# 11

## Informings and announcements in their environment: prosody within a multi-activity work setting

MARJORIE HARNESS GOODWIN

Linguistic anthropologists have long been fascinated by the complex ways in which intonation plays a critical role in the production of 'non-casual' speech (Voegelin 1960). Typically prosodic features have been examined in the domains of ritual speech (DuBois 1986, Fox 1988, Voegelin 1960) and verbal art (Briggs 1988). However, recently attention has turned to the examination of more secular domains in which specific alterations in the production of ordinary speech occur: for example, radio sports announcements (Ferguson 1983),[1] auctioneering (Kuiper and Haggo 1984), horse-race calls (Horvath 1991, Kuiper and Austin 1990), and public community announcements (Kroskrity 1993, Tedlock 1983). As argued by Tedlock (1983:190), in both ritual and secular contexts systematic stress and pitch inversion 'attracts more attention than ordinary delivery and implies that what is being said is "important"; the speech event in question "is not ordinary" and will take precedence over any other speech event that may already be in progress'.

This chapter will investigate intonation as a constitutive feature of two related types of speech actions used for the transfer of information about the arrival of incoming planes in a mid-sized American airport: (i) informings within the Operations room (the coordination center for ground operations) and (ii) subsequent announcements from Operations to the Ramp (where baggage is loaded and unloaded). Through analysis of the prosody of these related types of information transfers, I examine how talk gets tailored for a target audience and the space that they inhabit.

Both the Operations room and the Ramp are extremely noisy areas. Within the Operations room, a multi-activity work setting in the airport, workers are faced with a barrage of incoming messages

from various sources: radio scanners which transmit conversations between pilots and air-traffic control, other radios that connect various parts of the airport (for example, the gate area, the Ramp or baggage area, lost luggage, catering, fuel, etc.), telephones, computer print-outs, computer monitor displays and face-to-face communication. Distinctive intonation contours are useful for cutting through the sonic soup that constitutes the auditory environment of Operations. In the Ramp area, crew chiefs, responsible for seeing that their crews meet incoming planes to unload them, deal not only with the noise of incoming and outgoing planes, deafening without earplugs, but also radio calls from other areas of the airport. Radio announcements from Ramp Planners to crew chiefs on the Ramp, not unlike utterances of Hopi chanters signalling the start of a rabbit hunt (Voegelin 1960:61), perform the function of calling recipients to action, through use of a specialized register (Ferguson 1983).

### 1 The ecology of work situations in the airport

Figure 11.1 situates the two information transfers that are the focus of this paper within their ecological setting.

Updating co-workers in the airport about the arrivals and departures of planes is an important part of the Operations room's work. The radio scanner next to Flight Tracker's work station broadcasts conversations between incoming pilots and either tower or ground control (number 1 in fig. 11.1). Though this talk is not designed for them, it can be overheard by personnel in the Operations (Ops) room; this has implications for a whole set of others in the airport.[2] A person in the position of the Flight Tracker, overhearing a directive regarding parking from ground control to a pilot (e.g. *Sixteen seventy five contact ground point seven*) on a scanner next to her, relays the information that a plane is *on the ground* to the Ramp Planner through *informings* (number 2 in fig. 11.1). Subsequently through an *announcement* (number 3 in fig. 11.1), Ramp Planner relays the information that a plane has arrived to crew chiefs on the Ramp, whose job it is to organize their crews to meet a plane and unload baggage.

