## PART III

## GENDER AND CULTURE

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# Gender and Turn Allocation in a Thai Chat Room 

A growing body of research finds that females and males display different participation patterns online. Females tend to participate less and receive fewer responses than do males in mixed-sex asynchronous discussion forums (Herring, 1993, 1996), whereas in chat rooms, females sometimes participate more actively and get more responses than do males, for example, because they are objects of flirtatious attention (Bruckman, 1993; Rodino, 1997). At the same time, gender roles vary across cultures and, along with them, norms associated with how appropriate it is for women to speak and be heard in public, as well as attitudes toward flirtation. Thus far, however, most research on online participation patterns has focused exclusively on Englishspeaking contexts. We might reasonably ask whether gender roles differ across cultures with respect to participation in computer-mediated communication (CMC).

This chapter is part of study of initiation and response patterns manifested through the exchange of messages, or turn-taking, in a recreational Thai-language chat room (located at http://pantip.com/). In considering questions such as who responds to whom and how participants keep track of conversational threads in this popular multiparticipant chat environment, we were struck by the fact that participants were predominantly female, in contrast to English-language chat forums, which tend to have more male participants (Herring, 2003). This piqued our curiosity-what are the interactional dynamics in a predominantly female Thai chat room? Are patterns of
dominance reproduced from offline Thai culture-in which women are socialized to be docile and pleasing to men-or do women control the conversational floor because they are more numerous (and perhaps also liberated by the online environment)?

To address these questions, we investigated the effects of gender on turn allocation in the chat room. Our analysis draws on the model of turn allocation developed by conversation analysts Sacks, Schegloff, and Jefferson (1974), who posit three strategies for change of speaker turn in face-to-face conversation. The current speaker may use names or vocatives, gaze, posture, or targeted moves such as direct questioning to select the next speaker (strategy A). Alternatively, next speakers may select themselves (strategy B). If no one self-selects, the current speaker may continue speaking (strategy C). Sacks et al. (1974) order the three strategies, noting that A is preferred over B and $B$ over C .

In chat rooms, in contrast, gaze or gesture cannot be used to select the next speaker as in a face-to-face conversation. Moreover, everyone is in principle free to self-select (Lunsford, 1996), and turns are posted democratically in the order received by the system. These features lead to the prediction that chat rooms will have more self-selecting conversational "floors" (strategies B and C) than does face-to-face communication, with implications for gender equality (see. Edelsky, 1981). Since flirtation plays an important role in English-language chat room interactions, we also analyzed flirtatious behavior in relation to turn initiations and responses, predicting that cross-sex initiations would be more frequent than same-sex initiations ${ }^{1}$ and that males would attempt to initiate more flirtatious conversations with females than vice versa (Bruckman, 1993).

We find that females participate more often and receive a higher rate of response from both females and males. Females use strategy A more than do males, and they are more likely to select other females to take the next turn. Perhaps for this reason, males use strategy B, the next speaker self-selects, and strategy C, the current speaker continues, more than do females. Males, who are in the minority, must work harder to take the floor, even in their attempted flirtatious interactions. These results suggest that gender interacts with culture online in complex ways: Contrary to previous findings on gender in chat rooms, and contrary to culturally based expectations about the subordinate status of Thai women, females appear to be relatively empowered in the Thai chat room studied here, as assessed through turn allocation patterns.

The following section describes the Sacks et al. (1974) model of turn allocation, along with two approaches to analyzing turn-taking in computer-mediated chat. This is followed by a review of literature on gender and computer-mediated discourse and gender roles in Thai culture. We then describe the Thai chat data and the methods used to analyze turn allocation and flirtation. The results of the analysis are then presented and interpreted.

## BACKGROUND

## Turn Allocation in Spoken Conversation

Conversation is composed of speech between at least two people, organized by turns. The turn is the period of talk for each speaker; ideally, only one person talks at a time. In formal situations such as rituals, meetings, and public lectures, turns are often allocated by a moderator or predetermined according to participant roles. In unstructured, spontaneous conversation, however, participants must determine from moment to moment when it is appropriate to take the next turn. Sacks et al. (1974, p. 704) propose the following rules governing turn allocation in such contexts:
(1) For any turn, at the initial transition-relevance place of an initial turnconstructional unit:
A. The current speaker selects the next speaker and transfer occurs at that place.
B. The next speaker self-selects, the first starter acquires rights to a turn, and transfer occurs at that place.
C. If neither (a) the current speaker selects the next speaker nor (b) another party has self-selected, then the current speaker may, but need not, continue, thereby claiming rights to another turn-constructional unit.
(2) If, at the initial transition-relevance place of an initial turn-constructional unit, neither 1a nor 1 b has operated, and, following the provision of 1 C , the current speaker has continued, then the rule-set a-c re-applies at the next transition-relevance place, and recursively at each next transition-relevance place, until transfer is effected.

In order to converse smoothly, conversationalists must further coordinate transfer to minimize gap and overlap between adjacent turns (Sacks et al., 1974). In face-to-face conversation, transition-relevance places (places where turn exchange is likely to occur) are indicated by a variety of prosodic and visual cues. These include utterance-final intonation, deceleration, final stress, pausing, sustained eye contact, and signaling gestures of the head or hands (Duncan, 1972). In telephone conversations, where prosodic but not visual cues are available, turn transitions can still occur smoothly (McLaughlin, 1984). Text-only CMC lacks both prosodic and visual cues, however.

