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Constructing sexuality and identity in an online teen chat room

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Abstract

In this article, we propose that adolescents' online interactions are both a literal and a metaphoric screen for representing major adolescent developmental issues, such as sexuality and identity. Because of the public nature of Internet chat rooms, they provide an open window into the expression of adolescent concerns. Our study utilizes this window to explore how issues of sexuality and identity are constructed in a teen chat room. We adapt qualitative discourse methodology to microanalyze a half-hour transcript from a monitored teen chat room, comparing it, where relevant, to a second transcript, used in a prior study [Greenfield, P.M., Subrahmanyam, K., 2003. Online discourse in a teen chat room: New codes and new modes of coherence in a visual medium. Journal of Applied Developmental Psychology 24, 713–738.]. Our microanalysis reveals that participants use the online space of teen chat to air adolescent concerns about sexuality and to develop creative strategies to exchange identity information with their peers. This exchange is critical to the activity of "pairing off", an important teenage expression of emerging sexuality. Developmental issues from adolescents' offline lives are reconstructed online with some important differences. The virtual world of teen chat may offer a safer environment for exploring emerging sexuality than the real world. Through the verbally explicit exchange of identity information, participants are able to "pair off" with partners of their choice, despite the disembodied nature of chat participants. © 2004 Elsevier Inc. All rights reserved.

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1. Introduction

As the Internet has brought social interaction into the electronic domain, connecting electronic media with developmental processes has taken on increasing relevance. In this article, we explore the idea that adolescents' online interactions are both a literal and a metaphoric screen for representing two major adolescent developmental issues: sexuality (Chilman, 1990; Weinstein & Rosen, 1991) and identity (Erikson, 1959; Hill, 1983).

According to the survey conducted by the Pew Internet and American Life Project in Fall 2000, at least 17 million or 73% of all youth between 12 and 17 years use the Internet (Pew Internet and American Life Project, 2001). Although they use the Internet for both instrumental purposes (e.g., for school work and finding educational material) and for social-communication purposes (e.g., communicating with friends, meeting new people, and joining groups), the communication uses of the Internet are much more popular among adolescents (Pastore, 2002; Boneva, B., Quinn, A., Kiesler, S., Cummings, J., Shklovski, I., in press; Subrahmanyam, Greenfield, Kraut, & Gross, 2001; Turow & Joseph, 1999). These uses include applications such as instant messages, e-mail, chat rooms, bulletin boards, and Web logs or Blogs (see Gross, 2004).

Although instant messages are the most popular communication modality among adolescents (Boneva et al., in press), their private nature makes them impossible to study in detail. In contrast, the public nature of Internet communication applications such as chat rooms, blogs, and bulletin boards affords us an open window into adolescent concerns, and so we examine the content of an online teen chat room in this article.

Of particular interest to us is the culture of online environments, such as chat rooms. We use the term culture to refer to that which is socially constructed and shared in interactive environments. Here, we are referring to the symbolic, not the material aspects of culture, including the linguistic codes, interactions, and discourse patterns found within online spaces, which we have discussed elsewhere (Greenfield & Subrahmanyam, 2003). In this article, we are concerned with how these symbolic devices are used to enact important adolescent concerns online, specifically the social construction of sexuality and identity. Our assumptions are that the culture of chat is an evolving one and is being constructed and shaped by the users themselves. Like Steele and Brown (1995), our study adopts a practice perspective, focusing on a particular type of media use that is woven into the fabric of everyday activity. In a chat room, participants are not simply interacting with media; they are also interacting with each other. Consequently, an approach that focuses on media practice rather than media effects is most appropriate (Steele, 1999). Our thesis is that the culture of chat operates in the service of adolescent developmental issues and so teen chat provides a context for addressing the major developmental issues of adolescence. We investigate this thesis through a qualitative study of discourse in a teen chat room.

1.1. Communication in chat rooms

According to the Kaiser Family Foundation survey conducted in Fall 2001, among online youth between 15 and 17 years, 71% were participating in chat rooms. Another estimate from the Pew study (2001) is that about 55% of online teens had visited a chat room. Whereas some chat rooms have a dedicated topic (for example, California teens, teens looking for romance, etc.), others have no dedicated topic (e.g., just hanging out, etc.). Our data come from one of the latter. An important feature of chat rooms is their anonymous nature. Although participants have first to register with a chat provider, most

users probably provide only fictitious details about themselves. As part of the registration process, a user has to choose a screen name or nickname (also called a nick) that is visible when he/she is in a chat room. Users are advised to choose a name that does not reveal personal information (i.e., last name, phone number, etc.). Participants in a chat room are thus typically anonymous and disembodied to each other. Unless users divulge their real identity in the content of their conversation, participants in a chat room generally cannot "place" each other in the real world, either geographically or by name.