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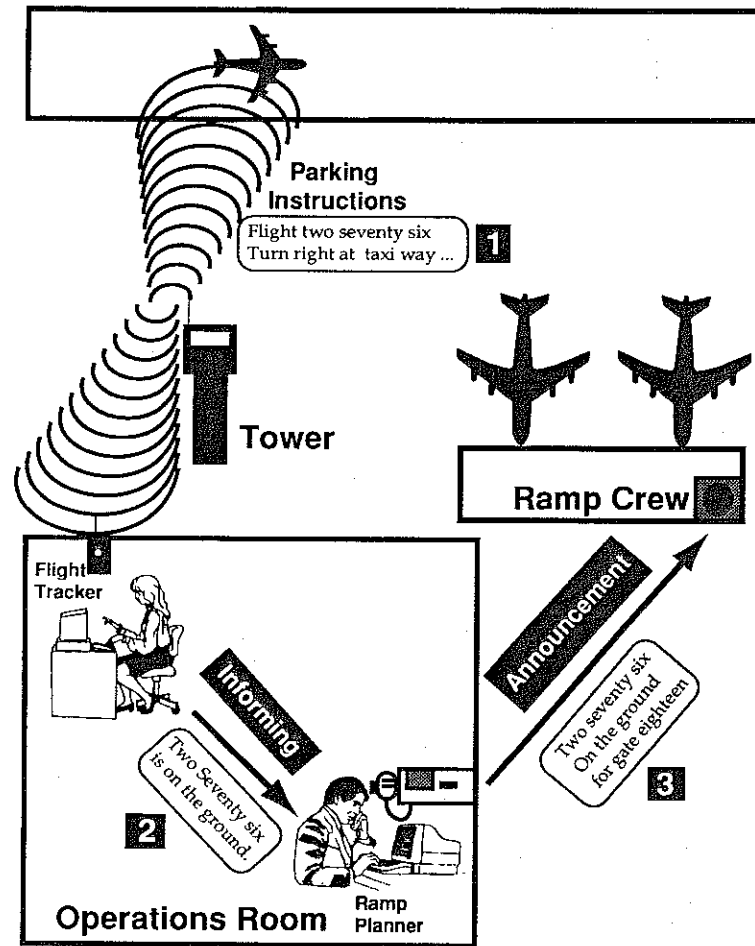
Figure 11.1

has been overheard, there are systematic modifications in the talk as it gets passed through the system. Intonation is not incidental, but rather a constitutive feature that frames talk in information transfer sequences. Speakers must be able to produce hearable utterances in the midst of competing talk; in the organization of this action sequence, monitoring or listening is equally as important in the sequence, of activity as talk itself. Producing a next action in a chain of actions means participants must be closely attending

talk, even though it is not specifically addressed to them, for its relevance to their activity.

The Ops room, as a 'center for coordination' (Suchman 1992, and in press), provides the possibility for coordinated action around a single focus; however, the room is arranged such that persons in each of four different work stations can also be occupied with their own focus of attention which involves work groups in other locations as well. The multiple distributed participation framework (Goodwin 1995) that is particular to this work setting differs from that assumed in most analyses of *encounters* (Goffman 1961:17),[3] in that it entails both co-present participants (the Flight Tracker and the Ramp Planner), who are positioned *back-to-back* rather than face-to-face, and work groups who are spatially distributed (workers in the Operations room and those on the Ramp). Ramp Planners, with their announcement, provide a single action relevant simultaneously within *two participation frameworks*; they both ratify that they have heard the informing from Flight Tracker and initiate an action prompting Ramp crew chiefs to meet a plane.

Among experienced Ops workers monitoring is carried out with relative ease by participants situated next to each other; with little more than a gesture or a glance, persons side-by-side may be cued that they should initiate a next projected action in a sequence (for example, placing a call to another service division). Though unproblematic for oldtimers, newcomers complain at length of the incredible effort that attending multiple messages demands. As one new Ramp Planner trainee reports:

(1)    RP Trainee: It's like I have fifteen people on the radio
                      trying to get ahold of me.
                      And I can only answer one.
                      And not many people know how to stand by.
                      Three people talking at once.
                      It doesn't work on that. It breaks up.
                      And then you have all the different commotion
                      going on inside Ops. So it is a difficult job.

Newcomers to the position of Ramp Planner may in fact experience so much difficulty in attending simultaneous messages that they have to be physically summoned by Flight Tracker. In the following example, upon noticing that the novice Ramp Planner has not pro-

**Figure 11.2**

duced an appropriate next move to his informing about an incoming flight, Flight Tracker (in right front) swivels and taps Ramp Planner's chair to create a focus of mutual attention. In the video freeze-frame (fig. 11.2) we see Ramp Planner (on the left) turning as he says *I'm sorry?* requesting repetition of the Flight Tracker's informing (transcription conventions appear in the appendix).

