

**Новый инструментарий справочной деятельности:  
как средства Google позволяют улучшить и модернизировать  
справочное обслуживание**

**Reference Retooled: How Google Tools Strengthen  
and Streamline Reference Service**

**Новий інструментарій довідкової діяльності:  
як засоби Google дозволяють поліпшити  
та модернізувати довідкове обслуговування**

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В справочном обслуживании прошлого библиотекарь выступал в роли посредника между читателями и информационными ресурсами. В случае необходимости он давал разъяснения и интерпретировал полученную информацию. Сегодня первое, к чему обращаются многие библиотекари – это Google и его многочисленные модули. Благодаря своему дружественному интерфейсу и популярности у пользователей он часто не требует интерпретации полученной информации. Таким образом, справочное обслуживание имеет форму опосредованного диалога с трехсторонним обменом информацией, при котором информационные потоки движутся во всех направлениях: между библиотекарем и пользователем, между библиотекарем и системой Google, а также между пользователем и Google. Я анализирую роль этого трехстороннего обмена и выявляю возможности по использованию Google и его менее известных модулей в справочно-информационном обслуживании.

In reference interviews of the past, librarians ferried information between patrons and resources, distilling and translating as necessary. Now, the first resource many librarians consult is Google or one of its many modules. Because Google is user-friendly and familiar to patrons, its output doesn't require much distillation or translation. As a result, the reference interview has evolved from a mediated dialogue into a three-way exchange with information moving in all directions: between librarian and patron, between librarian and Google, and between patron and Google. I explore the significance of these three-way exchanges and discuss opportunities to use Google and some of its lesser-known modules at the reference desk.

Раніше у довідковому обслуговуванні бібліотекар виступав у ролі посередника між читачами та інформаційними ресурсами. За потреби він давав роз'яснення та інтерпретував отриману інформацію. Наразі перше, до чого звертаються багато бібліотекарів – це Google та його численні модулі. Завдяки своєму дружньому інтерфейсу й популярності серед користувачів, він часто не вимагає інтерпретації отриманої інформації. Таким чином, довідкове обслуговування має форму опосередкованого діалогу із тристороннім обміном інформацією, при якому інформаційні потоки рухаються у всіх напрямках: між бібліотекарем і користувачем, між бібліотекарем і системою Google, а також між користувачем і Google. Я аналізую роль цього тристороннього обміну й виявляю можливості використання Google та його менш відомих модулів у довідково-інформаційнім обслуговуванні.

Reference librarians have always helped patrons articulate, refine, and satisfy their information needs. This process, the reference interview, has always involved the patron, the librarian, and one or more reference resources. Recently, though, the process has changed shape. Previously, librarians ferried information between patrons and reference resources, distilling and translating as necessary. Now, the first resource many librarians consult is Google, the tool most familiar to and adored by patrons. Google is famously user-friendly, and its output doesn't require distillation or translation. As a result, the reference interview has evolved from a mediated dialogue into a three-way exchange with information moving in all directions: between librarian and patron, between librarian and Google, and between patron and Google.

Let me not malign librarians of the past. I am not suggesting that they wanted to keep patrons at a remove from reference resources. Quite the opposite: like today's librarians, yesterday's librarians wanted patrons to engage with reference resources. But, because so many of yesterday's reference resources were dry, difficult to use, and generally impenetrable — in a word, unengaging — patrons were often unengaged. As a result, librarians had to act as go-betweens. For the most part, they facilitated the flow of information, but sometimes, simply by being between patrons and resources, they unwittingly obstructed that flow.

Unlike yesterday's (and some of today's) reference resources, Google is easy to use and instantly rewarding, qualities that promote patron engagement. Moreover, Google can help patrons and librarians articulate, refine, and satisfy information needs — in other words, it can be an active participant in every phase of the reference interview.

Welcoming Google as a third participant in the reference interview not only helps librarians engage patrons and satisfy their information needs, it also has several important corollary benefits. First, because patrons are more easily engaged, they are more likely to communicate directly with Google. This increases patrons' independence, which frees librarians from ferrying information. Second, when patrons are engaged, they are better able to absorb instruction, so librarians are better able to teach best searching practices. Of course, best practices on Google apply to other reference resources as well. Third, when patrons have positive experiences with the first tool used in the reference interview, they are more amenable to trying other tools. In other words, even when Google fails to find the answer, Google serves patrons by easing them into the use of reference resources. And finally, Google reduces reliance on the scope of librarians' knowledge.<sup>1</sup> As will be discussed later, patrons often ask questions that need to be completed or corrected before they can be answered. Because of Google, making these completions and corrections no longer depends on librarians' expertise.