Initial research on chat rooms has focused on the unique communicative environment of chat rooms, which sets them apart from more conventional face-to-face situations. Typically, the conversational space has (1) several topics discussed in parallel by partly overlapping groups of people, (2) people contributing to several conversations simultaneously, and (3) relatively short conversations on a given topic (Herring, 1999; Greenfield & Subrahmanyam, 2003). Furthermore, because utterances appear one at a time on the screen, chat looks deceptively sequential (Crystal, 2001; Parrish, 2002; Werry, 1996). In reality, however, a turn may appear many turns after the contribution to which it was responding (Greenfield & Subrahmanyam, 2003; Herring, 1999). In addition, because of the time lag between composition and time of appearance on the screen due to transmission speeds, a later conversational turn may actually be composed before the preceding turn appears on the screen. These sets of features disrupt the conventional turn-taking system and sequential nature inherent to face-to-face conversation (Herring, 1999). Yet users adapt to these conditions in a number of creative ways (Greenfield & Subrahmanyam, 2003; Herring, 1999).

Formally, this written chat room code integrates features of oral discourse, such as shorter, incomplete, grammatically simple, and often incorrect (grammar, spelling, and typographical errors) sentences (Greenfield & Subrahmanyam, 2003; Herring, 1996). Many of these features, such as the absence of case shift, serve to keep the written discourse moving at the pace of oral conversation (Greenfield & Subrahmanyam, 2003). Formal features include conventionalized chat codes such as the request for numerals ("press 14 if ya wanna chat 2 a 14/f/cali" = press 14 if you want to chat to a 14-year-old female from California), standard graphic formats (e.g., "14/m" = 14-year-old male), and slot filler codes ("a/s/l" = age/sex/location as the slots; 14/m/cali are sample fillers) (Greenfield & Subrahmanyam, 2003). In this article, we show how these codes are used in the service of two key issues of adolescent development—sexuality and identity—to which we next turn.

1.2. Sexuality and identity in adolescent development

One major adolescent developmental issue is the construction of sexuality. During adolescence, sexual maturation is accompanied by increased sexual drive and interest in sex (Weinstein & Rosen, 1991). Consequently, adolescents spend "time talking about sex, telling jokes, using sex slang, and exchanging sex-oriented literature" (Rice, 2001, p. 385). These activities are a way for adolescents to understand and control their sexual feelings. In fact, peer communication is the number-one source of information about sex for adolescents, followed by the media (Ward, 2004). Planned Parenthood (2001) suggests that maintaining open communication with peers can serve as a coping mechanism for adolescents when dealing with the need for sexual expression.

One important venue where adolescents can deal with their growing sexuality is the Internet (see Fraiberg, 2004 for a discussion of sexuality on the Internet). As online chat rooms combine peer interaction with a popular medium, they may be especially suitable for adolescent sexual exploration (but see Mitchell, Finkelhor, & Wolak, 2001, for the finding that youth who participate in chat rooms are

also at greater risk for unwanted sexual solicitation). In fact Bremer and Rauch (1998) report that one sexual comment is made every 4 min in AOL teen chat rooms. This frequency should not be too surprising, given that peers and media are such important sources of sexual information for teens (Borzekowski & Ricket, 2001; Ward, 2004). However, little is known about what adolescents tell each other about sex in general (Ward, 2004) and on the Internet in particular. The present study aims to fill this gap.

An increased sexual drive naturally prompts adolescents to initiate and engage in romantic relationships (Teare et al., 1995). That these relationships are a major source of concern to adolescents is illustrated by the finding that more than half of all the calls to a national telephone hotline dealt with relationship issues (Teare et al., 1995). Unfortunately, these new relationships are often accompanied by risky physical behaviors, such as engaging in unprotected sex. These physical dangers may be reduced when adolescents date and build romantic relationships online, even when they are engaging in cyber sex. (We define cyber sex as sexual arousal or masturbatory activity in response to interaction with an online partner.) In addition, Internet dating allows teenagers to maintain their anonymity and may lessen the emotional pain often associated with face-to-face dating (Clark, 1998). It may also allow girls to assume more authority in their interactions since obtaining and maintaining relationships is based on verbal skill, generally accepted as a female strong point (Clark, 1998). In the present study, we explore how sexuality is constructed and co-constructed, through interaction, in a teen chat room.

