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# **New “Inventions” in Written ‘Spoken’ Discourse: Internet Relay Chat among Young Japanese Speakers**

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## **Abstract**

This paper is an attempt to shed light on linguistic changes brought by information and communication technology by analyzing the behavior of Japanese participants in Internet Relay Chat. In fact, examining IRC chat logs of young Japanese participants, we can find a wide array of linguistic “inventions” that have not been previously discussed in scholarly literature. Japanese IRC participants use not only the same devices as English-speaking counterparts to overcome the communicative shortcomings of IRC, but also employ various innovative tools to take account of social and cognitive factors so important in the Japanese discourse. This suggests that the impact of new technology in the form of IRC may be much greater in Japan than in English-speaking countries.

## **1. Introduction**

Innovations in information technology have brought a number of changes in various aspects of our lives. One of these changes is seen in communication via the Internet. Different modes of Internet communication, such as e-mail, World Wide Web (WWW), and Internet Relay Chat (IRC), provide participants with different tools for communicative interactions and have influenced their communication behavior. Some Computer-Mediated Communication (CMC), especially in the mode of IRC has (as explained below) features of both written and spoken communication. Participants in IRC create and use novel writing devices unconventional to standard writing systems, and such use might convince us to claim that CMC creates “its own domain of discourse in the history of communication” (Jonsson (1998)).

Since the technology that made this type of communication possible originated in the United States, the dominant language used in CMC is English. Because of this fact, most research has been concentrated on the behavior of English speakers in this type of communication: for example, we have Herring (1996), Herring (1999), and Rintel, Mulholland, and Pittam (2001) to mention a few<sup>1)</sup>. In contrast, very little is known about CMC in languages other than English, especially non-western

languages in which alphabets are not used as standard orthography. However, there is indeed a huge amount of Internet communication in Japanese, for instance.

This article is an attempt to fill this gap. It will shed light on possible linguistic changes brought by this new technology by analyzing what Japanese participants do in CMC, especially in IRC. In fact, examining IRC chat logs of young Japanese participants, I find a wide array of linguistic "inventions" that have not been previously examined in scholarly literature. Japanese IRC participants use not only the same devices as English-speaking counterparts to overcome the communicative shortcomings of IRC, but also employ various innovative tools to take account of social and cognitive factors so important in the Japanese discourse. This suggests that the impact of new technology in the form of IRC may be much greater in Japan than in English-speaking countries.

This paper is organized as follows. In Section 2, I briefly examine IRC as an Internet-based communication mode and its characteristics. The linguistic impact of English speaking IRC is summarized to get a frame of reference. In Section 3, I examine the kinds of linguistic devices that make Japanese IRC communication distinctive. I discuss characteristics specific to the Japanese language, and analyze authentic IRC logs by young Japanese participants. Finally concluding remarks will be given, with an emphasis on the necessity of further research, for this new type of communication could mark an important shift in the history of human communication<sup>23</sup> from gestural, oral, written, and print, to the Internet communication.

## **2. Internet Relay Chat versus Traditional Modes of Communication**

### **2.1. Kinds of Computer-Mediated Communication**

In the broadest sense, any communicative activity carried out on the Internet by means of a computer and its network can be called computer-mediated, as opposed to oral, face-to-face conversation or written communication, such as correspondence with letters. More specifically, however, December (1996) gives very detailed accounts of how Internet-based, CMC can be realized, and further identifies three major categories of the Internet users' purposes, which are (1) communication, (2) interaction, and (3) information. Although these three are not mutually exclusive, they do each demonstrate a distinctive format or mode of exchanging data. For communication purposes, people typically use e-mail on a one-to-one, one-to-many, or many-to-many setting. They may also use Usenet and Listserv for scholarly activity and research or for personal or group communication or discussion. As for the category of interaction, people can use the Internet in order to play, learn, or share cyberspace with those who have the same interest, not just for information exchange or discussion. IRC and Multiple User Dialogue/Dimension/Dungeon (MUD or sometimes represented as "MU" for several possibilities of what "D" stands for.),

for example, are typical modes for this purpose. Finally, people use WWW, Gopher, and File Transfer Protocol (FTP), when they need to search for information. They retrieve information on any aspect of human activities covering wide range of knowledge. These tools can usefully be employed by information disseminators as well.

Among e-mail, IRC, and WWW, each of which is a typical mode for Internet-based data exchange, there are several physical differences on how communication activities are carried out. If we compare IRC and e-mail, IRC can be almost synchronous, while E-mail cannot always be. Addressees of an e-mail message may read it at any later convenient time, while participants in an IRC can get messages instantaneously as long as both participants, senders and recipients, have logged on at the same time. The WWW is essentially not interactive, with the communication through WWW being primarily one-way, though it is getting more and more interactive these days.

The quasi-synchronous nature of IRC makes this interaction similar to face-to-face, oral communication. However, since IRC uses typed or keyboarded characters or letters, the manner of its information exchange has limitations concerned with the incommunicability of messages and the slowness of input. Therefore, participants of IRC are stimulated to create and devise various measures to overcome these limitations. Thus, detailed analysis of IRC, especially examination of how people using IRC overcome such shortcomings, is important because it will give us a new kind of insight into the nature of human communicative behavior. Since this paper is focusing on IRC phenomena, e-mail and WWW are mostly outside of its scope.

## **2.2. Perspective: Differences between Written and Spoken Communication**

To put IRC in perspective, it is appropriate to start with the traditionally-made distinction between written and spoken communication. Various works on discourse analysis, such as Ochs (1979), Lakoff (1982), and Chafe (1982), among others, have investigated differences between spoken and written language. Ochs (1979) suggests that features of planned discourse are more often shared by communicators in written discourse while features of unplanned discourse are found more in spoken communication because of its spontaneity. We may interpret presence or absence of planning to be one factor that characterizes written and spoken discourse.

Chafe (1982) states the differences between the two is that "Speaking is faster than writing (and slower than reading) (36)" and that "speakers interact with their audiences while writers do not (45)." The first point leads to syntactic integration in written language and fragmentation in spoken language, and from his second point he claims that there is involvement on the part of the speaker, while there is detachment on the part of the writer.

