A DESCRIPTION OF COHESION IN INTERNET RELAY CHAT AND THE IMPLICATIONS FOR ANALYSIS IN THE EFL CLASSROOM

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Introduction

Most ESL students would be surprised if they were labeled language analysts. Yet, that is exactly what they are. Whenever they are presented with a sample dialogue, they typically study it, searching for recognizable structures and contemplating unfamiliar ones. Perhaps this notion of student as analyst could be utilized in the classroom.

Rutherford's (1987) method of grammatical consciousness-raising supports this concept of student as analyst. McCarthy (1991) proposes using *discourse analysis* as a tool for presenting language in use to learners of English as a foreign or second language. This discourse is 'real' language in use, and can be displayed in the form of transcribed spoken language, movie dialogues or samples of written language. This differs from the contrived dialogues offered in most textbooks. These dialogues written by textbook authors offer an efficient way to display target grammatical structures. However, as McCarthy states in his preface (1991: 1), they often fall short in exposing learners to other important aspects of communication. These include the structuring of texts beyond the sentence; the importance of intonation; the variety of patterns found in talk in different situations; and the cultural differences of discourse norms and their realisations.

An alternative to using samples of authentic spoken data for analysis is recording transcripts of communication found within Internet Relay Chat (IRC) rooms. Although most second language learners will claim that speaking is the most important form of communication for them to master, many are now finding a greater need to have the ability to communicate using computer-mediated communication (CMC). It would seem viable then to include samples of language taken from this environment when preparing a lesson involving analysis by ESL students.

This paper will describe IRC and procedures for selecting a suitable environment where

teachers can retrieve data for student analysis. Furthermore, a technique for recording data is also explained. Identifiable cohesive features of this system of communication will be listed, followed by a brief description of how this can be applied in the classroom.

Internet Relay Chat (IRC)

Since the advent of *Computer-Mediated Communication (CMC)*, linguists and sociologists have found the Internet to be a fruitful medium in which to conduct research. Various studies can be found regarding the use of CMC in second language education (Green: 2000, LeLoup and Ponterio: 2000, Holliday: 1999, Sierra: 1999, Chan: 1997, Huang: 1998). The issue of gender is another popular topic regarding *email*, *Internet Relay Chat (IRC)* and *computer conferencing* (Engle: 1999, Soukup: 1999, Lemon: 1999, Jaffe et al.: 1999, Flanagan: 1999). Virtual classrooms have been created and often student-student—as well as student-teacher communication—is carried out utilizing email. Many studies focus on the differences in production and communication strategies within these environments from those in a real classroom (Engle: 1999, Lee: 2000, Johnson: 1995).

Computer-Mediated Communication (CMC) is divided into two categories: *asynchronous* and *synchronous*. Asynchronous CMC involves the use of email, electronic bulletin boards or discussion lists. Following the sending of a message, the intended reader may not immediately receive the asynchronous communication. Furthermore, it may be days before a response is sent and received. Synchronous communication however, found within *virtual chat rooms*, is termed *Internet Relay Chat*.

In Internet Relay Chat (IRC), messages are 'posted', or typed by participants and sent immediately to a common screen shared by other users at different computers. Responses can be sent forthwith, if so desired, and conversations can be held between individuals or groups of people. Garcia and Jacobs (1999) debate the term *synchronous CMC*, preferring the title *quasi-synchronous CMC* (QS-CMC). They state the distinction being that 'although posted messages are available synchronously to participants, the message production process is available only to the person composing the message' (p. 339). Thus, in this study, all IRC communication will be referred to as QS-CMC.

Abdullah (1998: 3) refers to CMC as 'electronic discourse' and comments on its uniqueness in combining orthographic and verbal communication, calling it 'written talk.' Davis and Brewer (1997) as cited in Abdullah (ibid.) call this written talk 'writing that stands in place of voices.' They further comment on the characteristics of verbal behaviour such as 'repetition, direct address, disfluencies, and markers of personal involvement' that can be found in QS-CMC. Yet turn-taking and discourse fillers, such as 'uh' or 'er' are often absent.

Users communicating in asynchronous CMC are allowed time for 'planning', which gives the communication an orthographic look. This type of planning is absent in face-to-face communication (FtF). QS-CMC finds itself in the middle, where utterances are more spontaneous than asynchronous, yet planning is greater than in true FtF communication.