Another major developmental issue during adolescence is the construction of a psychosocial identity, which may be best viewed as a quest for self-understanding. The changes that occur during adolescence challenge the adolescent to find "his or her unique and consistent self-definition" (Kroger, 1995). According to Erikson (1959), the psychosocial task facing adolescents is to develop sexual, moral, political, and religious identities that are relatively stable and consistent. Research suggests that adolescents make use of the media to learn about two important aspects of identity development—sex and gender (Arnett, 1995; Brown, Childers, & Waszak, 1990; Steele & Brown, 1995; Ward, 1995). For instance, we know from previous work that adolescents use the multimedia environments of their rooms to express who they are (Steele & Brown, 1995) and to learn about sexual and romantic scripts (Brown et al., 1990; Evans, Rutberg, Sather, & Turner, 1991).

An important means for expressing gender, sexual, and other identities is the body (L. Greenfield, 2002; Merriwether, 2004). However, the online medium poses special problems as participants are disembodied from each other and so do not have information about one another's age, gender, race, or physical appearance (height, weight, etc.). Given the absence of "bodies" online and the fact that adolescence is a period when youth are experimenting with their identity, we were interested in examining identity expression in teen chat. We were influenced by the work of Herring (2000), who has shown that participants in computer-mediated communication provide cues regarding their gender by their verbosity, assertiveness, and use of profanity. We therefore examined the cues that participants used to express their identity in teen chat.

Adolescents' peers and the partners they choose play an important role in the development of sexuality and identity (Berndt & Savin-Williams, 1993; Connolly, Furman, & Konarksi, 2000). Indeed, an important feature of adolescence is the adolescent's need for close friends (Pombeni, Kierchler, & Palmonari, 1990) and desire for emotional fulfillment from friends (Larson & Richards, 1991). Young adolescents typically form small groups of friends, usually of the same sex and enjoy spending time and talking to each other. Often, they spend all day together at school and then come home and spend more time talking to each other, on the phone or in recent years, via instant messaging and chat. Subsequently,

adolescence is characterized by heterosociality—which is the forming of "friendships with those of both sexes" (Goff, 1990). Eventually, for heterosexual adolescents, group boy—girl relationships lead to paired relationships between members of the opposite sex. Adolescents commonly turn to these friends and romantic partners for intimacy and companionship (Connolly et al., 2000). Past research has tended to see adolescent romance merely as a context for sexuality (Brown, Feiring, & Furman, 1999). However, chat now enables us to view adolescent romance in the context of adolescent peer culture and peer relationships, whose evanescent quality has made it somewhat inaccessible to research in the past (Brown et al., 1999). Furthermore, given that romantic relationships are a major topic of adolescent conversation (Furman & Shaffer, 2003), online chat can make this conversation potentially visible to researchers for the first time.

An understudied issue concerning adolescent romantic relationships is partner selection (Furman & Wehner, 1994; Furman & Wehner, 1997). As the reader will see, chat provides a peer group context, where naturally occurring partner selection takes place before the eyes of the researcher and can therefore become an object of direct study. At the same time, the adolescent need for intimacy and romantic partners may be difficult to fulfill in a chat room because of the disembodied nature of chat. Under the conditions of an anonymous, purely verbal, large group situation, could pairing off occur, and, if so, what form would it take? These are some of the issues that we explore in the present study.

We address these issues by means of qualitative discourse analysis of a teen chat room. We describe how online chat may be used by participants to deal with the adolescent issues of sexuality and identity. Because these two issues are often expressed in the interactional process of "pairing off", pairing off is also the subject of our investigation. For each issue, we examine how participants in a teen chat room address problems created by the medium and also how they take advantage of the medium's opportunities. It is important to note that, because we know nothing about individual participants, our analysis is at the cultural rather than the individual level. Our analysis is interesting from a cultural perspective because it involves a whole group, not simply a dyad and is interesting from a developmental point of view because it offers a public window onto adolescent peer interaction.