Lakoff (1982) points out, aside from typical written and oral communication, there are intermediate types of discourse: written discourse with more features of oral communication, such as playwrights' works, and biographer's description of the great man's words that he writes about (Boswell's representation of Samuel Johnson's speech, for instance). She also examines several written conventions that signal oral properties in literary works, such as quotation marks, italics, capitalization, and so on as well as those works that convey a number of oral concepts in print, such as comic strips. She further suggests that in view of primacy of the oral mode, some newer media might bring us emotional closeness of the oral channel and preservability of print at the same time in future. Her foresight seems quite right and is relevant to the character of IRC.

Among many differences between written and spoken communication, I would like to discuss four major aspects that serve to distinguish IRC from the other two modes. The first is concerned with presence or absence of interaction among participants. The second has to do with participants' knowledge about other participants in the settings of the three types of communication. The third deals with the nature and amount of information that can be transmitted in the three modes of communication. The last is the speed or rate at which the communication is carried out. I will examine the nature of IRC with respect to the above four aspects, and investigate devices found in IRC to overcome shortcomings that exist in the IRC communication. First I will concentrate on data in the English-speaking world, as a frame of reference for the analysis of Japanese IRC in the next section.

## 2.3. Comparison among IRC, Written, and Spoken Communication Modes

### 2.3.1. Is There Interaction among Participants?

It may seem odd to question whether there is interaction among participants in communication activities, for interaction can be a notion taken for granted in considering communication. As Chafe (1982) points out, however, there is communication without interaction, at least, between writers and audiences. IRC at first glance looks like written communication, and thus interaction may seem to be rather limited. In reality, however, clear presence of interaction makes IRC and oral communication, not written communication, resemble each other. In IRC, the linguistic messages are short, fragmented, and do not often show syntactic integration. For instance, in Jonnson's Appendix, the following sample IRC is given:

(1) ...

50 <Vickim> Hi Focal- didn't recognise Merlin  
 <Focalplane> hiya vick  
 <Jodada> brb

...

In lines beginning in 50, we see there is a use of obvious syntactic fragmentation (no subject that goes with "didn't recognise"), a colloquial interjection, "hiya", and an abbreviation, "brb," which means "be right back." In other samples, many of the lines are short, some of which consist of only one or two words. Thus IRC logs show properties similar to those found in oral, spontaneous conversation, and those features are not shared by written language.

It should be noted that uses like those in (1) is a realization that shows interaction, because participants in IRC type in their messages as if they are talking to their close friends in a casual manner, and the IRC technology enables its participants to make immediate or almost instantaneous response to the message that has just been made. We find that participants are really interacting with other participants on IRC channels using such informal language. While Chafe says speakers interact with audience, but that writers do not, the Internet writers (or keyboardists to be more precise) do interact in cyberspace. While what Chafe says is right, with the emergence of a new medium, the dichotomy of written/spoken does not seem to work, though it certainly gives a basis of comparison. Interaction among participants in IRC has been made possible by the quasi-synchronous nature of this media, in which the participants share the time of interaction (but not the place of interaction).

### **2.3.2. Do Participants Know Other People in the Three Modes of Communication?**

This question might also sound odd when there is interaction among participants. In casual, face-to-face conversation, say, among friends, it is usually taken for granted that participants know one another more or less, depending on the degree of acquaintanceship. IRC is different from spoken communication on this point: Participants do not necessarily know one another in IRC, while they do know each other fairly well in real, face-to-face conversation settings. In IRC, the true identities of participants are, in many cases, not given, and they use "handle names" or "nick names" in chat sessions. Such convention in IRC enables them to pretend as if they are someone else. Thus, there is anonymity in IRC which is not normally seen in oral communication.

Even though participants do not know the real identity of other participants, they do and can interact with others in IRC as if they were friends. This is a feature of IRC that is shared by neither oral nor written communication. In comparison of IRC with written communication, writers do not usually know their readers, but there is no or little interaction with their audiences. Furthermore, the writers' knowledge of their readers is irrelevant. When there is interaction in

written communication, such as correspondence of letters, there is this knowledge, in a manner similar to oral communication. The Internet has made it very easy for thousands of its users to communicate with other people that they have not previously encountered, though their interactions may not always be successful<sup>3</sup>.

### 2.3.3. What Can and Cannot Be Communicated?

The greatest difference between IRC and oral communication, however, is that IRC, though it closely resembles spoken communication, cannot convey phonetic and para-linguistic information. The communication on IRC takes place in virtual cyberspace, and the participants do not come in physical contact with one another. Therefore, they cannot see how their interlocutors produce messages. Nor can they hear the voice because, obviously, the message itself is not directly transmitted by means of sound wave<sup>4</sup>. Vocal qualities that characterize utterances, such as pitch, stress, and intonation are not conveyed, nor can such para-linguistic information as hoarseness, loudness, tempo, etc be transmitted in IRC. In real face-to-face communication, however, interlocutors have, in addition to the above-mentioned phonetic and para-linguistic information, extra-linguistic or kinesic information, such as facial expressions, eye contact, gestures, and even the attire worn by other participants, among many other things, will give them a considerable amount of information. In this way interlocutors can obtain far more communicative information than merely what the speaker says. On this point, thus, IRC is limited as to the kinds and nature of information that can be communicated.