## Turn Allocation in CMC

## Disrupted Adjacency

Participants in CMC face certain challenges compared to face-to-face conversation. In addition to lacking nonverbal cues, text-only CMC is
characterized by disrupted turn adjacency; logically related turns are separated by unrelated turns, sometimes from other conversations (Herring, 1999). Disrupted adjacency is especially common in multiparticipant CMC. It is caused by technical properties of CMC systems such as delays in message transmission (e.g., system "lag") and the linear display of messages in the order received by the system, without regard for senders' intentions to respond to a particular message. This is illustrated by the following sample of Internet Relay Chat (IRC):
[4] ashna: hello?
[5] dave-g it was funny
[6] how are u jatt
[7] ssa all
[8] kally you da woman!
[9] ashna: do we know eachother? I'm ok how are you
Herring (1999) represents the connections between turns in this sample schematically as in figure 10.1. The perspective in figure 10.1 is anaphoricthe message lower in the diagram is considered to be responding "backward" (or in this case, upward) to a previous message in each case.

In this example, every pair of logically related turns (or adjacency pair, Schegloff \& Sacks, 1973) is disrupted by a message from another exchange. Participants in synchronous chat face the problem of how to keep track of who is talking to whom. A common strategy for creating cross-turn coherence is addressivity-the vocative use of the intended addressee's name (Werry, 1996). This can be seen in every turn in the example above except for message [7], which is addressed to "all." By explicitly naming the intended next "speaker" in each turn, chat participants compensate for the lack of nonverbal cues in the text-only medium.


FIGURE 10.1. Schematic representation of turn-taking in an IRC sample (adapted from Herring, 1999).

## Turn-Allocational Techniques

Lunsford (1996) systematically compares turn-taking organization in IRC with the turn allocation model of Sacks et al. (1974) and concludes that turn allocation in IRC is fundamentally different from that in spoken discourse. According to Lunsford (1996), everyone in a chat room has an equal opportunity to transmit a message at any given time. A speaker can then allocate the next turn by means of three turn allocational techniques:

> 1. Speaker ${ }^{3}$ addresses individual participants by their screen name. This is the same as the practice of addressivity described above. For example: WildRoseTX: $\begin{aligned} & \text { Dagny, you DO live in Texas, right? I mean, you used to be } \\ & \text { my neighbor in Dallas and you do }\end{aligned}$
2. Speaker addresses the whole group within a given room. The implication is that all present should respond. For example:

```
NAA4EVER: age/sex check
    HOOKNLOOP: 32/f and you?
    CM622: hello 30/f
    S Jolene: 33\f
```

3. Speaker elicits reactions from anyone who cares to respond, often by making a provocative statement. For example:
$\rightarrow A W M N$ : Women are taught to manipulate men, sexual harassment is just another way of doing so.
Doc Yeah: AWMN, how is a man harassing a woman a way of a woman manipulation a man?

Lunsford (1996) notes that a chat message is usually, but not always, equivalent to a turn, as in the case of a turn that is too long to be sent as a single message or a message that contains more than one functional turn.

Further evidence of turn allocation strategies can be found in Cherny (1999)'s observations of interaction patterns in a social MultiUser Dungeon or Dimensions (MUD), another form of synchronous text chat. Cherny finds frequent use of an address term (name), which she claims serves the function of eye gaze in face-to-face communication. The social MUD she observed also makes conventionalized use of routines that allocate the "next" turn to all who wish to respond, such as the ROLLCALL routine which Cherny describes as follows: "A character announces a roll call in capital letters, and the characters present who feel they fit the subject or attribute in the name of the roll call answer with their names on a line alone" (p. 102).

In addition to the above strategies, Cherny (1999, p. 181) notes the use of third-person present-tense descriptive actions to simulate bids for the conversation floor, such as "X raises her hand [to request permission to speak]." However, such simulated bids were not common in her spontaneous, recreational MUD data.

From this survey, it emerges that chat participants use various means to circumvent the coherence problems caused by lack of nonverbal cues and disrupted adjacency, including addressing others by name and engaging in conversations with the group at large rather than with targeted individuals. However, it is not apparent that turn allocation in chat rooms is fundamentally different from that of face-to-face speakers in groups. Addressivity is a form of "current speaker selects next" (strategy A) in the Sacks et al. (1974) turn allocation model, and Lunsford's (1996) claim that any participant can "selfselect" at any time is similar to Sacks et al.'s strategy B and can subsume strategy C ("same speaker continues"), as well. Moreover, the technical ability to take a turn must be distinguished from the social appropriateness of doing so, both face to face and in CMC. Social appropriateness is determined in part by speaker identities and roles, as discussed with respect to gender below.

## Gender Differences in CMC

Despite early claims that CMC filtered out social cues and was therefore gender neutral, research has found that gender remains socially important online. Herring (1992, 1993, 1996, 1998, 2003) found systematic differences in the participation patterns and discourse styles of males and females in both asynchronous and synchronous CMC in English. These differences are summarized in tables 10.1 and 10.2.

