

## WSU Libraries: Advanced Web Search

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**KAITLIN HENNESSY:** Hello, everyone. And welcome to Advanced Web Search. My name is Kaitlin Hennessy. I'm the Program Coordinator at Global Connections. Tonight we have Lorena O'English, from the WSU Libraries, joining us. She is our in-house librarian as well as her special subjects-- her specialty subjects are criminal justice, political science, sociology, sport studies, and theater. Tonight she's going to explain to us how we can better search the internet for things that we're looking for, to get results that are more accurate, and what we're really trying to hone in on.

So tonight, if you have any questions at any point, please use the chat box, and Lorena will answer them. Also if you have any technical difficulties, I will do my best to help you as a moderator. And feel free to discuss the content as well. All right. Thank you for coming tonight, and I'm going to turn over to Lorena.

**LORENA O'ENGLISH:** OK. So let's go ahead and get started . And what I want to do is I'm going to talk a little bit about advanced Google Web search strategies. And the thing is that those of you who use a different browser, like Bing, or if you use Windows 10 Edge, which is kind of like Bing anyway, or Safari, or Opera, or Firefox, a lot of the things are-- not Firefox. That's not a search engine.

But if you use a different sort of search engine, most things that I'm going to show you in Google will work in other search engines, like Bing or Yahoo or Safari, because they tend to all basically work the same way. So a few things are going to be Google specific, but most people use Google anyway, so I figured I was safe with really focusing on that. If there's interest in other search engines, with maybe some more specific sorts of things, I have created a web page for this presentation. And I can certainly add information onto it, if it's something that people are interested in.

So we'll go ahead and get started. But before we get started, I just wanted to point out my email address is here. I'm O'English@WSU.edu. And you can also reach me on social media. I'm wsulorena. So we're going to go over to the next slide, and you can see I have to go manually here. Let's see if I can get this to go. Let's try this out. There we are.

OK. So the first thing I want to talk about is the fact that all Googles are not the same. And this is really important, because you know the whole bit where we were talking about precision in Google searching? That was a lie. I just did that to get you all interested in this. Because the thing is, there really isn't a lot of precision in Google searching, because when it comes down

to it, there are lots of different Googles. All Googles are not the same.

And if you have never watched it, not during this presentation, but after this presentation, go ahead and do a search for the Filter Bubble. It's a Ted Talk. You can find it on YouTube. And it's about nine minutes long, and it does a really good job of explaining why Google results are different.

And you can also do a test. I did this myself last night. Do a search on your phone or on your browser and then have a friend do a search. And you're probably going to see different results. It may not be substantially different, but they will be different. And that's because of this thing called the Filter Bubble. And the Filter Bubble is about the fact that, whether you're logged in with a Google account or not, Google knows an enormous amount of information about you. And it is able to basically tweak an algorithm that is giving you stuff that you are more likely to like.

And that's not just Google. All search engines do that. Many websites, like Huffington Post or Facebook, et cetera, they use this algorithm to essentially send you information that they think that you're going to want. And that means that the information that you see when you do a search or when you look at Facebook is different from the information that a friend might see.

Added to that is the effect of just what happens when you just click on links. And you click on links that somebody else may not click on. So it's not just a matter of algorithms, it's also a matter of your choice. So this becomes really important when you're doing searches. Because let's say you do a search on your own computer, and then you do a search on a different computer. You may not see the same thing. And we may actually see that in practice today as we actually look at the searches that I have created for this particular webinar.

The other thing that goes on is that, when we're searching the Web, we're not searching the whole Web. There's three layers of the Web. It's kind of the public Web that we see when we do a Google search, the results that we find. Then we have something called the invisible Web, or it's also called the deep Web or the hidden Web. And these are the things that we don't see when we search, but that are there. And they might be websites, for example, that have special coding so that search engine robot, search engine spiders, can't actually find them.

Or they may be web pages that don't have any incoming links or any exterior facing links. So what happens then is spiders-- basically the little things that go out there and find content for

search engines-- they operate on links. If a website doesn't have any links, it's not going to be found. You will not find it when you do a Google search, unless the person who created the website manually asked Google to index a search. So that's something else that you're not going to find.

Other things that you might not find are things that are within walled gardens, like Facebook or Twitter, behind locked accounts. And these days, the mobile Web, things inside mobile apps are things that you're not likely to find. That's all hidden information that sometimes can be really valuable. So we're not-- when we Google search, we're not searching everything on the Web. We're searching the things that is available for us.

The other thing is, realistically, when we search the Web, the most important aspect of the Web is how many pages we actually look at. So I'm going to ask you all something. I want you to type in the chat box and tell me, when you do a Google search, how many pages of results do you look at? Everyone go ahead and type it in. Do you look at one page of results, two pages of results, three, or four? What do you all do?

I'm seeing maybe two, one to two, et cetera. Yeah, OK. And you know what? That's actually pretty consistent across the way. And that's also what happens when people search databases. So I'm going to show you a little bit later probably a technique that might help us actually get more stuff, even while we continue to-- satisfies our behavior and look at one or two pages. But the fact is that the invisible Web for us, our personal invisible Web, is everything that shows up in the result list after that second page, all the stuff that we're not seeing. So something to think about.

