

# **Opening and Closing Rituals of the Virtual Reference Service of the Internet Public Library<sup>1</sup>**

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## Abstract

**Purpose** The purpose of this paper is to explore the communicative rituals of opening and closing manifested in email-based Internet Public Library's (IPL) online reference interaction.

**Design/methodology/approach**-A total of 400 transcripts comprising user queries and responses by IPL librarians are examined. The opening and closing elements are identified to examine the way in which IPL librarians and users construct social space; that is, communicate their interpersonal and affective stances during the course of seeking and offering information.

**Findings**-The results of data analysis show regular patterns of verbal and structural politeness indicators of opening and closing email discourse. Linguistic elements such as greetings and acknowledgement are included in all the sampled transcripts; i.e., a 100% occurrence. Closing rituals have a 95% occurrence of linguistic features such as acknowledgement and invitation for follow-up. In contrast, there is a low occurrence of personalized openings through greeting by user name (26%). This lack of personalization also occurs in closings: personalized farewell through use of librarian name appears in only 8% of closings.

**Research implications**- The employment of the various politeness tactics in opening and closing reflects the librarian's attention and concern to user's information needs, interests and wants. Such communicative competence narrows social distance and brings forth close socio-interpersonal space for interaction; this may, in turn, improve the overall quality of reference service. Research findings also indicate that more use of personal names may decrease the social distance between the librarian and user, resulting in increased solidarity and proximity.

**Originality/value**- The study provides new insights into linguistic politeness and the functions of address forms such as personal names with a view toward developing effective opening and closing rituals that contribute to the enhancement of virtual reference services.

**Keywords:** Opening and closing rituals, interpersonal communication, transcript analysis, Internet Public Library, linguistic politeness, address forms, virtual reference service

**Paper type:** Research paper

## 1. Introduction

Asynchronous CMC (Computer Mediated Communication) exchanges such as email provide the benefit of more time to interpret a message, both by the sender and receiver. E-mail reference provides several advantages over more immediate reference services. Owing to its asynchronous nature, e-mail reference allows a librarian to digest and analyze a question more thoroughly. It is also easier to refer to the original query (Stacy-Bates, 2003). Since there is less pressure for an immediate response, this can lead to more complete and meaningful responses as the librarian is able to search for and compose a response (Braxton and Brunsdale, 2004; Straw, 2000).

Through an examination of real-time online chat forums, Park (2007; 2008a, b) shows that online discourse participants employ a high degree of interpersonally-oriented language. For instance, participants employ a variety of creative devices to signal non-verbal communication cues that serve to build interpersonal solidarity and rapport; they also employ linguistic and paralinguistic tactics to express interpersonal and affective stances. These include contractions of linguistic forms, prosodic features and typographical conventions such as capital letters and emoticons to simulate gesture and facial expressions. In the CMC channel, which includes email

and online chat, emoticons are used as graphical representations of interpersonal and affective features such as acknowledgement, thanking, expression of sympathy and happiness. These interpersonal and affective features are expressed through gesture and facial expressions in face-to-face interactions. Thus, socio-interpersonal content appears in CMC interaction through nonverbal as well as verbal communication cues and serves to index the interpersonal relationships and rapport of online discourse participants.

Radford (2006, p. 1046) also points out that “relational aspects have been shown to be critical to client’s perceptions of successful FtF reference interactions.” Through an analysis of an instant messaging chat reference service, Ruppel and Fagan (2002) argue that interpersonal relations, associated with terms such as “friendliness” or “politeness,” are very important for successful reference service. Interpersonal rapport seems to have a significant impact on positive perceptions of reference interaction with librarians. Thus, analysis of socio-interpersonal communication between librarians and users is essential in order to facilitate more effective interaction in virtual reference services, either through email or real-time chat.

This study is a part of a two-year project on the modeling of interpersonal discourse for virtual reference services. The overarching research question of the project stems from the need to assess the impact of interpersonal and affective communication emanating from librarian-user interaction in the context of virtual reference services. Modeling interpersonal discourse based on an empirical analysis of socio-interpersonal communication patterns between librarians and users underlie the assessment of such impact.

The goal of this particular part of the study is to examine the realization of interpersonal communication features, focusing only on opening and closing rituals during the course of information-seeking and offering by users and librarians, respectively. Toward this end, we focus on one particular aspect of interpersonal communication: the manner by which users and librarians accommodate verbal (e.g., thank you) and structural politeness (e.g., greeting and farewell expressions) for opening and closing reference interaction through the Internet Public Library (IPL)’s Online Reference Service ([www.ipl.org](http://www.ipl.org)).

The following are the specific research questions:

- What are the recurrent features of opening and closing rituals in the IPL Online Reference Service?
- How do IPL librarians employ verbal and structural politeness markers during the course of offering information to users?
- What are the differences in opening and closing rituals by users and librarians?

