Multi-modality in girls’ game disputes

Marjorie Harness Goodwin\textsuperscript{a,}\textsuperscript{*}, Charles Goodwin\textsuperscript{b},
Malcah Yaeger-Dror\textsuperscript{c}

\textsuperscript{a}Anthropology, 341 Haines Hall, Box 951553, UCLA, Los Angeles 90095-1551, CA, USA
\textsuperscript{b}Department of Applied Linguistics, UCLA, Los Angeles, CA 90025-1531, USA
\textsuperscript{c}Cognitive Sciences, University of Arizona, Tucson, A285721, USA

Abstract

This paper examines embodied procedures for producing disagreement turns in the midst of the children’s game of hopscotch. Turn shape, intonation, and body positioning are all critical to the construction of stance towards a player’s move in the game. In particular, in formulating a player’s move as “out” foul calls can state unambiguously, without doubt or delay that a violation has occurred. Turn initial tokens in disagreement turns include cries of “OUT!”, negatives (“No!”), or response cries (nonlexicalized, discrete interjections such as “Ay!” or “Eh!”). Players make use of pitch leaps, vowel lengthening, and dramatic contours (for example, LHL contours) to vocally highlight opposition in the turn preface. Whereas the normal pitch range of a speaker’s talk in ordinary conversation can be between 250 and 350 Hz, in opposition moves the pitch may be considerably higher, around 600 Hz. Affective stance is also displayed through gestures such as extended points towards the person who has committed the foul or the space where the foul occurred. Explanations or demonstrations (frequently embodied re-enactments of the player’s past move) constitute additional critical components of disagreement moves as they provide the grounds for the opposition. Disagreement moves and trajectories within children’s games provide demonstrations of the practices through which girls build and display themselves as agents in the constitution of their social order. Data for this study consists of videotaped interaction of working class fifth grade girls on the playground: second generation Mexican and Central Americans in Los Angeles, and African American Southern migrant children. Ethnic differences in the display

\* Corresponding author.
\textit{E-mail address:} mgoodwin@anthro.ucla.edu (M.H. Goodwin).
of opposition are observable within the groups studied. © 2002 Elsevier Science B.V. All rights reserved.

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1. Introduction

Within human interaction, displaying deference to others is an important feature of the organization of human behavior (Goffman, 1967: 47–95). This is accomplished in part through watchful concern that potential discord not emerge as an explicit event in encounters. Much of the research on the pragmatics of politeness has examined how disagreements between participants might be stated while preserving the face of each other. The work of Brown and Levinson (1978; 74), for example, examined how speakers avoid acting “baldly without redress”. Work on preferences of conversational interaction in polite adult middle class conversation by conversation analysts argues that disagreement is a dispreferred activity (Pomerantz, 1984: 64; Sacks, 1987[1973]). Pomerantz found that, with respect to a preferred-action turn shape, disagreement was minimized through use of phenomena such as delays before the production of disagreement and prefaces that mitigated the disagreement.

Work by sociolinguists and linguistic anthropologists, however, among a number of different ethnic groups including lower middle class Eastern European Jews in Philadelphia (Schiffrin, 1984), New York Jews (Tannen, 1981, 1984), Greeks (Kakavá, 1993, 2002; Tannen and Kakavá, 1992), Japanese (Jones, 1990; Mori, 1999), Israelis (Blum-Kulka et al., 2002; Katriel, 1986), and African Americans (Goodwin, 1990; Kochman, 1981; Morgan, 1999) has found that disagreement is not necessarily dispreferred. Indeed Schiffrin (1984) and Tannen and Kakavá (1992) find disagreement a “form of sociability”—that is, a cooperative as well as competitive way of speaking. Kakavá (2002) finds that argument is “an interactional practice in which participants engage to match their wits, compete for ideas, yet not necessarily resolve their differences”. Morgan (1999: 37) argues that “as African American girls grow into women, their everyday conversations often involve the expression and defense of social face”.

Until the 1980’s, as Grimshaw (1990: 2) notes, there was “surprisingly little research on the special features of ‘conflict talk’”. Brenneis and Lein (1977: 61–62) were among the first to discuss features of argument among children, defining it as an arrangement of content and or stylistic categories according to one of three different patterns: (1) repetition, (2) inversion, or (3) escalation. While Boggs (1978) used the term “contradicting routine” to describe the patterning of arguing among part-Hawaiian children, Eisenberg and Garvey, studying children in lab settings, looked at “adversative episodes” (1981: 150) among dyads. The dyads of children Eisenberg and Garvey studied ended arguments with resolutions, in part because this was part of the task in the experimental setting; however, children observed in multiparty participant frameworks (Adger, 1984; Corsaro and Rizzo, 1990; Eder, 1995; Genishi and di Paolo, 1982; Goodwin, 1982; Maynard, 1985; Sheldon, 1992) display an orientation towards sustaining and promoting rather than dissipating...
dispute. Corsaro and Rizzo (1990) find that the start of a fight among US middle and upper middle class nursery school boys may serve to initiate friendship relationships rather than to thwart them. Indeed psychologists (Hartup and Larsen, 1993) have argued that conflict is constitutive of children’s dealings with one another.

Gender differences in children’s dispute strategies have recently been explored. Sheldon (1992, 1996) found that middle class preschool girls use a highly assertive feminine conflict style which overlays mitigation, effectively softening the force of dispute utterances. By way of contrast, boys make use of refusals and actively attempt to escalate conflict. Challenging the notion that boys and girls inhabit different social worlds (Maltz and Borker, 1982), M. Goodwin found that both male and female working class African American children (Goodwin, 1990) as well as middle class children in ethnically mixed groups (Goodwin, 2001) actively seek out opportunities to display opposition. Kyratzis and Guo (2001) investigating the linguistic strategies by which middle class girls and boys from the US and Mainland China manage conflict found that Chinese girls and American boys used the most direct strategies.