Now, there's a third aspect of the Web that we're not going to talk about today. And that is the dark Web. That's the stuff that you have to use encryption software to see and to post. And so we're not going to actually take a look at that. But I wanted to include that, because that's something that's been getting a lot of talk in recent years. So let's go ahead take a look.

So let's go ahead, and here's where we're going to see if everything works the way I want it to. And what I'm going to do is-- oops, you know what? I really screwed up on this one. I did not put in a link. This may be a challenge. All right. So this is what I'm going to do. I'm going to zip us over. You can see us there. And we're going to go ahead to another tab-- I hope you all are seeing this.

And I'm going to do a Google search. Because the first thing I want to do is I want to talk a little

bit about settings. So here I am in Google. And if we go all the way down in the corner, we're going to see a link that says Settings. And this link is really important. So we're going to go ahead and click on this.

Right now, what we want to do is we want to click on Search Settings. And the first thing is our filters, instant predictions. We're just going to say whatever. Results Per Page-- all right, this is a big one. Because you know how we all look at one or two pages? What we can do is we can actually manipulate this by saying, instead of looking at 10 results, let's look at 30 or 40.

Let's just say 30. Let's see if we can get that to go. Let's put my slider over there. Come on, slider. Well, I think it's not going to let me do it. But it should with you. And then you may still look at two pages, but instead of looking at 20 results, you're looking at 60. So that's a small little fix that can make a big difference.

And you can see here I have my private results, which has to do with personalizations. It has to do with Google's algorithm. And I have the ability for Google to retain my search history. Even if I don't choose Private Results or Search History, Google is still able to actually fit a pattern for me based upon all sorts of things-- my IP range, where I'm located, et cetera. But fiddling around with these settings can sometimes make a difference in what you're doing. So-- whoops, let's see. There we are<sup>4</sup>. Let's get out of here. I'm going to move this back.

And that's the first thing we wanted to do, is we wanted to actually look at our search settings to see what we were responding. So right now, although it didn't work for me, hopefully it will work for you, that when we do a search, you're going to get more than 10 results. You're more likely to find something that's actually going to be useful to you, because you've expanded the pot.

All right. Let's go on. And the next thing we're going to do is we're going to finally start talking about searching Google. So the first thing I want to do is talk about how order matters. And this is kind of a surprise. So I am trying to get better at cooking, so I do Blue Apron. So I just typed in Blue Apron, and then I was like, Lorena, you need to practice. You need to do good practice, narrow it down a little bit. So out of nowhere, I typed in Crochet.

So let's see what happens when I do a search on Blue Apron Crochet. And I have to do this this clunky way because of our little problem here. But you can see our results. And you can see what I did here was I did Blue Apron Crochet, and you can see the results that I get-- Blue

Apron pattern. I get about two million results. That's a lot.

OK. Now what happens if, instead of doing Blue Apron Crochet, I do Crochet Apron Blue? I get very different stuff. So order matters. And you want to play around with your order to see how it's going to work for you, because that can really make a difference in terms of how Google actually approaches the search.

If you're comfortable with your keywords, and you're not getting good stuff, mix them around a little bit and see what happens. The second thing to keep in mind is that, when I search Blue Apron Crochet or Crochet Apron Blue, what I'm really doing is I'm searching this invisible And. So I'm searching Blue and Apron and Crochet, et cetera.

The second thing we want to talk about with search syntax is the effect of phrase searching. So I go ahead and just search the phrase Blue Apron-- let me see if this works. Let's drag this in again here. We're going to go to just search Blue Apron. Let's see what happens when we search Blue Apron. Whoops. Let's try that again. OK. So I get blue apron stuff, all about this. And I'm getting 3 million results. I'm getting loads and loads of results.

So what happens if, instead of searching Blue and Apron, which might give me things-- you can see it's pushing up the links that most people are likely to look at. That's part of the algorithm. If there are more links to something, it works its way up in the feed. So I'm getting a lot of stuff about blue apron. But I'll also get other things as well. I might get things about how she wore a blue apron.

But let's see what happens when I put this in quotation marks. Now what I'm doing is I'm searching for something different. I'm not searching Blue and Apron. I'm searching the word Blue followed by the word Apron. And you can see, when I do this search, I get a lot fewer things, and my things are going to be more targeted. And that becomes really important when you're doing a search for scholarly sorts of things.

If I'm interested, say, in-- let me just think of something. Let's say I'm interested in voter turnout. If I'm interested in voter turnout in Washington state, what I may want to do is search, say, a voter turnout. And then I may want to put in "Washington state" in quotation marks, because then I'm less likely to get it confused with Washington, DC and the state of Virginia, all of which might actually be there.

Now, I have to be careful about this. I can't extend this too far. I want to use my phrase

searching for things that are very precise. Think about nouns-- persons, places, things, things that we think of together-- United States of America, Go Cougs. If I put something in quotation marks that is, like, Lorena tried Blue Apron. She learned a lot, but frankly, it's getting to be a little bit overwhelming, so she is about to cancel. If I put that in quotation marks, I'm probably not going to find very much, mainly because I just sort of threw all that together.