One device called "emoticons" is commonly used in IRC to overcome such a shortcoming. As its word formation implies ("emotion" + "icon"), they are devised and used in CMC, and not in other modes of communication. "Smiley" is the most frequently used device of this kind. Arvidsson and Ek (1996) list various "faces" of smiley used in IRC, such as

- |             |                    |              |                                      |
|-------------|--------------------|--------------|--------------------------------------|
| (2) (a) :-) | Happy smiley       | (b) ;-)      | A humorous twinkle (blinking smiley) |
| (c) :-D     | Very happy smiley  | (d) :-(      | Sulky or sad                         |
| (e) :[      | Really downhearted | (f) :-<      | I'm mad                              |
| (g) :-/     | I'm skeptical      | (h) :-(<br>( | Crying                               |
| (i) :-@     | Screaming          | (j) :-X      | My lips are sealed                   |

### 2.3.4. Is IRC Faster or Slower than Writing or Speaking?

Another similarity between IRC and oral communication is seen in the rate or speed at which the communicative activity takes place. To be precise, IRC is not as speedily carried out as speaking, yet it certainly is faster than writing. Though in general, speaking is faster than writing, as Chafe correctly points out, typing-in on

the keyboard can be done quite rapidly, at least by some experienced IRC users. They can type in messages almost at the same speed as they speak. Many IRC users create economized ways of typing-in and use them in their interaction, devising various acronyms and time-saving conventions. Table 1 below gives examples of substitution and abbreviation cited from CNET (1997).

**Table 1** Samples of Substitutions and Abbreviations used in English IRC

Substitution		Abbreviation	
Symbol	Translation	Symbol	Translation
Y	why	<g>	grin
U	you	<bg>	big grin
C	see	<vbg>	very big grin
CU	see you	BBS	be back soon
CUL8R	see you later	HHOK	ha ha only kidding
OIC	Oh, I see	IMHO	in my humble opinion
U2	You too	IOW	in other words
		LOL	laughing out loud

Finally, differences among IRC, spoken, and written communication can be summarized in the following table, with e-mail added for reference only:

**Table 2** Differences among Written, Spoken and CMC

Mode of communication	Written/Print	Spoken/ Face-to-face	CMC	
			IRC	(E-mail)
Media	Handwritten or printed words	Audible vocal sounds	Keyboarded letters/symbols	(Keyboarded letters/symbols)
Interaction	No. ( books) Yes (letters)	Yes	Yes.	(Yes.)
Interaction time	Asynchronous.	Synchronous.	Quasi-synchronous	(Asynchronous)
Do senders know recipients?	No. ( books) Yes (letters)	Yes. Some	No. Little	(Yes. Some)
Exchanged message can convey:	Verbal as well as non-linguistic information (graphs, pictures)	Verbal as well as extra-linguistic information	Verbal information. No extra-linguistic information > EMOTICONS	(Verbal information. No extra-linguistic information)
Planning/Editing	More	Less	Less	(More)
Product is	Integrated	Fragmented	Fragmented	(Integrated)
Speed	Slow	Fast	Slower than speaking Faster than writing > SUBSTITUTION/ ABBREVIATION	(Slower than speaking)

### **3. Linguistic "Inventions" in IRC among Young Japanese Participants**

#### **3.1. Data**

The data here is drawn from ten IRC Web sites among innumerable IRC sites in Japan. The basic structure of IRC is the same as in the United States and other countries, since the technology is the same. The sites are accessible to people interested in the subject that are dealt with there, and their logs of the chat interactions are retrievable to some extent. In this way, new participants can visit such sites and when they join, they can communicate with and enjoy interactions with other participants, who share the same interest.

I use about four hours of IRC interactions, which are transformed into text files and have 450 kilo bytes in total. The topics that the particular sites (they are so-called "fan sites") under investigation deal with are current movies, movie stars, TV programs, music, and so on. The number of participants in one chat session varies from 8 or 9 to 25. In some instances the site manager asks newcomers for a brief self-introduction, though there is no guarantee that they give the true information. The participants, based on the content of their messages, can be assumed to be mostly women in their late teens and twenties or early thirties. The participants use nicknames or handle names, such as "HARU" and "never." Though there are a few instances of names that are seemingly real, there is no way of confirming them.

#### **3.2. Social Factors and Japanese IRC**

Clancy (1982) analyzes the differences between spoken and written styles in modern Japanese, comparing spoken and written narratives. She finds a number of linguistic differences, such as syntactic fragmentation, use of sentence final particles, among other features in spoken Japanese, while written data maintains the formal conventions of written Japanese, such as verb-final word order, and so on. Her analysis shows an important role of social and cognitive factors in Japanese spoken communication. She notes cognitive and social functions of syntactic fragmentation interdependently affect the successful spoken communication in Japanese, while in written language, the writer does not need to pay attention to social or cognitive factors involved in creating the written product. Since IRC is closer to spoken communication, we expect a much larger role for social and cognitive factors in this mode of Japanese communication.

One example may illustrate the importance of social factors in Japanese IRC. What is of interest here is conversation among strangers. When Japanese speakers talk in Japanese to someone they do not know, many of them, consciously or unconsciously take into consideration what speech level to use, what level of politeness or formality is appropriate, and so on, depending on the stranger's age,

sex, situation, topic, etc. However, such consideration on the part of the IRC users is not clearly observed in IRC logs. Instead, data examined here shows that polite, yet familiar and informal style, such as “です” (desu), and “ます” (masu) is often used instead of “だ” (da) and “である” (dearu). This way of showing uneasy politeness can be called pseudo-politeness.

This pseudo-politeness can be explained in the following way. Because of the lack of knowledge on other participants' identity, they may not be able to determine an appropriate level of politeness, without physical situation and face-to-face contact, and therefore, speaking (and typing-in) casually yet politely may be a safe style to use in order to interact with those who they imagine are in the same generation, even though they do not really know<sup>61</sup>.

In fact, I find paramount importance of social factors in understanding Japanese IRC sessions. As explained in the previous section, IRC has many limitations with respect to effective communication. Among them, social factors are most prominent since para-linguistic and extra-linguistic information is not present in IRC. This poses a serious problem for Japanese participants of IRC, since such extra-linguistic information is so important in successful communication.

Facing this challenge, Japanese IRC participants “invent” various ways to compensate for the inabilities involved in IRC and to make their interactions successful and enjoyable. They not only use the same techniques as English-speaking IRC participants, such as emoticons, but also utilize a wide range of strategies to overcome communicative deficiencies of IRC. This makes Japanese IRC logs very rich linguistically.