(2)    FT:   Eleven **twenty**'s on the ground.
              A little bit earlier.
              Than expected.
->     RP:   I'm sorry?
       FT:   Eleven twenty's on the ground.
              For gate twenty.

In informing sequences, Flight Tracker, who initiates the informing, is seated diagonally opposite Ramp Planner. Yet Flight Tracker generally manages to relay the news about an incoming plane *without* an address term or change in facing formation. In the midst of simultaneous activities, speaker displays that talk is designed for Ramp Planner without interfering with the talk of others in the room. The next part of this chapter will deal with how this is accomplished.

## 2 Informings

Informings vary depending upon the level of activity in Ops. However, they frequently take the form of a declarative statement:

FT:   Flight X is on the ground.

Expert Ramp Planners constantly monitor their computer screens for news of the status of incoming planes, and have ways of readily accessing relevant information. However, for less experienced planners, the informings of Flight Trackers serve as important prompts. As one trainee put it:

(3)    Ramp Planner Trainee:   If I'm in the computer and I'm pulling loads or something, weights and balance, I sometimes can't get into who's on the ground, who's taxiing, who's going out. So if they tell me 'four forty six or whatever flight number it is, is on the ground, taxiing to this gate' I can just automatically just turn to the radio and say 'the flight number is on the ground, holding or taxiing to this gate'. It's much simpler than having to change DECS, that's weights and balance, and then pull up who's on the ground.

During periods of relative calm, Flight Tracker may wait briefly for a silent period between competing talk and then relay the message to Ramp Planner without a marked intonation shift, using falling intonation:

(4)    FT:   Four **sixty**'s on the **ground**.

However, in the midst of densely occurring interaction, for example, when the intended recipient is involved in simultaneous talk,[4] Flight Tracker may modulate his/her voice in order to be heard over other talk in the room. The following informing occurs when Ramp Planner has been providing brief comment into ongoing talk with co-workers:[5]

(5)    FT:   Two seventy **si:x** is on the **gr:ound**,

The most important information being conveyed in the informing utterance is the naming of a specific flight. This is positioned in the initial part of the utterance, and is accented. In producing her
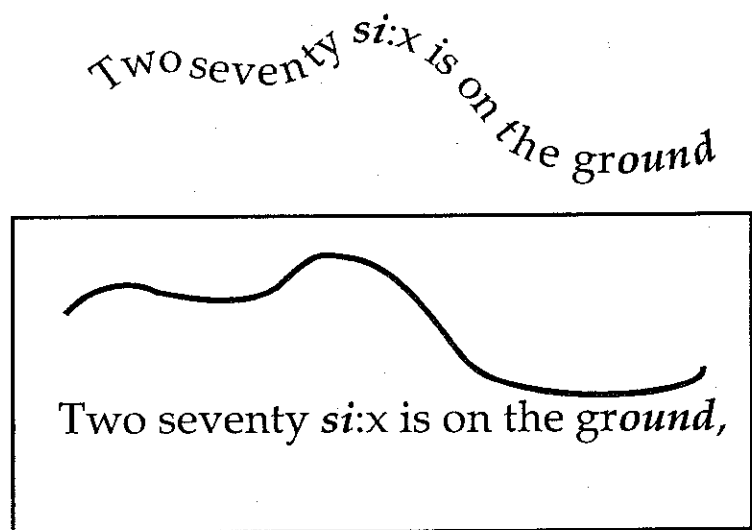
Figure 11.3

informing, this Flight Tracker uses an intonation contour which remains high over each of the numbers of the plane, the important information in the utterance (see fig. 11.3). The words *two* and *six* are produced without the characteristic deep 'sag' \/ that usually occurs between pitch accents. The phonetic interpolation rule used to get from one high-pitched sound to another is not applied to this instance and this indicates that scaling values or the pitch ranges are being manipulated for a specific effect.

