Responses to indirect speech acts in a chat room

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Examining an aspect of computer-mediated communication (CMC)

THIS STUDY compares responses to indirect speech acts in a chat room with responses in a telephone conversation. In this instance, the chat room serves as a meeting place for members of a recent undergraduate university course and the telephone conversations are taken from a study done by Clark in 1979. Indirect speech acts are those that have a literal meaning (e.g., 'Do you have a dollar?' – the surface question is a request for information) as well as an indirect meaning (in this case, a request for money). Responses can consist of (1) just the answer to the surface question, (2) that answer plus the information indirectly requested, (3) only the information indirectly requested, or (4) some other form of response. The percentage of each type of response was compared in the two forms of communication. Clark found that the majority of responses consisted of only the information requested, and as predicted, the typed environment of the chat room yielded an even greater majority of this simplified form of response.

Introduction

When Austin (1962) and Searle (1965a, 1965b, 1969) began to define and categorize speech acts in the 1960s, they included oral communication, either face-to-face or over a telephone, and written communication, either by letter, telegraph, or some other mode. The term *speech act* refers to what Austin initially called an *illocutionary act*, and can be defined as, 'the making of a statement, offer, promise, etc. in uttering a sentence, by virtue of the conventional force associated with it (or with its explicit performative paraphrase)' (Levinson 1983: 236). Thus, in a direct speech act, the speaker intends for the meaning to be taken at face value, and 'What is the temperature in Philadelphia right now?' is a direct speech act requesting information. On the other hand, an indirect speech act, such as 'Do you know what the temperature is in Philadelphia?' contains the direct illocutionary force of the utterance (here, inquiring whether the hearer has a certain piece of information), and *also* has some other type of illocutionary act (here, requesting that the hearer tell the speaker what the temperature is) (Searle 1965a).

Austin and Searle could not have envisioned the current forms of computer-mediated communication (CMC) that the widespread use of computers and the Internet have made possible for a large segment of the population. The precursor to the modern Internet, which was known as DARPANET, was introduced in 1969 for use by a handful of people in the military

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and at research universities involved in military projects (Comer 1988). The growth of CMC was exponential, and within just thirteen years Kerr and Hiltz (1982) published a 200-page book describing its status and potential. Studies of the human side of CMC weren't far behind, and by 1984, journals such as *American Psychologist* were publishing articles on the social and psychological aspects of this new form of communication (e.g., Kiesler, Siegal, and McGuire 1984). Even so, access to CMC in the mid-1980s was limited to people who worked for governments, universities, and computer companies, plus a very small percentage of the general public that was tech-savvy enough to be aware of the technology and have the means to use it.

When Clark studied responses to indirect speech acts in 1979, he chose to analyze telephone communications. If Clark himself was even aware of CMC at that time, the number of people using CMC was so small and represented such a unique segment of the population that it would not have been meaningful for his type of study. But time and technology have moved on, and with the advent of chat rooms, a much wider segment of the population has access to person-to-person synchronous forms of communication other than face-to-face or telephone conversations.

The linguistics and sociolinguistics communities have also kept up with these changes in forms of communication, and researchers have been there from the beginning, studying the impact of CMC on language. Indeed, Baron (1984) was among the first to document ways in which CMC impacts the way ideas are expressed. More recently, authors such as Shank and Cunningham (1996) have argued that CMC, and communication in chat rooms in particular, exhibits many of the features of face-to-face oral communication, but almost no work has been done to study speech acts in chat rooms. Because speech acts in general are far too broad to be handled here, we will focus on responses to indirect questions in chat rooms, and we will see how these responses compare to Clark's findings in 1979.

Because typing requires more effort than speaking for most people, it is hypothesized that the response to an indirect question or embedded question posed in a chat room will include only the information indirectly requested even more frequently than Clark (1979) observed. That is, the chat participants will not include the extra politeness feature of an answer to the literal question being asked, such as *'Do you know when the exam is?'* because that would require extra typing that would not convey real information.