Japanese IRC participants employ strategies that can roughly be divided into two types: (1) those that compensate for any aspects of interaction that cannot be communicated on the Internet (Section 3.3), and (2) those that establish and ensure solidarity and friendship among participants, though these two are not mutually exclusive (Section 3.4). By supplying what participants feel missing, they can at the same time attempt to achieve the second objective.

The first group of compensating strategies are further subdivided into three purposes: namely, (i) to supply phonetic information, (ii) to supply extra-linguistic information, and (iii) to supply meta-linguistic comments on emotional states. For friendship-ensuring purposes, participants employ a number of tactics, which Kataoka (1997) calls “affect-encoding strategies.” They are achieved in a variety of ways, from the use of non-linguistic visual symbols to a number of lexical choices<sup>62</sup>.

I also analyze in Section 3.5 a phenomenon that I call “self-backchat”, which is intended to mean that IRC participants create responses that might be given if the interaction took place in a real, face-to-face conversation setting. This is a quite unique phenomenon, and has not previously been reported or discussed in the

literature of discourse or conversation analysis, not to mention CMC analysis. In the analysis of self-backchat I look at instances of pseudo-reactions made by the writer herself to the immediately preceding remark.

My data contains features that show orality, such as the use of sentence final particles showing speakers' attitudes, and spoken diction like interjections and dialectal phrases, omission of case-marking particles, and so on. Though such features have not been discussed in detail in the context of Internet communication, I do not deal with them exhaustively here, but analyze them when they are relevant to the above-mentioned discussion of compensating and friendship-ensuring strategies.

### 3.3. Making Up for Uncommunicable Interactions

#### 3.3.1. How to Express What They Say and Hear

I examine how participants visually represent what they say and hear on the computer screen, using keyboard. The Japanese IRC users whom I have observed must be careful listeners of their utterances, because they are aware that standard Japanese orthography, learned over the years of schooling, does not accurately represent real vocal sounds. In order to reproduce with keyboards what they actually speak and hear, they ingeniously devise rather unconventional, innovative scripts, manipulating words. I find three kinds of novel scripts and symbols: small hiragana, "っ", lengthening dashes, and added vowels in small kana scripts. In addition to these achieved by unconventional methods, participants overtly and consciously add meta-linguistic comments, explaining the tone of their message, usually enclosed in parentheses, at the end of the line. At the end of this section, I will show how even non-linguistic sound is verbally expressed. Each feature is explained below.

##### 3.3.1.1. Small Hiragana, "tsu" (っ)

In order to express the vocal quality of glottal stop, a small hiragana, "tsu" (っ) (as opposed to large "tsu" (つ)) is used by the IRC participants in my data, in places where it is normally not used in standard Japanese orthography, so that they can make the written (typed) phrases as if they are like spoken.

- |                                                                |                                               |
|----------------------------------------------------------------|-----------------------------------------------|
| (3) (a) は <u>っ</u> じめまして～ [はじめまして～]                            | (b) ガンバリま <u>っ</u> す！ [ガンバリます！]               |
| Hajjime <sup>tsu</sup> masite～ [Hajime <sup>tsu</sup> masite～] | ganbari massu! [ganbari <sup>tsu</sup> masu!] |
| 'First time (to see you)'                                      | 'I'll do my best!'                            |

Compare “はっじめまして～” and “ガンバリまっす！” with those expressions in brackets right after each, which does not have small “tsu” (っ) respectively in (3) (a) and (b). The phrases in the brackets are written in standard orthography for

"hajimemasite" and "ganbari masu". Though the message is the same, the presence of small "tsu" (っ) gives the phrases some force, and makes the readers pretend as if they "hear the writer's eager and high-spirited voice". If the message is given in standard orthography, no such force will be felt; the atmosphere will be in somewhat conservative and an energetic tone will not be conveyed.

Uses of small "tsu" (っ) are also seen as a colloquial replacement of formal expressions that are given in brackets in (4) (a) and (b).

- |                                                                       |                                                                                        |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| (4) (a) いいっすねえ [いいですね]<br>iissu nee [ii desu ne]<br>'good, isn't it.' | (b) 閉鎖すっか~~~~ [閉鎖するか]<br>heisa sukka [heisa suru ka]<br>'Shall I close it [the site]?' |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|

In rapid speech, syllables often drop, and by replacing with small "tsu" (っ) the syllables, "de" (で) and "ru" (る) of the formal versions in (4), the outcomes, the informal versions of (4) (a) and (b) give a sound of speedy and lively spoken conversation.

### 3.3.1.2. Lengthening Dashes

In Japanese standard orthography there is a clear gap between what we hear and what we write, as far as lengthening of the vowel sound, [o:] is concerned. Examples like (5) (a) and (b) can be viewed as "spelling pronunciation" in Japanese and the standard orthography is given in brackets right after each instance. A dash (ー) or a wavy dash (〜) is used to show the lengthened vowel.

- |                                                           |                                                         |
|-----------------------------------------------------------|---------------------------------------------------------|
| (5) (a) ほんとーに [ほんとうに]<br>hontoーni [hontou ni]<br>'really' | (b) ありがと〜 [ありがとう]<br>arigato〜 [arigatou]<br>'thank you' |
|-----------------------------------------------------------|---------------------------------------------------------|

(6) (a) and (b) below, unlike (5) (a) and (b), are instances of truly unconventional uses of vowel lengthening.

- |                                                                                                                                                 |                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| (6) (a) 首を長~~~~くして待ってます<br>Kubi wo naga~~~~kusite matte masu<br>'neck' 'Object' 'lengthen' 'be waiting'<br>'I'll be waiting very, very eagerly' | (b) 拝んできま〜す。<br>oganne kima〜su<br>'worship' 'come'<br>'I'll go to worship it (and come back.)' |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|

If the wavy dashes (~~~~) in (6) (a) are eliminated, the outcome is the standard orthography. The writer uses multiple dashes to visually emphasize how long the

waiting time is. In this case, the semantic content matches visual representation, using the dashes to express lengthened period of time. (6) (b) is an instance of transcribing young speakers' speech, in which sentence final copular verb "desu" and "masu" are pronounced with a lengthened vowel between the two syllables. This kind of lengthening is often heard in casual speech.