2. Method

Our methodological contribution to the linguistic analysis of computer-mediated discourse has been the analysis of extended conversations and the identification of overlapping conversational threads (Greenfield & Subrahmanyam, 2003). In the tradition of linguistic anthropology (Duranti, 1997), we analyze extended discourse in chat room transcripts. In the tradition of conversational analysis (Sacks, 1992a,b), we conduct microscopic analyses of both the communication process and the conversational content.

We continue this methodology here, extending it to a 30-min conversation in a monitored teen chat room. This transcript, 19 pages long with 815 lines, contrasts with the much shorter length of the transcript in our first published study, which was only 3 and one-quarter pages long with 137 lines (Greenfield & Subrahmanyam, 2003). This greater length precludes our publishing the entire transcript, so we will rely on extracts and examples, using line numbers to denote a turn's position in the transcript.

The new transcript analyzed here was randomly selected from a larger sample of teen chat room discourse, in which we utilized the participant-observer paradigm to observe and record the conversation/s occurring in chat rooms targeting teenagers. The larger sample was acquired over a

two month period between April 14 and June 1, 2003, and is the same sample of 18 sessions in a monitored chat room utilized by Tynes, Reynolds, and Greenfield (2004) in their study of racial and ethnic discourse. The transcribed session took place on May 19, 2003 from 4:17 through 4:47 p.m. Pacific time; it was hosted by a chat room service that required a monthly subscription fee and provided an adult monitor (See Tynes, Reynolds, and Greenfield (2004) in this issue for a study of some of the effects of monitoring.). The chat room was not identified with any topical focus, but simply as a chat room for teens.

Following guidelines of the Institutional Review Board (IRB) at both UCLA and CSLA, the researcher did not initiate any conversation with any of the participants nor did she respond to any private messages sent to her. In this sense, we were more observers than participants. At the end of 30 min, she simply copied the log of the conversation and pasted it into a word document. Once the word document was created, we made two changes. First, as required by the IRB, we changed the nicknames, usually by deleting the last few characters (letters and numbers). Then, we added line numbers.

Our focus is on understanding processes, rather than on how often a particular type of event occurs. However, replicability is also important. As a consequence, where relevant, we qualitatively compare our findings concerning sexuality, identity, and "pairing off" in the randomly selected transcript from 2003, described earlier, with a transcript from 2000. To make this comparison, we draw on a transcript that was utilized and published in a linguistically oriented study of teen chat (Greenfield & Subrahmanyam, 2003). In the present article, we analyze the same transcript from the point of view of adolescent issues rather than linguistic ones. By comparing the two transcripts, we will be able to show that the adolescent issues of identity and sexuality have constancy in this teen chat room across a span of about 3 years. However, in order to preserve the coherence of the conversational threads, all of our discourse examples will come from the 2003 session.

In addition to discourse analysis in the tradition of linguistic anthropology, we also utilized a technique from psychology: coding, with inter-rater reliability. We coded participants' nicknames, in order to assess the extent to which nicknames used in the chat room communicated gender identities. To explore this issue, we first created a list of all the screen names in the transcript. Then, we identified screen names that were either feminine or masculine in connotation. We defined feminine screen names as those that included any one or combination of the following features: (1) commonly accepted female names (e.g., Nicole, Rose); (2) terms commonly used to refer to females, such as chick, babe, and girl; and (3) names that had a sexualized and seductive quality (e.g., Hotgurl, Sugarlove, etc.). We defined masculine names as those that had any one or combination of the following features: (1) commonly accepted male names (e.g., Derek, Matt, etc.); (2) terms commonly used to refer to males, such as boy, man, and guy; and (3) names that had a macho quality (e.g., Jock). Even in the shorter transcript from 2000, we had found many examples of masculine and feminine names that fit these criteria.

A total of 52 names were extracted from the transcript. The first author and a research assistant independently coded them as either masculine, feminine, or ambiguous. They disagreed on a total of six names out of 52; in other words, they had good reliability, achieving 88% agreement; the corresponding kappa was 0.82, considered to be in the excellent range (Bakeman & Gottman, 1986). The nicknames for which there was no agreement were not included in the rest of the analysis. Of the 46 names that the two coders agreed on, 10 were coded as masculine, 16 as feminine, and the remaining were ambiguous. Hence, a majority—but far from all participants—are expressing an unambiguous gender identity with their nicknames.