Methodology

The communication in many general chat rooms is limited to superficial chit-chat and repeated greetings, and contains little if any substantive conversation that is likely to include indirect requests. The rooms may be organized around a particular topic or area of interest, but participants usually use only a nickname, and don't have to prove their identities. Thus, a participant does not have to take as much responsibility for his or her speech, since a new identity can be created very easily. Further, participants can masquerade as someone of a different gender or age, and may mimic the perceived style of the type of person they are trying to imitate. This may significantly impact the politeness features used in 'public' chat, and could completely negate any attempt to study natural language patterns.

At the University of Pennsylvania, however, chat rooms are being used to hold online recitations and discussion groups for undergraduate and graduate courses. This enables students to interact with their professors and teaching assistants at a mutually convenient time (typically evenings or weekends), without everyone involved being required to travel to a particular location on campus. These chat rooms are also secure, requiring each person to log in with a user name and password. Further, every time a person enters a comment into the chatroom, it appears to the group in a line that is prefaced by the person's name, such as the following:

Thu Sep 12, 2002 04:47:42 PM
JM: hello everybody
Thu Sep 12, 2002 04:49:52 PM
LW: Hello :)
Thu Sep 12, 2002 04:49:57 PM
MA: hi

Here, I have used only initials, but in the actual live chat each person's full name appears. For the purposes of this paper, in subsequent samples of chat transcripts I will simply identify participants by their role in the course, such as Student, Instructor, or Teaching Assistant (TA).

In this paper, we will examine the chat transcripts from an undergraduate Anthropology course in the Fall semester of 2002 at the Uni-

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versity of Pennsylvania, with 51 students, one instructor and two TAs, where attendance at one of two weekly recitations, held exclusively in chat rooms, was compulsory. A total of 22 separate one-hour chat sessions were studied, representing the first eleven weeks of the 13-week course and more than 11,000 lines of text.

This particular course was taught through University's College of General Studies (CGS), which is an adult evening program for non-traditional students, where the classes are open to traditional full-time day students at Penn as well as to older adults. Privacy considerations have prohibited us from obtaining the age of each student in the course, but we do know that 40 of the students were full-time day students who are likely to be between 18 and 22 years old, and only 11 students were CGS students who are required to be over 21 years old. The group consisted of 27 males and 24 females. The TAs were two female graduate students in Anthropology and the instructor was a female adjunct instructor with a PhD in the field.

This data set was chosen for its comparatively large size and number of participants, in an effort to have enough examples to be meaningful and to avoid having any one person's responses skew the data. Data was collected by reviewing the chat transcripts and identifying indirect and embedded questions, then matching each question with one or more responses, since these conversations are multi-party. Next, each response was categorized as Clark did, as either 'answer to literal question alone', 'answer plus information', 'information alone', or 'other'. The role of the questioner and the answerer was also noted.

Results

A total of 56 indirect requests for information were found in the data, with 67 corresponding responses. In addition, 8 embedded questions for information with 19 corresponding responses were found. The embedded questions took only two forms: *'Can you think of'* (or the very similar *'Can anyone think of…'*) and *'Do you think…'*. Although these do not fit the strictest sense of the notion of indirect requests, and Clark (1979) did not include any such questions in his research, they are indirect requests in some sense, and will be included in the data.

Table 1: Number and percentage of responses to indirect questions in a chat room

Response Type	Number of Responses	Percent of Total
Answer only	3	3.5%
Answer + Info	9	10.5%
Info only	58	67.4%
Other	8	9.3%
None	8	9.3%
Totals:	86	100.0%

Thus, we have a grand total of 86 responses to 64 indirect requests. Responses fell into five categories:

1 Answer to direct part of question only (coded as *Answer only*)
2 Answer to direct question plus information requested (*Answer + Info*)
3 Information only (*Info only*)
4 Other response (*Other*)
5 No response at all *(None)*

The overall distribution of responses is shown in Table 1.