So that's too much. I have made too limiting a search. And so if I'm interested in how many people start Blue Apron and quit it, I might do Blue Apron quit rate, or something else like that, and see things a little bit differently. So let's go on and talk a little bit about the next stuff.

OK. Now, this slide, I put way too much stuff on this. And I apologize for it. But what we're going to do is we're going to talk a little bit more about search syntax. So we talked a little bit about your base, about order. We talked about phrase searching. And phrase searching is something that you do to have a more precise search. Even though I said no precision, phrase searching helps precision.

Let's talk now about actually creating a better search, not a more precise search, but perhaps a better search, more useful search, [INAUDIBLE] certain syntax tools. So the first thing I want to do is narrowing my search. And we've already seen that done. You can see here, I'm searching the phrase Greystone Church, so Greystone, followed by Church, and then Pullman Washington. So I'm searching Greystone Church and Pullman and Washington. So I've narrowed it, because now, three criteria have to be met-- Greystone Church, Pullman, and Washington.

Now, the other way that I might want to narrow my search can be a very dangerous way of doing it. So let's go ahead and try using NOT. So the first thing I'm going to do is I'm going to do a search for Wolverine. Let's see what happens. Here we are. Whoops. OK. And when I did my search for Wolverine, I got a lot of stuff about the *X-Men* character. You can see there he is, lots of pictures of him. And In fact, so much stuff, that look, he actually shows up over here in the Google panel, where they're pushing a lot of stuff.

Now what happens if, instead of searching Wolverine, I say Wolverine, then I do space, and I'm going to put in a hyphen, and I'm going to say Logan. Logan is the first name of the Wolverine. I think he doesn't have a last name. I'm a geek, so I know that. So I'm actually making this idea that, if by putting in Logan, I'm not going get stuff about Wolverine, the X-Men, I'm only going to get stuff about other aspects of Wolverine.

So I'm going to go ahead and do my search. And you can see I get different results. I'm getting stuff-- the Wikipedia entry for wolverine. I'm getting things about wolverines, the animal. You can see those are things that get pushed up at the top, a little bit other questions people might ask. If I go down a little bit, I'll probably find stuff about sports teams named Wolverine.

But you can also see sometimes, here, here's a mixture. This is Logan the wolverine, but also a medical aspect. So he's showing up there. So sometimes there are lots of pictures of Logan there. So my NOT-ing doesn't always work. But it got rid of a lot of, what I would call it library terms, false drops-- things having to do with Wolverine the X-Men, when I was really specifically more interested in either wolverine the animal or Wolverine the team, or something else like that.

And I could go ahead and add words in here-- Wolverine Team NOT Logan. And you can see my results get different. OK, look at that. There's Wolverine team up, probably because they're not mentioning his first name. What happens if I try NOT Marvel. OK, now a lot better, see? See how I play around with this, with my terms.

I really want to think of-- when I'm doing searching, it's a really organic process. I really can't go in, do a search, and then leave. I have to look at my results and try to figure out a way of making my search better. So it turns out that it's actually a better to NOT out the Marvel than it is to NOT out the first name of a character, which it doesn't always get used. So something to think about.

Now, one of the things that can be dangerous though-- the reason why NOT is so dangerous is what if there was an expert on wolverine habitat whose name was Logan Logan-- Mr. Logan or Ms. Logan-- who worked at Logan University in Logan, Utah? And by NOT-ing out Logan, I would miss out on this person. And oh, let's just say that they've published with Logan Press, too. Let's really pile it on. By NOT-ing out Logan, I've lost this probably really good resource. So I had to be really careful. OK.

So let's go ahead and try another search. And you can see I forgot to link this. But we're starting to mix in some of the things that we're going to be doing. So I'm going to go back and drag in my window. And I hope you all aren't getting seasick with all of this. And I'm going to go ahead and put in my search.

And you can see what I'm searching is I'm searching Pullman WA, and then I'm searching the

phrase Graystone Church. And then I'm trying something different. I'm saying, Or Greystone Church, because look at my spelling. I don't know about you all, but I've always been a person who spells gray with an A-- G-R-A-Y. And it was really kind of challenging for me to realize many people spelled it with an E. And a lot of people are like me. They spell it a different way.

So what I'm trying to do here is I'm trying to expand my search. I'm trying to say it has to have Pullman, and it has to have Washington. And then there's an invisible parentheses here. It has to have either the phrase Greystone Church, with the E, or the phrase Graystone Church, with an A. Let's see what happens when we do our search. OK.

And you can see, as I go looking at this, that eventually, as I go through, I'm going to be seeing mostly things that are spelled with Greystone with an E. But I'll also be seeing things that are spelled-- because that's actually the primary spelling, and most people are going to spell that way. But I'll also be seeing things that are not spelled with with an E. I'll be seeing things that are spelled with an A.

So you'll notice this is something that I can do to basically expand my search by looking for synonyms. Although it doesn't always work that great, usually it tends to be best for things doing a search like this, where we're talking about a spelling difference, what they would call an orthographic irregularity. Or maybe we'll see another example of that a little bit later.