In recent years, there has been increasing concern with documenting the expression of emotion in language (Besnier, 1990; Caffi and Janney, 1994; Günthner, 1996; Irvine, 1990; Ochs and Schieffelin, 1989). In this paper, we examine the multiple semiotic fields (Goodwin, 2000), including intonation, body position, and talk, through which opposition moves in the midst of a particular form of activity—children’s games—are built. With respect to work on intonation in disagreement, the work of Yaeger-Dror (1985, 2002) argues that because of the potential face-threatening nature of disagreement, it is uncommon for pitch prominence to occur on negatives in everyday contexts. Noting the importance of register, however, Yaeger-Dror (1985, 1996, 1997; Yaeger-Dror et al., in press) argues that within story reading tapes for children and political debates, pitch prominence on negative statements is common. Like debates, games constitute arenas where opposition is expected. Children’s games provide opportunities to test and realign the current arrangement of social identities among one’s peers (Goodwin, 1985, 1990, 1998). When the actions of another are construed as a violation, the offended party can and may feel obliged to take action to remedy such an affront. Opposition moves provide the opportunity to register one’s affective alignment toward the other, and in so doing to create portraiture of moral stance through exchanges Goffman (1967: 237–258) has analyzed as “character contests”: “moments of action during which the individual has the risk and opportunity of displaying to himself and sometimes to others his style of conduct”. Because in next moves to prior speech and action, participants display what they make of a prior move, analysts have available a way of documenting how coparticipants themselves are construing the pragmatic import of prior turns.

2. The current study

The larger data base for this study consists of a corpus of over twenty hours of videotaped interaction during children’s play, which includes hopscotch, jump rope,
Chinese jump rope, and four square. The groups reported on in this paper include (a) second through fifth grade working class bilingual Spanish/English speakers (second generation Central Americans and Mexicans) in the downtown Pico Union neighborhood of Los Angeles, filmed in 1993 in an after-school program; (b) fifth grade working class African American children (speakers of African American Vernacular English or AAVE) in a summer school program for migrant children in rural South Carolina filmed in 1994. Five girls were involved in each study, though one of the African American girls produced no opposition moves. The data for this paper is based primarily on analysis of the interaction of the Latina and African American groups playing hopscotch. The children and teachers at the Los Angeles school were well acquainted with ethnographic research involving videotaping; in 1993 one of the teachers at the school, who was a student at UCLA, conducted her own study recording negotiation and arbitration between the children and aides on the playground.

Children were informed that the researchers were interested in learning about the naturally occurring play activities of children and needed to obtain excellent sound as well as video recordings for the project. Permission to videotape was obtained from both parents and children prior to beginning the studies and the project was explained in language the children could understand. In order to obtain excellent sound, two researchers worked together; one videotaped and the other recorded the sound, using a highly directional Sennheiser 100 shot gun microphone mounted on a pole pointed directly above the heads of girls at play. Researchers did not interact with the participants while they were being filmed.

2.1. Children’s play disputes

In earlier work, analyzing sequences of aggravated correction among African American working class children, Goodwin (1983) found that the turn shapes and intonational contours of repair-like moves did not display an orientation towards a preference for agreement, as had been found in adult talk (Schegloff et al., 1977). That is, rather than delaying the production of disagreement or prefacing a disagreement move with a mitigating expression, children display an orientation towards signaling opposition immediately. In a game such as hopscotch, turns may either downplay opposition or highlight it (Goodwin, 1998) through intonation, gesture, or positioning of turn elements. In that fouls can be ignored or pardoned, turns that display a clear orientation towards promoting or sustaining opposition demonstrate that displaying rather than avoiding conflict is important in the play of girls.

2.2. Prosodic focus

Bolinger (1983) has hypothesized that there is a relationship between higher vocal pitch and displays of increased excitement. Selting (1994) has argued that in “emphatic speech style”, linguistic devices (prosodic, syntactic, and lexical cues) are used to signal heightened emotive involvement of their interlocutors. Prosodic prominence, as indicated by duration (the acoustic correlate of length) and height in fundamental frequency (the acoustic correlate of perceived pitch) are two prosodic
cues used in emphatic speech style (Selting, 1996: 237). It was expected from previous fieldwork experience with working class African American children (Goodwin, 1990) and Latina children (Goodwin, 1998) that pitch prominence, as indicated through vowel length and fundamental frequency, would occur on forms of adversarial talk, such as turn prefaces to opposition moves.

2.3. Data analysis

Transcripts of the entirety of each play session were made using the Jefferson (Sacks et al., 1974) system of transcription developed for conversation analysis. Pitchtracks of each adversarial sequence (as well as samples of girls’ nonconfrontational speech) were made using PitchWorks—a program developed by SCICON Research and Development (www.sciconrd.com), which produces pitch and intensity calculations automatically upon opening or recording a new sound file on the computer. The PitchWorks program has been tested with low fundamental ranges and with ranges higher than 800 Hz for children. Although we are actually doing analysis directly from acoustic measures, we will refer to fundamental frequency as pitch.

2.4. Plan for this paper

We begin this paper by looking at extended sequences of opposition among African American and bilingual Spanish/English speakers. An orientation towards highlighting rather than mitigating opposition is clearly evident in each of the examples, and manifests itself as pitch prominence on key words as one of its characteristics. We lay out the range of multiple semiotic fields entailed in the expression of children’s adversarial talk during spontaneous play. These include oppositional markers, expressed through a range of different intonation contours, accounts, address terms, demonstrations, and body positions. Next, after laying out alternative formats for constructing disagreement (negation and substitution), we analyze prosodic signaling of heightened emotive involvement (Selting, 1994), as expressed through duration and the prominent fundamental frequency of key words in three turn-initial opposition moves which oppose the move of a player: (1) response cries (Ah, Ay, and Eh, and Hey among Latinas; Oh, Uh, and Oo, among African Americans); (2) “No” oppositions; and (3) “Out!” cries, comparing Latina and African American girls.

3. Sustained opposition in an extended hopscotch dispute

In hopscotch, a player systematically moves through a grid of squares drawn in chalk or painted on the sidewalk, street, or other flat surface. The marks on the grid construct a visible field for action, which orients players to the sequence of moves through space that must be traversed. The object of the game is to be the first player to advance her token, a stone or beanbag, from the lowest to the highest square and back again. Players must toss a token into a square without hitting a line and without stepping on lines or in squares occupied by tokens. Jumping from one end of the
grid and back should be done on one foot, except for places on the grid where two squares are located next to each other, without changing feet. African American players had to “ask permission” to step in squares occupied with tokens and say “Butterscotch” before putting two hands down to walk forward to reach for their own token in a far square. Young newcomers to the game, however, were given certain kinds of leeway on how they advanced through the grid. The games of hopscotch observed with the Latina and African American girls were overlaid with multiple framings. African American girls would make sounds of barking dogs or clucking chickens to unnerve a player. Latina girls screeched “Un ratón!” (A rat) and made scary noises as players were moving through the grid. For her part, a player would at times attempt various moves to trick the onlookers and to advance her token through the grid quickly. Much of the game was colored with laughter.