Cohesion and Coherence

Utterances derive meaning through context. What is stated at the moment somehow relates to what was uttered before, and should affect what is stated after. The concept of *cohesion* (Halliday and Hasan, 1976: 4) is one that 'refers to relations of meaning that exist within the text, and that define it as text.' 'Text' refers to 'any passage, spoken or written, of whatever length, that does form a unified whole' (p. 1). Halliday and Hasan stress that although cohesion can be distinguished as either being grammatical (grammar) or lexical (vocabulary), 'cohesion is a semantic relation' (p. 6). McCarthy (1991: 34) describes grammatical cohesion as 'the surface marking of semantic links between clauses and sentences in written discourse, and utterances and turns in speech.' The analysis in this paper will focus on one type of grammatically cohesive device labeled *reference*.

Reference is the most frequently used and possibly the most easily identifiable cohesive device. Reference devices are those that refer or 'point' to items 'identified in the surrounding text' or within 'the context of a situation' (Halliday and Hasan, 1976: 32). Three types of reference exist: personal (person, i.e. he, she), demonstrative (proximity, i.e. this, that) and comparative (similarity/identity, i.e. better, same). These reference types may be bound by the text (endophoric), or situational, referring to something outside of the text (exophoric). Endophoric reference, being text-bound, can either point back (anaphoric) or forward in the text (cataphoric). Exophoric reference does not have this distinction as it 'directs the receiver[listener/reader] 'out of' the text and into an assumed shared world' (McCarthy, 1991: 41) (my brackets).

Finding an Environment

The data for the sample analysis in this paper was collected in a virtual chat environment, or *chat room*, within America Online (AOL). Most IRC environments are similar in that a screen displaying scrolling lines of discourse can be viewed by the user. Each line contains a user's name followed by his or her posting. These lines scroll up quickly or slowly, depending on the number of users and the amount of conversation. Also, all IRC environments must have a 'staging area' where postings can be typed by the user. However, they cannot be viewed by the other members of the room until the user presses the enter

key. After pressing the enter key, a user's utterance is posted, and can be seen by every other member in the room. The staging area is then cleared, and the user can begin typing a new utterance at anytime.

AOL Chat offers multiple virtual chat rooms from which a user may choose. It is important to find a room that is conducive to analysis. In a majority of rooms, very few actual 'conversations' take place. Instead, random insults, comments, questions regarding age or sex, and attempts to disrupt communication are the norm. Therefore one should 'lurk' (Simpson: 2000) in various rooms and try to find an environment where analysable communication is occurring.

Recording Discourse

The recording method is relatively simple if the proper software is used. Lines of postings can be highlighted and then 'cut and pasted' within a word processing environment such as Microsoft Word. These lines will include the user name and posting as well as any messages announcing user entry or exit. After the recordings are extracted and saved into Word, they can be analyzed for conversations.

The length of recording is dependent on the analyst. Recording twenty-minute pieces of 'chat' discourse for a total of two hours was found to be the most suitable by this analyst. Firstly, it allowed for an ample amount of analysable data. Also, it was thought that rather than recording one two-hour segment, the shorter segments would display a variety of discourse from multiple participants. This in turn added to the overall analysis as participants displayed their own unique communication techniques. However, because the recording usually started in the middle of a conversation or conversations, much of the data in the beginning of each recording could not be accurately analysed.

Finally, concerns of privacy regarding the recording conversations without consent were resolved by shortening the nicknames of the participants to only two letters. Another solution is for the analysts to create their own chat room. Upon entry, new participants should be warned that their utterances are being recorded for research purposes.

Transcript Analysis

When participants in a virtual chat room communicate, their messages are posted in what appears to be a random fashion, causing conversations to overlap. This is due to multiple participants within a room. Using the techniques described below, as well as the analyst's implicit knowledge of conversation, 'topic-units' can be found and then numbered for later analysis. In this way the log of discourse can be kept in its natural state, while

conversations are identified throughout. Below is an example.