### 3.3.1.3. Added Vowels in Small Kana Scripts

Uses of the vowel syllable in small hiragana, as in "a" (あ), "i" (い), "u" (う), and "o" (お) in (7) (a) through (7) (d) are instances of innovatively expressed syllables, though it is not necessary at all to add a script for a vowel syllable at the end of a word, phrase, or a sentence in standard orthography.

- |                                     |                                            |
|-------------------------------------|--------------------------------------------|
| (7) (a) 終わりましたかあ～,                  | (b) 久しぶりい                                  |
| owari masita kaa                    | hisasiburii                                |
| 'Was it really over?'               | 'I haven't seen you for a long, long time' |
| (c) 読みたいですよ～～～!!!                   | (d) 良かったよお～!!                              |
| Yomitai desuu～～～!!!                 | Yokatta yoo～!!                             |
| 'I really, really want to read it.' | 'It was really, really good.'              |

Japanese standard orthography restricts uses of small hiragana scripts to "tsu" (つ), "ya" (や), "yu" (ゆ), and "yo" (よ) (and also their katakana versions) and they are used based on certain phonetic principles. Yet the writer uses such unconventional scripts, so that she can more precisely put what she actually hears/says into words and give some emphasis to the contents in addition.

### 3.3.1.4. Meta-Linguistic Comments on Tone

The writer gives meta-linguistic comments verbally at the end of the line in order to explain in what kind of intonation, pronunciation, or tone the phrase is to be heard, if spoken.

- |                                         |                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------|
| (8) (a) らっしえいませ!! (寿司屋風)                | (b) 連絡, そのうちするぜ! (熱血調で。Gガンダムの関智一くらい。)                                               |
| rasshei mase!! (sushiya huu)            | rennraku, sono uchi suru ze! (nekketu chou de, G gandamu no seki tomokazu kurai)    |
| 'Welcome!!' (In a tone of a sushi chef) | 'I'll contact you in time! (In an enthusiastic tone. Like Tomokazu Seki of Gandamu' |

The writer of (8) (a) intends to reproduce the entire atmosphere of a typically vigorous sushi chef's cheerful greeting: its tone, intonation, voice quality and so on.

This can be done because Japanese speakers in general have some knowledge of how a sushi chef greets his customers when they visit a prosperous sushi restaurant. The writer of (8) (b), however, assumes her readers are acquainted with *Gandamu*, title of a TV animation program, and relies on somewhat restricted knowledge on the part of its readers, unlike the generally spread knowledge on sushi chef's greeting in (8) (a). Readers of (8) (b) do not always know *Gandamu* or Seki Tomokazu, yet the writer believes her intention of telling the tone of (8) (b) will be realized, for the TV animation program and its character are popular among the persons of the younger generation.

### 3.3.1.5. Non-Linguistic Vocal Sound

In real face-to-face communication, when someone laughs, the laughter is perceived as non-linguistic sound. In IRC, however, the participants need conscious efforts to let the other participants know that they are laughing. To indicate various kinds of non-linguistic sound, they use onomatopoeic expressions as in (9) (a) and (b), and Chinese characters (mostly at the end of the line) in isolation, as in (10).

- (9) (a) ふふふ…仕方ないさつ あれが私なんだから (b) えーん！ 一瞬でもみたかったよー  
 huhuhu... sikata nai sa are ga watasi E~n! Issyun demo mitakatta  
 nannda kara yo~  
 'dismal laughter... can't help it. 'cause 'Weeping! I wanted to have even  
 that's me.' a glance at him'
- (10) (いつもビデオ)悔しいなあ！織田ァァ！（号泣）  
 (itsumo bideo) osii naa! Oda a a! (goukyuu)  
 '(Always on video) what a pity! Oda! (wailing; (wild) lamentation)'

Speakers produce such non-linguistic sounds, which are not usually taken as part of human speech. When participants in IRC need to express such sounds, they verbally represent what is not considered verbal.

So far I have explained how participants actively compensate for those vocal aspects of IRC that cannot be communicated to other participants. More specifically, we have looked at what kind of special devices are created and what kind of additional explanations are used to supplement what the writer feels missing. In the next section, I will explain how the writer makes up for visible information that cannot be communicated in CMC.

### 3.3.2. How to Express What They See

In the following, I will examine the way in which IRC participants attempt to communicate what they see onto the Internet. More specifically, my analysis focuses

on how gestures including hand movements, and facial expressions, which are visible in face-to-face interaction, are communicated in the IRC setting. One thing that is readily noticeable is that onomatopoeic expressions, which are meant to describe various physical as well as mental states, are used very frequently throughout their interactions. It should be noted that the writers may not necessarily perform the actions described by the expressions used. Rather, it may be more accurate to say that the writers attempt to convey what can be associated with gestural expressions.

### 3.3.2.1. Gestures

Verbal expressions showing the writers' physical actions, such as bowing are used. Note that they are not direct expressions for the action itself. Instead, the writers choose to use various onomatopoeia, which are abundant in casual conversation, in order to convey the connotations of such onomatopoeic expressions.

- |                                                                                                                                                                           |                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (11) (a) それでは、短いですが、失礼しました。<br>(ぺこりっ)<br>sore de wa, mijikai desu kedo, siturei<br>simasita. (pekori)<br>'Well then, it was brief... it was rude<br>of me to... (bowing)' | (b) お、おひさしぶりでございます…(こ<br>そこそ)<br>o, ohisasi buri de gozaimasu...<br>(kosokoso)<br>'It it's been a long time since I last<br>(visited this site)... (stealthily)' |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The writer of (11) (a) uses "pekori", which is a conventional mimetic word describing an action, although the act of bowing produces no such audible sound. The writer of (11) (b) types in "o, ohisasi buri de gozaimasu..." because she has just entered this IRC session, and she has not visited for some time before, and the reason for "kosokoso", which is also a mimetic word, is that she has some feeling of guilt for not visiting the site for that period of time, and such a feeling of guilt is also shown at the beginning of her message that sounds like stuttering.