Specifying that the plane is *on the ground* also provides useful information for Ramp Planner. Simply stating that a plane *is here* does not provide Ramp Planner with sufficient information to proceed with an announcement. For example, in the following when Passenger Planner (PP) states that a plane is *here*, RP requests clarification that the plane is actually *on the ground* before proceeding with her announcement to crew chiefs on the Ramp:

(6)    Radio:  Wagon. Four seventy five. / / (      )
       PP:     **Holey mackerel.** Four seventy **five** is here. ((looking
               first at computer and then at his watch))
       RP ->   On the ground?
       PP:     Yep.

       RP:     Four seventy **five's**
               on the ground.
               For gate **fifteen.**

Intonation varies across speakers and even within a single speaker's repertoire. For example, some informings, as in the following examples, are produced with what could be called a 'stylized falling' (Ladd 1978:520), 'vocative chant' (ibid: 525), ' spoken chant' (Pike 1945:71) or 'call' contour (Gibbon 1976:274–287) – a chanted intonation pattern which steps down from one level pitch to another with an interval of approximately a minor third.
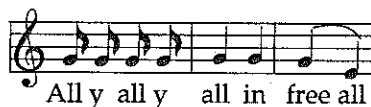
(7)    FT:   **Three** sixty **three's** on the ground,



Three six ty three's on the ground
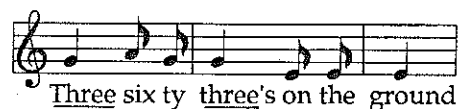
(8)    FT:   **Six ninety one's** here **now::**



Six nine ty one's here now: :
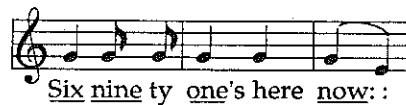
A drop of a minor third as over the word *now::* in example (8) is usually associated with such everyday American English calls as 'Johnny', 'Dinner's ready', or 'Ally ally all in free all', used during the children's game of hide-and-seek.



All y all y   all in  free all

Amidst periods of extremely dense interaction the contour will be even more pronounced and address terms may be appended after the informing. For example, the following occurred when the intended addressed recipient, Ramp Planner, was hearably engaged in extended talk with his co-worker:

(9)    FT:   Four **sixty's** on the **ground Mark,**



Four six ty's  on the ground  Mark
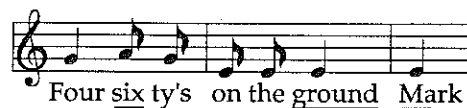
Informing statements delivered amidst dense room activity are characteristically produced with raised volume, higher pitch than other talk in the room, and an intonation contour which often sounds more like song than speech. Instead of dropping as in a normal declarative contour, tonal targets are sustained as in chanting or singing. In the one chanted contour which appeared 'in the clear' of simultaneous talk so that a pitch track could be attempted (*three sixty three's on the ground*), the shift in contour was so rapid that it could not be accurately tracked by the computer.

Under normal circumstances Flight Tracker uses neither a summons nor an address term to get the attention of a co-worker, and rarely even makes a turn of the head in his or her direction to direct talk towards a colleague. Instead the chanted intonation *frames the talk* as distinct from other ongoing talk and thus permits it to stand out from the hubbub of other activity in the room (while not, however, conveying any sense of emergency about a plane's arrival).

Ladd (1978:520)[6] describes vocative chants as signalling a certain predictability or stereotype in the message. Discussing the ritualized nature of this contour Ladd (1978:520) argues it conveys a 'flavor of everyday domestic life': 'What is signaled by this intonation is the implication that the message is in some sense predictable, stylized, part of a stereotyped exchange or announcement.' For Ops workers this 'call' signals that an expected, unremarkable event has occurred; it prompts the Ramp Planner that a scheduled flight has in fact arrived while conveying the sense that business is proceeding as usual. The construction of the utterance as a declarative statement (without an explicit address term or form of summons) does not demand that addressee abandon concurrent activity, or elicit a direct response from Ramp Planner to Flight Tracker. Informings are produced without the initial establishment of a framework of mutual orientation. As Gibbon (1976:280), Abe (1962:522) and Pike (1945:187n) argue, call contours are used when physical distance separates the interlocutors. In the Operations room the multiple, competing foci of attention as well as distance between work stations which are diagonally opposite make listening difficult. Flight Tracker relies on Ramp Planner being positioned to receive the message in the work space he or she habitually occupies and on the chanted intonational contour to carry the message over the

ongoing talk in the room.[7] This intonation provides a way for Flight Tracker to mark for recipients that new updated information about a routine work activity is available.