But you can see, if I just went ahead and did Pullman Washington Greystone Church, I got 13,000, by putting in my alternative spelling-- which I have to spell things right if I'm going to put them in quotation marks. I actually picked up a few more results, not that many, but a few. And that can be enough to make a difference. OK.

But let's actually look at some things that we need to watch out for. Whoops. Let's go ahead and go back to my previous slide here. We just looked at this search. That was the search that I did. Now we're going to try a different search. You can see, what I'm doing here is I am reversing the order, a little bit, of my search. Try that.

And you can see, this time I did it a little bit different. And look what happens. The first thing that happens is I only am getting about 38 results. So I start looking at them. The thing is, though, that I'm missing something really important. And this happens a lot to people.

There's this concept called iTrack theory. And iTrack theory says that, what is it that, when you're looking at a screen, what is it that you tend to look at? We tend to look at things in a S

pattern. We tend to look at things more in this corner than that corner. We tend to pass over a lot of stuff.

And one of the things that I might very easily have passed over, not even perhaps noticing there's only 38 results, is that what Google did was it didn't actually search what I wanted it to search-- Greystone, with an E, or Graystone, with an A. It actually said, no, no, Lorena. We think you made a typo. And it actually said, well, how about this? And I'm like, no, no, no.

So in order to actually get the search that I want, I have to change it. And now I get my results. But it's still trying to push me to that other search. So I really have to watch what's actually being searched. It would be very easy for me to skip over this and go focus on the results. And I've talked with a lot of people, and I've actually done some research, where I actually sat and watched people search. And this is the sort of thing that people are likely to actually skip over. So you have to watch out for that.

OK. Now let's try this one here. And you can see, with this one-- let's drag our little screen in here. We'll erase everything, put in our search. This one, I didn't use any quotation marks. But I still did the same search. I said Greystone Church OR Graystone Church Pullman Washington. And I get a lot more results, don't I? Yeah.

But the thing is, what I'm searching is not what I think I'm searching. What I want to search is this concept of Greystone Church, with an E, and this OR this concept of Greystone Church. And then it also has to have Pullman Washington. So I want to search Pullman Washington AND [? Gree ?] Greystone OR Pullman Washington AND Graystone.

But what happens is, without putting in the quotation marks, then internet searches are stupid. I want it to search this. But what I am really searching is this. So what I'm really searching is Greystone and Church and Pullman and Washington and either Church or Graystone, with an A. So I get very different results. So I really want to think about that, because Google doesn't give me the ability to do the kind of complex search that I could do if I were in a library search engine, where I could use multiple fields, multiple search boxes, to actually construct a search that would actually do this in a proper way. All right.

Let's try something else. Let's try-- oops, sorry about that. Let's try this one here. So you can see tiny little difference here make big differences when we actually do our searching. And again, here, this is doing the same thing. It's actually giving me-- it's trying to push me to something else. And the other thing that's happening here is, again, I'm probably going to get

maybe some-- I think I might be getting less stuff with this one, because Graystone, I think, is the-- Graystone is the more primary use.

So some of these terms, I might be getting more with. Because Graystone, with an A, might get used more than Greystone, with an E. So this part gets a little bit messy. But the main thing is to really think about what you are searching, and think about how Google is actually translating your search, and factor that in. So you want to play around with it until you work some of these things out.

So what it all means, though, is, bottom line, complex searching in Google and other Web searches, with Web search engines, does not work as well as complex searching in library databases. All right. So I'm going to stop now. And I'm going to see if there's any questions. And I have no idea what I'm seeing anymore. So I'm going to have to ask. Does anybody have any questions? And if they do, this is a chance to ask away.

Ah. I'm looking at it. I found it again. Let's see. Emily asked, can you use more than one NOT in a single search? I would not do it. I don't think that's a good idea. Gabrielle asked, which part of the sentence would I put into quotations again when searching? And the answer to that-- let's go back over here-- is that I'm going to use a particular phrase, something that you think of as a phrase-- Go Cougs, Voter Turnout, United States, Washington State, Voter Participation, House of Representatives-- can you tell I'm a social sciences librarian?

All of those, think proper nouns. You wouldn't put in-- this would be a terrible search-- "What is the impact of weather on voter turnout," in quotation marks. That would be a terrible search. You might do-- that would be something where you probably wouldn't use-- you might do "Voter Turnout" in quotation marks. Let's try it. Let's do, Weather Impact, and then we're going to do, Voter Turnout. And then let's see what happens. Yeah. And see, we get some good stuff there.

Whereas, if I put that in as a quotation-- "What is the impact of weather on voter turnout"-- I hope I spelled it all right. That's a whole another thing so I didn't [INAUDIBLE]. Look at that. OK. Watch what happens now. You know, it really didn't find it. So instead, look what it did. It took the quotation marks out, and it's actually searching. And I'm getting stuff that's probably very similar. But I think my search probably would have been better the way I did it originally, using my key word terms, rather than natural language sort of thing. So I hope that answers that question.

