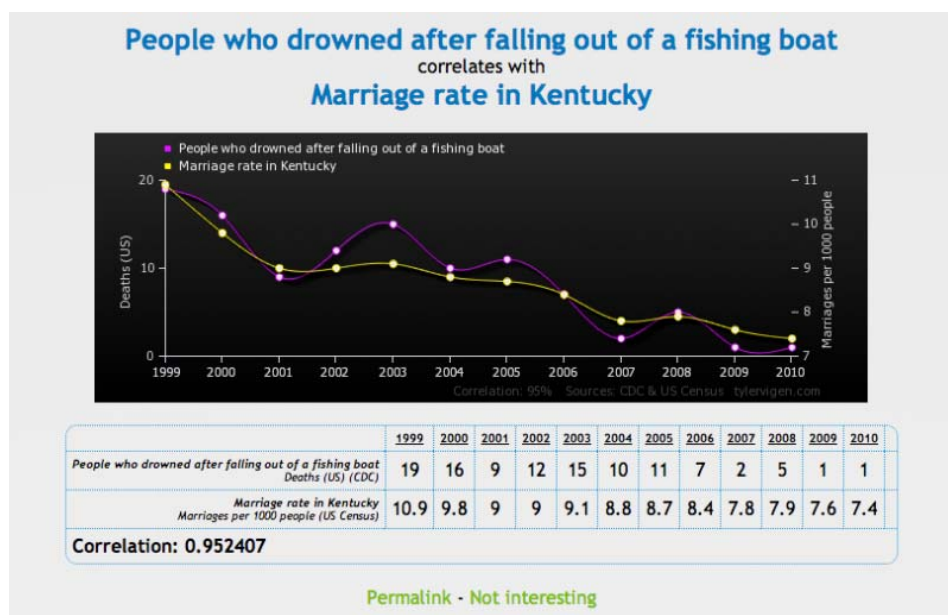


DINA SPECTOR
MAY 9, 2014, 12:42 PM

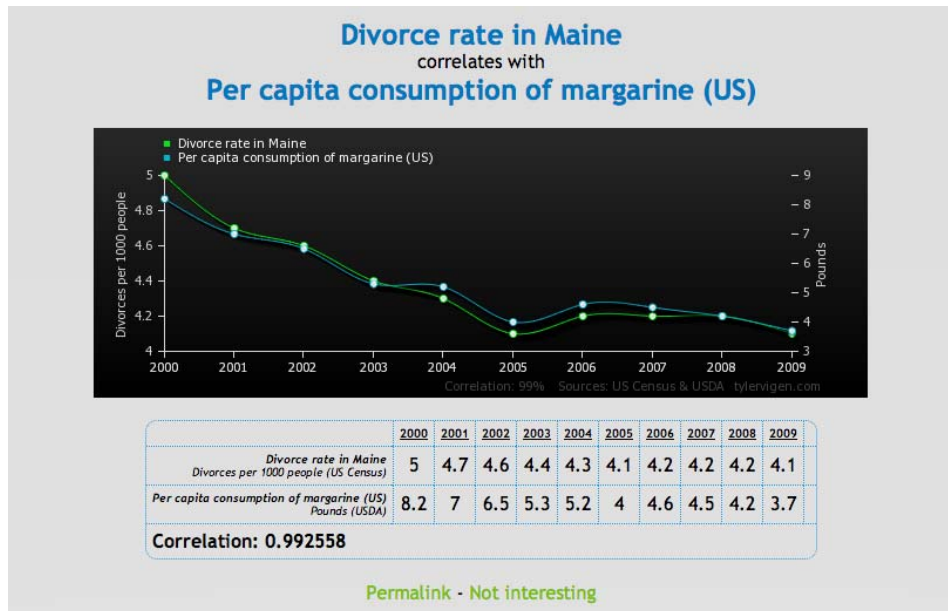
To prove that correlation between two variables does not necessarily mean that one causes the other, Tyler Vigen has created [a series of comical charts](#) that show "spurious correlations."