One surprising thing about the data is that 8 questions had no response at all in the chat room. At least, no response that was visible to all of the chat participants was given – chat includes the option of sending a 'private message' to just one of the participants. This would be comparable to whispering in someone's ear in a face-to-face conversation, but these private messages are not recorded in the chat log.

One of the questions that received no response was completely off topic, so it may have been ignored by the group, or it may have been answered privately. Another of the unanswered questions was posed just before a shift in topic, so the 'conversation' went off in a different direction without anyone answering the question. These phenomena might be found in multi-party (group) face-to-face conversations, where multiple simultaneous threads of conversation both make it possible for a question to go unnoticed and perhaps minimize the impact of the failure of the Cooperative Principle (Grice 1975:45), which says that participants in a conversation will make a required contribution at an appropriate time – in this case, that interlocutors will answer questions.

Clark (1979:208), however, set up his exper-

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iment so that the indirect question was posed in a telephone call to a business. In this case, it would obviously violate the CP to give no reply at all – it would be both rude and bad for business. Since one of the purposes of this study is to compare responses in chat rooms with the oral responses that Clark reported, we will recast our data to eliminate questions that received no reply. Table 2 shows the results without the 'no reply' responses, and compares these with the results that Clark reported for his Experiment 1, which was the more direct examination of responses to indirect requests. It should also be noted that Clark's experiment included one direct question for comparison, but we have eliminated this from his data, since we are not comparing responses to direct questions.

This confirms our hypothesis that 'information only' responses would be found more frequently in the chat logs than they were in Clark's oral data. But we also see that the chat logs also had a much greater percentage of 'Other' responses than were found in the oral data. A close examination of the logs shows that most of the 'Other' responses were attempts by the instructor or one of the TAs to get the class to think about the question instead of simply giving the answer. For example:

Thu Sep 26, 2002 05:08:40 PM
Student: could you go over what a deme is again
Thu Sep 26, 2002 05:09:04 PM
TA: can anyone answer this?

Since the instructor and TAs account for most of the 'Other' responses, this raises the question of the distribution of the types of responses according to the role of the person providing the response. Because of their unequal status, do students make more of an effort to be polite, perhaps by including the answer to the literal question in an indirect request as a politeness feature? Table 3 shows the percentage of each type of response that each of the groups in the course (Instructor, TAs, and students) used.

Table 2: Responses to indirect questions: Chat Room *vs.* Clark's (1979) data

Response Type	Chat Room Percent of *n* = 78 Total	Clark's Percent of Total *n*=120
Answer only	3.8%	4.2%
Answer + Info	11.5%	35.0%
Info only	74.4%	57.5%
Other	10.3%	3.3%

Surprisingly, students provided only the information requested for a substantial majority of the indirect requests that were posed and more frequently than any other group did. TAs also provided only the information more than any other type of response, but their types of responses were more evenly divided among the categories, with nearly 30% of their responses falling into the 'Other' category, as discussed above. Unfortunately, the Instructor provided so few responses to indirect questions ($n=6$) that no meaningful conclusions can be drawn. One can note, however, that the few responses that were provided included no 'Answer only' responses, but were evenly divided among the remaining categories.

Perhaps rather than being concerned with being polite, students are more concerned with registering their responses quickly so that their participation is noted, or so that they are able to answer before the conversation moves on to a different topic. In that case, do they reserve their most polite responses (those with both the answer and the information) for questions

Table 3: Percent of each type of response, by responder's role

	Answer only	Answer + Info	Info only	Other
Instructor ($n=6$)	0.0%	33.3%	33.3%	33.3%
TAs ($n=17$)	5.9%	23.5%	41.2%	29.4%
Students ($n=55$)	3.6%	5.5%	89.1%	1.8%

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Some chat room samples

Chat includes multiple participants and multiple simultaneous threads of discussion. Some participants, for the sake of clarity, preface their question or comment with the name of the intended 'hearer'. Accurate spelling is not emphasized.