So we've just talked a little bit about some search syntax at Google that will help you create a better search. And I really do want to emphasize that library databases offer all of these things, and they do a better job. But we pay 1000s and 1000s and 1000s of dollars for library databases, so they ought to search better, because that's worth paying for.

Google is free. We're lucky it gives us what we get. And we have to work within those parameters. But knowing about this search syntax can make a really big difference. So I want to just segue out a little bit. I'd really put it in as a side, but I'm talking about all sorts of things here. But we're thinking about this in the context of academic work.

But when you leave, when you graduate, and you go someplace else, let's say you might be working for a small business or the corporate world. And because you're young, your boss might say, hey, Gabriele, go find this on the internet for me. And there's actually some really interesting research out there about the cost to corporations and businesses of people not being able to find stuff on the internet. They search and they search and they search, and they can't find it. Every hour that they can't find something is an hour of their pay, or it's an hour that that information isn't available.

So actually, not being able to search is not just a scholarly skill, it's a lifelong learning search skill. These sorts of techniques can be useful, not just for scholarly work, but finding information about presidential candidates, finding information about assisted living facilities, or what washing machine you should be buying. And we're going to see some tools very soon that are very helpful for those sorts of questions. All right. You guys ready to go on?

So the next thing I want to talk about is-- if I can get my search up here-- is Google Site Search. And you can see-- and just this one, I'm not going to actually do. I'm just going to show you. The syntax for this is, if I'm going to do a Google [INAUDIBLE], I'll go ahead and do it. Let's go ahead. Let's bring this in. And here I am, and I'm going to do two searches.

The first thing I'm going to do is I'm going to go to the WSU page. And you can see there's a little search engine. And I'm going to type in what [INAUDIBLE] was I searching. Ah, Greystone Church. Whoops. Let's make that a little bit smaller. There we are. I don't want to close out on the wrong thing here. And you can I'm not bothering with quotation marks here. I'm just searching Greystone Church.

And when I do that, we can see that I get seven results. And what happens if I-- oh, look. It's

showing results for Graystone. What happens if I search for Graystone? Well, I get 43 results. So I get a little bit more.

But watch what happens if I search in a different way. Watch what happens if I do this-- site:wsu.edu. That means I want to search across that site, Greystone Church. I get 223 results. Why is it different? Because technically, it should be the same thing. Technically, when I'm searching in the library website, I'm probably using some sort of Google search engine, a private Google search engine, to actually search the WSU site, versus searching on the open Web.

Well, it might be that some things are hidden. It might that index terms are different. It might be that-- there's any number of reasons. But the fact is that I potentially get more results when I actually use a site search. And I do site searches all the time. I'm always like, oh, man, I need to look something up - time schedule. [INAUDIBLE] to schedule the classes. That's the easiest way for me to get there. I can never remember the URL Schedules.wsu.edu. But boy, I can go ahead and do this.

And this makes it a lot easier to find information, as we saw. Sometimes it will surface up more and better stuff than if I actually searched inside of the proprietary search engine within that. So that's our site search, and that can be a really valuable tool, especially we'll see if we put it together with some other things.

Let's look at our next thing, our next options, if I can get this. OK. And this is where we're going to talk about time and language specificities. So I'm going to bring our little search back. And we're going to go to Google, google.com. And I'm going to search Greystone Church. Notice what's happening. The more I search, the more it's going to be pushing Greystone Church up to me, because I'm actually interested in it. So things are happening. I'm actually changing things right now. All right.

So most of the time, this is what we do. We go ahead and do our search. We look at our stuff. And we ignore a lot of things here up at the top. And I'm not going to talk about Maps or Newses. I am going to talk about Images a little bit later. I'm not going to talk about Shopping. What I want to do is I want to go over here and look at Tools, because the tool menu in Google is extremely powerful.

And there are two things that I'm able to do. One is Time. So you can see I can say something that happened in the last 24 hours, something that happened in the last year. How about a

custom range? I want things dated in Google between 2000 and 2008 having to do with Greystone Church. And you can see here's my dates. They fall between 2002 and 2008, so I'm getting things within a particular period. This can be an incredibly valuable tool when you're doing research that's time sensitive.

Let's say I'm searching Brexit, which is basically the initiative process in the United Kingdom to actually separate out from the European Union. Time searching, if I want-- and you can see-- kept that 2002 to 2008. So it's amazing to me we actually found some stuff there, except apparently, you can see, aha, they've been talking about Brexit for a long time. Here we have stuff going to 2004, which is something that I didn't actually realize.

But see, what I can do is I might say, OK, let's actually look at the results for Brexit from 2004. Let's compare with 2005. Let's compare with 2006. Let's look at 2014. Let's look at 2016. Let's look at 2017. And as I look at those results, I can actually see the progression of ideas about something. So using this Time search is a really good way to find really recent stuff.

I'm looking for reviews of washing machines or computers-- even better. I want to find the best computer that just came out. So my Time search can be really valuable. I probably want to look at things, maybe a custom search by date or maybe the past month, or probably the past year-- I mean, you can get too far.

But there are other times when I might actually, for current events, for things that are just happening, go look. President Trump was supposed to announce his Supreme Court pick. I don't know who it was. I could actually-- I think he was supposed to do it at 5:00 our time. I could probably do past hour or past 24 hours and find out who it was. So that can be really helpful.