TABLE 10.1. Gender differences in asynchronous CMC (Herring, 1992, 1993, 1996, 2003).

| Males | Females |
| :--- | :--- |
| Participation |  |
| Longer messages and greater variability <br> in message length | Short messages |
| Post more messages |  |
| Receive more responses | Post fewer messages |
| Discourse Styles | Receive fewer responses |
| Strong assertions; absolute and |  |
| $\quad$ exceptionless adverbials (e.g., certainly, | Attenuated assertions; hedges and |
| definitely, obviously, never, by no | seems, sort of, rather, somewhat, a bit) |
| means) |  |
| Impersonal, presupposed truths (e.g., | Speaker's feelings/experiences (e.g., I |
| It is obvious/clear/a fact that...) | feel that..., I am intrigued by ...) |
| Exclusive first-person plural pronouns | Inclusive first-person plural pronouns |
| Rhetorical questions | Questions as a means to elicit a response |
| Self-promotion | Apologies |
| Disagreement with others | Support and agreement with others |
| Opposed orientation | Aligned orientation |
| Less polite | More polite |

TABLE 10．2．Gender differences in synchronous CMC（Herring，1998，2003； Bruckman，1993；Cherny，1994）．

| Males | Females |
| :--- | :--- |
| Participation |  |
| May get fewer responses | May get more responses |
| Discourse styles |  |
| Use more violent verbs（e．g．，＂kills＂） | Use more neutral and affectionate <br> verbs（e．g．，＂hugs＂and＂whuggles＂） |
| More profanity and more offensive <br> swear words <br> More sexual references <br> Evaluative judgments，sarcasm，insults and laughter | Attribution of feelings to self and others <br> Appreciation and support |

These findings are in many respects similar to those of language and gender research in face－to－face public contexts（see Coates，1993）．That is， males tend to dominate in amount and manner of communication，using confrontational and self－promotional talk，while females tend to be attenu－ ated，self－deprecating，and supportive of others．These patterns reenact a familiar gender power hierarchy，with males in the dominant and females in the subordinate position．

At the same time，gender patterns in asynchronous and synchronous CMC differ．Males post longer messages and get more responses than do females in asynchronous discussion groups（Herring，1993，2003）．For partici－ pants in chat rooms，by contrast，messages are similar in length，and females not infrequently get more responses than males（Bruckman，1993；Herring， 2003）．At first blush，this might appear to suggest that females enjoy greater equality in chat rooms than in other forms of CMC，because it is more anony－ mous and more egalitarian（Danet，1998；Grossman，1997）．However，many reported cases of females receiving more responses than males in mixed－sex chat rooms involve flirtatious interactions in which one or a small number of females are the focal point of attention，often explicitly sexual in nature，from a larger number of males（e．g．，Rodino，1997）．Herring（1998）calls this the ＂belle of the ball＂phenomenon，illustrating the dynamic with the following exchange from IRC：

〈Dobbs〉 come on，Danielle！！
〈Danielle〉 No．
〈Danielle〉 You have to SEDUCE me ．．．
＊＊＊Action：jazzman reaches out for Danielle＇s soft hand．
＊＊＊Danielle has left channel \＃netsex
＊＊＊Action：Dobbs whispers sweet nothings in Danielle＇s ear
＊＊＊Action：Butthead moves closer to Danielle
〈jazzman〉 danielle＇s gone dumbass

While the female in this example appears to be in control and is the center of attention, it is as an object of sexual desire, not as an intellectual equal. Thus, this interaction reproduces the traditional (Western) gender role of female as sex object, rather than eliminating or equalizing gender roles.

A further qualification concerns the majority gender in the CMC environment under consideration. In asynchronous discussion lists, Herring (1996) finds that the numerically predominant gender establishes the overall discourse norms for the group. She calls this the "list effect." Groups with more females will tend to exhibit, and value, female discourse styles for both females and males. Moreover, Herring (in press) finds that in groups with a majority of females, women are more likely to introduce new topics and have them taken up by others in the group; the converse is true for groups with a majority of males. If the same principle holds in chat rooms, we would expect the relative proportion of males and females in a chat room to influence its gender dynamics. Specifically, we would predict that a chat room with more females than males would show more active female participation and that female patterns of participation would prevail. We would further predict that sexualization of females by males would be less evident than in male-predominant environments, since female discourse norms would not favor such behavior. As yet, however, no research has systematically investigated the effect of majority gender in chat rooms.

## Gender in Thai Culture

Women in Southeast Asia are generally thought to enjoy high status, in contrast to the male dominance characteristic of traditional Indian and Chinese societies (van Esterik, 1982). In Thailand, women enjoy a relatively active role and high status in society (UNESCO, 1990). Historically, Thai women controlled household financial expenditures, and Thai society was, and remains, quasi matrilineal (Suriyasarn, 1993). Modern urban Thai women are encouraged to pursue higher education and occupy important, even dominant, roles in public professions such as television broadcasting and some areas of university teaching (Suriyasarn, 1994).

At the same time, Thai males occupy most of the high-paying professions, and women are excluded from many leadership roles. From an early age, females are socialized to be care-giving, submissive, and pleasing to men. Women's language is expected to be more polite than the language of men (Simpson, 1997). Van Esterik (1982) concluded more than 20 years ago that the presumed high status of Thai women is "a delightfully refreshing cliché [. . .] and very little else" (pp. 2-3). However, as Suriyasarn (1994) notes, Thai women are making inroads into increasingly important positions in Thai society.

On the U.S.-dominated Internet (Paolillo, chapter 18 this volume), Thai women are stereotypically portrayed as beautiful, exotic, and eager to meet foreign men. Approximately $90 \%$ of the hits in the first five pages produced by an English-language Google search in April 2003 for the terms "Thai,"
"women," and "Internet" led to sex sites and dating services. Suriyasarn (1997) also found an active discourse sexualizing Thai women on the newsgroup soc.culture.thai, produced mostly by Western men posting messages seeking and debating the merits of Thai women as prospective girlfriends, wives, and sexual partners. Thai women posted very little to these discussions. ${ }^{4}$ The reputation of Thai women as sexually available can be traced to the widely publicized prostitution services made available to American military personnel during and after the Vietnam War (Gay, 1985). Although the Thai government has in recent years taken actions to restrict prostitution, stereotypes about Thai women persist, especially in the West.

