Culturomics – collecting data for the study of human culture

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Who uses google search? Who uses it on a daily basis? Who uses Bing? Oh, that’s good to know.

Alright, so what is Culturomics? Culture refers to the attitude and behaviour of particular groups of people. So, when you doing Research Project perhaps their attitudes and behaviour is important to back up your question.

Culturomics, as in like economics, is the quantification and characterisation of data. Now that seems really sciencey right, but you can really easily access, you can go home and access this stuff right now.

There is three and a half billion searches today, if you look down the 2000’s, hardly anything, it is really really ramping up the number of times people google search per day, in fact, we are looking at per year 12 thousand billon google searches. All that data is actually held by google and you can access it.

What does that about people, what does that say about their attitudes, what does it say about their behaviour. The database that you can access is call google trends, has anyone here been to google trends? Even heard of google trends? We have one or two tentative hands.

There is another database as well, who’s used google books for instance? Right, you can access every single word in those books, 30 million books has been digitized. It’s a database of words that you can search

Who’s heard of google ngram viewer? Good, no hands what so ever. You can actually type in to this ngram view any word and see it frequency in the books of the world from 1800 onwards. Really really powerful data that you can use to interrogate your research project question.

So, how does this fit with the Research Project? You can access, analyse, select appropriate primary sources. So this is a primary source of data, and really it is an untainted source of data. No one’s sat there and, with motives and typed into a google search box.

How do you get to google trends? You google it of course, that would seems fairly obvious. What does some of the results look like? You can actually do search term frequencies over time.

So anyone here thinking of getting a tattoo? Oh good, we’ve got some people down the back. Let’s have a look, this is the trend from about 2004 to 2015. That’s what the trend looks like, so, what’s that telling me about the trend, mm, perhaps it’s on the downward trend, perhaps you should rethink that, maybe we’re going out of fashion there.

You can compare time periods, so I can put 2013 2015. Have a look there at 2013, more people search the word tattoo in 2013 compared to 2015. Tattoo removal, this trend seems to be increasing, mm, I wonder why that is? You never know, it might be peaking up the top there.

So, research project is all about interpreting information. And this is really good numerical data that you can in interrogate with your research project questions.

Alright, you can interrupt patterns and relationships solving problems. Those things are straight out of the subject outline.

Not only can you do it over time, but you can do it over geographical region. So, I actually specified Australia for that data. I can go and have a look at Europe, I can go look at America. I can compare regions. But you can also compare states if you just look at Australia.

So this the word tattoo, and you can see that in Queensland, quite popular. South Australia not so popular. You can actually see fluctuating searches over time. Alright, an example of real life research done with google trends. There was a paper that was published in Nature, where they looked at influenza epidemics with what people typed in google search boxes. So if they searched for the word flu, if they searched for the word runny nose, aches and pains, that sort of thing.

And, out of that came something called google flu trends. So now this is the thing that you can actually look at the data on influenza to see it predicting epidemics just by what people are typing in search boxes. What that means is you can actually do your own data analyse of what people are typing in search boxes

ADHD, I don’t know, Asperger’s, have a look, just think about what you can potentially type into here.

Ok, so in booth 35 today, there is a why don’t international acts come to doing a national tour? Well, perhaps they could have used google trends. Fleetwood Mac, not coming to Adelaide, but have a look at the trends things, let’s see, South Australia’s number two. We love Fleetwood Mac, obviously, we are googling them a lot, perhaps Fleetwood Mac should reconsider. Florence and the Machine, who likes Florence and the Machine? I know I do, but apparently we’re not googling them enough, maybe they’re right not to come here, cause we’re not really that interested in them.

Ok, ngram viewer, you can look at the world’s books and all the words in it. So, how do you find that, well, I’d google ngram viewer, that would be a start. Here’s tattoo, the word tattoo. You can see the popularity really spikes what’s people writing about the word tattoo. Between 1980 and 2000, you can actually have a look at retrospectively at history and the words in books. For instance, the Spanish flu. It killed lots and lots of people back in 1918, you can see the spike in the frequency of that word. Here I’ve got a search that says the human immunodeficiency virus, which is HIV, compared to influenza and malaria. And malaria wins out there; malaria is the winner as frequency words. It says something about our culture and the impact on our culture.

Booth 26 it talks about mirror therapy and unmediated treatments having an impact on phantom pain. So, phantom pain, is that a thing? So in books, actually started in about 1940 suddenly appeared, and a lot more recognition in books as you go along up to the present day.

And I think we are round about at the end, thank you very much.