Now, the other thing-- and you can see over here, let's look at some of the other things that we can do once I do my Time search. OK. Do you guys remember, when I was talking about how when we do our search, we know most of us only look at two pages-- so I was like, you know, let's make it so that, when we do our page, instead of 10 things at a time, we get 30, so we get 60 things out of two pages instead of 20? Well, here's another way where you can surface interesting stuff.

You can see that Google defaults to relevance. It always defaults to relevance. So it's going to push up stuff that it thinks that you want. So what if I said, I've already sorted this by date, let's sort over here from my whole set, but let's sort by date. So you can see, this is my most recent

stuff. Then I can go all the way down to the bottom and find the oldest stuff for that particular period.

So date only shows up because I actually did a Date search over here. So let's clear everything and go back to where we were originally so we don't see-- that we don't see that Sort option here. Now I'm going to look at All results. And I get two things-- All results and Verbatim.

So sometimes when you get weird results from Google searches, what happens is Google is doing this weird-- it's doing this automatic stemming, saying-- like if I type in Library, it's also searching librarian, librarians, et cetera. And sometimes this automatic stemming actually extends from just the word in different variants to actually words that have a semantic connotation, a semantic connection-- which is why sometimes you get weird results, and you can't figure out why. Because you're searching this word, and Google is actually searching some other things that it thinks are related.

If I change this to Verbatim search, it's just going to search the word Brexit. And you can see I get different results. However, I can force this as well by putting just the single word Brexit in quotation marks. And you can see I'm getting the same things. So this is another way to clarify things.

There will be times when you actually want to search for a single word in quotation marks, because you really want that exact word and not stemmed or semantically connected words, that Google is actually thinking that you might want. So we want to think about that. All right. So those are really two really helpful tools we see that works. So we've got our Time and Language specificity. And we've given up on our Greystone Church, over here.

Let's talk a little bit about Google Regions search. Because the thing is that many countries have their own variant of Google. OK. Now let's see. Let's see what happens here. I have no idea what screen I'm on. Let's see what happens if I click on this. I go ahead and click on this. Let's go ahead and open. All right. I hope I can-- OK, good.

OK. This is actually from a genealogy magazine. And you know what? Genealogists are amazing searchers. Genealogists do really interesting things on the internet. They are on the cusp of data mining, searching, et cetera.

So I got this in this little Genealogy in Time Magazine. And this was the best thing that I found

for showing the syntax, the terminol-- the link, to actually do different country Google searching. So you can search in Ethiopia Google or Greece Google or Finland Google. And when you do that, Google will sometimes offer the ability to translate.

So the thing is that Google, essentially, is a local thing. Most of the time, you want to see results that are related to what you're doing. So if we switch it, if we say, Google, we'd like to not search US Google, we'd like to look at this other Google, it can be really helpful for looking at things in a comparative way, increasing our empathy, understanding different perspectives.

And from a scholarly point of view, let's say I'm in a comparative politics class, that might really valuable. So I could actually go look at US Google or Germany Google, which would actually translate it into English for me, and actually search Brexit and get different results. I'm running out of time, so I'm not actually going to do this.

But the interesting thing is that you do get different results, but you also get a lot of the same results, which is interesting to me, because it shows, in a way, that the internet really does have a Western United States, Anglo bias. Even in the German Google, we get a lot of stuff from Western newspapers, Wikipedia, US, UK newspapers, et cetera. So that can just-- a really cool thing. And don't forget, all these links are going to be available to you afterwards, because I put them on a sloppy library guide for you. OK.

A couple of other things to talk about-- searching by URL type and searching by Format. So let's go ahead, and you can see, at a basic level, this is a variant of our Site search. But instead of searching for a particular website, WSU.edu, I'm searching these extensions-- edu, gov, mil, or bus, any of the Google things.

Let's see what happens when I do this. So I'm doing a search, and I want-- so let's see. I'll go ahead and paste that search in. OK. And so you can see here I'm using my OR for, again, a good use of or. Snow pack is sometimes spelled as two words, sometimes spelled as one word. And I said, I want stuff about snowpack, which we have lots of in Washington state this year. And I want them to be from sites that are .org, which usually, but not always, is some sort of nonprofit organization. I say usually but not always because that used to be the case, that it was always that way. But you could actually go buy yourself a .org site, so not entirely trustworthy.

But watch what happens now if I say, Mil, military sites dealing with snowpack. And I find some really interesting things. OK. Now let's add something on to this. So I'm looking at this. I'm

looking at information on snowpacks from military sites or government sites or business sites or education sites. But one of the things that I know is that, a lot of times, the best stuff comes in reports. And a lot of time, reports are PDFs.

So I'm going to do this. I'm going to say, filetype.pdf. So now it has to be a PDF. It has to have a military extension. It has to have either the word snowpack or snow pack. And let's see what happens. And you can see everything PDF. And I find some really interesting things here this way. So that's another way where I can be more specific.