Among online Thais themselves, the situation is quite different. According to S. Hongladarom (2000), Thais preserve their cultural ("local") identity on the Internet despite Western dominance of the medium. On soc.culture. thai, Thai men did not participate in objectifying discourse about Thai women; some protested against it (Suriyasarn, 1997). ${ }^{5}$ Thai women (especially, urban, middle-class women) are supposed to be modest and chaste (VanLandingham et al., 1993); ${ }^{6}$ (male) participants defended these traditional virtues. More generally, crude discourse is considered impolite in Thai culture, and avoided online as well as offline. For example, the netiquette guidelines posted on the pantip.com website and analyzed for politeness behaviors by K. Hongladarom and S. Hongladarom (2005) prohibit messages that contain foul language and sexually explicit content, and disrespectful comments about the king of Thailand and the Buddhist religion. At the same time, gender plays a role in online interaction among Thais. S. Hongladarom (2000, n.p.) describes the Internet as "a place where [Thai] teenagers hang out and find their girlfriends or boyfriends," adding "as with other cybercommunities elsewhere, women, or those who identify themselves as such on the Net, are instantly popular and can attract a lot of traffic." Conversely, although gender is not a focus of the K. Hongladarom and S. Hongladarom (2005) study, it appears from their examples that most of the participants in the asynchronous science and philosophy discussion forum they analyzed are male.

As yet, no research has systematically investigated the discourse of men and women in Thai Internet contexts. The available evidence, however, points to the importance of distinguishing between Thais participating in Englishlanguage, Western-dominant Internet contexts and Thais communicating online among themselves. The present study analyzes participation patterns of Thai speakers communicating with other Thais in a Thai-language chat room popular with young, educated, urban users, focusing on the effects of participant gender. Significantly, the participants in this chat room are predominantly female.

## DATA AND METHODOLOGY

The primary research question in this study was how gender affects turntaking in Thai chat. To answer this question, we analyzed turn allocation and
response patterns in light of Sacks et al.'s (1974) claims regarding face-to-face conversation, taking into consideration the independent variable of participant gender. Sacks et al.'s model was chosen because it allows us to test whether turn allocation in the chat room is similar to face-to-face strategies (i.e., favors selecting a next speaker, strategy A) or whether it is fundamentally different, as Lunsford (1996) suggested (i.e., favors self-selection, strategies B and C). We also analyzed use of, and responses to, flirtation, in order to test whether females are selected as conversational participants with flirtatious intent, as in English-language chat.

## Data

The data were collected from the Thai chat room \#jaja5 (located at http:// www.pantip.com). The name of the site, "pantip," is derived from Pantip Plaza, a large shopping center in Bangkok specializing in computer hardware and software (S. Hongladarom, 2000). This site was selected because it is the most popular chat website in the Thai language. ${ }^{7}$ In addition to 11 chat rooms, the site includes asynchronous discussion forums, news, and links to commercial and technical resources. The \#jaja5 chat room, like the other chat rooms on the site, ${ }^{8}$ is intended for general social chat ( jaja is a combination of two final particles in Thai that signal intimacy between speaker and hearer). Most messages posted to the chat room are in Thai script in the Thai language. ${ }^{9}$ From the information they provide about themselves in their chat messages, it appears that most participants live in Thailand and are between the ages of 11 and 25 . The chat room interface is shown in figure 10.2.


FIGURE 10.2. The \#jaja5 chat interface.

Thai chat is especially amenable to the study of gender since the Thai language has sentence-final particles that can be used to classify whether participants are female or male; that is, gender is grammatically visible. These particles, which occur frequently in the chat data, include

- Final particles for men such as /khráp/ (with variants /khráap/, /khrâap/, /khâap/, /kháap/, and /há/)
- Final particles for women such as /khà/, /khá/, and /khâa/

In addition, the Thai language has gender-specific first-person pronouns (phom for males and dichan or chan for females), although the male pronoun is more common in everyday use than are its female counterparts, which sound somewhat formal. Either can be omitted, or a gender-neutral pronoun or self-referential nickname can be used in its place; the latter strategy is especially common among females (Simpson, 1997).

Participants were classified as female or male on the basis of their use of sentence-final particles, first-person pronouns (when available), and nicknames. Regarding nicknames, for example, "Roy," "Jay," "dul," and "Maunjalho" were classified as male; ${ }^{10}$ "Prim," "Pimja," "Namfon," "Maunsuey," and "Viva" as female;" and "O," "Nut" (possibly from English "peanut"), and "Nangmannoi" ("devil") as gender indeterminate.

The data consist of 917 messages produced over a two-hour period in July 2001. This sample was part of a 60 -hour corpus collected in two-hour intervals three times a week over a 10 -week period from the six \#jaja chat rooms, ${ }^{12}$ for a total of 10 hours per chat room. All data collection took place on weekdays from 6:00 p.m. to 8:00 P.m., the most active period in Thai chat rooms and the time when the widest range of participants are present, since it is both after school hours and working hours in Thailand (Todla, 1999). For the purposes of the present analysis, one two-hour interval was selected from the larger corpus. The interval was chosen because it contained the largest number of messages, but otherwise appeared to be typical. As in English-language chat rooms, participants joined and left the room continuously during the sample period. In total, the sample contains messages from 52 individuals: 25 females, 12 males, and 15 participants whose gender could not be identified. ${ }^{13}$ Five hundred ninety-eight female messages, 269 male messages, and 50 messages from participants of indeterminate gender were posted during the sample period.