## **2. Background: linguistic Politeness and opening and closing rituals**

In this section, we will present an overview of politeness, linguistic elements for opening and closing rituals and studies that look at interpersonal communication in relation to opening and closing rituals in virtual reference service.

### **2.1 *Linguistic politeness***

Park (2008a, b) presents a comprehensive introduction to linguistic politeness and its application to a real-time educational online forum. For the purposes of this study, we will recap

the theoretical framework from Park (2008b, section: Brief Recap of Linguistic Politeness, p. 2200):

The phenomenon of linguistic politeness is prevalent in everyday language usage. For instance, indirect and ambiguous communication among speech participants is frequently used when expressing disagreement. In this sense, linguistic politeness can be seen as a strategy for reducing interpersonal friction and conflict and as a device that speech participants utilize to facilitate smooth social interaction (Lakoff, 1973; Leech, 1983). The Brown and Levinson's (1987) face-saving theoretical framework, which prominently served to shape linguistic politeness theory, is constituted with politeness principles and strategies for maintaining and enhancing one's *face* (i.e., public self-image) during social encounters. In everyday language use, such strategic devices can be easily observed in various verbal and nonverbal expressions and rituals.

An example: in a job setting a subordinate may be discussing work-related matters in her supervisor's office. The subordinate feels cold and wants to have a window closed. In this context, the utterance by the subordinate for making a request to her supervisor (*it's cold in here*) is realized as an indirect speech act through hint together with a nonverbal gesture. A direct command, such as *close the window!* would likely vitiate smooth social interaction considering the asymmetrical power relationship between subordinate and supervisor.

In other words, a direct speech act would likely pose a threat to the speech participant's *face*. In this sense, indirect verbal and nonverbal behaviors reflect the use of linguistic politeness as a strategic device for facilitating social interaction; it can be said that linguistic politeness underlies the interpersonal and interactive function of language use during social interaction.

There are two interrelated aspects of *face* desire. One is the *positive face* desire that is rooted in involvement and connection and proximity with others. Scollon and Scollon (1983) used 'solidarity' in lieu of *positive face*. The other is the *negative face* desire that is rooted in the independence and autonomy of individuals. According to Scollon and Scollon, 'deference' is in line with *negative face*. There are a variety of politeness strategies that attend to the *positive face* desire to be liked and appreciated. These include verbal and nonverbal forms encompassing the claiming of common ground, such as shared interest and knowledge with the other speech participant, seeking agreement and avoiding overt disagreement, delivering compliments, showing interest, approval or sympathy and using in-group identity markers such as nickname.

On the other hand, *negative face* desire can be realized by giving others options, independence and freedom of action and freedom from imposition. Accordingly, this desire brings forth a certain degree of social distance between interlocutors and maintains personal space and territory. Politeness strategies for realizing *negative face* desire encompass verbal and nonverbal expressions and rituals conveying indirectness and/or hesitation, avoidance, apology, deference, self-effacement and formality.

Brown and Levinson (1987) delineate four major categories of politeness strategies: bald-on-record (e.g., direct speech act), positive politeness (e.g., solidarity), negative politeness (e.g., deference) and off-record (e.g., hint, the most indirect speech act). The realization of politeness strategies is dependent on the cognitive assessment of social interpersonal variables in a given socio-cultural context. According to the politeness assessment formula of Brown and Levinson, there are three variables involved: *power*, *distance* and *imposition*.

## 2.2 *Linguistic elements for opening and closing rituals*

Opening and closing rituals can be seen as analogous to a verbal handshake during social interaction. Such a verbal handshake sets not only the initial tone of socio-interpersonal communication for upcoming speech acts but also facilitates the sustaining of positive social interactions. As a ritualized discourse unit, opening and closing elements can be strategically used for expressing linguistic politeness and interpersonal communication.

Commonly occurring linguistic elements for opening and closing rituals can be categorized as follows: 1) verbal politeness markers (e.g., acknowledgement, thank you); 2) structural politeness markers such as greeting expressions (e.g., hi, hello), greetings through use of the other party's name and leave-taking conventions in the form of farewell expressions (e.g., take care, sincerely, regards).

Address forms and greeting expressions are the most frequently used linguistic elements for opening discourse. Address forms are typically composed of pronouns, personal names, kinship terms (e.g., mom, sis), occupational titles (professor, waiter) or a combination of title and name (e.g., Dr. Park). Address forms mostly occur in the initial position of an utterance or sentence. This initial position serves to direct the other party's attention to the upcoming speech act (Park, 2002); in addition, these forms function to index interpersonal and affective stances such as intimacy, formality and informality.

Employment of address forms can be seen as noticeably different when comparing social encounters, dependent on setting. The speech style in formal meetings such as an organizational group meeting or a conference presentation tends to be more rigid, in a neutralized voice, with suppressed interpersonal affect. On the other hand, the speech style in informal settings such as small talk is familiar and interpersonal.