And I'm going to give you an example. I actually do a comparative politics class site. And we work with information from other countries. And a lot of times, they're looking for reports from nonprofit organizations, from non-government organizations. And using our Site search and our Format search, we've been able to find some really interesting things that we would not otherwise have found, because they were probably outside of those first two pages of results that everyone looks at. So something to think about.

OK. And we're going to look at just a few more things. I want to make sure that I give you some time to actually ask questions. So what I'm going to do now is actually put this all together. Because all of these little things that I've been telling you about, you can use them the way I use them. But Google actually has this really cool Advanced Search screen, which you can get to in two ways.

The first way is, when you do a Google search-- here's our Settings thing-- we looked at Search settings. But there's also a link here for Advanced Search. And history, if you want to see the sites that you've looked at before, you can also clean them here, if you want. Search Help-- we'll come back to that as well. Or we can actually just go ahead and type in this link. Let's go open our little thing over here.

Or we could actually just Google search, Google Advanced Search. Why not model our behavior? There it is. And you can see all those things that we did and more. We can look for a phrase. We can AND all of our terms. We can look for a phrase. We can do OR all of our terms, none of our words. That's our NOT. We can do a number search, which we can also do by a number 5..15, which would look between 5 and 15. So we can use that in cost, et cetera. That's our Search syntax.

And then here, we have the ability to narrow by language. Here's our Region, all those terms

again; last update, site or domain. Main We talked about that a little bit, about file type. And then Usage right, if we want something that is free to use or share, using Creative Commons, which we'll take a look at in just a minute, and all these other things as well. So this is a really cool site. And actually, a lot of people aren't always really familiar with Advanced Search and how cool it can be to actually do a better search. So I just wanted to point that out. OK.

Just a few more things-- one of the things is keeping your searches current. I have a-- and here we're going to do this the fast way again, Google Alerts. I'm just telling you right now, you should have a Google Alert on your name. So I can go ahead to Google Alerts. And I can log in, because generally, I want to log if I create alerts. So somebody is logged into Google right there, because it knows.

But if I'm logged in, because then it basically-- I'll put an alert. Let's say I want to put an alert for Lorena Global Connections. And then they have all these suggestions here. And I can create an alert. And you can see here's my options. And I can get options for different regions, et cetera.

And so any time anything new shows up, theoretically I get a notification in my email. I say theoretically, because not always. But yet, this is a really good way for me to keep up with how my name is being mentioned. So let's say there's an article that is really key for you. You could actually put a Google alert on the article name. So you went and cited. You could do a Google alert on the author.

You could do a Google alert on the subject. I'm interested in digital comics, so I have a Google alert on digital comics. So I get notification when new stuff has been added. So it doesn't always work really well, but it works pretty well.

The other thing related to this that I wanted to mention is a distant student's best friend, at least when it comes to the WSU Libraries. And that is the WSU Libraries' Proxy Bookmarklet. So let's say I'm searching Disability Voter Turnout. Let's go ahead and do this, Disability Voter Turnout. OK, and I look at my results. And I notice that some-- let's see, eventually, if I work down here enough, oh, here's a result from [INAUDIBLE]. Oh, it looks amazing.

So let's say I'm not on WSU campus. You guys are distant students. You probably aren't. Or let's say I'm not logged into the library or on an IP range. If I click on this, I'm not going to get access to it.

So enter the WSU Bookmarklet So let's model some of our tools. We're going to do a Site search, site:wsu.edu. And I'm going to say, Proxy Bookmarklet. Hopefully, I spelled that right. Garbage in, garbage out. Here it is. This is a really cool thing. You basically take it, and I'm just going to go ahead and drag it. You see up here, over here, and into the Global Connections browser. There it is, WSU Libraries' proxy server.

Now if I'm seeing this little thing right here when I click on it-- and this isn't going to work for me because I'm already in it. When I click on it, if it says, you don't get access to this, Lorena-- let's go find it again. And I just go ahead and click on my Proxy bookmarklet. I log in with my WSU credentials. And then, if the WSU Libraries has access to it, I have access to it.

And this is a really good resource. Because I'm not talking about Google Scholar in this talk, because I'm already out of time already. But we do find this works for Google Scholar, and it also works for Google and other browsers as well, to help us get to library full text when we find something.

This is also useful, by the way, when somebody emails you a link to an article that is in a database. You click on it. No access? Use a proxy bookmarklet, and you're good to go. OK. I'm almost done.

I just wanted to talk very briefly about Google Books, which is one of my favorite things. I'm just going to do one-- I'm just going to go ahead and do this one thing. Let's go ahead and open this up. And you can look at it. Google Books-- you can search a full text of books, mostly things that are out of copyright; not just books, magazine articles, et cetera. And so this is this wonderful, wonderful search that I just love.

We're going to go to Google Books here. And you see I'm in Google Books, and I did a search for Coffee and Immanuel Kant. And I find this absolutely amazing thing written by Immanuel Kant about coffee, where he says-- let's see if we can find it. "Well, one can die after all-- it is but dying. And in the next world, thank God, there is no drinking of coffee, and consequently no waiting for it." So see, I can actually find some really cool things inside of Google Books. And it's just an interesting thing.

