Eli Pariser:

Beware online "filter bubbles"

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[Mark Zuckerberg,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#0) [a journalist was asking him a question about the news feed.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#2000) [And the journalist was asking him,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#5000) ["Why is this so important?"](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#7000) [And Zuckerberg said,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#9000) ["A squirrel dying in your front yard](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#11000) [may be more relevant to your interests right now](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#13000) [than people dying in Africa."](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#16000) [And I want to talk about](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#19000) [what a Web based on that idea of relevance might look like.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#21000)

[So when I was growing up](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#25000) [in a really rural area in Maine,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#27000) [the Internet meant something very different to me.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#29000) [It meant a connection to the world.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#32000) [It meant something that would connect us all together.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#34000) [And I was sure that it was going to be great for democracy](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#37000) [and for our society.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#40000) [But there's this shift](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#43000) [in how information is flowing online,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#45000) [and it's invisible.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#47000) [And if we don't pay attention to it,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#50000) [it could be a real problem.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#52000) [So I first noticed this in a place I spend a lot of time --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#55000) [my Facebook page.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#58000) [I'm progressive, politically -- big surprise --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#60000) [but I've always gone out of my way to meet conservatives.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#63000) [I like hearing what they're thinking about;](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#65000) [I like seeing what they link to;](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#67000) [I like learning a thing or two.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#69000) [And so I was surprised when I noticed one day](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#71000) [that the conservatives had disappeared from my Facebook feed.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#74000) [And what it turned out was going on](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#78000) [was that Facebook was looking at which links I clicked on,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#80000) [and it was noticing that, actually,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#84000) [I was clicking more on my liberal friends' links](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#86000) [than on my conservative friends' links.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#88000) [And without consulting me about it,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#91000) [it had edited them out.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#93000) [They disappeared.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#95000)

[So Facebook isn't the only place](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#99000) [that's doing this kind of invisible, algorithmic](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#101000) [editing of the Web.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#103000) [Google's doing it too.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#106000) [If I search for something, and you search for something,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#108000) [even right now at the very same time,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#111000) [we may get very different search results.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#113000) [Even if you're logged out, one engineer told me,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#116000) [there are 57 signals](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#119000) [that Google looks at --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#121000) [everything from what kind of computer you're on](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#124000) [to what kind of browser you're using](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#127000) [to where you're located --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#129000) [that it uses to personally tailor your query results.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#131000) [Think about it for a second:](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#134000) [there is no standard Google anymore.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#136000) [And you know, the funny thing about this is that it's hard to see.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#140000) [You can't see how different your search results are](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#143000) [from anyone else's.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#145000)

[But a couple of weeks ago,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#147000) [I asked a bunch of friends to Google "Egypt"](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#149000) [and to send me screen shots of what they got.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#152000) [So here's my friend Scott's screen shot.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#155000) [And here's my friend Daniel's screen shot.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#159000) [When you put them side-by-side,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#162000) [you don't even have to read the links](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#164000) [to see how different these two pages are.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#166000) [But when you do read the links,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#168000) [it's really quite remarkable.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#170000) [Daniel didn't get anything about the protests in Egypt at all](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#174000) [in his first page of Google results.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#177000) [Scott's results were full of them.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#179000) [And this was the big story of the day at that time.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#181000) [That's how different these results are becoming.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#183000)

[So it's not just Google and Facebook either.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#186000) [This is something that's sweeping the Web.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#189000) [There are a whole host of companies that are doing this kind of personalization.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#191000) [Yahoo News, the biggest news site on the Internet,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#194000) [is now personalized -- different people get different things.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#197000) [Huffington Post, the Washington Post, the New York Times --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#201000) [all flirting with personalization in various ways.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#204000) [And this moves us very quickly](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#207000) [toward a world in which](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#210000) [the Internet is showing us what it thinks we want to see,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#212000) [but not necessarily what we need to see.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#216000) [As Eric Schmidt said,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#219000) ["It will be very hard for people to watch or consume something](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#222000) [that has not in some sense](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#225000) [been tailored for them."](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#227000)

