

# Internet Reference Tips:

“I’m not a Reference Librarian, but I Play One on the Web”

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## 0. Introduction

A quotation from the author Neil Gaiman that is popular among reference librarians is that “Google can bring you back, you know, a hundred thousand answers. A librarian can bring you back the right one.” The sense of the saying is that finding information sources might not require expertise anymore, but separating the wheat from the chaff can sometimes be beyond Google’s capabilities.

In October’s tech program we’ll look at ways to improve your web searches. This will include technical tips for crafting search engine searches as well as tips for evaluating the various pages that a search engine returns.

## 1. What even is the question?

“Real librarians are people who are very good at two things: asking questions and finding answers.”  
— *Eric Lease Morgan, “Day in the Life of Mr. D.”*

### 1.1. ***A good question is (sometimes) more important than a good answer***

The first step in finding an answer is asking a question, but often the first question asked doesn’t really communicate what is wanted. Various lists of questions that weren’t quite ready for prime time exist, but I’ll look at some (actual) examples from a 2015 article by Jennifer Peterson:

- “What is Google?”

This question (like many others that seem “obvious”) could be deeper and more ambiguous than it might first appear. Does the patron want to know the “obvious” answer (“It’s a website that

lets you find other websites”)? Do they want to know how to use it? Are they hoping to buy stock in the company? Do they want to know how it works? Or are they really asking “What is a googol?” (10<sup>100</sup>).

- "Do you eliminate papers here?"

Ms Peterson comments, "After some questioning, I determined that she wanted us to laminate her papers."

- "How do I find scholarly articles on the zombie apocalypse?"

Here the question asked may well be just the right one, the one that pinpoints exactly the information that the searcher wants. And while the information at <https://www.cdc.gov/cpr/zombie/index.htm> is not a scholarly article, the CDC may well have produced some journal articles from the research they've done.<sup>1</sup>

- "Where's the best place to see UFOs in the state?"

Like the question about Google, this one could well be serious and requires some work to lessen its ambiguity. Does the questioner want to know where in the state has the highest rate of UFO reports? Do they want to know where in the state has a combination of good night sky viewing conditions and high UFO sightings that makes it more likely to see them?

Though some of these questions may seem silly (and I'll grant that some of Ms. Peterson's examples are hard not to see as confused, at best), there is quite often some sort of more serious question lying under them.

## ***1.2. How to get that good question: the reference interview/"pearl growing"***

The reference interview is one of the major techniques that reference librarians have for getting at the actual information need that the questioner has. The example about “eliminating” papers in the previous section no doubt involved such an interview (“after some questioning”). As the name implies, a reference interview is an interactive conversation between 2 people — the library patron and the librarian — so how is a solitary person surfing the web to use anything like the technique? The 3 aspects of a reference interview that we'll focus on are

1. Its goal of getting the patron to the information that answers their (actual) question,
2. The involvement of 2 independent, intelligent agents, and
3. Its iterative nature.

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<sup>1</sup> Though such research might seem “frivolous” or “wasteful,” it helps with creating models for the spread of real diseases.

At first glance the goal at first seems like a point that we can take for granted. However, when we shift emphasis to answering the *actual* question, we can see that there is a need not to stop the search after finding any information that just answers the first formulation of a question.

In other words, pressing the “I’m feeling lucky” button might not be your best bet except for simple, factual questions.

The second aspect is not present in the solitary Google search since only the person asking the question is intelligent. Google is very good at what it does, but what it does is to match a query against the billions of web pages that it has indexed. It is not intelligent. Even its language processing abilities are based on crude statistical analysis rather than anything like the linguistic structures used by humans.

The first aspect requires continuing the search until adequate information is found, and that requirement leads to the third aspect of the reference interview: its iterative nature. Google’s algorithm is pretty good at ranking how well the web pages it suggests align with what was typed into the search box, so if none of the suggested links on the first page of results are quite right, the second page is not likely to have a better match.

As mentioned above, you are the only intelligent agent in your Google searching, so instead of scrolling through pages of Google’s suggestions, it can often be more useful to follow 1 or 2 of the links in the first page or so of its results, get some information from the page that link takes you to, and then use that information to refine your question. This can be especially useful if the links include pages from Wikipedia, WebMD, the Mayo Clinic, the CDC, federal or state government departments, universities, . . . , and other trustworthy sources likely to have good, general information on a subject. The page you visit might not have the full answer to your question, but it may have enough information on the general area to help you rephrase your question in a more productive way.

## 2. Worth 1000 words

Sometimes the “question” isn’t in words (beyond “What is this [pointing at a picture]?”). Google’s image search is useful here. Go to <https://www.google.com> and click the “Images” link in the upper right hand corner. You can type a query into the search box if you’re looking for images about something, but I want to focus on using an image as the query. Click on the camera icon in the search box, and then on “Upload an image.” You can click “Choose file” to open a dialog box that lets you navigate your files to an image, or you can simply drag an image onto the area to upload it.

The links Google gives you will be based on Google’s guess as to what the picture is about, but towards the bottom of the page is a section called “Visually similar images.” Clicking on that label (“Visually similar images”) lets you scan through images that Google thinks are similar to the one you submitted. If you find 1 that seems to be on the same theme as yours, clicking

through to the page that it came from may give a better idea of what it's about than Google's rough guess was.

### 3. Getting under the hood

Back on the main search page,<sup>2</sup> click on the "Settings" link and choose "Advanced search." This takes you to a page that allows you to easily specify that your search should include an exact phrase, should exclude certain words, should be from a particular website, or a variety of other restrictions.

### 4. Resources

Morgan, Eric Lease. 2004. "Day in the life of Mr. D." *Infomotions*, November 12, 2004.  
<http://infomotions.com/musings/mrd/>

Peterson, Jennifer. 2015. "Interesting Patron Questions." *WebJunction*, November 4, 2015.  
<https://www.webjunction.org/news/webjunction/interesting-patron-questions.html>

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<sup>2</sup> Actually, several of Google's search modes (text, image, video, and books) have advanced search that is tailored to the given mode.