## 3 Announcements

In informal settings, confirmation of the receipt of an informing or 'new news' in conversation is achieved through a return action to prior speaker, for example an assessment of the news (Terasaki 1976:7–8).[8] In the Operations room, by way of contrast, no talk whatsoever by Ramp Planner is addressed to the prior speaker, the Flight Tracker who relayed the message about the arrival of a new flight. As participants are located within a web of interlocking distributed participation frameworks, the appropriate next action is, instead, delivery of an announcement to crew chiefs in the bagroom, whose job is to meet incoming flights. This action carries out the projected next move in the chain of activity, thus providing a powerful demonstration of understanding of the import of Flight Tracker's informing. Through the Ramp Planner's announcement Flight Tracker knows that his/her talk has been received and properly taken into account.

The following provides an instance of how Ramp Planner's announcements (lines 2–4) typically follow an informing from Flight Tracker (line 1):

(10) 1 FT:    **Three** sixty **three's** on the ground,
     RP:    ((goes to mike, then looks through papers, checking for
            number of gate))
            (0.4)
     2      **Three six three**
     3      On'th'**ground**
     4      F'ga'**eighteen.**
     5 Radio:  Thanks Mary.

Whereas Flight Tracker in her utterance (line 1) describes only the flight number of the plane that is on the ground, relays by Ramp Planner (lines 2–4) note both the flight number and the gate. Through her complex sheet (a print-out of expected times of incomings and outgoings for planes) and computer monitor Ramp Planner has access to information regarding the gates at which planes will arrive. By constructing her relay as she does, Flight

Tracker delivers in as concise a fashion as possible what is new news[9] for Ramp Planner – that a particular plane has arrived on the runway and is now *on the ground*, omitting information that Ramp Planner already has accessible.

An orientation towards the sequential implicativeness of the initial informing for Ramp Planner's next course of action is observable in examples where Ramp Planner (RP) does *not* take stock of Flight Tracker's informing to produce an announcement of the plane's arrival to the ramp. If, while Flight Tracker monitors RP's talk, Flight Tracker does not hear this next projected move in the action chain, she will repeat her informing, making use of a more insistent informative intonation and a more direct statement about the plane's arrival, until RP displays some recognition of receipt. In the following example (11), Flight Tracker's informing of a plane's arrival (line 5) is recycled (lines 11, 13, 29, 32, 35) until she receives a display of recognition that Ramp Planner has heard and acted upon her delivery of it (line 36). Below, the participation frameworks between Flight Tracker and Ramp Planner are highlighted by shading. A box is drawn around talk over the radio between Ramp Planner and a crew chief, and marked with a walkie-talkie icon. Other talk within Ops is not marked.

Though the Ramp Planner's announcement, like other announcement sequences (Terasaki 1976:7), is formulated as a declarative statement, it has far greater significance than a mere description of events. As a prompt for relevant subsequent action, it alerts crew chiefs in charge of meeting incoming flights. Should this announcement not be made (as was done once as an Ops-initiated experiment), crew chiefs on the Ramp will radio Ops with messages such as *What's going on? We're not hearing arrivals.* and meeting the plane could be delayed.

### 3.1 *The structure and intonation of announcements*

Acoustic analysis of announcements confirmed initial auditory analysis[10] of the sequences, showing that they are segmented into three separate *intonation units*.[11] Schuetze-Coburn, Shapley and Weber (1991:216) define an intonation unit as 'a stretch of speech by a single speaker uttered with a "coherent intonation contour" (Chafe, 1987, p. 22)'. According to Schuetze-Coburn, Shapley and Weber