Formality increases the social distance between interlocutors. Accordingly, this attends to the interlocutors' negative-face desire to be able to keep personal space and territory and be free from imposition. On the other hand, informality increases the use of solidarity-oriented linguistic forms including informal speech style and address forms. Informality also decreases social distance and brings forth proximity among speech participants (Wierzbicka, 1991). This in turn attends to interlocutors' positive-face desire to be liked, appreciated and approachable. Address forms reflects the difference in linguistic forms centering on formality vs. informality (Park, 2002). For instance, in a formal setting such as a conference presentation, the moderator may address presenters by using deference-oriented linguistic forms such as title followed by last name (e.g., *professor Lee*); on the other hand, in informal settings in everyday language use, people may address each other by employing solidarity-oriented linguistic forms such as first name or endearment terms (e.g., *dear, sweetie*).

Address forms in English are largely based on an individual's name (Braun, 1988). Social distance comes to be fairly easily narrowed after the first encounter and the interlocutors are shortly utilizing first-name based address forms.

### **2.3 *Opening and closing rituals in virtual reference***

Conducting a virtual reference interview can be particularly difficult in an e-mail setting. Marcum (2005) noted a weakness in asynchronous reference manifested in the use of clarifying questions. Reference interviews can be more easily conducted face-to-face or even through chat services, which may lack full use of nonverbal cues but allow a quicker method of clarification. Doing so through e-mail can take much more time and multiple exchanges; there is still the

chance that the question will not be properly addressed. As Marcum notes, the risk of miscommunication is high through this method of reference.

On the other hand, providing a reference interview during a chat reference interaction is less cumbersome than through e-mail reference but it still provides challenges. While to this point technology prevents full use of nonverbal cues, there is the opportunity to clarify the user's request more quickly than through e-mail. This method may pose problems for slow typists, and the nature of a chat conversation can seem stilted as there is a delay between turns. However, studies have found that the reference interview is still very important. Users were more satisfied with a session when a reference interview had been conducted. Another reason to stress the importance of reference interviews is that librarians who conduct them are also more likely to follow service guidelines (Hyde and Tucker-Raymond, 2006). Marsteller and Mizzy (2003) found reference interviews occurring in chat 64% of the time, a rate comparable to face-to-face services.

Transcript analysis of the virtual reference interview either through email or chat has significant advantage. It allows researchers to investigate without influencing a librarian's behavior. A main advantage to virtual reference services in relation to assessment is the ability to keep complete and accurate artifacts (i.e., transcripts) of interaction between librarian and user (Garnsey and Powell 2000). This provides a major benefit over face-to-face sessions where keeping verbal interaction for future study can be unduly cumbersome. Transcript analysis is useful for examining several aspects of virtual reference services, such as quality of an answer, correctness of an answer, adherence to appropriate guidelines and interpersonal communication.

Through transcript analysis, several studies demonstrate that interpersonal rapport has a significant impact on positive perceptions of reference interaction with librarians (Mon, 2006; Radford, 2006; Ryan et al., 2006; Westbrook, 2007). The critical role of interpersonal relations and rapport in users' perceptions of successful interaction is demonstrated by Radford. Through transcript analysis of chat reference drawn from the LSSI Samuel Swett Green Award (n=44) and Maryland AskUsNow! (n=245), Radford found that there are a substantial number of interpersonal aspects in the chat environment including techniques for rapport building, compensation for lack of nonverbal cues, strategies for relationship development, evidence of deference and respect, face-saving tactics and greeting and closing rituals. In terms of greeting and closing rituals, Radford shows that there is the frequent presence of scripted as well as non-scripted greetings and closings used by librarians: in the case of non-scripted greetings, greeting rituals occur in the Green Award (57%) and in Maryland AskUsNow (31%). Non-scripted closing elements used by librarians are found in the transcripts of the Green Award (77%) and in the Maryland AskUsNow (28%). Radford points out that greeting rituals serve to build interpersonal rapport with users; on the other hand, negative closure such as abrupt ending and ignoring cues for more help can become a relational barrier between librarians and users.

Mon (2006) investigates perceptions of interpersonal communication between users and librarians in virtual reference service through email and chat. The findings of the study indicate that users positively perceive the interpersonal connection with librarians during the process of virtual reference service. For instance, users are appreciative of efforts employed for enhancing interpersonal communication through utilization of the user's name or provision of contact information or name. Actions that users cite positively also include open and polite communication styles and interpersonal rapport developed through working with and follow-up with users and inviting users to return to the reference service. On the other hand, users negatively perceive actions that are not informed by interpersonal communication. For instance,

automated responses, phrased as “computer-generated reply,” or “copy and paste,” and insufficient interaction, phrased as “a lot of silence from the other end” together with impolite communication styles are all actions that are negatively perceived by users.