## Methodology

Herring's (1999) schematic representation of coherence in turn-taking was adapted for identifying turn initiations and responses. We coded each initiation $(N=576)$ in terms of the three basic strategies of turn allocation identified by Sacks et al. (1974). In addition, we analyzed which initiations received no response, and whether males or females received more responses in the
chat room. Finally, we classified flirtatious initiations in terms of the nature and explicitness of their flirtatious content. ${ }^{14}$

We coded three basic strategies of turn allocation used in the Thai chat room, adapted from the classification scheme of Sacks et al. (1974). (All examples given below were translated from the original Thai by the first author.) Arrows indicate the message that illustrates each category of phenomenon in examples with more than one message.
A. The current speaker selects the next speaker by using a name (nickname) or kinship term such as "sister," "brother," and so on.
Prim: Hey roy, have you given me your email [address]?
B. The next speaker self-selects

1. By responding to a previous conversation. That is, the speaker "interrupts" a conversation between other speakers. For example, Fon asks dul a question, and Omyinlaksi comments on his answer:
Fon: What is your telephone number?
dul: 01-3636655
$\rightarrow$ Omyinlaksi: Fon, don't believe it. It is a wrong number.
2. By changing the topic or initiating a new conversation.

Prim: Hey girl, can you give me your email. I'll send you a card.
POOH BEAR: xxxxxxXX@hotmail.com
$\rightarrow$ Prim: POOH, are you feeling sleepy? Do you need my lap?
C. The current speaker continues

1. Immediately

Roy: POOH , do you have a special friend yet?
$\rightarrow$ Roy: Prim and I will find one for you.
2. After a pause (stops posting for a while)

POOH BEAR: What are your real names? They are Prim and Roy, right?
Peesaew: IE4 or IE5 or IE6
Pimja: Hi TAR
Pimja: What's IE? Peesaew. I don't know.
[[TAR]]: Hi too.
$\rightarrow$ POOH BEAR: Hey, please answer.
Strategy A can co-occur with either B or C; that is, in self-selecting or continuing to take a turn, a speaker can simultaneously select a next speaker. Thus, a turn may be coded for multiple turn allocation strategies.

A grounded theory approach was used to identify categories of flirtation (Glaser \& Strauss, 1967). Specific behaviors observed to be used flirtatiously in the data were first listed and then generalized to a smaller set of coding categories:

## Flirtation strategies

1. Request/give personal contact information
1.1 Email
1.2 Phone number
1.3 Home address/office address
2. Talk about relationships
2.1 Do you have a boyfriend/girlfriend?
2.2 Can I date you?
2.3 Sexual proposition or sexual reference
3. Request/offer personal contact
3.1 Chat with me
3.2 Email me/I will email you
3.3 Phone me/I will phone you
3.4 See me

The coded data were entered into Microsoft Excel 98 and analyzed statistically using GLMStat, a generalized linear model statistical analysis program for the Macintosh, set up to run log-linear models. This method was chosen because log-linear models are better suited than linear regression and analysis of variance models to analyzing count data that do not show a normal distribution, as was the case for the data in this study.

## RESULTS

## Turn Allocation

The results of the analysis of turn allocational strategies for all participants combined are shown in table 10.3. Current speaker selects the next speaker was used the most ( $66.5 \%$ ), followed by next speaker self-selects ( $25.9 \%$ ), while current speaker continues was least exploited (7.6\%).

GLMStat was used to determine the relationship between turn allocational strategies and gender. The turn allocation strategies ( $\mathrm{A}, \mathrm{B}$, and C ) reported in table 10.3 were set as dependent variables, and the independent variables were FS (female speaker), MS (male speaker), FA (female addressee), and MA (male addressee). In addition, the software automatically generated interaction categories for the speaker and hearer combinations FS.FA (female speaker, female addressee), FS.MA (female speaker, male addressee), MS.FA (male speaker, female addressee), and MS.MA (male speaker, male addressee). ${ }^{15}$ An iterative process of model selection and refinement was followed in the statistical analysis. We started by including all the main variables

TABLE 10.3. Percentage of use of turn allocational strategies.

| Turn allocation strategy | $N$ | Frequency (\%) |
| :--- | :---: | :---: |
| A. The current speaker selects the next speaker | 525 | 66.5 |
| B. The next speaker self-selects | 205 | 25.9 |
| C. The current speaker continues | 60 | 7.6 |
| Total | 790 | 100 |

in each analysis, weeding out those that proved to be nonsignificant, and then adding in the interaction variables and weeding out those that were nonsignificant, to arrive at the best model for each analysis. Only the best model in each case is presented in the tables below (i.e., no nonsignificant results are included). All results are significant at $p<0.05$.

The numbers yielded by the statistical analysis show either positive or negative values. In table 10.4, a positive value means that the speaker, hearer, or speaker-hearer combination is associated with significantly greater use of the specified turn allocational strategy than the mean. ${ }^{16}$ A negative value means that the speaker, hearer, or speaker-hearer combination significantly avoids use of the turn allocational strategy relative to the mean. In the tables, "variable" refers to the independent variables, and "estimate" refers to the size of the contribution of each variable to the statistical model.

In table 10.4 A , the current speaker selects the next speaker. Both females and males significantly use strategy A. However, females use A more than do males, because the value of the estimate is higher. In addition, males use A in order to talk to females. None of the other interaction combinations was significant.

In table 10.4B, the next speaker self-selects. Male speakers make significant use of strategy B, but female speakers do not differ significantly from the mean, inasmuch as they do not appear in the model. Moreover, when B is used by males, the addressee is usually female.

In table 10.4 C , the current speaker continues. The use of strategy C is again significant for male speakers but not for female speakers. That is, males are more likely to continue speaking even when they do not receive a response. If the speaker uses C , either females or males (but not participants of indeterminate gender) are the addressees.