The following is a dispute among African American children of Southern migrant laborers, which occurs in the midst of hopscotch when a player inappropriately steps on the hopscotch grid, jumping twice in a single square. After she is called out, she defiantly disputes the ruling against her with her utterance “I AIN’T HIT NO LINE!” (line 8):

In this game of hopscotch there is a clear violation and referees state unequivocally “You out” (line 2), followed by an explanation (“You hit the line”) (lines 4,
As in oppositional sequences in the talk of African-American working class girls in Philadelphia (Goodwin, 1990), polarity markers such as “No” (line 3, 11) and “Yes” (lines 5, 9, 12) preface opposition moves. Here the multiple participants present can ratify the judges’ point of view and judges counter the player’s position about her move. Explanations or demonstrations of positions are presented by girls re-enacting the moves of players committing fouls. For example, replaying a player’s stepping on a line, Krystel states “You did like this” (line 16), as she re-enacts Lovely’s prior move. Judges’ positions are also highlighted by stomping feet on the place where the line was touched (line 19). The grid is used as an area which can be tapped (line 19), pointed to (line 6), and jumped upon (line 16) to further explicate the proofs judges are offering. Girls formulate their logical proofs by making use of a number of components in an integrated manner—the material game grid, their own bodies, and accounts. In the midst of this sequence, the player also produces a personal insult with a challenge gesture towards one of the referees (line 17): “Shut up with your old fashioned clothes”. Despite rather direct oppositional moves, girls do not, as argued by Lever in her observational studies of middle class White girls’ game behavior (Lever, 1976, 1978), break up the game because they cannot tolerate conflict.

The pitch on Lovely’s negative, “AIN’T” reaches a dramatic 753 Hz. Her denial ends in a low rise over the word “line”. It goes from 450 to 552 Hz and lasts 960 ms, so that even the low end of the utterance is well above her normal pitch range. The low rise is considered by some researchers a distinctively African American final contour (Foreman, personal communication April, 1999; Kortenhoven, personal communication May, 2000; Tarone, 1973). In addition, her expression of righteous indignation at having been called out is accompanied by a strong body stance—a challenge position in which the player extends her chest towards one of the judges (line 8).

(2) AAVE opposition turn
Comparing the spontaneous speech of a white and an African American adolescent peer group and formal speech of an African American speaker, Tarone (1973: 32) found that, for adolescent AAVE speakers, the overall pitch range in her data was wider and higher pitches were more frequent. In the first in-depth quantitative and qualitative analysis of African American English, Jun and Foreman (1996) found that African American English speakers use a wider pitch range and higher pitch than Mainstream American English speakers, particularly at phrase boundaries (see also Foreman, 2000: 58).

4. Sustaining opposition in an extended hopscotch dispute among Spanish/English bilingual speakers

One place where disagreement frequently occurs is when players deliberately probe the rules to see what they can get away with. Girls in the position of judge respond to infractions of players with face-threatening acts formulated with negatives. This occurs in the following example of a game of hopscotch among second through fifth grade Latinas, in which one player violates one of the rules about how to move one’s feet before propelling her beanbag to the squares at the far end of the grid. According to the rules of ABC, a player may take three baby steps on the side of the hopscotch grid before throwing her beanbag into a square above the number 6. In the following, as Paula is learning how to do ABC, she looks towards the other players and starts laughing. Paula persistently takes steps that are slightly larger than those permitted, playfully probing what she can get away with. The referees counter her tests with polarity markers: “NO::” (lines 2, 4), response cries: “AY::” (lines 3, 11), opposition turns containing negative person descriptors: “NO Chiriona!” (line 4), and “Cheater!” (line 7), and accounts (line 12–17) and demonstrations of appropriate moves (line 11). The term “chiriona”, meaning “cheater”, is derived from the English word “cheat” and “ona”—a Spanish agentive nominalizer (or intensifier):

\[
\text{cheat} + \text{ona}
\]

English Verb + Spanish agentive nominalizer (intensifier).

\[(\text{Paula, a newcomer, has just been instructed in how to take baby steps in ABC, putting her heel to the tow of her shoe. She is now trying to take larger steps than permitted})\]

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1 Norma Mendoza-Denton (personal communication, 1995) points out that this example shows how the bilingual phonology of the children operates, taking the English word *cheater* and code switching in the middle of it at a morphological boundary by changing the /t/ of *cheat* to /r/. Although the vowel quality is primarily Spanish, the word has an English phonological process operating within it, with the intervocalic flapping of /t/.
Here, immediately after Paula takes larger steps than are permitted and keys her talk with laughter (line 1), Rosa and Risa mark that a violation has occurred with oppositional moves: a polarity marker “NO::” and response cry “AY:::”. These words are produced with dynamic pitch contours, which are shown in the Pitchtrack in example (15). The turns which oppose the player’s movement contain not merely a negation and a response cry, but in addition an explanation for the counter move produced with a raised volume: “AY:: QUE TIENES QUE METERTE EN LA RAYA DE AQUI´ LOS DOS JUNTITOS. AL OTRO PIE NIÑA!” (“Hey you have to place yourself on this line with both [feet] very close together to the other foot Girl!”). This account describes what the move should have been and what the violation consisted of. Through the intersection of multiple semiotic resources, the player is instructed in the appropriate way to move her feet through the grid. While the judges produce the counter and the explanation, they lean over at the waist with their bodies, intensifying the force of the action. While the girls say “AY:::” (line 3) they spank Paula, and during “NO” (line 9), Risa lowers her body dramatically at

1 Paula: A(hh), B, C(h) (smiling))
2 Rosa: NO::
3 Risa: AY::: ((spanking Paula))
4 Risa: ¡NO CHIRIQA::!
5 Paula: Okay.
6 Rosa: A
7 Paula: Cheater!
8 Paula: B, C,= ((taking big steps))
9 Risa: NO::: ((body lowers dramatically))
10 Paula: ((smiles widely))
11 Risa: AY::: ((pushing Paula out of the way so she can demonstrate the correct foot patterns))

12 Risa: QUE TIENES QUE METERTE
You have to put yourself
13 Paula: Hih hih!
14 Risa: EN LA RAYA DE AQUI.
on this line
15 Paula: Okay!
16 Risa: LOS DOS JUNTITOS.
with both [feet] very close together
17 Paula: AL OTRO PIE NIÑA!
to the other foot Girl!
18 Paula: A,
the waist and then subsequently (line 11) pushes Paula out of the way in order to demonstrate the correct foot patterns, placing one foot closely behind another. With each of Paula’s new attempts to further probe the boundaries of acceptable behavior come increased sanctions. What emerges in this example is a fully embodied opposition move produced through gestural, intonational, and verbal admonishment. Not only is Paula told about the inappropriateness of her actions, but also the girls physically move her body, instructing her in the appropriate size of steps to take. Such forms of multi-modal turns occur throughout girls’ adversarial steps as girls provide accounts making explicit their positions of opposition.