By utilizing a purposive sample of 402 transcripts derived from a chat reference service, Westbrook (2007) demonstrates the effectiveness of application of formality indicators drawn from the linguistic politeness theoretical framework for examining interaction between librarian and user. She identifies informality indicators such as the use of linguistic contractions, abbreviation and acronyms, slang (e.g., informal speech style) and non-conventional punctuation markers. The study points out that lack of these devices may increase the formality level from both ends (i.e., librarian and user). The shift of formality levels occurs during the reference interview stages (i.e., opening, clarifying, answering, evaluating, closing).

For instance, answering by the librarian entails providing instruction and advice to users that may pose a potential threat to interlocutors’ *face*; in this stage, the formality differential becomes marked. On the other hand, during the closing stage, formality may drop to a lower level. Westbrook found that the opening launched by the user is relatively formal. In the closing stage, the formality level is lower owing to the fact that it is the opportunity in which “both parties express their affective reactions to the question and/or the chat service exchange” (Westbrook, p. 652). Westbrook points out that advice to users that mitigates any potential *face* threat is more valuable than that which is given without such mitigation. The study indicates that the linguistic politeness theoretical framework can be effectively used for interactive reference service.

In relation to (in)formality, Maness (2008) found that students are more likely to be formal with librarians than they are with each other in a chat situation, and that there existed a correlation between user satisfaction and the employment of informal language. This indicates that a librarian may need to find an appropriate balance between formal and informal speech when providing chat reference.

Ryan et al. (2006) examined the quality of chat reference services by looking into the following elements: salutation, concluding statements, personal language and compensation for visual cues. Results show that librarians effectively welcome users through greetings; however, the study points out that there is inadequate provision of closing language to users. Wheeler and Fournier (2001) made some suggestions for ensuring successful asynchronous interactions. These include being approachable, which includes using a greeting and signature, and reassuring a user that the question being asked is valid. Tenopir (2006) notes that greeting rituals are a good starting point for rapport building and positive closing rituals help to encourage user returns to chat reference.

### **3. Internet Public Library**

The Internet Public Library ([www.ipl.org](http://www.ipl.org)) was founded in 1995 at the University of Michigan. In January 2007, IPL entered a new phase and was physically moved to Drexel’s College of Information Science and Technology. Since 2007, a total of 18 partner or participating universities have been involved with the IPL Consortium. The IPL solicits questions from the general public on just about any topic through its web-based Online Reference Service. IPL serves online users and provides a learning environment for LIS students. The IPL provides guidelines through a training manual since its services are provided mostly by volunteers and LIS students who may or may not have had previous experience in providing reference services.

To submit a question, users must fill out a form, which can be seen as serving the purpose of a reference interview. The form asks how the user plans to use the information, whether it will be used for a school assignment and what sources have already been consulted. Volunteers have the option of requesting more information from a user.

The form indicates that up to three days may be needed to respond to a query. The manual includes a checklist of elements to provide in every answer: greeting, acknowledgement, two to four sources or answers depending on the type of question, name or citation for the sources, search descriptions and a closing. IPL's policies generally fall in line with the RUSA (2004) and IFLA (2008) guidelines. IPL also utilizes many of the same specific guidelines found in the IFLA rules, including writing to the level of the query when possible, checking spelling and URLs and providing authoritative sources. The areas in which IPL differs from these rules are similar to how any individual library may tailor guidelines to fit their own institution's needs.

#### **4. Research procedures and methods**

For examining opening and closing rituals, transcripts from IPL's Online Reference Service are used. The IPL Online Reference Service is intended to help users find resources based in the web. For this study, we employ 400 online reference interactions (200: IPL librarian's responses; 200: users' queries). The sample transcripts for the study were randomly selected out of the larger data set drawn from the following period of reference transaction: January 1, 2006 through June 30, 2006.

The basis for the coding categories for the sampled transcripts is derived from discourse analysis based on the linguistic politeness theoretical framework of the studies by Park (2008a, b). We looked at openings and closings of IPL transcripts by isolating linguistic elements for opening and closing rituals employed by both IPL users and librarians.

The linguistic opening and closing elements are identified to examine the way in which IPL users and librarians construct social space; that is, communicate their interpersonal and affective stances during the course of seeking and offering information. The coding was an iterative process. During the actual coding, coding categories were revisited as necessary and additional codes derived from the transcript analysis were added to the final coding taxonomy.

The coding categories for opening elements are as follows:

- No opening elements
- Greeting expressions
- Acknowledgements
- Address forms/naming
- Self-introduction

The table below illustrates the description and some examples of each coding category for opening.