So I'm not going to do this. But some things to keep in mind, if I wanted to keep up with the Google Books lawsuit, which is a lawsuit that a lot of authors and publishers have done with Google to limit what it provides of the things that are in copyright, if I want to see the most recent stuff, I use my TOOLS time narrowing to see that. And that's an example of how I might

do this.

So I've run out of time, so I'm not going to talk about the next things very much. But I just wanted to say, never pay for a classic again. You can get free access to books through Project Gutenberg at Open Library. Say that really fast.

Google Images-- if I wanted to, I could find images of Greystone Church in Pullman by searching Google Image search. And you can see that it lets me do things like sort by size or color, including usage rights, which is, can I use this in a PowerPoint? is this open to use? There's a little bit more information about Creative Commons there. And you will have these links.

The other thing I can do is do a reverse image search. Sometimes I have a picture, and I want to know where it originated. Where did it come from? And I can go ahead and go to Google Images and either put in the URL, or even just upload a picture. I'll make a video of this, and I'll put it on the site I have for you, and get information about that. Google isn't the only one in that space. TinEye does the same sort of stuff.

The last thing I want to do before our eight minutes of questions-- and if we have time, if you guys don't have any questions, we'll go back to Google Image search--- is I did want to talk about one particular Deep Web resource. And remember, our Deep Web is between the open Web, that let's us do-- find stuff in Google, and the Dark Web, where you have to be encrypted.

This is a really cool thing called the internet Archive. Let's go take a look at the Internet Archive really fast. So I'm going to go to Archive.org. And so the thing is, with the Internet Archives, I'm probably not going to find stuff inside of it when I do Google searches. I have to actually go to the Internet Archive and search inside of it, which is what I mean by something that is on the hidden, or Deep, Web. It doesn't really surface very often in Google.

But you can see, when I look at this, there's all sorts of cool stuff here. I can check out books, listen to music, all that sort of stuff. There is a charming fairy tale by MMK called "The Ordinary Princess." And I was able to check it out from here and read it. And that was a lot of fun.

But I can also use the Wayback Machine. And the Wayback Machine lets me actually say, let's go look at the WSU site as it looked in, oh, 1999 on January 9, 1998, I guess I chose. This is what the WSU Library-- WSU website looked like; very different. So this is a really good tool for

scholarly purposes, if I want to compare changes over time. If a website is no longer available, I might be able to find things that have been archived by the Wayback Machine.

And anyone can use, can actually submit, a URL for the Wayback Machine to actually archive. So you can do that yourself if you want. And that becomes useful. Because think about how many times you actually used a link and then go back, and it's gone or it's changed. So using archiving sites like the Wayback Machine or, oh, what is the name of that project? I can't remember. There's another project. Or even reference management services, like Zotero, that actually takes screenshots of pages, can be really helpful for you.

So after all that, we have five minutes left. And let's talk about your questions. So I'm going to go back, and I can see your questions now. So please, if you have questions, that's great. You can see this is the link. This is [liveguides.libraries.wsu.edu/googlesearchstrategies](http://liveguides.libraries.wsu.edu/googlesearchstrategies). That will take you to all the links that I showed you in this presentation, because I know I threw a lot of stuff at you. You can explore them at your leisure.

I just want to mention right now, it is a very ugly-looking website, because I threw it together really fast. But I'll try to make it pretty and add more stuff and maybe a few videos to it to clarify some of the things that I didn't have a chance to do today, like Image search and Reverse Image search.

Rachel asks about slides from the webinar. Actually, this whole webinar is going to be archived and made available on the Global Connections website. Let's go take a look at that, because the Global Connections website is amazing. We're just going to go over here and just look at-- see, we're going to do a Site search again. See how helpful this is? Global Connections Vault, and that is the video vault.

This is all of the amazing talks that have come through Global Connections, not just mine, but other ones. And you can search people. can search by category. So it will show up here. And this is a really good place for you to go look at all of the archived previous sessions. So yes.

Olivia asks, does the Wayback Machine provide valid resources for research? Yes, it does. Sometimes it's really important to actually be able to look at a site that existed at one point and is no longer there. So you might actually want to do a comparison. Let's say you were doing political research, and you were looking at how people talked at one time, or looking at information available on a government website or something else like that. That would be a case for it.

Also, sometimes you may need to be able to prove that something was on a website at a particular point. There's no guarantee that the Internet Archive will have it. They don't archive everything. So it's, did it get archived? You noticed that we didn't have an archive for every day. They send their spiders out, and if a website has the code in it that doesn't let something get archived, I mean, get spidered, get looked at, then it's not going to end up in the Internet Archive. So the Internet Archive is limited, even as a deep website is limited by the constraints of deep websites. So there's a nice little time paradox for you. All right.

I'm going to go ahead and move this out. And just to remind everyone-- I'm going back to my screen here-- my contact information-- O'English@wsu.edu. I'm wsulorena on social media. And my page, let's go ahead and actually look at this. I'm going to open the hyperlink. We'll bring back our little site, and you can see that this is my barebones page . And it has all the links in there that I talked about, with very little other information, because really, I was just slapping those links in.