Example 1

7	Bp: the shade I really like are the coral ones	1
8	MA: right after they flowers fall off Reg trim them way back	1
9	Tr: hi room	2
10	MA: yes Coral are nice	1
11	Bp: hi trim	2
12	Sk: \wavin to Kimm	2
13	Tr: hi Bp	2
14	Online Host: Su has entered the room.	
15	Bp: well, magI would need to get some new ones	1
16	MA: i see	1
17	Tr: waiting for the rain too stop	3
18	Su: golf is so boring	4
19	Sk: where ya from Kimm?	3
20	Tr: ohio	3
21	MA: so is reading your scroll Friek	4
22	Bp: ski, are ya playing today?	5

In this small sample, five conversations have been distinguished. The numbers in on the right side represent labels created by this writer after analysing the transcript to identify conversations. Conversations can be as short as two postings in length, or much longer, involving multiple participants. Conversations 2 through 5 in Example 1 above continued on at various lengths. An analyst should be aware of the common occurrence what of initially appears to be the beginning of a new conversation. However, this might, upon referring back in the transcript, be the resumption of a prior topic. Also, once the beginning of a topic is identified, the conclusion may not always apparent. Some conversations seem to 'die out' in the sense that there might be no identifiable endings. Often, the starting of a new conversation a member of a past conversation signals the possible ending of a topic unit. Finally, regarding the concept of conversation or topic, this paper reflects the thoughts of Francis and Hunston from their analysis of everyday conversation, 'We do not propose here to go into the thorny question of 'topic', which must remain a pre-theoretical and intuitive notion' (1992: 140).

Identification of Cohesive Devices

In this section, devices used by participants within the IRC environment, to maintain coherence, will be displayed. Grammatical cohesion, and specifically reference, helps to facilitate coherence. Of the three types of reference (see above), only examples of personal

and demonstrative will be given below, as they were the most commonly observed patterns.

Personal reference uses pronouns to refer to items in prior utterances. In Example 2 below, every line was linked except for line 28 (which is marked with an asterisk). Personal reference was used throughout. Only in line 26 were proper nouns used (Bp and SI are abbreviations for user nicknames). Lines 29, 30 and 34 used the pronoun 'he' to identify SI, and 'him' was used in line 33. The pronoun 'me' was used to represent the initiator of the conversation (JL). Both participants used 'you' to identify one another. In line 30, the use of 'you' pointed to the participant Bp, who then replied: 'knew you?' which pointed back at JL. The two participants appeared to have a clear idea of what the other one was talking about, even when using the same words to identify different people.

Example 2

- 26 JL: Bp who is SI
- 27 Bp: why??
- * 28 Bu: lol mfg...now a sophomore:)
 - 29 JL: He was in here this morning and knew me
 - 30 JL: and he said you would fill me in
 - 31 Bp: knew you?
 - 32 JL: yes
 - 33 JL: I dont know him
 - 34 Bp: I dont know how he knows you, sorry
 - 35 JL: LoL

Incidents of demonstrative reference were less prevalent than personal. Demonstrative reference involves proximity and can be identified by the use of determiners or the adverbs 'that' and 'this'. These devices can point within the discourse or outside, as can be observed in the following examples.

Example 3

- → 67 Bp: you could go to prom if an upper classman asked, right, gal?
- 68 Go: yup
 - 69 Online Host: MO has exited the room.
 - 70 Online Host: Tr has exited the room.
- → 71 Go: but that was last night also

Example 3 was taken from the middle of a string of discourse. In line 67 a question was asked regarding 'prom'. In line 71 Go answered the question stating 'but that was last night also'. In this case 'that' represented 'prom'. This use of reference is endophoric as it is

text-bound and anaphoric as it points back to prior discourse.

Example 4

- → 28 Wh: are you alright this morning? you are so quiet
 - 29 Online Host: CO has entered the room.
- → 30 Je: yeah Im fine....dang kids are fighting AGAIN

Example 4 displays demonstrative reference outside the discourse. Line 28 was the first line in the start of a new topic. The reference by Wh to 'this morning' did not refer to any past discourse, but rather it clarified to the reader (Je) that the topic was the morning of the day of the posting. Therefore, this form of reference is exophoric.

A feature of demonstrative reference unique to IRC can also be observed. Holmes (1995: 212) distinguishes two types of 'deictic' expressions within IRC. He states that one type identifies the participant's 'physical location', and the other his or her 'location in the virtual space of the computer network'. An example of each type is displayed below.