TABLE 10.4. Log-linear model for the use of turn allocational strategies. All estimates significant at $p<0.05$.

| Variable | Estimate |
| :--- | :---: |
| A. The current speaker selects the next speaker |  |
| FS | 2.551 |
| MS | 0.9594 |
| MS.FA | 0.9967 |
| B. The next speaker self-selects |  |
| MS | 0.8826 |
| FA | 0.4258 |
| MS.FA | 1.274 |
| C. The current speaker continues |  |
| MS | 1.309 |
| FA | 2.087 |
| MA | 2.304 |

TABLE 10.5. Log-linear model for distribution of "no response" by gender. All estimates significant at $\mathrm{p}<0.05$.

| Variable | Estimate |
| :--- | ---: |
| MS | 0.5166 |
| FS.FA | -0.3723 |

TABLE 10.6. Percentage of each turn allocational strategy that gets no response.

| Turn allocation strategy | $N$ | Percentage (\%) |
| :--- | ---: | :---: |
| A. The current speaker selects the next speaker | 177 | 33.5 |
| B. The next speaker self-selects | 99 | 48.3 |
| C. The current speaker continues | 2 | 3.3 |
| Total | 278 | 35.2 |

We then considered which gender receives more responses to its turn initiations. The average number of responses for the three initiation strategies combined was 0.21 per male message and 0.48 per female message. That is, male participants were less than half as likely to get a response as were female participants. This result is confirmed by the results of the GLMStat analysis shown in table 10.5, in which "no response" was taken as the dependent variable, and gender of speaker, addressee, and speaker-addressee combinations as independent variables.

Table 10.5 shows that male speakers are significantly likely not to get a response. In contrast, female speakers are significantly likely to receive responses from females, as shown by the negative value for FS.FA. We also considered which turn allocational strategies are most successful at generating responses. The percentages of "no responses" to each of the three strategies are shown in table 10.6.

About $35 \%$ of the initiations receive no response in the sample overall. Strategy A generates a response two-thirds of the time, while B gets a response just over half the time. If a speaker continues after getting no response, however, his chances of being responded to increase to $97 \%$. We also used GLMStat to determine which turn allocational strategies were most successful. For this analysis, we considered "no response versus response" as the dependent variable, and strategies $\mathrm{A}, \mathrm{B}$, and C as independent variables. The results in table 10.7 are a logistic rather than a log-linear, model in that the dependent variable is a binomial.

Table 10.7 reveals that strategy B received significantly few responses. In contrast, strategy C received many responses, as shown by the negative value of the estimate. Strategy A also received responses, inasmuch as the value for A was not significant. Because the value for A is close to the mean for the sample overall, it does not show up in the model.

TABLE 10.7. Logistic model for distribution of "no response" by turn allocation strategy. All estimates significant at $\mathrm{p}<0.05$.

| Variable | Estimate |
| :--- | ---: |
| Strategy B | 0.05707 |
| Strategy C | -0.2032 |

TABLE 10.8. Log-linear model for distribution of flirtatious initiations. All estimates significant at $\mathrm{p}<0.05$.

| Variable | Estimate |
| :--- | :---: |
| FA | 2.449 |
| MS.FA | 3.303 |

## Flirtation

In addition to turn allocation and response patterns, flirtation by both genders was analyzed. We considered the nature of initiations by gender, hypothesizing that male initiations to females would be more flirtatious than other initiations. The results of the GLMStat analyses for all categories of flirtatious behavior combined are shown in table 10.8.

Males initiate more flirtation than do females, and females are the primary recipients of flirtation, especially from males. The incidence of flirtation in the corpus was relatively low-only $8.7 \%$ of the turn initiations included any flirtatious content, as coded according to the categories described in the methodology section. Table 10.9 shows a breakdown by gender of the frequency of each flirtation strategy.

Table 10.9 shows that females asked for and offered email addesses more than did males, while males asked more directly flirtatious questions ("Do you have a boyfriend?" "Can I date you?") than did females. Moreover, 14 out of the 19 instances ( $74 \%$ ) of female initiations regarding email exchange were addressed to other females and were not flirtatious in intent, whereas seven out of seven $(100 \%)$ of the direct questions asked by males were addressed to participants of the opposite sex and appear to have been intended flirtatiously. Gender-indeterminate participants made the lowest percentage of flirtatious initiations. These individuals also produced the fewest messages (an average of 2.7 messages per person, compared with 15.3 messages per female-identified participant and 12.8 messages per male-identified participant). ${ }^{17}$

TABLE 10.9. Distribution of flirtatious initiations by strategy (raw numbers).

| Strategy | Females | Males | Indeterminate | Total |
| :--- | :---: | :---: | :---: | :---: |
| 1.1 Email | 12 | 2 | 0 | 14 |
| 1.2 Phone number | 1 | 1 | 0 | 2 |
| 1.3 Home/office address | 3 | 2 | 0 | 5 |
| 2.1 Do you have a bf/gf? | 0 | 4 | 0 | 4 |
| 2.2 Can I date you? | 0 | 3 | 0 | 3 |
| 2.3 Sexual prop. or sexual ref. | 2 | 1 | 0 | 3 |
| 3.1 Chat with me | 1 | 2 | 0 | 3 |
| 3.2 Email me/I will email you | 7 | 1 | 0 | 8 |
| 3.3 Phone me/I will phone you | 3 | 0 | 0 | 3 |
| 3.4 See me | 2 | 2 | 1 | 5 |
| Percentage of total initiations | $31 / 382=$ | $18 / 154=$ | $1 / 40=$ | $50 / 576=$ |
|  | $8.1 \%$ | $11.7 \%$ | $2.5 \%$ | $8.7 \%$ |