5. Opposition types: negation and substitution formats

Two forms of disagreement formats are used in children’s arguments: Opposition may be signaled through negation, accounts, and demonstrations of appropriate moves (as well as replays of inappropriate ones). Alternatively it can be signaled through substitution: “replacement of one item in a sentence with another having a similar structural function” (Halliday and Hasan, 1976: 146). Both forms are similar to dispute processes Goodwin (1983, 1990) has described elsewhere for African American children. For example, substitution occurs in the following sequence in which an African American girl attempts to take a turn out of turn, first announcing that she is going to take her turn:

Joy: MY go woman.

In the next two examples of a similar activity, usurping someone’s turn, negation prefaces substitution moves:

(5) Krystel: It’s my turn.
Joy: Uh UH::: It’s MY go.

(6) Risa: Ya voy.
Rosa: NAI::: Ya voy YO.
No. I’m going now.

When the substitution format is used to create opposition, a number of phenomena heighten the salience of the term being offered as a correction. First, the utterance containing the correction characteristically maintains the frame of the prior talk, with the exception of the item being challenged. This repetition of another’s talk frames the item being repaired and helps to emphasize that what is occurring is
a correction of something the other said. Second, the addition of lexical items not required in the utterance can make the utterance more emphatic. The address term in example (4), “woman”, an address term not necessary for the meaning of the utterance and reserved for confrontational talk, makes the opposition more challenging. In example (6), the use of the subject pronoun “YO” is not required because Spanish is a prodrop language; the addition of the pronoun “YO”, put in emphatic position and produced with an increase in volume and “contrastive stress” (Ladd, 1980: 78), makes the substitution trebly emphatic.

Pitch prominence over negatives and substitutions is evident in these examples. While Lovely’s “My” in example (4) is produced at 332 Hz, the replacement term “MY” which Joy produces is at 724 Hz; the replacement term is 392 Hz higher than the previous word it is substituting. The polarity markers are produced with high pitch as well. In example (5), the negative reaches from 350 Hz over the first “Uh” to 639 Hz over the UH: of “uh UH:::”, or 289 Hz higher than the beginning of the same word. In example (6), opposition is highlighted by a dramatic pitch rise from 402 Hz on “voy” to 588 Hz over “NAI:::” (186 Hz higher than the word being countered). There is also contrastive pitch accent over the replacement terms. Although it is impossible to measure the pitch of the word “it’s”, the word preceding the contrastive term “MY”, in example (4) “MY” is produced at 616 Hz and “YO” reaches 512 Hz from under 300 Hz in example (6).

6. Components of disagreement turns

Disagreement is accomplished through the use of a number of different components, including negative person descriptors, turn prefaces, and accounts. Negative person descriptors such as “chiriona” and “cheater” permit referees to argue not simply that an infraction has occurred, but that what the player is doing is morally wrong. Other address terms used by the Latina girls in this group are ‘niña,’ ‘niña burra,’ (silly girl), and ‘zorilla’ (skunk). Among a group of Puerto Rican and Mexican second generation fifth graders M. Goodwin recorded in Columbia, South Carolina, address terms used while playing hopscotch included ‘tramposa’ (cheater), ‘embustera’ (liar), ‘chapusera’ (big cheater), ‘huevona’ (lazy), and ‘cabra’ (bitch). Address terms used by African American children in this study included ‘honey’, ‘child’, ‘woman’, ‘fat hog’, ‘quarter pound bacon”, and first or last names of girls.

A range of turn prefaces may be used to signal a violation or express disagreement with a prior move. Judges may (1) display polarity, as in “NO”, or (2) signal a response cry, for example through ‘Ah’, ‘Eh’, or ‘AYE’, or (3) call out. These are discussed in more detail in the next section. Among the African American girls, other prefaces used include ‘See?’ as in “See there. ((pointing)) See didn’t you see it? Look over here”. Or “See that?” followed by an account: “You had both feet in the box! Get out of there!”. Among the Latinas, an equivalent expression, ‘Mira!’ is used quite frequently, e.g., in “Mira. Pues mira. Fíjate” (Look. Look. Well look. Imagine). ‘Mira!’ can also occur with other components: ‘Out!’ and accounts of the violation, as in “Mira. Out. Mira. Vés, ya pisastes aquí?” (Look. Out. Look. See you

“Sorry” in both Latina and African American groups provides another component of disagreement turns. Among the African American girls the term “Sorry” occurred in the utterance: “You hit that line. Sorry to tell you that but you hit that line right there” . Among the Latinas, the utterance “Sorry” was produced while clapping hands as a player missed her square, as a preface to the disagreement sequence. ”Sorry” argues that the judge takes up a stance of apology, though the term was observed being spoken by a Latina judge as she threw a player’s beanbag from the grid into the schoolyard.

Opposition can also occur through a statement of the violation which has occurred. This can happen with little raise in volume or without a dramatic pitch contour. For example, an African American judge may point to a beanbag that landed on a line of a square and state “You stepped on three”, “You stepped on a line!”, or “Stepped on that line”.

![Graph](image)

In the utterance “Stepped on that line”, the peak contour, which occurs over “line”, does not rise above 378 Hz, which is well within the normal voice range of 11 year old girls. The vowel length here of “i” in “line” is 226 ms, which is not excessively long in girls’ oppositional talk. Even the overall range of the body of the turn, while high, is practically monotonic.