Next, in order to obtain corroborative evidence for our analysis, we searched the transcript for declarations of identity. In previous work (Greenfield & Subrahmanyam, 2003), we have described that users use a variety of devices such as a slot filler framework in the format of age/sex/location to both ask for and provide information about identity (e.g., line 814. Babygiurl: "15/f/sc here"). Such declarations of identity can provide evidence for our claim that participants in chat rooms use nick names to convey their gender identification to others in the room. Note that in this example, the nickname would have been coded as feminine, and, indeed, Babiguirl declares herself to be a girl.

3. Results

3.1. Conversational threads

The first step of our analysis was to diagram the different, but parallel conversations or conversational threads that were occurring in the chat room (for a discussion of the term conversational threads, see Greenfield & Subrahmanyam, 2003). Because the turn-taking sequence typical of face-to-face conversations does not occur in online chat conversations, related utterances are usually not adjacent to each other. Consequently, our analysis is based on a 23-year-old experienced chatter's charting of the conversational threads supplemented by our own examination of the transcript. We found three conversational threads in the transcript. The first thread appeared to be underway when we started recording the conversation and dealt with high school sports—mostly football—and sports injuries. Although this was a much more sports-focused thread than the earlier transcript that we analyzed, reference to participating in a sport—swimming—was made in passing in the transcript from 2000 (Greenfield & Subrahmanyam, 2003).

A second thread about abortion, rape, and premarital sex began when Twonky asked for suggestions for a persuasive essay (line #333). When Twonky mentions abortion as a possible topic for a persuasive essay (line 356. Twonky: I was thinking abortion, is that too general?), the conversation became heated (line 363. OOo0CaFfEiNe: Abortion? well i hope ur against it...itz murder). In the ensuing conversation, a wide range of topics of concern to adolescents are brought up—birth control devices such as condoms, rape, getting drugs from a health department to prevent a pregnancy after rape, unprotected sex and AIDS, and even adoption. Again, while these particular aspects of sexuality had not been discussed in the 2000 transcript, there was continuity with that chat session, in which sexuality was explicit or implicit in much of the conversation.

When Snaikeyes begins a very personal narrative to argue against having unwanted children, it leads to the third thread about parents, difficulties with parents, and foster homes. In this thread, Snaikeyes' description of his troubles with his parents elicited a lot of supportive comments and commiseration from other participants in the room, including the monitor, identified here as HOST:

608. Snaikeyes: my mom doesnt like me at all, and i say its her fault for having children and not being a good parent

609. Twonky2: I'm sure she likes you

610. Twonky2: you're her kid

613. Snowbunny: snaik eyes htat is rude!

615. Snaikeyes: no she doesn't

- 620. Snaikeyes: she kicked me out of my house at midnight
- 622. Snaikeyes: same with my dad
- 627. Snaikeyes: and neither of them wanted me
- 633. Immaculate ros: snaikeyes your mother probably lovess you to death
- 634. Snaikeyes: late cafine
- 635. Snaikeyes: lol
- 636. Snowbunny: snaikeyes i feel so bad now:-[
- 640. HOST: Snaikeyes, but they had you instead of aborting
- 651. Julinato: my mom says i'll be sorry one day if i'm mean to her
- 652. Snowbunny: snaikeyes how old r u?
- 653. Snaikeyes: she called me an a-hole, jerk, and many words i cant say in the chat, sprayed me in the face with windex, and i have 2 reports with child protective services with her
- 655. Snaikeyes: im 13

In particular, Snowbunny's utterances in lines 613 and 636 are interesting—in line 613 Snowbunny admonishes Snaikeyes for talking disrespectfully about his parents. But after hearing about his difficulties with his parents, she empathizes with him in line 636. Later in the conversation, she explicitly offers him emotional support and says (line 727) "sniak eyes if u ever want someone to support you mentaly i'm here:-) tri again please cherry". The offering of peer social support replicates a phenomenon found in our first transcript, as well as something that occurs online both in teen health/sexuality bulletin boards (Suzuki & Calzo, 2004) and in the personal web pages of teen cancer patients (Suzuki & Greenfield, 2003).