Of course, Google can cause problems at the reference desk too. But arguments against the use of Google appear in many other papers (e. g., «Thinking and Researching — Don't Just 'Google It'» by Steven M. Cohen and «A Gaggle of Googles: Limitations and Defects of Electronic Access as Panacea» by Mark Y. Herring), and I am not going to cover them here. Instead, I will present something I haven't seen elsewhere: a discussion of how Google can help librarians answer various kinds of «ill-formed» reference questions.

### **III-Formed Reference Questions**

Patrons, not being librarians, rarely express their information needs in the way that librarians would. As Ross, Nilsen, and Dewdney put it in *Conducting the Reference Interview*:

If users were all experts in ways in which information is gathered, organized, and retrieved, they would think about information differently, more like the way librarians do. They would also ask for information differently. Because they are not all experts, they often phrase their information needs in terms that reference librarians find indirect, incomplete, or misleading. (17)

Indirect, incomplete, or misleading questions, known as «ill-formed» questions, are indeed frequent phenomena at the reference desk, and transforming ill-formed questions into well-formed ones is a crucial part of the reference interview (Ross, Nilsen, and Dewdney 22).

There are many kinds of ill-formed questions, and Google can help clarify (and sometimes answer) many of them. In the following sections, I describe how librarians and patrons can team up with Google to deal with incomplete citations, incorrect citations, incorrect spellings, tip-of-the-tongue questions, and forgotten searches.

### **Incomplete Citations**

Determining whether or not a library owns or has access to a certain article is, in theory, a simple task. All that is needed to make this determination is a citation. A complete citation is nice, of course, but it's not necessary. Really, all that is needed is a sufficiently informative combination of two or more of the following: journal title, article title, author, date, issue number, or page number. Many different combina-

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<sup>1</sup> When reliance on librarians' expertise is reduced, librarians may be more able to assume a stance of a non-expert, a posture that, according to Mark Stover, promotes collaboration and «encourages sensitivity and humanity in the reference interview» (287).

tions suffice: it's not hard to work around a missing author name, issue number, or page number — or all three. But one element that is hard to do without is journal title. Unfortunately, journal title is often the very thing patrons come without.

Most patrons understand the world of books better than they understand the world of periodicals, and when these patrons record an article citation, they sometimes think it's enough to write down the author and the article title. If the item were a book, those two elements — author and title — would be enough. But for articles, more information is needed. Unfortunately, by the time a patron learns this, the rest of the information is inaccessible: the browser window has been shut, the book has been left at home, the blackboard has been erased.

It was never necessarily the case that a patron with an insufficient citation was doomed to leave the library empty-handed. A print index or online database could sometimes supply the rest of the citation. But success in this endeavor depended on choosing the right index or database — often a shot in the dark when the journal title wasn't known. There was no universal tool for completing incomplete citations.

Until Google.

No, Google isn't actually a universal tool for completing incomplete citations. But it's close — closer than any other tool. If an article is listed on a publisher's website or mentioned on a webpage, Google will most likely find that mention. A search on, say, the author's last name and the beginning of the article title (in quotes) will find it.<sup>2</sup> Google may or may not turn up the article itself, but citation completion, not article retrieval, is the point. Once Google fills in the holes in the citation, the article can be sought: the simple task of determining whether the library owns or has access to the article can begin.

Many users, both patrons and librarians, have the urge to search Google Scholar when they need to complete citations. And this is a good urge — the search often succeeds. But a Google Scholar search should supplement, not replace, a Google search, even when the article in question is scholarly. Google and Google Scholar have different databases of information, and citations that can't be found with one can sometimes be found with the other.

### **Incorrect Citations**

Determining whether or not a library has an article is slightly trickier when the citation is ostensibly complete but incorrect. Generally, a librarian can't tell that a citation is incorrect until she starts looking for it and hits a dead end. At that point, it doesn't take her long to realize that something's amiss and to deduce that the citation is flawed. Unfortunately, finding and eliminating the flaw can be considerably harder.

If the journal title is believed to be correct, the librarian can find out which database indexes the journal and take the patron directly to that database. If either the author name or article title is correct, searching will uncover the article. If either the date or issue information is correct, browsing by issue will.

However, if the journal title is incorrect, the patron and librarian are left with the options described above for incomplete citations: they can make their best guess about which database to search, or they can try Google — itself incomplete and sometimes incorrect but vast, fast, and frequently the tool that saves the day.