One IRC participant overtly explains her hand movement in (12) below, though she may not literally be holding sweat in her palm.

- (12) いいい、いいんですかっ(手に汗握りつつ)  
iii, iin desu kak (te ni ase nigiri tsutsu)  
OK OK copular Question (hand in sweat holding while)  
'Are you really, really sure it's OK?' (Feeling uneasy (Lit. holding sweat in the palm))

"Te ni ase wo nigiru" is an idiom showing fear, nervousness, or worry at the sight

of some dangerous or tense situation, though this idiom originates from perspiration at such a sight. By means of expressions that seemingly describe hand movement, the writer intends to convey her feeling of uneasiness or nervousness.

### 3.3.2.2. Facial Expressions

There are many cases where the subsequent notation attempts to convey information about various types of smiling countenances, in (13), or with an expression related to the eye, in (14) below:

- (13) でも、またつきあってね(ニヤリ)  
 demo mata tsukiatte ne (niyari)  
 but again keep company with SFP (grin)  
 'Please keep company with me again, OK?' (Grinning)
- (14) 参加されるんですね～… 行きたいなあ～(遠い目)  
 sankā sareru n desu yo ne～… ikitai naa～ (tooi me)  
 participate, honorific copular SFP go want～～(distant eyes)  
 'You're going to take part in it, aren't you. I'd really like to go～.' (As if looking at a distant place)

There is no way of telling whether the writers of (13) and (14) actually grinned or looked at some distant place at the time of interaction. Yet the phrases in parentheses serve to supply shades of feelings of the verbal text prior to the parenthesized phrases. In (13) somewhat shy character of the writer can be conveyed with "niyari" and in (14), the readers can interpret eagerness on the writer's longing to go.

### 3.3.3. How to Express What They Feel

Single or at most two Chinese characters are used within parentheses at the end of the line. They do not always have sound value, *i.e.*, readers do not always know how to pronounce the characters used in isolation, yet readers can get the meaning of the character visually and hence the writer's feeling instantaneously. This kind of emotion indicating device is abundant throughout many chat sessions.

- (15) (a) 独りでした…(泣) (b) とても素敵なサイトですね!(惚) イラストが……(激惚)  
 hitori deshita... (naku) totemo sutekina saito desu ne! (horeru)  
 irasuto ga.... (geki hore)  
 'I was alone...' (crying) 'It is a very wonderful site! (I'm attracted)'  
 its illustration is... '(very much attracted)'

(15) (a) is a typical instance of this emotion-encoding device, in which the writer was alone and was perhaps sad, because of the Chinese character for "crying," even though she may not have been crying at the time of interaction. In (15) (b) the writer uses the Chinese character, (惚) twice, and in the second instance, she adds "激" before "惚" to show the intensity of her being attracted.

Examples of other Chinese characters, with its meaning in quotation marks, include: (謎) "puzzlement", (照) "embarrassment", (歓喜) "joy", (恥) "shame", (爆) "explosion, burst", (笑) "laughter", (汗) "perspiration", (死) "death", (苦笑) "bittersweet laughter", (感涙) "tears of gratitude", (殴!) "punch!" among many other characters. This way of expressing feeling is rather unconventional and not very often used in other communication modes except for personal letters, as reported by Kataoka (1979, 121). At the same time there are also instances of conventional onomatopoeic expressions, as in (16).

- (16) ドキドキしています。(ドキドキ)  
 dokidoki site imasu. (dokidoki)  
 '(My heart is) pounding. (pounding)'

So far we have looked at how participants in IRC attempt to represent what they say, hear, see and feel in conventional and non-conventional manners. Their efforts are directed to the major purpose of interaction. Since the IRC logs under investigation are from so-called "fan sites", the participants share affection toward the star being talked about. Under such circumstances, it is of course important for them to express what they expect to say, and equally or sometimes even more important for them is how to convey their messages. That is why they devise various innovative ways of transcribing their speech. Now in order to ensure solidarity and friendship among the participants, they use another set of strategies, in addition to, and in combination with those measures described above. Let us now look at such strategies in the following section, paying more attention on how they express what they want to tell.

If I classify the strategies based on the form, they can be verbal as opposed to pictorial. The verbal expressions employ various methods to ensure comradeship among participants, and the pictorial methods have relatively fewer kinds of options. I will begin with the pictorial options.

### 3.4. To Ensure Solidarity and Friendship

#### 3.4.1. By Means of Pictorial Measures

There are two kinds of pictorial symbols: non-linguistic symbols like stars (☆), and emoticons.

### 3.4.1.1. Non-linguistic symbols

Japanese IRC participants very often use non-linguistic symbols, such as star (☆), musical note (♪), and so on (★, ☆, v), which are found in the Japanese character set. Such symbols are used in place of a punctuation mark, a period (.). When they expect to convey a warm, hearty feeling with a heart symbol ('or'), they use "v" as a replacement of 'or', because of some technical factors. (Some programs cannot show the font for hearts.)

- |                                   |                              |
|-----------------------------------|------------------------------|
| (17) (a) 見ようと思ってます♪               | (b) 可愛かったですねvvv              |
| miyou to omotte masu ♪            | kawaiikatta desu ne vvv      |
| 'I'm thinking of looking at it ♪' | 'It was cute, wasn't it vvv' |

In (17) (a) the musical note, (♪) adds somewhat joyful feeling, as if wanting to sing songs, to the textual message, and hence the writer can convey such feeling to the other participants, hoping to share such feelings with those who have interests in the topic discussed in the site. Other symbols, such as "★", "☆", and the one used in (17) (b) serve the same purpose.

### 3.4.1.2. Emoticons

This second group of pictorial symbols consists of what are normally called emoticons. As explained in Section 2, emoticons are also found frequently in English-speaking IRC sessions. However, there is one difference. In my data set, emoticons usually appear together with a verbal message, reinforcing its emotional coloring.