3.2. Sexuality

The quantitative study of sexual comments in teen chat (Bremer & Rauch, 1998) had indicated that sexuality was important in chat, and the presence of a "sex thread" replicates that finding here. Looking at this thread in more detail, we find a broad range of sexual topics that were the subject of peer discussion. Although the conversation began with the topic of abortion, it quickly digressed to related topics such as pre-marital sex and birth control devices such as condoms. The adolescent preoccupation with sex is evident in the following extract from the conversation:

- 548. Immaculate ros: sex sex sex that all you think about?
- 559. Snowbunny: people who have sex at 16 r sick :-(
- 560: Twonky: I agree
- 564. 00o0CaFfEiNe: no sex until ur happily married...thatz muh rule
- 566. Twonky: I agree with that too
- 567. Snowbunny: me too caffine!

In our 2000 transcript, we found a similar concern with sex, but, in that instance, with the sexually developing body (Greenfield & Subrahmanyam, 2003, 2004); there participants discussed the merits and demerits of Speedo swimsuits as they show off sexual anatomy, especially of boys. In both examples, the special contribution of the online medium is that its anonymous nature allows participants to have a frank discussion of a potentially embarrassing topic. Note too that participants can get information by

"lurking" or just hanging out in the chat room (see also Suzuki and Calzo (2004) for evidence that observation or "lurking" occurs most frequently for difficult sexual topics).

3.3. Identity

3.3.1. Nicknames as a vehicle for identity expression

One very fundamental way in which participants express their identities in chat rooms is via their screen names, called nicknames or nicks. In a chat room, there is no physical embodiment of gender or other physical markers of identity. It is through screen names that participants present those aspects of their identity that they wish to reveal, such as their gender and race/ethnicity (see Tynes, Reynolds, and Greenfield, 2004). Nicknames then become the initial and primary vehicle through which teen participants present their identity to others in the chat room—a kind of substitute for the face and body.

Many of the screen names in teen chat rooms utilize strong gender stereotypes or what Francis Steen has called "hyper gender signals" (personal communication May 9, 2002). Table 1 shows a list of both masculine and feminine nicknames as identified by us, and for which we were able to find declarations of identity in the transcript. Names such as Babygiurl, basketballgurl, and Hotgrl56Hot have a clear feminine, or even in the case of the last, sexual, connotation. Names such as ArmorCrewman20, DEREK01, Jason26, and TJHockeyGUY66 have a clear masculine connotation, by association with a masculine name or masculine terms. SuthurnGirl4sure as a screen name portrays a feminine persona. Some names, such as Hotgrl56Hot, function as a sexual come-on. The names seem almost to be a substitute for the use of the body (Greenfield, 2002) as a signal to proclaim identity, fit in with the peer group, and attract potential sexual partners. These playful names seem to compensate for the absence of physical identity in dealing with important adolescent concerns.

Not all nicknames provide gendered information; some seem more like statements—something that the user wishes to convey about himself or herself or something that he or she is or wants to be (CrazyDrum, Flwthatsmoi, InsulentBrat1004). Others are hard to interpret from a researcher's perspective (e.g., Breethebrat, CHSBones). Nicknames thus appear to be one way by which participants exchange information about themselves such as their gender, their sexual identity, and their special interests (e.g., sports or music).

Table 1 Nicknames with masculine and feminine connotation for which gender identity was confirmed

Type of nickname	
Masculine	Feminine
Jason26	Babygiurl
Jeff443	KsugerI
Nickman20	cherrycolabebe
ShreddingChris	CRaZy DaZy
TJHockeyGUY44	GabbyGirl
	Hotgrl56Hot
	Basketballgurl
	Immaculate ros
	PrincessDabrat1980
	Snowbunny
	SuthurnGirl4sure

3.3.2. The a/s/l code as a vehicle for identity expression

Capitalizing on the alphanumeric nature of the chat environment, participants utilize another cultural solution to give and get fundamental identity-related information about potential conversation partners. The solution is the ubiquitous a/s/l (age/sex/location) chat code, which we have previously described from a linguistic point of view as a slot-filler code in a standard graphic format (Greenfield & Subrahmanyam, 2003). According to the Pew Internet report (2001), titled "Teenage Life Online", online teens report that the a/s/l code is the most common question directed toward new entrants in a chat room (p. 23).