The following provides an equivalent example of a statement of a violation, without an emphatic turn preface, among Latina speakers. The judge argues that the token has “bitten” the line with her utterance “Mordió la raya”: 
There is no major pitch prominence in either utterance “Mordió la raya” (It bit the line) or “Stepped on that line” in example (7). Across a range of different turns in which judges state violations, presenting their observation as a simple statement of fact, little deviation from the girls’ normal pitch range occurs. These turns will serve as a baseline for nonprominent presentation, which will contrast with the girls’ emphatic presentation, which is common in our data to be discussed in the next section.

7. Prosody in emphatic adversarial speech style

The researchers were intrigued by the dramatic pitch excursions which are used by the Latina girls. Looking at the pitchtrack for opposition turns in example (3), shown in example (16), for instance, one finds a rising-falling contour pitch moving from low to high to low again. We will refer to such a pattern as a ‘rising-falling’ or ‘LHL’ contour. Here we will characterize it on the ‘tone’ line of pitch tracks as LHL and where needed in the transcription, an overaccent mark ‘˘’ will be used preceding the relevant syllable. These contours are rare in native American or British English data analyses published to date, but very common in the Latina data. We decided to compare similar types of adversarial moves in the Latina game playing and the African American game playing, to see if the African American or AAVE (African American Vernacular English speaking) girls also used this contour, or if this was truly distinctive to the Latina girls’ game-playing disagreement moves. We compared similar types of adversarial moves by the Latina and the African American girls—those which are used to contest a hopscotch player’s move. We analyzed three types of turn prefices, which can be used to disagree with the previous speaker’s turn. We refer to these as ‘Response cries’, ‘No!-cries’, and ‘Out! Cries’.
1. Response cries (Goffman, 1978), nonlexicalized, discrete interjections such as (Ah, Ay, Hey and Eh among Latinas; Oh, Uh, and Oo among African Americans:

(9) Player: \(((\text{throws beanbag and it hits a line}))\)
Maria: Ah: tocastes.
\[\text{Ah: You hit.}\]

(10) Player: \(((\text{steps on line}))\)
Vanessa: Oh, Lovely. You step between the line.
\[\text{Not in them.}\]

2. Opposition signaled by an expression of polarity (Halliday and Hasan, 1976: 178) such as “No”:

(11) Player: \(((\text{takes baby steps to throw to a low square, which is not permitted}))\)
Risa: No niña.

(12) Player: \(((\text{steps twice in a square}))\)
Joy: No. You stepped in number six there—two times. You said \(((\text{jumps two times}))\)

3. “Out!” cries, which can be produced with varying pitches and durations:

(13) Player: \(((\text{steps on two lines while jumping}))\)
Risa: OUT! OUT! PISASTÈ LA DE AQUI Y LA DE ACÀ.
\[\text{Out! Out! You stepped on this and this one.}\]

(14) Player: \(((\text{jumps in a square two times and then in a square occupied by a token}))\)
Vanessa: You out. You totally out.

The present study of pitch contours is based on 26 min of extended interaction among working class second through fifth grade bilingual Spanish/English speakers, and 26 minutes of interaction among working class African Americans playing hopscotch. All oppositional forms for which pitch contours were measurable during the 26-minute play sessions of each group were analyzed using PitchWorks. Instances of ‘self talk’ (“Oh geez oh my,” “Gal garn it”, or “Ay”), when speakers provided
metacommentaries on their own performance, were excluded from the sample because speakers were not opposing another participant. We did not measure instances of overlapping talk where it was impossible to distinguish different speakers.

From the data, pitch tracks of 48 instances of oppositional talk were analyzed for African American speakers and 85 instances of oppositional talk among Latinas. As Selting (1994: 377) has argued, emphasis is produced through an emphatic speech style which entails a marked prosody used in co-occurrence with particular syntactic and lexical choices in particular sequential environments. We measured the vowel duration, start, peak, and end of pitch accents and the range for each of the three types of oppositional prefaces (Response Cries, No’s, and Out!-Cries) for each speaker in each group across four types of contours: Noncontoured (less than 30 Hz range), H* + L (falling), L + H* (rising), and LHL (low high low or rising-falling). Though prosodic prominence is also often realized with greater perceived amplitude (Selting, 1996: 237), it will not be examined in this paper, since it cannot always be accurately measured in an outdoor, uncontrolled urban setting.

Forms of pitch prominence can be considered more broadly instances of “highlighting” (Goodwin, 1994)—or making especially salient for recipients features of an exchange. The prosody used in example (3), shown in the Pitchtrack for example (15) below, provides a particularly vivid example; in example (15), both the vowel length and the intonation contour are critical to the construction of oppositional talk.

(15) No!-Cry and Response Cry as Used by the Latina Group

The duration of the vowels in the “NO: AY: NO chiriona” sequence is quite prolonged. While 200 ms is considered extended vowel length for adult speakers, here the vowel length over the first “NO::” is 1460 ms. Risa’s joined by “AY” is sustained for 1140 + 225 ms, producing a total length of 1365 ms, and ‘chiriona’s’ voiced segment is 1030 ms. The pitch of these utterances is quite dramatic as well. While the typical pitch range for this group of Latina grade girls is from 250 to 350 Hz, here the pitch reaches from 485 to 580 Hz on “NO” and from 327 to 559 Hz on Rosa’s “no” of “No chiriona”.

Over the words “NO:: AY::” (lines 2 and 3), as well as the vowel “o” of “chiriona”, a distinctive LHL contour is produced. According to Sosa (1991: 153), the
LHL is common in the “dialecto mexicano”. Although the first speaker with the polarity marker “NO:::::" starts at 306 Hz and the second speaker with her expletive “AY:::::" starts from 444 Hz, what is remarkable is that both speakers produce similar contours; they join in ascending to over 550 Hz on their accented talk and subsequently produce a falling contour in unison. That they are able to jointly produce this gradually ascending and then falling contour demonstrates the familiarity of this LHL intonational contour for members of this speech community.

The shape of this contour is not restricted to polarity markers such as “No” or “response cries” such as “Ay” in Latina girls’ speech. In fact, the LHL contour is quite common in ‘Out!’-calls during hopscotch whenever violations, such as propelling one’s token onto a line, or stepping on a line, or into a space occupied with a token, occur. In producing an Out!-call, a participant playing judge may take up different types of footing, defined by Goffman (1981: 128) as one’s “stance, or posture, or projected self”. The Out!-call characteristically occurs immediately after a violation. In the following example, a Spanish/English bilingual speaker has just stepped on a line. The Out!-call itself states unambiguously, without doubt or delay that a violation occurred:

(16) Out!-Cry as Used by Risa from the Latina Group

While the normal pitch of the girls is between 250 and 350 Hz, here Risa’s voice leaps dramatically from 465 to 678 Hz to 525 Hz over the first ‘Out!’ and from to 630 to 684 Hz to 585 Hz on the second ‘Out!’ The duration of the first vowel of ‘out’ is 412 ms, while the duration of the second is 296 ms.