- |                                                                  |                                     |
|------------------------------------------------------------------|-------------------------------------|
| (18) (a) 会っていっぱい話しましょうねえ(^_^)                                    | (b) ナンダ! これわ [sic] (@_@) もう         |
| ニコニコ                                                             | びっくりです                              |
| atte ippai hanasimashou nee (^_^)                                | nan da! Kore wa (@_@) mou bikku     |
| nikoniko                                                         | ri desu.                            |
| 'When we meet, let's talk about it a lot. (^_^) happily smiling' | 'What! Is it? (@_@) I'm surprised.' |

The writer of (18)(a) uses both an emoticon and verbal expression for a happy smile. Some emoticons depict emotions very cleverly, such as the one in (18)(b) that the feeling associated with the emoticon ("surprise" in this case) can very vividly be conveyed<sup>7</sup>.

In comparison of IRC with correspondence of personal letters, a written communication mode that involves interaction, the latter can convey more

information. Personal letters, if handwritten, can convey one aspect of the writers' individual traits in the shape of the letters, round-shaped or square-shaped, as reported by Kataoka (1997). On young Japanese women's casual letter-writing behavior, he points out that with conventional and unconventional Japanese orthography, they send affect to and establish intimate and solidary relationship with their addressees, converging written and spoken modes. Some writers do so by the shapes of letters. In IRC, since the shape of the letters are determined by machines, there is no possibility of sending affect by means of letter shapes. However, pictorial symbols and emoticons are similar to what Kataoka observes, and the variety of emoticons is enormous.

### 3.4.2. By Means of Various Lexical Choices

Varieties in the choice of diction include abbreviations, dialect, cant phrases (from the mass media), jargon among the youth, and so on. This list is neither exhaustive by any means, nor are the categories mutually exclusive.

#### 3.4.2.1. Abbreviations

The expressions in this group also belong to cant phrases. In the third line of (19), unabbreviated words that these abbreviations are derived from are given.

(19) (a) レス,	(b) 新アド,	(c) あけおめことよろ
resu,	sin ado,	ake ome koto yoro,
resuponsu	sin adoresu	akemasite omedetou kotosimo yorosiku
'Response'	'new (mail) address'	'New Year's Greeting/Happy New Year'

Notice this type of shortening or acronymization is different in nature from the English speakers' abbreviations discussed earlier, in that there is less motivation for speeding up the interaction among Japanese users, whereas English speakers use abbreviations for that purpose. These Japanese shortened forms are used as a manifestation of belonging to a generation that is distinct from adults' generation.

#### 3.4.2.2. Dialect, Cant Phrases from Mass Media , and Jargon among the Youth

(20) (a) あかんやろ	(b) おっはー!
akan yaro	Ohha~!
'no good, isn't it.'	'(Good) morning!!'
(c) 私的には,	(d) ってゆーか
watashi teki niwa	tte yuーka
'In my personal opinion/way'	'Or shall I say... or if I say it in a different way...'

(20) (a) is from Kansai dialect. The use of dialect gives other IRC participants somewhat close, familiar feeling, for dialect is often associated with one's hometown accents, which are more often heard in his or her private life. (20) (b), which is also an abbreviation of the morning greeting phrase, "ohayou", originated from a TV actor/singer, and spread all over Japan in 2000. (20) (c) and (20) (d) are typically heard among the youth. Such expressions listed in (19) and (20) all contribute to ensure friendship among participants in IRC, because with these lexical items that they are familiar with and often use in oral conversation, they can confirm and share that they belong to roughly the same generation, who share the knowledge on popular phrases, as well as their special interest in specific persons (actors, etc.) and events.

### 3.5. Self-backchat Phenomena

What is self-backchat? I will present instances of self-backchat and show what IRC participants are actually doing. Then I will explore its possible motivation behind using self-backchat in this particular IRC setting. Observe (21) through (23) below:

- ㉓ めっちゃツボでした!! 最高格好いいっす!!!! いや~~もう~~~(>ワ<)§(←落ち着け)  
 Meccha tsubo desita!! saikou kakkou iissu!!!! iya~~mou~~~(>ワ<)§(←  
 ochituke)  
 'I'm extremely attracted (to him). (He has) the best look.' 'Wow, ~~well, ~~  
 now~~~ Calm down'

In (21), the self-backchat is "落ち着け." The writer of (21) expresses her feeling about the movie star, saying he is really the most handsome, in an enthusiastic tone. In the latter half (after four exclamation points) we can interpret that the writer is too excited to say more than the words in the first half, for she only gives interjections and a pictorial emoticon, which are intended to show the extremity of her excitement. After the emoticon in the second line, however, the writer makes a command-like remark on her own mental state of being in love, using an imperative form of the verb, 落ち着く, which is very different in tone from the first half. (Note that a polite form "desita" is used in the first half.) The self-backchat, "落ち着け" can be interpreted as giving advice, (don't be a fool by getting too excited), though in a rough tone of men's speech. Here we can hear the writer's two voices, one as an ardent fan, and the other as a cool observer or advisor on her behavior and mental state in a frank tone.

- 22 そっ、そんなに緊張なされましたかっ!!!! (\*)\_(\* ) 別にとって食いはしませんから(あたりまえだ...)
- so sson nani kinchou nasare mashita ka!!!! (\*)\_(\* ) betsu ni totte kuiwa simasen kara (atari mae da...)
- stuttering that degree nervous Polite Honorific past Question else taking eat not do because ((matter) of course)
- '(Stuttering) Were, were you really that nervous!!!' '(No one) takes you and eats you up. (Of course not...)'

In (22), “あたりまえだ” (Of course not.) is the self-backchat directed toward the preceding remark, “別にとって食いはしませんから.” The writer of (22) is the site manager, and she writes this as a response to a new participant's message, asking whether the newcomer was so nervous at the time of her first entry. In the second part the manager employs a polite style, assuring the newcomer as if saying, “it is OK. No one will hurt you.” The self-backchat at the end of the second part uses a very different, rough style, meaning it is too obvious to say the previous remark. In this instance also, this one writer has two voices, one as the site manager in gentle, polite tone, and the other, in a detached tone, as a third party who looks at the interaction between the manager and the newcomer, commenting on the manager's reassuring words. Notice also the difference of tones between the two voices is manifested by polite “masu” style as manager and a plain “da” copular in the self-backchat.