[So I do think this is a problem.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#230000) [And I think, if you take all of these filters together,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#232000) [you take all these algorithms,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#235000) [you get what I call a filter bubble.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#237000) [And your filter bubble is your own personal,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#241000) [unique universe of information](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#244000) [that you live in online.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#246000) [And what's in your filter bubble](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#248000) [depends on who you are, and it depends on what you do.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#251000) [But the thing is that you don't decide what gets in.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#254000) [And more importantly,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#258000) [you don't actually see what gets edited out.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#260000) [So one of the problems with the filter bubble](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#263000) [was discovered by some researchers at Netflix.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#265000) [And they were looking at the Netflix queues, and they noticed something kind of funny](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#268000) [that a lot of us probably have noticed,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#271000) [which is there are some movies](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#273000) [that just sort of zip right up and out to our houses.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#275000) [They enter the queue, they just zip right out.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#278000) [So "Iron Man" zips right out,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#281000) [and "Waiting for Superman"](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#283000) [can wait for a really long time.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#285000)

[What they discovered](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#287000) [was that in our Netflix queues](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#289000) [there's this epic struggle going on](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#291000) [between our future aspirational selves](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#294000) [and our more impulsive present selves.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#297000) [You know we all want to be someone](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#300000) [who has watched "Rashomon,"](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#302000) [but right now](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#304000) [we want to watch "Ace Ventura" for the fourth time.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#306000) [(Laughter)](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#309000) [So the best editing gives us a bit of both.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#312000) [It gives us a little bit of Justin Bieber](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#314000) [and a little bit of Afghanistan.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#316000) [It gives us some information vegetables;](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#318000) [it gives us some information dessert.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#320000) [And the challenge with these kinds of algorithmic filters,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#323000) [these personalized filters,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#325000) [is that, because they're mainly looking](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#327000) [at what you click on first,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#329000) [it can throw off that balance.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#333000) [And instead of a balanced information diet,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#337000) [you can end up surrounded](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#340000) [by information junk food.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#342000)

[What this suggests](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#344000) [is actually that we may have the story about the Internet wrong.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#346000) [In a broadcast society --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#349000) [this is how the founding mythology goes --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#351000) [in a broadcast society,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#353000) [there were these gatekeepers, the editors,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#355000) [and they controlled the flows of information.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#357000) [And along came the Internet and it swept them out of the way,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#360000) [and it allowed all of us to connect together,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#363000) [and it was awesome.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#365000) [But that's not actually what's happening right now.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#367000) [What we're seeing is more of a passing of the torch](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#371000) [from human gatekeepers](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#374000) [to algorithmic ones.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#376000) [And the thing is that the algorithms](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#379000) [don't yet have the kind of embedded ethics](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#382000) [that the editors did.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#385000) [So if algorithms are going to curate the world for us,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#388000) [if they're going to decide what we get to see and what we don't get to see,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#391000) [then we need to make sure](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#394000) [that they're not just keyed to relevance.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#396000) [We need to make sure that they also show us things](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#399000) [that are uncomfortable or challenging or important --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#401000) [this is what TED does --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#404000) [other points of view.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#406000)

[And the thing is, we've actually been here before](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#408000) [as a society.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#410000) [In 1915, it's not like newspapers were sweating a lot](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#413000) [about their civic responsibilities.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#416000) [Then people noticed](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#419000) [that they were doing something really important.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#421000) [That, in fact, you couldn't have](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#424000) [a functioning democracy](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#426000) [if citizens didn't get a good flow of information,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#428000) [that the newspapers were critical because they were acting as the filter,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#433000) [and then journalistic ethics developed.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#436000) [It wasn't perfect,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#438000) [but it got us through the last century.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#440000) [And so now,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#443000) [we're kind of back in 1915 on the Web.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#445000) [And we need the new gatekeepers](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#449000) [to encode that kind of responsibility](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#452000) [into the code that they're writing.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#454000)

[I know that there are a lot of people here from Facebook and from Google --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#456000) [Larry and Sergey --](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#459000) [people who have helped build the Web as it is,](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#461000) [and I'm grateful for that.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#463000) [But we really need you to make sure](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#465000) [that these algorithms have encoded in them](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#468000) [a sense of the public life, a sense of civic responsibility.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#471000) [We need you to make sure that they're transparent enough](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#474000) [that we can see what the rules are](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#477000) [that determine what gets through our filters.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#479000) [And we need you to give us some control](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#482000) [so that we can decide](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#484000) [what gets through and what doesn't.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#486000) [Because I think](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#489000) [we really need the Internet to be that thing](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#491000) [that we all dreamed of it being.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#493000) [We need it to connect us all together.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#495000) [We need it to introduce us to new ideas](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#498000) [and new people and different perspectives.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#501000) [And it's not going to do that](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#505000) [if it leaves us all isolated in a Web of one.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#507000)

[Thank you.](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#510000)

[(Applause)](http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#512000)

<http://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles.html#conversation>