In order to discern whether or not the LHL contour was distinctive of Latina girls, we compared its use in Out!-calls across Latina and African American working class girls’ groups. Eight out of 28 African American contours were produced with LHL contours; however these had very shallow contours. The following provides two examples of Out!-cries by African American girls. In example (17), the pitch does not go above 304 Hz and is within the speaker’s normal pitch range; the vowel duration is 181 ms. Because there is very little change in pitch over the accented syllable (the speaker moves from 304 to 277 Hz), the contour appears quite flat by comparison with the Latina Out!-cry example. Tokens like this were coded as level:
In the following, the pitch on ‘Out!’ remains at 338 Hz throughout; the vowel duration is only 227 ms:

Only 57% of the African American girls’ Out!-cries were contoured, while 98% of all Latina girls’ Out!-cries were contoured. Later we will show this difference to be highly significant. With respect to pitch peaks on all Out!-cries, there were dramatic differences in the fundamental frequencies of the peaks of the African American and the Latina Out!-cries. While there were 23 out of 44 Latina pitch peaks above 500, there were only 10 African American pitch peaks out of 37 that reached over 500. In Section 8, we will also show this difference to be highly significant. With respect to the LHL contours on Out!-cries in both groups, however, the pitch peaks were quite similar (556 Hz for the AAVE speakers and 549 Hz for the bilingual speakers). Section 8 will report on the statistical comparison of tokens from the two groups of speakers.
Out!-cries contrasted with Latina Out!-cries in other ways as well. Among the AAVE speakers, a subject pronoun, such as “you”, “she”, or a girl’s name usually preceded the word ‘Out!’. Perhaps the vowel length of the Out!-cries was not as long because the duration of the utterance in which ‘Out!’ was spoken was longer. If the vowel length of the subject pronoun had been included different values for the duration of the Out!-cry would have been obtained.

LHL contours are common not only in Out!-cries of second generation Mexican and Central American children but in the contours of their longer utterances as well. During a debate about whether or not a player in the game of four square is out or not after bouncing her ball outside her square, one of the participants argues her position by stating “Cuz it went out side when you threw it” (see examples 19 and 20.) Similar LHL contours occur over the words “side” and “threw”. In the first example, the pitch goes from 328 to 513 to 361 Hz on the vowel on “side” and the duration of the vowel is 554 milliseconds. On the vowel in the word “threw”, the pitch goes from 360 to 509 to 355 Hz (ending at 313 Hz on “it”) and the duration of the vowel is 212 ms:

(19) Latina Double Use of LHL Contour in One Sentence

![Diagram](image1)

(20)
In nonconfrontational or nonemphatic talk, one might expect a steady downstep, rather than two parallel LHL contours with similar beat structures in the same utterance. However, in the Latina data LHL, contours occur in turn final position when challenging a prior party’s move in utterances such as “No em’pujes” (Don’t push), or “Y tú vas en el cuatro. No vas en el quinto” (And you go to the four. You don’t go to the five”), or “Ah pues eso debian de decir” (Ah well you should have said this). Clearly the LHL contour is distinctive for the Latina group, while duration and pitch peaks are not necessarily different across working class African American and bilingual Spanish/English speaking groups.

In calling ‘Out!’ or marking a violation, judges not only produce words with vowels of extended duration and salient intonation contours and turns of distinctive shapes. In addition, as we have explained with examples (1) and (3), judges position their bodies to constitute a particular type of stance. For example, during the Out!-call in example (16), the word “OUT!” is accompanied by a quite vivid embodied affective alignment as the finger of the judge points accusingly at the offender (while the player laughs at her own attempt to pull something over on the girl acting as judge). Example (21) shows the accusatory point of the judge and the humorous stance being taken up by the player:

(21) Latina Judge’s Use of Body in Opposition

Risa: OUT! OUT!

8. Quantitative analysis of the differences between the African American and Latin girls

As pointed out in Section 7, this study is based on an equal amount of data, from the same register, from each of the groups; therefore there is adequate data to draw
some comparisons. Looking at the pitchtracks, the analysts began to draw conclusions about the strategic use of prosody in Latina girls’ play arguments, and note how that compares with the same situational ‘register’ [play arguments] as used by the African American girls. There were, however, some differences between the groups. Though both groups were working class, the African American girls, AAVE speakers, were children of migrant laborers, who were taped in rural South Carolina. The Latina girls, filmed in downtown Los Angeles, were bilingual speakers who were second generation Mexicans and Central Americans; their parents lived in Pico Union (a predominantly Latino community in downtown Los Angeles) and worked nearby, in a variety of different jobs.

The games being played by both groups, however, were the same, and the interactive rules for this register appear to be the same in the two groups of speakers. It seems clear that both groups of girls prominently express their response cries, No!-cries and Out!-cries. The focus in this study is on the fact that we find that the prosodic choices which draw attention to specific words are fairly similar for the Latina girls whether they’re speaking in Spanish or English, and that the prosodic choices made by the African American girls are systematically quite different. We have concluded that the difference between the two groups is not a purely linguistic difference: we claim here that in the Latina girls’ subculture, strong disagreement is expressed with wide contours, and in many cases with what can be referred to as LHL contours. The durations appear to be systematically much longer, and the girls use pitch range more consistently. In contrast, examples of the same disagreement forms used by Latina and AAVE girls were compared; in those examples, while the African American girls also prosodically focus on the same words—with response cries, Out!-cries, and No!-cries—the way they go about highlighting these expressions of opposition is significantly different. This section will quantitatively compare these three types of face threatening disagreement for the two groups of girls.

8.1. No!-cries

The most obvious and most salient expression of opposition is the ‘No!- cry. Below are charts of the contours on No!-cries for both Latina and African American (AAVE) girls as well as the duration and height of Peak on No!-cries for both groups (Table 1).