- 23 Mステ!見られなかったんでございますか!?(口調変)
- M su te! mirare nakatta n de gozai masu ka!?(kuchyou hen)
- Music Station watch Deferential/Potential not Past Nominalization Polite Modal Question!?(tone wired)
- 'Didn't you/Weren't you able to watch Music Station (a TV program)!? (The tone is strange.)'

The self-backchat in (23) is “口調変”, which comments meta-linguistically on the “oral” manner of presenting the previous remark. She says the tone is strange, I speculate, because of a mixture of casual, informal tone (omission of case-marking particle after “M sute”, and the use of “n” as an informal variant of nominalization marker, “no”) and polite formal sound realized by “rare”<sup>8)</sup> and “gozaimasu”, an even more polite replacement of “desu”. Here in (23) also, the writer has two voices of the message sender and its objective commentator.

As we can see in (21), (22), and (23), the writer has two voices in her remark. In one voice, the writer types in what she expects to say in the tone she feels

comfortable when conveying her message. In the other voice, she gives comments, advice, and sometimes a meta-linguistic remark on the way of her communicating her message.

Why do Japanese IRC participants in this data group use self-backchat, incorporating these two distinct voices in a single message? If the interaction was face-to-face in a real conversation setting, when one speaker makes a remark, her interlocutor, or other members in the conversation might give such comments, as a reaction, simultaneously with the speaker's utterance or immediately after it. Since IRC users do not share the physical space of interaction, the writer herself instantaneously "utters" some reactionary comments that might be given to them as if in real conversation. No one can respond to what she says at the same time of her remark in IRC except for herself. Thus she gives the self-backchat, which may also be considered as quasi-response, in place of her invisible interlocutors, as if they are talking to her.

If such uses of self-backchat were not included, the remark might sound loose and less interesting. Since the writer presumably enjoys not only writing but also reading the logs, she presumably expects to make what she writes as interesting and tight as possible. This will help establishing and ensuring solidary friendship, because the writer is aware that there are other participants, who she feels share the same interest and enjoy reading as well. She does this self-backchat also for her (sometimes unconscious) purpose of entertaining other participants by reading the messages.

#### **4. Concluding Remarks**

We have found through the examination of Japanese IRC data, that Japanese IRC users employ not only the same devices as English-speakers' counterparts such as emoticons to overcome communicative shortcomings of IRC, but also they ingeniously create a number of new linguistic devices in order to make their interactions successful and enjoyable. They also use various communicative strategies to incorporate social and cognitive factors so important for interaction in the Japanese language. This suggests that the advent of information and communication technology, especially IRC, may profoundly affect the communicative behavior of Japanese speakers, especially young ones. The usage of the new technology seemingly enables them to override existing rules of written discourse in order to get more intimate interactions of oral discourse.

We have also found that utmost importance of social factors that young Japanese speakers attach to their "utterances" in cyberspace called IRC. Among the youth, conveying atmosphere or feeling may be as important as or even more important than conveying the contents of the message. With the emergence of the

new media, they can visually convey their feelings in a most ingenious way, compensating for the shortcomings of the new medium.

This study, however, has limitations. We have found many new "inventions" in IRC chat logs of some Japanese IRC participants, but it is not yet clear how widely these inventions are observed in other IRC settings. In particular, whether self-backchat phenomenon we have discovered in our IRC logs is getting popular in the Japanese cyberspace or not seems a very interesting question, since this introduces a new dimension into the Japanese written "spoken" discourse of IRC. This is an important topic of future research.

Moreover, computer-mediated communication is not the only mode of communication enabled by innovations of information and communication technology. Somewhat more familiar to Japanese people than computers are cellular phones and pagers that are connected to the Internet. Sending typed messages on such machines is their everyday habit, and such practice may have a profound effect on the communication styles of Japanese speakers. Further research about communication through these means is highly expected for the purpose of clarifying the nature of communication on the Internet, and interrelation between the technological advancement and the behaviors seen in human communication.

#### Notes

- (1) Herring (1996) gives a collection of the then-state-of-the-art articles on this subject, and more recently, Herring (1999) discusses CMC in terms of the notion, "coherence," which has been employed in discourse analysis. Rintel, Mulholland, and Pittam (2001) examine IRC openings in a structurally oriented direction, analogous to openings in conversation analysis.
- (2) On this point, McMurdo (1995) reviews history of communication from oral to electronic cultures.
- (3) In fact, one recent work in IRC research (Rintel, Mulholland, and Pittam, (2001)) reports newly-joined users often face difficulties in establishing relations with other already-joined users at openings that occur directly after their entries into public IRC channels.
- (4) Some state-of-the-art software called "via voice" enables users to hear one another, yet this way of hearing the voice is still indirect. For transmission of visual information we have some devices such as "CU-Cme". Exchanging audio-visual data, *i.e.* voice and pictures in motion is not carried out in IRC sessions, and hence out of the scope of this paper.
- (5) Choice of styles in IRC in Japanese is an area unexplored, and further research seems in order.
- (6) Some aspects of what I find in my data are also reported in Kataoka's (1997) article, because IRC is basically written in nature, with the tools for creating the product being different. His data are written letters using pens (or pencils) and writing pads, while mine are typed or keyboarded messages using computers.
- (7) Because of somewhat spiral and round shape of the at-mark (@) in (@\_@), Japanese speakers are reminded of an expression "me wo maruku suru" (literally "to make the eyes round", meaning "open one's eyes wide") and the user of this emoticon expresses a state in which her eyes are wide open in surprise.
- (8) "Rare" could indicate either potential or deferential, though it could also be used to refer to the

passive. In this instance of "rare", the possibility for passive seems to be small, because of the presence of more polite forms later in this remark.

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