## DISCUSSION

To interpret these results, we break them into two sets, the first concerning the nature of turn allocation in the chat room, and the second concerning the effects of gender. With regard to the first set, we ask which turn allocation strategies are preferred and which turn allocation strategies are most successful. The answer to the first question is that the current speaker selects the next speaker (A), followed by the next speaker self-selects (B), followed by the current speaker continues (C). These results are similar to the observations of Sacks et al. (1974) for face-to-face conversation. They do not support the proposal of Lunsford (1996) that self-selection (B or C) should predominate because everyone in the chat room has an equivalent right to take a turn. Although everyone theoretically has a right to self-select, conversational coherence would be sacrificed if all participants took on the role of speaker all the time. Strategy A promotes coherence by creating linkage between turns, and thus is generally preferred over strategy B, both face-to-face and in synchronous chat.

At the same time, there are differences in turn-taking between the two media. System lag and one-way message transmission not only lead to disrupted adjacency (Herring, 1999) but also may affect turn allocation. When a speaker asks a question and does not receive immediate feedback (e.g., because the addressee is in the process of typing a response), other messages may be sent in the meantime, giving rise to apparent speaker self-selection as the speaker waits for the addressee's response. Moreover, because the pantip.com chat rooms have a limited message buffer, allowing a maximum of 150 characters per message, if one wishes to take a long turn, one must first send a message and then continue posting in a second message, creating the appearance of "same speaker continues" (Lunsford, 1996). These properties of the chat medium should logically result in higher incidences of strategies

B and C than in face-to-face conversation. We are unable to evaluate this proposition at present, however, since to our knowledge no one has yet attempted to quantify the use of turn allocation strategies in face-to-face conversation in such a way as to enable a direct comparison.

The answer to which turn allocation strategies are the most successful, is strategy A, the current speaker selects the next speaker. Strategy A is responded to $68 \%$ of the time. Although strategy C gets a higher rate of response ( $97 \%$ ), C is by definition a continuation of an unsuccessful initiation and shows the effects of persistence more than successful initiation. Strategy B-simply speaking up without consideration for ongoing conversations-is the least successful strategy, garnering a response $52 \%$ of the time.

The second set of results concerns gender. We found that the use of turn allocational strategies depends in part on participant gender. Females use strategy A more than do males, and males use B and C more than do females. We noted above that A is the strategy that most directly mimics face-to-face conversation. A is also the most interactive strategy, in that it engages the addressee directly, creating social as well as structural cohesion. Our finding is thus consistent with previous research that finds females to be more interactive and other-oriented than are males (Coates, 1993; Edelsky, 1981; Gilligan, 1982; Herring, 1996). Strategies B and C, in contrast, involve individuals acting independently. Thai males speak out in public CMC forums, regardless of whether they are addressed or responded to (see also Suriyasarn, 1997). This result corresponds to Herring's (1993, 1996, in press) findings on Englishlanguage asynchronous discussion groups, in which males tend to adopt an independent, rather than a socially aligned, stance. Further, the fact that male chatters are more likely than female chatters to take a turn without being invited and to persist in posting even when they receive no response is consistent with previous proposals that males experience a greater sense of entitlement to "speak" in public cyberspaces (Herring, 1993, in press).

As for flirtation, although it is not very frequent overall in the Thai chat data, it exhibits familiar gender dynamics. Males are more flirtatious and engage in more direct, explicit flirtation than do females. In contrast, most of the behavior coded as flirtation for females involves requests for email addresses or phone numbers from other females. Flirting is asymmetrical in Englishlanguage chat rooms, as well (Bruckman, 1993; Rodino, 1997), with males in the role of pursuer and females in the role of pursued (the "belle of the ball" phenomenon, Herring, 1998). It would be misleading, however, to conclude that because traditional gender roles are evident, males dominate or enjoy greater power in the Thai chat room than do females. On the contrary, females participate more and get more responses in this sample than do males, only a relatively small percentage of which are flirtatious in nature. Furthermore, females interact predominantly with other females and often ignore the males who attempt to get their attention. Males, who are in the minority, must work harder to take the floor, even in their attempted flirtatious interactions.

In part, this may be because males do not use the preferred turn allocation strategy, current speaker selects next, as often as do females. The
strategies of self-selection and continuation may be inherently less effective, as suggested above. Alternatively, because females are more numerous than males in the sample ( $48 \%$ female vs. $23 \%$ male), as well as in the chat room in general, based on informal observation of other \#jaja5 samples in the corpus, they might be empowered by virtue of their majority status, as Herring (1996, in press) found for asynchronous discussion groups. ${ }^{18}$ However, this leads to the question of why there are more females than males in this Thai chat room, contrary to the trend in English-language chat rooms. A possible explanation for this is cultural: Thai women may feel comfortable communicating in chat rooms, especially when the topic is casual socializing, because the norms of behavior in Thai contexts are different from those in Englishlanguage contexts.

It is interesting to note that the netiquette guidelines posted on the pantip.com website prohibit "messages which contain foul language and sexually explicit content" (as translated by S. Hongladarom, 2000). Given that sexually explicit content in CMC is often used to degrade and objectify women, this guideline may help to ensure a respectful online environment for Thai women. Flirtation in \#jaja5 (and the other chat rooms on the site) never approaches crudeness, and we found hardly any instances of sexual references in our corpus. Such behavior would be perceived as rude in Thai culture, and participants could be judged negatively as a result.

