Virtual Reference to Participatory Librarianship: Expanding the Conversation
by R. David Lankes

Few would question the assertion that a reference interaction is a conversation. Be it online, over the phone or in person, the core of a reference interaction is interpersonal communication. However, the true power of this conversation basis has yet to be fully explored. This article seeks to introduce a series of assertions and questions acknowledging that the foundation of reference is a conversation for learning.

Over the past decade an intensive effort has been underway to better understand, and in some cases, reinvent reference in a digital age. Some of that work has focused on systems for reference [1], evaluating reference [2] and on the communication acts in a reference process [3]. This focus on research has been more than matched by development of software and tools in reference. Where a decade earlier several organizations developed their own applications, there is now a market for virtual reference software. These proprietary systems have been joined by a growing use of free, hosted and open source tools including instant messaging and e-mail.

While some may say that virtual reference is a fully developed field with little opportunity for research and development, many outstanding issues still need further investigation. The whole question of reference archives remains – the utility of the transcripts of virtual reference interactions. The integration of reference data with the rest of an organization’s information and functions remains unresolved. Certainly the entire business/cost model is still very much an open question.

Yet, in all of this work, and even in discussions of future research, one implicit aspect has remained a constant: virtual reference has been seen as a “one-to-one” conversation. Even in the settings of a virtual reference cooperative that uses referral systems, the underlying content-laden process is seen as one librarian and one patron. This view is odd, as the many available definitions do not include this aspect. OCLC [4] defines virtual reference as “using computer and communications technology to provide reference service to patrons anytime and anywhere.” The digital reference research agenda defines it as “the use of human intermediation to answer questions in a digital environment.” [5] This notion of one-to-one conversation is also missing from the Reference User Services Association’s definition [6]:

“Virtual reference is reference service initiated electronically, often in real-time, where patrons employ computers or other Internet technology to communicate with reference staff, without being physically present. Communication channels used frequently in virtual reference include chat, videoconferencing, voice over IP, co-browsing, e-mail and instant messaging.”

Is there something about answering questions online that necessitates one expert/librarian and one user/patron? While one can make an argument that certain situations require one-on-one work, say to preserve privacy, to prevent the ambiguity of multiple answers or perhaps to build an ongoing user relationship, in many cases this mode is the result of tradition and existing praxis based on limited resources in a physical world. Getting input on questions was expensive.

What if, however, the pool of expertise available to answer questions was radically increased? What if barriers like queuing in lines or holding on the telephone were removed? Certainly then reference could be a more social experience. There are plenty of examples of mediums for a more group-based
question answering. In the Internet alone there are mailing lists, web forums and the like. Yet one can ask: Are these examples of virtual reference? They meet the aforementioned definitions. In fact, the only reason these might be excluded is because they are not formally seen as an activity of reference staff at institutions called libraries.

Is there something special about librarians that creates the phenomenon “virtual reference” other than a term of practice? Perhaps. Certainly libraries approach reference from a very different perspective than most Internet users on mailing lists. Librarians are (or should be) trained not only in resources but also in the very process of question answering and negotiation (or as Radford [7] has called it, encountering). After all, anyone can nail together two boards, but that feat doesn’t make anyone a carpenter. Librarians bring to question answering a suite of principles and ethics. Also, as part of a larger institutional focus on information organization, there is at least the opportunity for the information exchanged in a reference transaction to be linked to many other information dissemination activities (including collection development, the writing of pathfinders and more).

So if librarians are a special class of question answerers, and virtual reference is a special class of question answering (one that involves an information professional indoctrinated into the praxis, theory, ethics and principles of librarianship) is there any reason to wonder whether this special case should include more social aspects? In essence, is the one-to-one focus of virtual reference a product of a librarian’s praxis or theory?

To test this question, the Information Institute of Syracuse created a test site called “StoryStarters.” The site allowed users to ask and track questions through an online form. Rather than routing these to a librarian, the questions were instead placed in a queue available to a series of experts through blogs. These experts included librarians and scientists, but also anyone else who wished to load a plugin into their blog software. The individual would answer the question as a post in their blog. The post would also be sent back to the StoryStarters website where the person who asked the question could read the answer (and possibly more than one answer if more than one blogger decided to respond to the question). Not only could the questioner see the answer, but the answer appeared in the context of the answerer’s entire blog.

Librarians monitoring the system could also “bless” answers they felt were the best or the “official” response based on their professional judgment.

This experiment highlighted some very interesting aspects of answering in a social setting. The first is that such answering is possible. Many experts responded positively to the ability to prompt blog postings. They felt pressured into blogging by their institutions or peers, but had trouble finding materials to blog about. By having a steady stream of questions, they had adequate prompts to refresh their blogs. It was also noted that by answering questions within their own blogs, responders took greater ownership and were more willing to use the system. Rather than having to login to another system, and learn a new interface, experts were actually building up the content and visibility of their space on the web.

Perhaps, the richest observation of the project, however, was in terms of credibility. Librarians view themselves as credible sources of information. Much of the profession’s principles and ethics refer to a librarian being unbiased and devoted to the best information available on a topic. The good news is that the view of librarians as credible information brokers is often shared by the public. But the work of StoryStarters highlighted the contextual nature of this credibility. A user posed the following question to the StoryStarters site: “Why do teens abuse alcohol.” Two people responded to the question. One was a simple answer:

“Teens drink because they are having problems at home, have too much stress in their life or simply want to look cool and fit in with friends.”