A spurious correlation occurs when two things — like the rising divorce rate in Maine and the state's plummeting margarine consumption — appear related, but in reality are not.

Check out a few of our favorite charts below, then head over to [Vigen's website](#) to see the rest. Make of these what you will.



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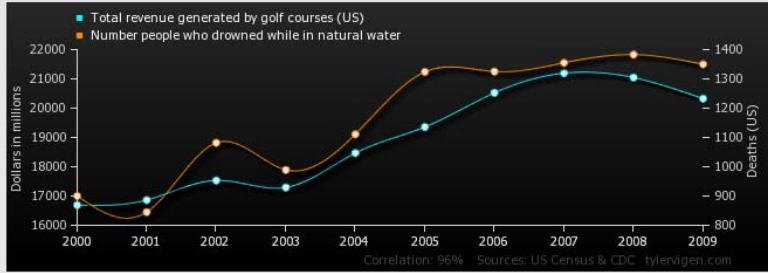


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Total revenue generated by golf courses (US) correlates with Number people who drowned while in natural water



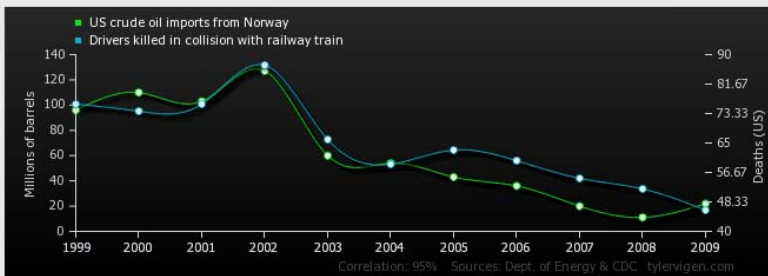
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue generated by golf courses (US) Dollars in millions (US Census)	16,692	16,862	17,533	17,291	18,469	19,356	20,523	21,195	21,044	20,326
Number people who drowned while in natural water Deaths (US) (CDC)	900	845	1,082	989	1,111	1,324	1,325	1,355	1,383	1,350

Correlation: 0.958053

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US crude oil imports from Norway correlates with Drivers killed in collision with railway train



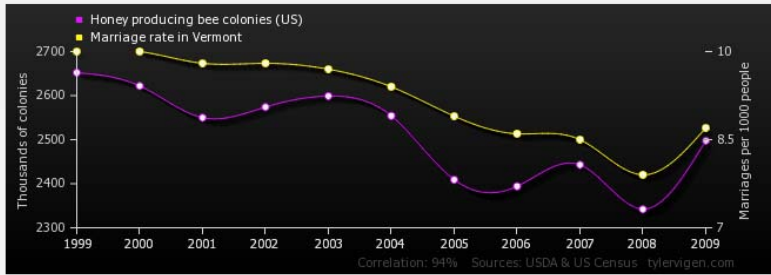
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
US crude oil imports from Norway Millions of barrels (Dept. of Energy)	96	110	103	127	60	54	43	36	20	11	22
Drivers killed in collision with railway train Deaths (US) (CDC)	76	74	76	87	66	59	63	60	55	52	46

Correlation: 0.954509

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Honey producing bee colonies (US) correlates with Marriage rate in Vermont



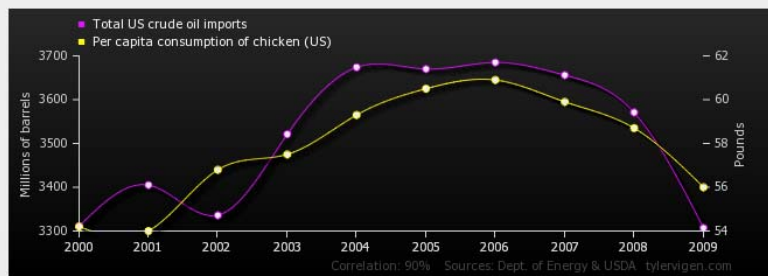
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Honey producing bee colonies (US) Thousands of colonies (USDA)	2,652	2,622	2,550	2,574	2,599	2,554	2,409	2,394	2,443	2,342	2,498
Marriage rate in Vermont Marriages per 1000 people (US Census)	10	10	9.8	9.8	9.7	9.4	8.9	8.6	8.5	7.9	8.7