In order to determine the relative importance of each of these factors, further empirical research is needed. To explore the effectiveness of different turn allocation strategies, the present findings could be supplemented with qualitative analysis of message content, to determine, for example, whether response rate is influenced by the topic (or by whether the initiation itself is on- or off-topic). Majority gender effects could be assessed by comparing the present findings with chat rooms (or chat samples) on the pantip.com site in which the majority of participants are male. Systematic comparisons of initiation and response patterns by gender could be made across chat rooms frequented by different cultural groups. Ideally, a study incorporating a multivariate design could allow topic, gender, and culture to vary, enabling a more precise determination of their relative contributions to participation patterns. It would also be of interest to compare Thai chat with Thai asynchronous discussion groups and private forms of Thai CMC such as email to assess the stability of gender patterns across CMC modes.

## CONCLUSIONS

In this study, we investigated turn allocation and participant gender in a Thailanguage chat room, employing methods of analysis adapted from the study of turn taking in face-to-face conversation. We found that turn allocation in the chat room is generally similar to that in face-to-face conversation: Participants preferentially address one another, rather than self-selecting to speak. We also found gender differences, with females making greater use of
the preferred strategy to create coherence and orient to their conversational partners, and males initiating more turns independently, as well as initiating more flirtatious exchanges. At the same time, contrary to previous findings on gender in chat rooms, and contrary to culturally based expectations about the subordinate status of Thai women, we found evidence that females appear to be relatively empowered in the Thai chat room sample studied here, participating more often than males and receiving a higher rate of response from both female and male interlocutors. This finding reflects, on the one hand, the numerical predominance of females in the chat room, which enables them to set and enforce interactional norms according to their own preferred practices. On the other hand, it reflects the value placed on politeness and civility in Thai culture, which creates a context in which women can participate comfortably, free from the crude, aggressive behaviors that often characterize public, English-language CMC.

These results contradict the socialization of Thai females to be submissive and their sexualized reputation in the West. The young Thai women in the \#jaja chat room sample are generally friendly but not overly accommodating to males; they are objects of flirtatious male attention but less so than are females in English-language chat rooms. This suggests that the relatively higher status of Thai women may be more than just a "refreshing cliché" (van Esterik, 1982) today. More generally, the results indicate that gender interacts with culture online in complex ways, underscoring the need for further comparative research.

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## Notes

1. Public chat rooms tend to be heterosexual by default, unless otherwise indicated by a modifier such as "gay," "lesbian," or coded terms such as "twinks" (young gay males) in the chat room's name. The chat room in this study is not named in such a way as to suggest that its participants are homosexual.
2. This example is from the IRC EFNET channel \#punjab. Ssa is an abbreviated form of the Punjabi greeting sat siri akal (literally "God is truth").
3. In research on turn taking in CMC, posters are often referred to as "speakers," by analogy with face-to-face conversation. Lunsford (1996) follows this practice, as we do also in this study.
4. It is possible that the Thai women who read the newsgroup felt uncomfortable posting in English. Thai men posted to the group, however, so this explanation would require us to posit different linguistic competencies (or different degrees of self-confidence about posting in English) for females and males. It is not clear from Suriysarn's discussion whether Thai women posted to the newsgroup on other topics.

5．Some Thai women resist such stereotypes by creating websites to identify the problem and to replace myths with facts（e．g．，http：／／www．siamweb．org／and http：／／www．busakorn．addr． com／thaiwomen．htm，retrieved September 15，2005）．

6．At the same time，Thai men have traditionally been allowed and even expected to visit prostitutes．This has started to change in recent years due to fears associated with the spread of AIDS in Asia（Simpson，1997）．

7．It is also the fifth largest Thai website（K．Hongladarom \＆S．Hongladarom，2005）．
8．Chat rooms named \＃jaja1，\＃jaja2，\＃jaja3，an so forth，are also available，with the same theme of social chat．

9．Some Thai－English code switching occurs in the chat room，which displays log－on and log－off messages in English．（The message＂I just logged on＂in figure 10.2 was automatically generated by the system．）However，the Thai language is overwhelmingly dominant in the \＃jaja chat rooms．For those who wish to practice their English，pantip．com provides a separate English－language chat room．

10．The first three are male Thai names；the last is a chat－specific nickname that means ＂seems smart．＂

11．The first three are female Thai names，the fourth means＂seems beautiful，＂and the last is a foreign name．

12．See note 8 ．
13．Unlike earlier reports of play with identity in English－language chat rooms （see Bechar－Israeli，1995），nicknames are relatively stable identifiers on the pantip site． Attempting to pass as the opposite gender online is not common（compare Bruckman， 1993）．Todla（1999）interviewed participants in \＃jaja chat rooms at pantip．com；some reported having misrepresented their gender online．However，only one instance of this was observed in our 60 －hour corpus．Participants often discuss their gender（and age） explicitly．This evidence，along with nicknames，pronouns，and final particles，allowed us to identify the gender of participants as male or female with a relatively high degree of confidence． ＂Gender－indeterminate＂participants were treated as a separate category for purposes of analysis．

14．Coding categories were developed and refined by both authors；the first author，a native Thai speaker，coded the data．

15．In the spreadsheet for the GLMStat analysis，gender－indeterminate speakers and hearers were coded as＂not－female and not－male．＂

16．This value is computed from the aggregate of the nonsignificant factors in the model．

17．It is partly because these individuals posted so few messages that they were classified as gender indeterminate．

18．Synchronicity alone cannot lead to female empowerment．If this were the case，we should find similar effects in all chat rooms，regardless of the language used and regardless of the relative percentage of male and female participants（compare Herring，2003）．

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