The second answer was:

“There are a number of reasons a teen may abuse alcohol. The following sources of information may be valuable:

- Focus Adolescent Services’ Alcohol and Teen Drinking: [www.focusas.com/Alcohol.html](http://www.focusas.com/Alcohol.html)
- Teen Drug Abuse’s Health Effects of Teen Alcohol Use: [www.teendrugabuse.us/teensandalcohol.html](http://www.teendrugabuse.us/teensandalcohol.html)
Has Alcohol become a problem online test: www.alcoholtreatmentweb.info/?gclid=CNDQr5zu4oYCFSAESQodYDy2CQ

University of Notre Dame University Counseling Center’s Early Signs of Alcohol Problems: www.nd.edu/~ucc/ucc_alcohol1.html

Several interesting observations can be drawn from these two answers. The first is that when presented on the page, much as on the StoryStarters’ website, there are very few visual clues as to who provided these answers. However, remember that these answers are only gathered on the StoryStarters website. The original answers are posted in the blogs of the people providing the answer. The following figure shows the themes used by the two blogs:

![Themes (visual layout) used by the responding blogs.](image)

By looking at the blogs’ themes (look and feel) one can make a safe guess as to which belongs to a reference librarians and which belongs to a 16-year-old. Suddenly credibility decisions are shaped by the context of the people providing answers (in this case represented by the blog’s theme). This type of context is often the first thing stripped out of search engines and online databases.

The other very interesting observation is that both answers can be credible, but not at the same time. Take the reference librarian’s answer first (it is the second answer above). It has all the hallmarks of credibility. It is dated (not shown here), it uses numerous citations and it comes from an authoritative source. However, does the librarian represent a truly authentic view of the problem? Does he or she drink? Is he or she a teenager? If one wants a broader view, mostly based in aggregate data, then the librarian’s is the credible answer, and the shorter, personal opinion of a teen is not. On the other hand, if one wants an “authentic” view from an actual teen, the librarian’s answer is not credible.

This observation on the situational nature of credibility may be obvious. In fact librarians try to present users with multiple perspectives from multiple sources when they provide answers. Why then limit the perspectives available to the user at the point of answering the question itself to that of a single person? Once again the answer often comes down to resources. There are several possible reasons to retain a one-to-one relationship, but few based on theory. For example, one might say that gathering multiple opinions takes time, and users are unwilling to wait. Yet previous research counters the argument that there is either something fundamentally different in synchronous and asynchronous reference or that users are unwilling to wait for answers. Of course there will be contexts in which immediacy (very low lag time) is necessary (or strongly desired), but no research has been done to see if the value of immediacy and the value of richness of answer are correlated in any way. In other words, we know what we do, but have not really asked users what they need us to do and when.

By being able to better answer that question not only can librarians better serve users, but they can also better deploy valuable human resources.

So what guidance is available to organizations as they seek to investigate the potential of social or one-to-many means of virtual reference? The answer that comes from recent developments in participatory librarianship [8] is to look at the core of the reference process as a conversation between a librarian and a patron. In accordance with conversation theory [9] these conversations are between two agents and are ultimately a learning act. The two agents exchange understandings until an agreement is reached, thus setting a foundation for additional agreements to be reached in a scaffolding manner, resulting in knowledge. The reason this is a useful framework is that agents in the theory are flexible. They can be two individuals, as seen in current VR practice, or two organizations or two countries. In fact the two agents in a conversation can be within the same person, so called metacognition or critical thinking.
Looking at virtual reference as a participatory act provides a framework for multi-agent or social reference. Social reference has already been explored in the context of credibility [10] in which people online are moving away from single-source authorities to determine credibility to a reliability approach. Under this approach users seek out multiple sources of information to form their own credibility determinations. This behavior is not a shock to many virtual reference services, which often begin interviews with “What have you already looked at?” implicitly acknowledging that the service is only one of many sources. However, there is much to be gained by bringing this variety of sources within the reference interaction itself.

When we make the reference act itself a participatory system with multiple sources of expertise interacting, the user is better served by multiple sources and perspectives to derive credible information (as defined by the user him- or herself). A participatory system can also provide greater context and potential use of the artifacts that emerge from reference interactions (transcripts). Simple transcript metadata such as the name of the user, the responding librarian and date (as well as more extensive indexing as seen in services such as QuestionPoint’s Global Knowledge Base) could be augmented by social activities. Imagine a Wikipedia-like approach to the knowledge base where reference questions serve as the starting point for more community developed knowledge bases. Ratings services and tagging could be used to create alternative methods of finding existing answers and launching larger resource development. Finally, communities of interest could tie together a series of questions and answers into threads of knowledge and pathfinders.

This type of participatory virtual reference allows a number of new integrated library activities as well. Questions and answers can be embedded into an enhanced catalog for example. When patrons search on topics they could see books, web pages, existing answers and even open questions that, if they have the proper permissions, they can answer. In this participatory mode the information professional moves from being the source of knowledge to being the facilitator of it. In addition to doing basic research for an answer, they may simply endorse answers developed by the community (as defined by the library; community is equivalent to the use population, not necessarily the public at large).

If there is one point the reader should take away, it is that much more work is needed in the continued evolution of reference from an in-person, place-based activity to the anytime-anywhere nature of the Internet. A prime area for investigation is how the conversation between one information professional and one user can be expanded to a participatory system that links into the larger organization.

**Resources Cited in the Article**