Specimen 1

Question1 (indirect)
Thu Oct 10, 2002 04:59:51 PM
Student 1: I am a little confused about what we are supposed to be reading. Unit 5 section says we should read Chapter 12 but the sylabus says Chapters 9–12. Could you clarify that for me?
Question2 (direct)
Thu Oct 10, 2002 04:59:56 PM TA
Instructor: How many people are in the class?
Greeting 1
Thu Oct 10, 2002 05:00:05 PM
Instructor: hello
Greeting 1 – response
Thu Oct 10, 2002 05:00:09 PM
Student 2: hi
Question 2 – response Thu Oct 10, 2002 05:00:16 PM
Instructor: 'like 50 or so'
Question 3 (direct) Thu Oct 10, 2002 05:00:18 PM
Student3: [TA], what time is the viewing of Goodall
Question3 – response Thu Oct 10, 2002 05:00:43 PM TA
Instructor: we must decide this tonight. sunday is no good for people because of football
Question4 (direct) Oct 10, 2002 05:01:09 PM
Student 2: is it homecoming?
Question 4 – response Thu Oct 10, 2002 05:01:17 PM
TA: TV
Question 1 – response Thu Oct 10, 2002 05:01:37 PM
Instructor: hello [Student 1]. you need to read all of the chpaters 9–12; 12 is most relevant at the moment

In this case, it took several turns and 1 minute and 46 seconds for the instructor to reply to Student 1's question. In that interval, the instructor answered a different question and greeted a student who had just arrived. When the instructor responded to Question 1, it was with the information only.

In the following example, students are asking the teaching assistants about a project that will be due soon. The project involves collecting data about family members' third molar teeth.

➳

posed by the Instructor or one of the TAs? To determine the answer to this question, we should evaluate each type of response given by students separately, and determine what percentage of that response was given to the Instructor, etc. This data is presented in Table 4.

Once again, several of our categories have too few data points to be meaningful. But it is interesting to note that all of the 'Answer + Info' replies that students gave were directed to the Instructor or one of the TAs – none of the students gave their classmates this most polite form of reply. This is also true of the students' 'Answer only' replies, but since those were all replies of the 'no – sorry' or 'I don't know' kind, in this multi-party environment no particular politeness factor can be said to be missing in these responses.

Table 4: Distribution of recipients for each response type given by students

Response Type	% to Instructor	% to TAs	% to Students
Answer only (n=2)	50.0%	50.0%	0.0%
Answer + Info (n=3)	33.3%	66.7%	0.0%
Info only (n=49)	22.4%	20.4%	57.1%
Other (n=1)	0.0%	0.0%	100.0%

The most significant type of response that students gave was the 'Info only' response. A bit more than half of these replies were given to other students, with slightly less than half being somewhat evenly divided between the Instructor and the TAs. It would seem that this indicates that the less polite response was given primarily to other students, but the strength of this conclusion must be tempered by consideration that most of the questions that students answered came from other students.

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Specimen 2

Sun Oct 27, 2002 02:07:35 PM
Student 1: how many samples should we take
Sun Oct 27, 2002 02:07:36 PM
Student 1: ?
Sun Oct 27, 2002 02:07:45 PM
TA1: i don't have any of mine :-(
Sun Oct 27, 2002 02:08:05 PM
Student 2: mine are gone, too, [TA1]
Sun Oct 27, 2002 02:08:16 PM
Student 1: i got mine out
Sun Oct 27, 2002 02:08:21 PM
TA2: that sounds right [Student1]- it is a really easy project. nothing to worry about
Sun Oct 27, 2002 02:08:27 PM
TA1: when my brother had his out he gave them to me b/c i study this stuff

Student 1 emphasizes his question (or perhaps corrects his punctuation) by entering a question mark on the next line. TA1 makes a remark about her personal lack of third molars, adding a humorous frown. Students then chime in with their personal information. In the middle, TA2 responds to an earlier question about the project.