In Example 5, the topic of the exchange (lines 23 and 27) was the physical location of the two participants. This was apparent from the topic of the conversation, which was the weather, and the mention of 'PA', the abbreviation for Pennsylvania, a state located in the eastern United States. The posting in line 27 displayed the desire by Tr for sunny weather at her location (which was unknown at the time).

Example 5

- → 23 Bp: I am in PA, and it is sunny here, for once
 - 24 Online Host: Go has entered the room.
 - Sk: <played MOn-Wed—Yesterday—headed to the casino for 2 days
 - 26 Go: Im going golfing today yayayayay!!!!!! 1
- → 27 Tr: wish it was sunny here

Conversely, Example 6 displays a second type of deictic expression. The question posed by Go in line 31 referred not to the physical location of AG, but rather her existence in the chat room. Participants never displayed confusion in recognizing which type of reference had been posted.

Example 6

- → 31 Go: AG, you still around in here
 - 32 Ga: lol..

33 Gol: man, long time no see

34 Ga: Mariners'...

→ 35 AG: HelloGo

Application

In the prior section, just a few examples of how participants in IRC use techniques of cohesion to organize discourse were displayed. Teachers who intend to use transcripts of IRC discourse as a tool for displaying language should identify these cohesive devices in their data to distinguish conversations. After conversations have been identified, each one can be displayed separately for analysis by students. Below, a description of possible uses of data taken from recorded IRC will be given.

An instructor might consider using cohesive devices as a focus of analysis by students. This type of lesson might benefit initially by giving students copies of the unanalysed transcripts, taken from IRC. After giving a description of different types of reference through example, students could be allowed to analyse the data for themselves, in an initial attempt to identify cohesive devices. Then the students might be asked to try to identify conversations, and number them themselves. Some of these conversations could possibly be read to the class for comparison with other students' results. Finally, their results could be compared to the teacher's. It might be wise to make clear that the teacher's analysis should not be considered 'correct', but rather a native English speaker's interpretation.

Data, previously analysed by the instructor, can be used for the presentation of other features of language. An exercise displaying Sacks' (see Coulthard: 1985) concept of *adjacency pairs*, which perpetuate relevance in communication, could be designed. One type could involve distributing to the students, a handout of parts of an analysed transcript, with specific lines removed. These lines could include the first or second pair parts of greetings, questions, offers, requests, and so on. The students could then be instructed to fill in what they consider to be appropriate utterances. Furthermore, if students in pairs had opposing parts missing (i.e. Student A is missing first pair-parts and Student B second pair-parts), they could compare their answers to discover if together they can create a cohesive bit of discourse. This again could be read to the class. The benefit here is that the students are not working with contrived examples of discourse, but rather with real conversations.

Conclusion

This paper has attempted to introduce an analysis of IRC by displaying some of its cohesive features. It was found that although IRC is seemingly disjointed, participants use

devices such as reference to allow their conversational partners to comprehend their postings. These tools are the same as those found in spoken conversation. If teachers were to utilize data taken from IRC, they could expose students to evidence of these technique actually in use. Although perhaps this also could be achieved through the use of contrived examples, the data is much more convincing when the participants are people actually engaging in the act of sharing information.

The concept of student as analyst is not easily accepted. Japanese students have typically been exposed to a form of teaching that supplies them with rules to follow. What this paper—and following papers—propose is that students should attempt to create their own hypotheses based on their analyses of data. In this way, teachers must step out of the role of instructor, and engage students as more of a guide. Exercises, like the ones described above, allow students to raise their awareness of certain points by repeated exposure to them in a variety of ways.

Although this paper offers little in the way of practical classroom application, it is hoped that teachers will consider IRC as a possible resource for lesson planning. If they have doubts as to IRC being an organized form of communication, these beliefs will hopefully be quelled by the examples shown above. In further publications it is this writer's wish to provide information on more practical applications and evidence of success with this type of classroom endeavor.

Finally, the use of data taken from IRC need not be limited to the analysis activities described above. Teachers, with their own explicit knowledge of language presentation and explanation, can find multiple uses for the data provided by IRC. Also, IRC can be a valuable resource for EFL students with little or no access to native English speakers. By entering a chat room, students can engage multiple participants while using a form of communication that combines their spoken and written skills. Perhaps exposure to, and analysis of, this blend of communication, in the classroom, will allow them the added confidence and motivation they need to take advantage of this resource.

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