The a/s/l code is particularly interesting to us because we know from a classic article by Brewer and Lui (1989) that age and sex are the primary categories to which people are assigned. Clearly, both these pieces of information are immediately evident in face-to-face encounters. Within the ambiguous nature of the chat environment, however, they are not evident and have to be made explicit. Location, a third category of information, is so fundamental that it is taken for granted in face-to-face interactions; it most definitely cannot be taken for granted on the Internet and must be made explicit. Here, we describe two ways that the a/s/l code is used in a teen chatroom. One primary use of the a/s/l code is as a conversation opener—users frequently type a/s/l to find out the characteristics of others in the room. Sometimes the intended recipient is specified as in line 148 (OOo0); here, we see a response in line 151.

148. Respct: OOo0 a/s/1???

151. OOo0CaFfEiNe: 15~F~CALI

On other occasions, the recipient/s may only be broadly specified as in line 8.

8. Shortbaby121: a/s/l all guyz

Finally, it may be a generic request not directed to any user in particular (line #34); in this instance, basketballgurl clarifies in the next line (35) that she is looking for a male to chat with.

34. basketballgurl: a/s/l

35. basketballgurl: any guys??

An interesting variant of the a/s/l code as a conversation opener is the a/s/l check (line 51), which seems to be an attempt to get other participants in the room to reveal their age, gender, location, and other identity-related information that are relevant to choosing a conversation partner. Paralleling our first transcript (Greenfield & Subrahmanyam, 2003), here is an example from our 2003 session:

51. DEREKH01: a/s/l check!!! 56. Shortbaby121: '13/f/ohio here

Shortbaby121 provides the first response to DEREKH01. In addition to its relevance, another clue that it is in fact a response to DEREKH01 is that Shortbaby and DEREK were already engaged in conversation at the time of DEREK's a/s/l check. Interestingly, Shortbaby121 had previously put out an a/s/l check (line 8) directed to males that did not receive any response in the public space. DEREKH01

responds to Shortbaby's utterance in line 56 with "child" in line 69, leading Respet to use the a/s/l format to reveal himself as older:

71. Respct: 15/m/cali pic IM me to chat....

Respct later repeats Derek's complaint:

116. Respct: everyones so young hear

117. Respct: here*

120. Respct: no ones over like 13

This leads to further discussion of age, sometimes in the a/s/l format.

122. SenorTaco: im 15!!

123. OOo0CaFfEiNe: IM OVA 13!!!!

125. Widdget: 18/m/tx 167. Kdubon40: 14/m/cali

In this conversation, presentation of identity highlights age rather than gender. However, the ubiquitous a/s/l form asks for and provides information about three dimensions—age, sex, and location. We found the same phenomena and importance of a/s/l in our 2000 chat session (as did the Pew Internet and American Life Project, 2001). In the next section, we will see how a/s/l is used in the service of "pairing off".

3.4. Pairing off

Our analysis suggests that one way by which participants identified a potential partner with whom to "pair off" was by combining disclosure of basic identity characteristics, with a request for numerals (for a linguistic description of this strategy, see Greenfield & Subrahmanyam, 2003). Before going further, it may be useful to describe the "cyber pickup". It occurs when one person makes a sexualized advance to another with the goal of going off into a private, dyadic Instant Message space.

In line #276 below, TVHMJ provides basic identity information about herself and asks interested partners to identify themselves by pressing 12345. By identifying herself with the adjectives "hot" and "sexy", the speaker conveys that she is looking for sexual intimacy in a conversational partner. However, note that she does not specify which gender she wants her conversational partner to be. Here, TVHMJ does not receive a public response immediately and this may be why she repeats her utterance two more times (line #296 and 326). The lack of response (12345) in the transcript suggests a lack of interest in her particular identity. She had revealed herself to be 13 years old and might have been considered too young by the other participants—we have already seen that complaints about participants being too young were rife in this chat room.

276. TVHMJ: who wants to chat with a hot and sexy 13/f/ct press 12345 296. TVHMJ: who wants to chat with a hot and sexy 13/f/ct press 12345 326. TVHMJ: who wants to chat with a hot and sexy 13/f/ct press 12345

Our transcript from 2000 had indicated that a prerequisite for a successful cyber pickup might be divulging one's own information about age, sex, and location. However, this strategy does not work for TVHMJ, probably because the information was not attractive to the other chatters.