Because one of the purposes of the online recitation is to review material covered in the previous class meeting, the TA will often ask the students questions. Since there is no mechanism for raising a hand to volunteer an answer in chat, the students all reply freely.

Specimen 3

Thu Oct 17, 2002 05:14:44 PM
TA: what features do all hominids have that apes don't
Thu Oct 17, 2002 05:15:03 PM
Student 1: bipedalism
Thu Oct 17, 2002 05:15:08 PM
Student 2: larger brains
Thu Oct 17, 2002 05:15:11 PM
Student 3: hard enamel
Thu Oct 17, 2002 05:15:12 PM
TA: YES!
Thu Oct 17, 2002 05:15:21 PM
TA: no [Student3] not hard but thin
Thu Oct 17, 2002 05:15:26 PM
Student 3: whoops
Thu Oct 17, 2002 05:15:36 PM
Student3: mine is pretty hard ;)

The TA is encouraging about correct answers, but the pace of the chat can make it difficult to tell which answer she is affirming. But she does specify which student's answer is incorrect, and supplies the correct information. The student acknowledges the error, and makes light of it.

Discussion

Because the data for this experiment was taken from a naturally-occurring sample of internet chat room dialog, fewer data points were collected than might have been hoped for. It was somewhat surprising that more than 11,000 lines of chat yielded fewer than 100 responses to indirect requests. Perhaps the 'burden' of typing communication means that a smaller percentage of questions are posed indirectly in chat than are posed in conversation. That was not the purpose of this study, but it would be another interesting area for research.

Clark (1979) had the advantage of designing experiments in such a way that he was guaranteed to get a certain number of data points, giving him enough information to draw meaningful conclusions. This study did produce enough data to compare response rates to those that Clark found, and to confirm our hypothesis that we would find an even greater percentage of 'Info only' responses in chat than Clark found in his data. But it also raised other interesting questions that could not adequately be answered with this data.

For example, the data yielded glimpses of interesting patterns, such as the distribution of responses given by students compared to those given by the instructor, but we would have to have more data points of responses given by the instructor and the TAs before we could draw meaningful conclusions. Similarly, the data hints that students gave the most polite 'Answer + Info' form of reply exclusively to the instructor and TAs, but more data would be required to say that the relationship is significant. All of these are areas with opportunities for future research.

The increasing use of chat rooms for serious purposes, such as the academic recitations studied here, are slowly earning them a reputation as a valuable pedagogical tool. But the image of chat rooms is burdened by a history of only recreational use, and by the extensive press coverage given to a handful of cases where minors have been enticed away from their families by unscrupulous adults. Because of this, many people still discount chat as nothing more than a haven for teenagers and pedophiles. But limiting the use of a chat room to students in a course and requiring all of the

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participants to identify themselves clearly and take responsibility for their words can eliminate the possibility of interlopers or illicit use of the chat room and open up its possibilities for meaningful communication in a mode that is more convenient for all concerned.

If CMC is to be adopted for educational purposes, however, it should be examined and understood far better than it is today. Very little has been written on the linguistic aspects of CMC, and chat in particular, and even less has been done to study the pedagogical implications of synchronous CMC versus traditional face-to-face communication. This paper is one attempt to begin to address the void of available information, but there is much to be done, providing a wealth of opportunities for future research. ■

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Losing heart

I've often wondered why it is the only body part
That figures in expressions is the common or garden heart

The heart is just a muscle meant for pumping blood around
So why do images of love and honesty abound?

What need is there for us to wear our 'hearts upon our sleeve'?
To say 'she's got a spleen of gold' would cause no one to grieve

How could a heart be such a thing to win or steal or break
For eating out or pouring out, to have or lose or take?

And other vital organs – like the kidney and the lung
Intestine, liver, brain and bowels – go totally unsung

Now wouldn't it be wonderful, and wouldn't it be grand
To celebrate the virtues of the humble thyroid gland?

Such radical ideas, I know, may give some folks a shiver
But lest you think me insincere, I mean this from the liver

– Roger Berry,
Lingnan University, Hong Kong

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