Note that unfortunately, while there are 15 of these cries in the 26 min of Latina girls’ play, there are only four tokens in the African American girls’ play. However, we can measure how speakers go about making their No!-cries salient: pitch, loud-
ness, and duration can all be used to make a particular word more salient. However, Table 1 shows that all of the tokens for both groups of girls are contoured. Moreover, for both groups of girls, the preferred contour is a rise, or a rise–fall contour, rather than a falling contour, which would be just as salient, and which occurs elsewhere in the corpus.

The other form of salience which appears to be favored by the Latina girls is that the pitch chosen for salience is not just high in the ‘normal’ range for the speaker, but well outside the normal range. Table 2 provides figures for the duration and height of peak on No!-cries for the Latina and African American girls’ groups. In the following, −500 indicates that the pitch is up to 500 Hz and 500+ means that the pitch is over 500 Hz. Similarly −200 ms means up to 200 ms and 200 ms+ means over 200 ms.

Table 2 shows that if we make a basic judgement call that for all these girls, 500 Hz is outside their normal vocal range, we find that the Latina girls are much more likely to pitch their No!-cries well outside the range.

Given that a normal word would be about 200 ms long in casual conversation, and given that No! is a short word, we can make 200+ ms a default ‘extra long’ category. We can see that the Latina girls are also more likely to stretch their No! tokens than the African American girls.2

Therefore, we can say that while both groups of girls favor No! tokens to express disagreement with the status of a preceding ‘play’, and both groups appear to favor rise fall, or at least falling contours, the Latina girls are much more likely to express disagreement using extremely high pitch and very long duration. However, again, given the fact that the AAVE girls only used four No!-cries, while these differences look compelling, they are not statistically significant.3

8.2. Out!-cries.

Another group of special cries which we have examined are those which are used to tell a girl that she is out of the game. Table 3 shows the intonation of the contour (or lack of contour) for the two groups:

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Table 2
Duration and height of peak on No!-cries for Latina and AAVE girls

<table>
<thead>
<tr>
<th>Group</th>
<th>−500 Hz</th>
<th>500 Hz +</th>
<th>−200 ms</th>
<th>200 ms +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina</td>
<td>4</td>
<td>11</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>AAVE</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

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2 See, however, the discussion in Yaeger-Dror (2002), Yaeger-Dror et al (in press), and Sosa and Hedberg (2001).

3 This study will present data from ‘quick and dirty’ Chi Squares, although a regression would permit even greater statistically finessing of the evidence.
Table 3 shows that not only are the African American girls less likely to use contours on *Out*-cries, but they are significantly less likely to do so. Looking at the breakdown of contour types, it is also clear that the African American girls are more likely to use a simple level or falling terminal (as in examples 7 and 8), while the Latina girls are by far most likely to use the LHL intonation shown in example (2). Both the relative number of contours ($P \leq 0.000035$) and the difference in preferred contour type ($P \leq 0.026$), are clearly significant differences between the two groups of girls. Our basic hypothesis has been statistically supported.

Moreover, in Table 4, we find that the Latina girls are also significantly more likely to use extra high pitch on their contour ($P \leq 0.0006$), and are more likely to use duration to emphasize the position ($P \leq 0.0001$). Obviously, the Latina girls’ *Out*- cries are significantly more emphatic: they are more likely to be outside the normal speaking range of the girl, are more likely to be lengthened, are more likely to be given an emphatic contour, and that contour is more likely to be elaborate, even if it is sentence terminal.

### 8.3. Response cries

The last group of special cries which we have examined are Response cries used to signal that an illegal move has been taken. Table 5 shows that—as with *Out!*—not
only the African American girls are less likely to use contours on response cries, but they are significantly less likely to do so. 

Looking at the breakdown of contour types, it is also clear that the African American girls are more likely to use a simple level or falling terminal (as in examples 7 and 8), while the Latina girls are by far most likely to use the LHL intonation shown in example (2). Both the relative number of contours \( (P = 0.007) \), and the difference in preferred contour type \( (P = 0.026) \), are clearly significant differences between the two groups of girls. Here too, our basic hypothesis has been statistically supported. Moreover, in Table 6, we find that the Latina girls are also significantly more likely to use extra high pitch on their contour \( (P = 0.05) \), and are more likely to use duration to emphasize the opposition \( (P = 0.02) \).

The data show that the Latina girls’ combined cries—Out!-cries, No!-cries, and other response cries—are significantly more emphatic: they are more likely to be outside the normal speaking range of the girl, are more likely to be lengthened, are more likely to be given an emphatic contour, and that contour is more likely to be elaborate, even if it is sentence terminal. All of these variables are highly significant, including even the No!-cries which we found were not significantly more salient when analyzed separately. Obviously, the African American girls are not reducing their No!, Out!, and other response cries, but their dynamic range of ways to do so is narrower, and they use them less frequently. The pitch track in example (2) demonstrated that the African American girls can and do go well above their pitch range. They make use of contours and duration to call attention to what is being said. However, the statistical evidence clearly demonstrates that the Latina girls use these prosodic parameters more consistently in game playing situations. The following charts show the contour, duration, and height of the peak of all cries for both groups (Tables 7 and 8).

Table 6
Duration and height of peak on Response cries for Latina and AAVE girls

<table>
<thead>
<tr>
<th>Group</th>
<th>(-500 \text{ Hz})</th>
<th>(500 \text{ Hz} +)</th>
<th>(-200 \text{ ms})</th>
<th>(200 \text{ ms} +)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina</td>
<td>5</td>
<td>18</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>AAVE</td>
<td>5</td>
<td>02*</td>
<td>4</td>
<td>03*</td>
</tr>
</tbody>
</table>

*When \( P \leq 0.05 \) for the relevant comparison between groups.

Table 7
+Contour, and \( \pm \) LHL contour comparisons for all ‘cries’ for Latina and AAVE girls

<table>
<thead>
<tr>
<th>Group</th>
<th>(-\text{Contour})</th>
<th>(+\text{Contour})</th>
<th>LHL</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina</td>
<td>1</td>
<td>80</td>
<td>62</td>
<td>19</td>
</tr>
<tr>
<td>AAVE</td>
<td>15</td>
<td>24******</td>
<td>13</td>
<td>26****</td>
</tr>
</tbody>
</table>

******When \( P \leq 0.0000005 \) for the relevant comparison between groups.


Note that not only do Latina girls use contours significantly more often. In addition, they use peaks over 500 Hz, and durations over 200 ms significantly more often
than the AAVE girls; and they use the LHL contour specifically much more often than the AAVE girls do.