<b>Codes</b>	<b>Descriptions</b>	<b>Examples</b>
<b>No opening</b>	No use of greetings and other linguistic elements to engage conversation before mentioning formal content of subject matter	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Greeting expressions</b>	Express salutation or greetings	<ul style="list-style-type: none"> <li>• Hi</li> <li>• Hello</li> <li>• Dear</li> </ul>
<b>Acknowledgements</b>	Express thankfulness or appreciations to the recipient of the message	<ul style="list-style-type: none"> <li>• Thanks for using...</li> </ul>
<b>Address forms/Naming</b>	Greetings and salutation followed with the name of the recipient of the message	<ul style="list-style-type: none"> <li>• Dear Alex</li> <li>• Hi Dr. Park</li> </ul>
<b>Self-introduction</b>	Introduce one's name or job title or background	<ul style="list-style-type: none"> <li>• This is from xx, volunteer reference librarian.</li> </ul>

**Table 1. Categories of opening rituals**

The coding categories for closing elements are as follows:

- No closing elements
- Acknowledgements
- Farewell/ending salutations
- Signature using sender's name
- Follow-up invitation/ referral to other service

The table below illustrates the description and some examples of each coding category for closing.

<b>Codes</b>	<b>Description</b>	<b>Examples</b>
<b>No closing elements</b>	No use of closure or concluding statements to indicate the end of the interaction	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Acknowledgements</b>	Express thankfulness to the recipient of the message	<ul style="list-style-type: none"> <li>• I would be so grateful for a reply.</li> <li>• Any advice is greatly appreciated.</li> <li>• Thank you very much for using our website.</li> </ul>
<b>Farewell/ending salutations</b>	Express farewell to end the interactions	<ul style="list-style-type: none"> <li>• Regards</li> <li>• Sincerely</li> </ul>

		<ul style="list-style-type: none"> <li>• Best wishes</li> </ul>
<b>Signature using sender's name</b>	Use signature by sender's name	<ul style="list-style-type: none"> <li>• Jung Park., Volunteer</li> </ul>
<b>Follow-up/referral</b>	Determine if the user is satisfied with the answers; ask the user to come back for further assistance; or refer the user to other reference services	<ul style="list-style-type: none"> <li>• If you have any more questions please just write back to us.</li> </ul>

**Table 2. Categories of closing rituals**

Transcript analysis is done at an utterance/sentence level--the smallest linguistic unit to assign a coding category. Utterances may vary in length from a single word to a lengthy sentence or sentences (Roter, 2008). Opening and closing categories may occur more than once in an utterance. Data was coded by a single research assistant to achieve coder stability, "one coder agreeing with herself over time" (Rourke et al, 2001, p.13); the limitation of this approach lies in the lack of inter-rater reliability. The principal investigator of the project supervised the actual coding and helped to address any ambiguities of coding that arose.

The quantitative presence of linguistic elements in openings and closings are examined. The frequencies of the occurrences of categories in the opening and closing were counted and then compared vis-à-vis users and librarians.

## 5. Findings and discussion

The frequencies of the linguistic features that are used for opening the interactions by both parties (IPL librarians and users) are shown in the table below:

<b>Categories of Opening</b>	<b>IPL - replies</b>	<b>User – questions</b>
No Opening	0 (0%)	190 (95.0%)
Greeting expressions	182 (91%)	6 (3.0%)
Acknowledgements	145 (72.5%)	0 (0.0%)
Address forms/naming	52 (26%)	0 (0.0%)
Self-introduction	3 (1.5%)	4 (2.0%)

**Table 3. Opening rituals by IPL librarians and users**

The frequency of linguistic features indicates that IPL librarians provide highly sufficient openings in welcoming users to the IPL Online Reference Service. As shown, there is no response to user queries that do not include linguistic features for openings. All (100%) of the sampled transcripts contain various linguistic cues and elements for opening the interaction. As shown in the table, in the case of IPL replies to users' questions, expressions of greeting (91%) were the most frequently occurring type of opening ritual, followed by acknowledgement and thanking (72.5%), address forms (26%) and self-introduction (1.5%).

The librarian's response below illustrates an opening ritual:

Hello xxx. Thank you for contacting the IPL regarding scholarly sources on African American cowboys. I understand that you are mainly interested in book and journal titles and authors. .... Since I noticed that you are from NYC I also searched the website of the New York Public Library for you. ...

The opening ritual in the above illustration evidences employment of various linguistic politeness strategies which narrow the social distance between the interlocutors. Greeting expressions such as ‘hello’ can be considered as an in-group identity marker and a positive politeness strategy which manifests the speaker’s interest in the other. Showing interest to the other is even strengthened by using the user’s first name [xxx]. Such a greeting expression followed by the user’s first name creates a warm and friendly welcoming atmosphere to the IPL service and generates an amicable footing for further interaction. The librarian further creates proximity with the user by an acknowledgment and thanking for his question. Such acknowledgement to the user’s question serves to validate the user’s information needs. In addition, prior to helping the user by searching relevant resources, the librarian employs another positive politeness tactic by attending to the user’s information needs and interests: “I understand that you are mainly interested in book and journal titles and authors.” Such caring and sensitivity to the user’s needs are also observed in the body of reference interview followed by opening: “..... Since I noticed that you are from NYC I also searched the website of the New York Public Library for you ... .”