### **Incorrect Spellings**

Of course, patrons come to the reference desk with incorrect data of all kinds, and incorrect spellings are especially common. When the misspelled word or name is one that the librarian knows, the patron is in luck — but the success of reference interviews should not depend on luck. When Google is incorporated into reference interviews, this element of luck is minimized because Google doubles as a spell checker. In fact, Google is arguably the best spell-checking tool because it, unlike any single reference resource, can be used to check *both* words and names.

If a word or name searched in Google is correctly spelled and appears in Answers.com, a website that aggregates content from over 100 reference resources, then a «definition» link appears at the top of the

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<sup>2</sup> If the beginning of the article title is a common phrase, an alternative is to search for a distinctive phrase from the title, a phrase that is unlikely to appear in many places besides the article title. Amazon calls these kinds of distinctive phrases «statistically improbable phrases» («What Are Statistically Improbable Phrases?»).

Google results page. The «definition» link leads to the corresponding Answers. com entry and also serves as a quick confirmation that the search term was spelled correctly.

If the word or name is misspelled, chances are good that Google will detect the error and present a «Did you mean» message suggesting the correct spelling. Google doesn't «know» how to spell; rather, it detects trends in the words on the pages it crawls («Google Web Search Features»). Therefore, it offers «Did you mean» suggestions for all kinds of words, including newly coined slang, and all kinds of names, including the names of ordinary people. For example, the most common misspellings of my name are «Jill Cerasella, « «Jill Ciracella, « and «Jill Sirasella. « Search for any one of these, and Google helpfully replies, «Did you mean: Jill Cirasella» — even though I don't appear in any dictionary, encyclopedia, or authority file. This «Did you mean» functionality is also noteworthy because it makes Google an active and equal participant at the reference desk. Like a reference librarian, it analyzes what was asked, and when it senses that something's not quite right, it asks a follow-up question that contains a helpful suggestion.

For many searches, Google presents neither a «definition» link nor a «Did you mean» message and just lists the search results. In these cases, it is less immediately clear but often still possible to discern whether the search term was spelled correctly. If there are many hits and the top hits are from . edu, . org, and . gov sites, the spelling was probably correct. If there are fewer hits than expected and the top hits don't inspire confidence,<sup>3</sup> the spelling was probably incorrect. Of course, it's never a bad idea to consult a resource other than Google. But when Google is already being used in a reference interview — and it often is — it's the fastest and least disruptive way to check spelling.

### Tip-of-the-Tongue Questions

Patrons sometimes approach the reference desk because they have a block: they have something in mind but can't think of the words, and they are looking for help. But just as a reference interview should not depend on a librarian's spelling skills, it should also not depend on a librarian's ability to conjure words. And now it doesn't, thanks to Google.

Sometimes, a Google search for words related to the concept on the tip of the patron's tongue digs up the concept itself. But, in addition to a regular Google search, there are two tools that are especially good at dealing with tip-of-the-tongue questions: Google Suggest and Google Sets, both buried at the bottom of the Google Labs list.<sup>4</sup>

Google Suggest is a tool that presents possible endings to what's typed in the search box and is helpful when a patron knows how the tip-of-the-tongue term begins but not how it ends. For example, if a patron can't remember the last name of a senator whose first name is Chuck, she can start typing «senator chuck» into the search box. The suggested search terms will change as she types, but by the time she has typed «senator chu, « the drop-down menu will include «senator chuck hagel» and «senator chuck schumer, « among others. Next to each possibility appears a rough estimate of how many results that search would generate.

Google Sets, on the other hand, asks searchers to supply a short list of related items and then returns a longer list of related items. It is useful when a patron can't think of a word but can think of words that are conceptually «near» that word. For example, suppose a patron is trying to remember the name of a certain kind of particle in physics and knows it is not a proton, a neutron, or an electron. If she enters «proton, « «neutron, « and «electron» into Google Sets, it will return a long list of related words. Because results depend on the vagaries of the web, there is no guarantee that the word she is seeking will appear, but chances are good. If the word she wants is «ion» or «neutrino, « she will find it on the list. But if it is «lepton, « she won't, and she'll need to try a different search strategy or a different resource. Still, Google Sets has impressive associative powers and is a good first stop for tip-of-the-tongue questions.

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<sup>3</sup> When examining results pages, librarians might explain to patrons why hits do or don't inspire confidence. It's a perfect opportunity to augment a reference interview with instruction about authority.

<sup>4</sup> Google Labs is a collection of Google projects that are still in development; its address is <<http://labs.google.com/>>.

## Forgotten Searches

Forgotten searches are another common predicament. Patrons often approach the reference desk with a vague memory of having read something online but no idea how they found it or how to find it again. Furthermore, because their memories are hazy, their questions are fuzzy, often sounding like this: «I saw something on some website sometime last week that said something about such-and-such. Can you help me find it again? « These questions are frustrating for both patrons, who are often irritated at themselves for failing to remember more, and librarians, who want to help but have very little to go on.