Correlation: 0.937689

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Total US crude oil imports correlates with Per capita consumption of chicken (US)



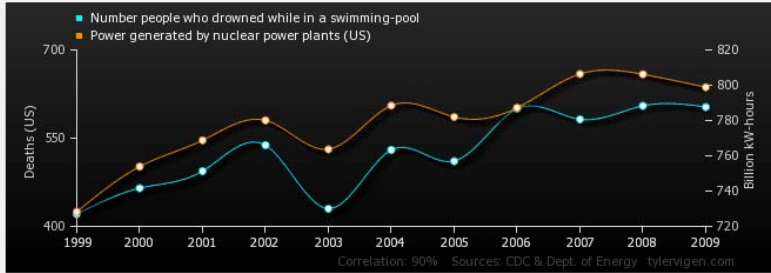
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total US crude oil imports Millions of barrels (Dept. of Energy)	3,311	3,405	3,336	3,521	3,674	3,670	3,685	3,656	3,571	3,307
Per capita consumption of chicken (US) Pounds (USDA)	54.2	54	56.8	57.5	59.3	60.5	60.9	59.9	58.7	56

Correlation: 0.899899

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Number people who drowned while in a swimming-pool correlates with Power generated by nuclear power plants (US)



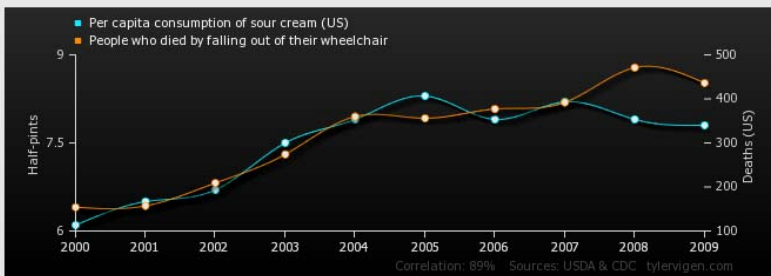
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number people who drowned while in a swimming-pool Deaths (US) (CDC)	421	465	494	538	430	530	511	600	582	605	603
Power generated by nuclear power plants (US) Billion kW-hours (Dept. of Energy)	728.3	753.9	768.8	780.1	763.7	788.5	782	787.2	806.4	806.2	798.9

Correlation: 0.901179

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Per capita consumption of sour cream (US) correlates with People who died by falling out of their wheelchair



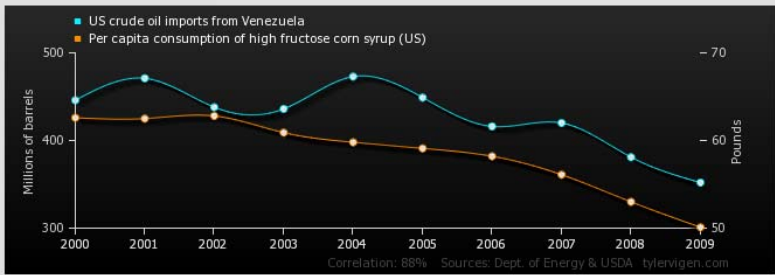
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Per capita consumption of sour cream (US) Half-pints (USDA)	6.1	6.5	6.7	7.5	7.9	8.3	7.9	8.2	7.9	7.8
People who died by falling out of their wheelchair Deaths (US) (CDC)	154	157	209	274	360	356	377	392	471	436

Correlation: 0.888923

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US crude oil imports from Venezuela correlates with Per capita consumption of high fructose corn syrup (US)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<i>US crude oil imports from Venezuela</i> Millions of barrels (Dept. of Energy)	446	471	438	436	473	449	416	420	381	352
<i>Per capita consumption of high fructose corn syrup (US)</i> Pounds (USDA)	62.6	62.5	62.8	60.9	59.8	59.1	58.2	56.1	53	50.1

Correlation: 0.884883

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