All the above mentioned linguistic elements and positive politeness tactics create an atmosphere of approachability and function to encourage the user’s involvement. In this sense, the employment of linguistic politeness tactics underlies the librarian’s communicative competence and caring for the user’s information needs. Such communicative competence brings forth rapport and solidarity which function to narrow the social distance between the speech participants. This may contribute to the overall quality of reference services and the user’s perceived satisfaction of the service (see also Ulvik and Salvesen, 2007).

Westbrook’s study (2007, p. 652) on the use of formality indicators in chat reference communication shows that: “virtually every initial library staff posting included a greeting and use of the user’s first name, a combination that generally led to a lowered formality level ....” In contrast to the real-time chat reference communication mode, IPL librarians employed personalized openings by using the user’s first name to a small degree (26%). Such a relatively low usage of address forms/naming may be derived from the asynchronous nature of email communication. The asynchronous communication channel may hinder exchanging names and narrowing the social distance gap between the participants in a short term. As illustrated in the above, the use of address forms including first name signifies employment of positive politeness tactics. One of the key functions of positive politeness is to convey approachability and proximity to the other party (see Park 2008a, b for details).

As shown, the frequency of usage of linguistic features indicates that IPL librarians were compliant with IFLA and IPL’s guidelines. IFLA’s digital reference guidelines specify the structure of the written response, including a heading, body and closure (IFLA, 2008). For the heading, it specifies that “Greet patron, include a generic notice of thanks for using the service ...” (IFLA). In the opening, librarians in the dataset follow the IFLA’s specification for the headings (using greeting terms, 91%; using thank you notes, 72.5%). But the librarians in the dataset did not use greetings accompanied by users’ names in the opening (only 26% did so).

Shachaf and Horowitz (2006, p. 514) studied the virtual reference services and found that “the different frequencies of greetings, use of first and full name and honorific use for each user indicate an important aspect of reference service quality”.

On the other hand, opening rituals appear very differently in user queries. The following transcript illustrates this:

To estimate PPP, I need wholesale price statistics going back to approximately 1990 for several foreign countries. These statistics are conveniently packaged in a single journal, published by the International Monetary Fund, which is entitled "International Financial Statistics". My question: Do you know of a library or other source that offers this journal online? I don't want to pay over \$500 to peek at the journal through the IMF.

The majority (95%) of questions from users do not contain any opening cues. The user in the above illustration initiates the interaction by directly introducing the reason for her information seeking. Following this, she employs the bald on-record type of linguistic strategy: “Do you know of a library or other source that offers this journal online?” The bald-on-record strategy conveys clarity and directness (see Park, 2008 a & b). It conforms to Grice’s Maxims (Grice, 1975). According to the Grice (1975) model, communication is possible because interlocutors mutually abide by a cooperative principle (CP). The CP consists of the four general maxims of *relevance* (make a contribution relevant to the exchange), *quantity* (be as informative as required), *quality* (say what is true), and *manner* (be clear). In everyday language uses, speech participants assume that they follow the cooperative principle and its four maxims. This allows the interlocutors to understand each other’s intentions and implied meanings. In information-seeking contexts through the computer mediated communication channel, politeness and clarity often clash. In other words, users compensate linguistic politeness, which often conveys indirectness and ambiguity, for the sake of increasing clarity, which may in turn affect the results of their information seeking (see Park, 2008 b).

In addition, in daily social interaction with an unknown addressee there is a strong tendency to avoid greeting and addressing the other party. The social distance between the unknown is high. The avoidance of opening rituals is in a sense reasonable in the context of the IPL in which users have not had any previous engagement with IPL librarians. Avoidance is also derived from asymmetrical power relationship between librarian and users. Owing to professional position and educational credentials, as in any other professional relationships such as between doctor and patient, librarians have power over the users (see also Ulvik and Salvesen, 2007). In this social relation, the user will attend to the librarian’s negative face desire. According to Brown and Levinson (1987, p. 61) the negative-face concerns: “the basic claim to territories, personal preserves, rights to non-distraction, i.e., to freedom of action and freedom from imposition.” The most frequently employed politeness strategy for attaining negative-face desire is the utilization of indirectness, apology, avoidance and hesitation in varying degrees.

In social interaction evincing high social distance and asymmetrical power relationship as in the user and librarian, users tend to maintain social distance with librarians by respecting the librarian’s personal territory and right to non-distraction and freedom from imposition. Thus, in this context negative politeness strategies may frequently occur. Radford (2006, p.1055) found disparity in social interaction between librarians and users in the virtual reference setting: According to the comparison of relational facilitators used by librarian and user, the user utilizes

‘deference’ foremost in interaction with librarians. Deference can be considered as the negative politeness tactic of politeness theory.