An example of successful partner selection is illustrated below. The beginning of the example shows FoxyR making numerous attempts to find a partner. Finally, in lines 262 and 264, she explicitly declares her identity as a "hot chick" and invites those who want to chat with her to "press 1234". At this DEREKH01 responds with "1234" in line 266. Although we cannot be sure, it appears that she asks interested parties to Instant Message her (line 268). FoxyR is not heard from again until line 304. This may be because she was having an instant message conversation with DEREKH01; however, because of the private nature of Instant messaging, we have no way of confirming this from the chat transcript.

210. FoxyR: wasssssssup yallllllllllll

212. FoxyR: anybody here like 50 cent press 1234

214. FoxyR: 1234

221. FoxyR: wasssssssssup 222. FoxyR: wanna chat

262. FoxyR: any body wanna chat with a hot chick

263. Kdubon40: being the biggest jv player i dont get hit by bigger guys

264. FoxyR: press 1234

265. Breethebrat: if there r any m/13/Tx in here if so im me

266. DEREKH01: 1234 268. FoxyR: i amame

304. FoxyR: any body wa nna chat

It is interesting that these examples as well as the ones below were initiated by girls.

516. InsulentBrat1004: any single guys in here if so im me or press 252

582. Lilangal: hey any rally hott guys wanna chat to a really hott girl im me or press 23456

They point to the possibility that online chat is liberating for adolescent girls when it comes to initiating intimate relationships. With regard to offline face-to-face situations, Lakoff (1975) has noted that cross-gender talk is biased in favor of men, as dominant male status is often reproduced in everyday conversation. Since the advent of computer-mediated communication, researchers have suggested that the relative anonymity and absence of bodies on the Internet may liberate women from an often subordinate position (Rodino, 1997). Notwithstanding our finding that participants use implicit ways to give and get information about gender, these examples suggest that adolescent girls may be able to initiate online relationships with the opposite sex without much of the weight of traditional gender roles and without the possible stigmatization for being too forward.

4. Conclusion

In this article, we have shown how the online medium provides adolescents with a venue wherein they can and do deal with the same developmental issues as in their offline lives. In the case of sexuality,

it provides a place to discuss embarrassing topics in an anonymous social context. It also provides a relatively safe place to "practice" new kinds of relationships, such as dating, that can be risky in the real world (Bouchey & Furman, 2003). Relative to offline dating, benefits are reduced; but so are the risks that come with face-to-face interaction. For example, rejection in an online setting with strangers probably stings less than one from a known other. On the other hand, the online chat environment has its own special dangers—such as unwanted cybersexual solicitation (Mitchell et al., 2001; Greenfield, 2004).

We also see that the categories of identity are just as salient online as off and that teens go to great lengths to overcome the "facelessness" and "placelessness" of the medium to present themselves and learn about the critical categories of identity of others. We found a high concordance between stated gender identity and the more implicit message conveyed by the nicknames. At the same time, a minority of participants used nicknames to express some other part of their identity rather than gender or sexuality. All in all, placement in the categories of age, sex, and location, plus expressions of gender identity in nicknames, provide a means for intimate pairing off with a peer. Consequently, the medium is not doing something to adolescents; they, instead, are doing something with the medium. Teen chat provides new affordances for old adolescent issues.

Methodologically, we have shown that teen chat provides a new and rich data source to study standard adolescent developmental issues that are hard to study. In particular, researchers have noted the evanescent quality of peer culture in adolescence and noted how this evanescence makes it difficult to research (Brown et al., 1990). The records of a teen chat room are perfect for studying many evanescent phenomena of peer culture. For instance, the peer group provides adolescents an opportunity to develop basic skills for interacting with opposite sex peers (Dunphy, 1963, cited in Furman and Wehner 1994; 1997). Our analysis of transcripts from teen chat provides insight into these learning processes.

In the highly mobile society of today, media provide common ground for all adolescents and are an important socialization agent for adolescents (Arnett, 1995). According to Arnett, adolescents have considerable freedom and choice about the materials that they draw from the media—the materials that then contribute to their socialization. Thus, "when they use media materials towards identity formation or coping, when they participate in a media-based youth subculture, adolescents are also, in a larger sense, participating in activities that are part of their socialization" (Arnett, 1995, p. 7). Importantly, as pointed out by Arnett, media as a socialization agent, are more similar to peers than other agents such as family, school, or community. Since adolescents choose both their media and their peer group, they have more control over their socialization from these agents compared to their socialization from agents over which they have less control, such as their family or school. Chat, with its amalgam of media and peers, enables researchers to look at this socialization process up close and personal.

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