Depending on how much the patron remembers and how popular the topic is on the web, the librarian may or may not be able to lead the patron back to the desired information. Provided that the information was found on a freely available website and not in a subscription database, Google is the best tool for the rediscovery process. But, in moments like these, Google's value is not limited to its excellence as a search engine. Google also offers librarians an opportunity to teach patrons about a tool that minimizes reliance on memory: Google's Web History.<sup>5</sup>

Web History remembers every Google search a user performs while logged into a Google Account, as well as every link followed from Google results pages. Searches and pages in the history can be searched or browsed by date, and there's a helpful calendar that uses colors to show how many searches were performed on each day.<sup>6</sup> Creating a Google Account automatically activates Web History, but users who don't want the service can deactivate it. Also, users who want the service but don't want every search stored can pause and resume Web History as often as they like, and they can permanently delete items from the archive.

Because librarians strive to preserve patron privacy, it's probably best not to use Web History at the reference desk, where it would be of limited usefulness for forgotten search questions anyway. (Google searches performed at the reference desk constitute a tiny percentage of most patrons' Google searches and are rarely the searches that patrons approach the desk struggling to remember.) Web History is a useful tool at many times and places, and librarians serve patrons better not by using Web History but rather by informing them about it. It won't help with the forgotten searches that prompt patrons to visit the reference desk, but for patrons who have or are inspired to create their own Google Accounts, it will help prevent future frustration. And, personally, I have yet to encounter a patron who wasn't delighted to learn about it.

## Conclusion

In «Being Organic Gives Reference Librarians the Edge over Computers» Terence K. Huwe argues that reference librarians have an advantage over Google because «[r]elationships determine success, and knowledge work is all about relationships» (40). Huwe clearly believes that people have relationships only with people, that they don't have relationships with Google. But I disagree: I believe that people *do* have relationships with Google.

Although exchanges with Google are based on a vast database of information and involve no interpretation, intonation, or intuition, many searchers nevertheless feel that they have relationships with Google, sometimes even professing love for Google. Welcoming Google into the reference interview takes advantage of these relationships: it creates connections with patrons who are ill-at-ease with libraries and engages them in the research process. Furthermore, it helps librarians refine ill-formed and ill-articulated questions, as well as correct ill-remembered facts and ill-recorded words and names. Google is of course not a panacea, but it can be a cure for many «ills» at the reference desk.

## Websites Mentioned

Answers.com, <<http://www.answers.com/>>.

Google Labs, <<http://labs.google.com/>>.

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<sup>5</sup> Google is not the only search engine with a history feature, and it is not necessarily the best. In «Tracking Your Search History,» Greg R. Notess examines several search history tools and declares A9's toolbar his favorite (41-43).

<sup>6</sup> More Web History features are available to users who download the Google Toolbar, available at <<http://toolbar.google.com/>>.

Google Web History, <<http://www.google.com/history>>.  
Google Sets, <<http://labs.google.com/sets>>.  
Google Suggest, <<http://www.google.com/webhp?hl=en&complete=1>>.  
Google Toolbar, <<http://toolbar.google.com/>>.

### Works Cited

- Cohen, Steven M. «Thinking and Researching — Don't Just 'Google It. '» *Information Today* 23. 6 (Jun 2006): 28-29.
- «Google Web Search Features. « *Google*. 3 Jan 2007  
<<http://www.google.com/help/features.html>>.
- Herring, Mark Y. «A Gaggle of Googles: Limitations and Defects of Electronic Access as Panacea. « *Libraries and Google*. Ed. William Miller and Rita M. Pellen. New York: Haworth, 2005. 37-44.
- Huwe, Terence K. «Being Organic Gives Reference Librarians the Edge over Computers. « *Computers in Libraries* 23. 5 (May 2004): 39-41.
- Notess, Greg R. «Tracking Your Search History. « *Online* 30. 2 (Mar/Apr 2006): 41-43.
- Ross, Catherine Sheldrick, Kirsti Nilsen, and Patricia Dewdney. *Conducting the Reference Interview: A How-To-Do-It Manual for Librarians*. New York: Neal-Schuman, 2002.
- Stover, Mark. «The Reference Librarian as Non-Expert: A Postmodern Approach to Expertise. « *Reference Librarian* 42. 87-88 (2004): 273-300.
- «What Are Statistically Improbable Phrases? « *Amazon.com*. 3 Jan 2007  
<<http://www.amazon.com/gp/search-inside/sipshelp.html>>.

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