Avoidance is one of the key strategies for expressing deference and negative politeness. Thus, we assume that lack of opening cues from users may in part derive from the fact that social distance is high between a librarian and a user. In other words, users first initiate conversation with someone with whom they have not previously engaged. In this context, users may tend to seek information directly without any opening rituals such as greetings.

For closing rituals, we looked at IPL interaction in the same way as openings. The table below illustrates the recurrent types and frequency of linguistic elements that are used for closing interactions by both parties (IPL librarian and user):

<b>Categories of Closing</b>	<b>IPL – replies</b>	<b>User – questions</b>
No closing elements	1 (0.5%)	155 (77.5%)
Acknowledgements	190 (95.0%)	44 (22%)
Farewell/ending salutations	35 (17.5%)	1 (0.5%)
Signature using sender’s name	16 (8%)	12 (6.0%)
Follow up invitation/Referral	188 (94.0%)	0 (0.0%)

**Table 4. Closing rituals by IPL librarians and users**

In the same way as in openings, the recurrent use of the linguistic elements shows that IPL librarians provided sufficient closings to users during the IPL Online Reference Service. As shown, a high percentage (ca. 99%) of the sampled transcripts contain various linguistic cues for closing the interaction. Abrupt endings without any verbal and structural closing elements compose less than 1% of the sampled transcripts.

The following transcript excerpt illustrates this:

... This gives you a good list of both book and journal titles. For a fee you can access these titles from the Questia website, but I imagine you could find most of these sources from your local library. .... Best of luck with your research, and if, in fact, you are not in the New York Metro area, let us know and perhaps we can find sources at another local library for you. Thanks again for using the IPL, xxx

In the above closing, the librarian employs various linguistic politeness tactics. For instance, by presupposing the librarian’s knowledge of and by claiming common ground and concern for the other’s wants, the librarian suggests that the user can access the book titles from the local library rather than paying a fee for access: “For a fee you can access these titles from the Questia website, but I imagine you could find most of these sources from your local library.” This conveys that the librarian cares for the user’s desire for free access to the desired resources. Furthermore, the librarian provides a farewell, “Best of luck with your research,” evidencing interest in the user’s research. The librarian does not stop here in providing sufficient closing. By offering a follow-up service she further attends to the user’s interests and needs: “... if, in fact, you are not in the New York Metro area, let us know and perhaps we can find sources at another local library for you.” She closes the interaction by offering thanks to the user followed by her personalized signature with her first name [xxx]. Personalized signature with librarian’s name in the closing brings forth approachability for further contact and follow-up service.

The employment of the series of positive politeness tactics in closing (i.e., presupposing and attending to the user's wants, claiming common ground, showing interest and caring for the user's needs, offering a follow-up service, acknowledgement for using the IPL service and providing a personalized signature) characterize the librarian's attention and concern to the user's needs, interests and wants. Such communicative competence narrows social distance and brings forth close socio-interpersonal space for interaction between the interlocutors; this may, in turn, contribute to the overall quality of reference service. While examining the interaction and communication of reference service from an ethical perspective, Ulvik and Salvesen (2007) also demonstrate that showing interest to the user's information needs engenders trust, a requisite for any human relationship.

In the case of IPL librarians' replies to user questions, as shown in Table 4 above, acknowledgement and appreciation for using the IPL Online Reference Service is the most predominant type of closing (95%), followed by follow up invitation/referral to other service (94%), farewell expressions (17.5%) and signature using sender's name (8%). It is interesting to note that verbal politeness markers such as thanking and acknowledgement for using IPL service appear the most in the closing of IPL librarians' responses. As shown earlier (see Table 3), this category also occurs with high frequency (72%) in the opening rituals of IPL librarians' responses to user questions. The extensive use of gratitude signifies a positive politeness strategy that functions to convey approachability and proximity to users.

Follow-up invitation and referral to other service appears almost as frequently (94%) as acknowledgement. Follow-up suggestions are an important part of offering information. Follow-up may bring forth the building of rapport with users by showing interest and concern for the users' information needs; it may also function to encourage users to come back to the IPL Online Reference Service and help to build a long-term relationship with the users. Examples include: "Please let us know if we can be of further assistance."; "If you have any further questions, please ask the Internet Public Library again!" Farewell expressions (e.g., sincerely) are sparingly used; 17.5% of the librarians closed their responses with farewell expressions.

Personalized signature using the librarian's name appears to be limited: only 8% of closings include librarians' names. This may derive from the fact that the IPL manual specifies that a signature is optional. It should be noted that an automatic signature with the librarian's first and last name and the IPL email address are added at the very bottom of all outgoing emails (e.g., Joe Q. Volunteer, The Internet Public Library - <http://www.ipl.org/>). However, the manual welcomes IPL staff to continue to include a signature at the end of a response. Another reason for the low use of the signature is that librarians in the dataset foreground the group identity (i.e., IPL) and emphasize group services, as reflected in their frequent use of the terms "Internet Public Library" and "us" and "we" (e.g., "Thanks for asking the Internet Public Library"; "Please let us know if we can be of further assistance").