In addition, while the present study is limited to the analysis of particularly obvious opposition markers like ‘No!’, ‘Out!’ and response cries, the statistical results would have been even more flamboyant if all disagreement sequences would have been included [e.g., from Section 7: ‘no em’pujes’, no vas en el `quinto’, etc.]. It is, however, beyond the goals of a study such as this to analyze every single opposition for the use of LHL/^ [as used by the Latinas], or the lack of such a contour [among the AAVE girls]. The prosodic variables have been discussed in the present analysis, as they were coded on only three groups of obvious disagreement or repair moves that are used consistently by both groups of girls as they play hopscotch.

Moreover, as was shown in Section 6, the dynamic range is expanded for the Latina girls in other ways that we have not measured quantitatively: for example, while the African American girls may use sorry as a mitigator, the Latina girls appear to be using it to emphasize rather than mitigate the disagreement; this is evident from the observation that they use clapping and hand-waving systematically to further emphasize the force of the opposition. The quantitative comparison of nonverbal techniques and their interface with the prosodic patterns discussed here will be reserved for later analysis.

8.4. Returning to the larger picture

While most studies of children’s arguments have focused rather exclusively on the lexical items and syntactic shape of opposition moves, in this paper we have not only looked closely at the component features of opposition moves—address terms, accounts, and polarity markers, response cries, and Out!-cries—but in addition we have examined them in conjunction with other semiotic systems: the prosody and body positioning which overlays them. Bolinger (1986: 27) notes how pitch can be used to provide commentary on and take up stances towards what is being said grammatically:

Though intonation is indispensable to grammar, the grammatical functions of intonation are secondary to the emotional ones; speakers feel differently about what they say, and the feelings manifest themselves in pitch changes that serve as clues.

<table>
<thead>
<tr>
<th>Group</th>
<th>−500 Hz</th>
<th>500 Hz</th>
<th>−200 ms</th>
<th>200 ms+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina</td>
<td>18</td>
<td>63</td>
<td>8</td>
<td>73</td>
</tr>
<tr>
<td>AAVE</td>
<td>25</td>
<td>14****</td>
<td>21</td>
<td>18******</td>
</tr>
</tbody>
</table>

****When $P \leq 0.00005$ for the relevant comparison between groups.
******When $P \leq 0.0000005$ for the relevant comparison between groups.

Table 8
Duration and height of peak on all ‘cries’ for Latina and AAVE girls

Though intonation is indispensable to grammar, the grammatical functions of intonation are secondary to the emotional ones; speakers feel differently about what they say, and the feelings manifest themselves in pitch changes that serve as clues.
By closely examining vowel duration, pitch height, and measuring ranges of pitch excursions, we have taken Bolinger seriously and treated intonation as constitutive of the activity of disagreement and the affective expression of opposition. Later studies will document the degree to which these prosodic patterns are supplemented by gesture.

9. Conclusion

While concern for face-saving has been a major theme in research in conversation analytic work on preference structures, in sociolinguistic work on politeness, and in feminist sociolinguistic research on female speech, one line of thinking in contemporary social theory stresses the importance of the pursuit of conflict for the organization of social life. Anthropologists such as White and Watson-Gegeo (1990: 3) argue that “interpersonal conflict, disagreements, and moral dilemmas are at the heart of social life”. According to developmental psychologists Shantz and Hartup (1992: 11), “the virtual ‘dance’ of discord, of disaffirmation and affirmation . . . is critical to the comprehension of development”. Studies of everyday arguments among White middle class children’s groups (Brenneis and Lein, 1977; Cook-Gumperz, 1981; Corsaro, 1985; Eisenberg and Garvey, 1981; Genishi and di Paolo, 1982; Hughes, 1993; Maynard, 1985; Sheldon, 1992, 1996), Italian children (Corsaro and Rizzo, 1990), part-Hawaiian children (Boggs, 1978), working class African American children (Goodwin, 1990), Chinese children (Kyritzis and Guo, 2001) and children in culturally diverse middle class American school settings (Adger, 1984, 1986; Goodwin, 2001) have demonstrated the ubiquity of contest frameworks for interaction in children’s groups, countering many of the stereotypes about the cooperative nature of female style (Gilligan, 1982).

This paper has investigated the construction of opposition turns within a specific type of game disputes used frequently by elementary school girls. Both Latina and African American girls use turn prefaces which clearly mark their oppositional stance. The linguistic shapes of oppositional turns are remarkably similar across both groups. Positions of opposition are highlighted not merely through the shape of their turns, but also through extended vowel length, distinctive pitch contours, and raised pitch on negatives. Latina girls use dramatic intonation contours which we have referred to as the ‘LHL’ contour to mark opposition, while African Americans use less contoured turns, use less extreme pitch maxima, and durational expansions. Both groups make use of embodied performances—i.e., marking the spaces stepped on with physical tapping and jumping—within the built social world of the game grid in producing opposition moves. Rather than relying on talk alone, participants make use of a range of semiotic resources in the construction of their action in interaction.

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References


Marjorie Harness Goodwin is Professor of Anthropology at UCLA. She received her PhD in Anthropology from the University of Pennsylvania, 1978. Her research interests include how children construct their social organization in the midst of play and in particular how stories, dispute, gossip, and directives are employed strategically. Her recent work deals with how children use language practices to circumscribe the boundaries of their groups and how participants make use of intonation, gesture, and a range of semiotic resources in the construction of their action in interaction.

Charles Goodwin is Professor of Applied Linguistics at UCLA. He received his PhD from the Annenberg School of Communications, University of Pennsylvania, 1977. He spent two years analyzing discourse and cognition in the workplace at Xerox PARC. Interests and teaching include video analysis of talk-in-interaction, grammar in context, gesture, gaze and embodiment as interactively organized social practices, aphasia in discourse, language in the professions and the ethnography of science.

Malcah Yaeger-Dror (www.u.arizona.edu/~malcah) is a research scientist in the Cognitive Science Program at the University of Arizona. She received her PhD in Linguistics from the University of Pennsylvania, 1979. She has done research on Canadian French, American English and Israeli Hebrew dialects, as well as on discourse factors related to social situation and language (or dialect) variation in these languages. Currently she is comparing the relative importance of cognitive and conversational 'imperatives' in a variety of interactive situations.