As discussed earlier, address forms such as names can be strategically used in conveying interpersonal and affective stances. For instance, addressing the users by their first name decreases the social distance between the librarian and user; this, in turn, brings forth solidarity and proximity and may engender smooth social interaction. Closing reference transactions through personalized signature using librarian's first name or initials may convey a message of further invitation to the reference service. It is noteworthy that as many as 12% of users responded to replies signed by librarians' names in their closings. This may lead one to think that users feel more comfortable making a subsequent request for more information if the first answer by the librarian does not satisfy. That is, when there are positive politeness indicators such as

first names in the closings, users may feel comfortable in approaching the virtual reference service than when such positive politeness indicators are not present. However, this needs to be substantiated in a future study using a separate dataset.

In the same way as in opening rituals, a large number (77.5%) of user queries do not contain any closing expressions. The following illustrates this:

When the city of New Orleans was founded, was it below sea level and is it considered below sea level today?

As discussed earlier, the majority of user queries can be categorized as direct speech acts which convey the clarity of the proposition of the utterance. The lack of a closing in user queries stems from the fact that the user is interacting with an unknown addressee; in other words, users have not had any previous engagement with IPL librarians. Such social interaction with an unknown individual evinces high social distance and at the same time an asymmetrical social power relationship due to the librarian's professional position and educational credentials. In this context, there may be a tendency of avoidance of closing rituals. A total of 22% of closing remarks concern acknowledgement and appreciation. Farewell expressions and a signature using the sender's name (6%) compose another type of closing ritual by IPL users.

## 6. Conclusion

In this study we explored the communicative rituals of opening and closing manifested in email-based reference interaction. User queries and responses by IPL librarians to the queries were examined. Recurrent linguistic features of opening and closing in particular were analyzed by a frequency count of the features.

The effectiveness of social interaction in asynchronous email interaction such as the IPL's Online Reference Service may depend on the interpersonal and affective communication that takes place between the librarians and users. The establishment of social cohesion affects both the cognitive and emotional processes of negotiation of meaning and approachability that take place during the seeking and offering information. The communication channel through a text-based asynchronous email interaction such as the IPL Online Reference Service contains barriers that may impede interaction; for example, users may not know the librarians previously (high social distance) and narrowing of the social distance between the two parties takes much longer than in real-time chat. Speech acts such as requesting and offering information may threaten the negative face of participants (Brown and Levinson, 1987). The presence of opening and closing rituals may reduce such barriers by bringing forth social cohesion and proximity between librarians and information seekers.

Results of the analysis of sampled transcripts show that during the course of offering answers to user queries, IPL librarians attentively utilize verbal politeness indicators such as thanking and acknowledgement and structural politeness indicators such as greetings and farewell expressions for openings and closings, respectively. The transcripts analysis shows that IPL librarians complied with IPL's standards (training manual) and professional guidelines such as RUSA and IFLA in terms of opening and closing reference transactions.

The recurrent linguistic features of opening and closing rituals through structural and verbal politeness markers set positive interpersonal rapport with users during the entire interaction for seeking and offering information. The result of data analysis shows regular

patterns of certain verbal and structural politeness indicators of opening and closing email discourse of IPL Online Reference Service. In other words, linguistic features such as greeting expressions and acknowledgement were included in 100% of the sampled transcripts. Closing rituals also show an approximately 95% occurrence of linguistic features such as acknowledgement and follow-up invitation. The employment of the various politeness tactics in opening and closing underlies the communicative competence of the librarian and overall concern for the user's information needs. Such communicative competence brings forth close socio-interpersonal space for interaction by narrowing the social distance between the interlocutors; this may, in turn, improve the overall quality of reference service and the user's perceived satisfaction of the service.

Noteworthy is that there is a lack of personalized openings through greeting by the user's first name (26%). This limitation of personalization also occurs in closings in the sense that personalized farewell through using the librarians' names appears only 8% of the time. Effective use of address forms may decrease the social distance between the librarian and user, in return, resulting in increased state of solidarity and proximity.

Personalized signatures using the librarian's first name or initials (differentiated from those automatically generated) may facilitate repeat use of the virtual reference service. However, even though personalized opening and closing rituals may bring forth positive interpersonal relations, we do not yet know how such personalized rituals affect user perceptions of IPL's Online Reference Service. The functions and impact of such personalized openings and closings need to be examined through further analysis of responses to IPL librarians' answers in which the reference transaction is closed with the name of the librarian.

There are some limitations of this study: Opening and closing rituals may be conditioned by question and user types; however, in this study, we did not differentiate question types (e.g., factual and non-factual) and user types. Communication modality (email vs. chat) may also affect opening and closing rituals in reference interaction. The sample size is relatively small which somewhat limits the findings of the study. Questions, user types and communication modalities with a larger sample size need to be taken into consideration in future studies.

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