(11)

| | | |
|---|---|---|
| Ramp Planner: | Oh: okay uh: *There* we go. | 1 |
| | =Ruh is Jason the: (.) (uh) transfer driver? | 2 |
| Radio: | *yeah.* | 3 |
| Ramp Planner: | Uh: can you have him go over to gate uh:m | 4 |
| Flight Tracker: | Five seventy *eight*'s on the *grou:nd* ((chanted)) | 5 |
| Ramp Planner: | ((looks down at papers, holds finger on page)) | 6 |
| | tch! Sixteen when five seven eight gets in?= | 7 |
| | It'll be in about ((*looks at flight information* | 8 |
| | *display screen*)) thirty six *af*ter. | 9 |
| Supervisor: | Eagles okay?= | 10 |
| Flight Tracker: | =Here. | 11 |
| Ramp Planner: | And uh:, you've got ((looking at papers)) | 12 |
| Flight Tracker: | It's on the ground now:. ((leaning her head back | 13 |
| | in direction of Ramp Planner over her shoulder)) | 14 |
| Ops B: | ((shakes head)) Uh: the next thing probably start | 15 |
| | callin in in about ten minutes. | 16 |
| | (0.5) | 17 |
| Ramp Planner: | *What*'a'we got here. | 18 |
| | You've got about *twelve peo*ple come to you | 19 |
| | so you got *ba:*gs comin off that flight.= | 20 |
| | Can you pick em up? | 21 |
| Radio: | I sure *will* Mike. | 22 |
| Ramp Planner: | Kay. That's on gate *six*teen. | 23 |
| | Be in about ((looks toward the Flight | 24 |
| | Information Display)) thirty six *af*ter, | 25 |
| | ((starts looking for a pen or pencil on the surface | 26 |
| | of his desk and in his drawer as Radio responds)) | 27 |
| Radio: | Gate *six*teen. *I copy.* | 28 |
| Flight Tracker: | It's *here* | 29 |
| Ramp Planner: | ((The Ramp Planner is looking in a drawer | 30 |
| | displaying disengagement from the radio call)) | 31 |
| Flight Tracker: | *It's here.* | 32 |
| Ramp Planner: | It's here? ((looks in direction of Flight Tracker | 33 |
| | and at screen with a quizzical look)) | 34 |
| Flight Tracker: | It's here. | 35 |
| Ramp Planner: | Okay. It's on the *ground* right *now:* | 36 |
| | It'll be coming in to sixteen ((looks at monitor)) | 37 |
| Radio: | Yeah buddy. | 38 |

(1991) prosodic cues which are used to determine intonation unit boundaries include cues related to the pitch pattern of the utterance and cues related to timing:

The perception of coherence in the pitch pattern is influenced by at least two factors: degree and direction of pitch movement on a stressed syllable and change in pitch relative to the speaker's preceding utterance (pitch reset). Timing cues which contribute to perceived IU unity include an acceleration in tempo on initial unstressed syllables, prosodic lengthening of the final syllable(s), and a noticeable pause (0.3 second or greater) between IUs.

All three intonation units of announcements are produced with falling pitch. The pitch range declines throughout the production of each intonation unit of the three-part utterance (which is part of what makes it appear a cohesive unit).

(12) RP:  **Two:** seventy **si:**x
          On'th'ground.
          F'ga'eigh**teen.**

(13) RP:  Six ninety **one.**
          On'th'ground.
          For'gate fif**teen.**

(14) RP:  Two two **five.**
          On'th'ground.
          Gate six**teen.**

(15) RP:  Eleven **twenty's.**
          On'the'ground.
          For gate **twenty.**

The announcement has a three-part structure. In the stereotypical announcement sequence the first intonation unit contains the flight number of the plane, the second, the phrase *on the ground*, and the third, the gate that the plane will be arriving at:[12]

Flight X          ((flight number of plane))
On the ground     ((state of plane))
For gate Y        ((gate destination))

Three separate pieces of information are presented in the intonation units making up a turn at talk.[13] The information is produced in one turn at talk and is delivered as a single package by fitting it into one *declination unit* (Schuetze-Coburn, Shapley and Weber 1991:212), a period of speech sharing a common declination line,

or gradual falling-off of pitch during an utterance. By packaging information in this way it can be received intact and the pieces can be assembled into a whole. The following figure provides a diagram[14] of the pitch track of a typical announcement sequence:

(16) RP:  **Two:** seventy **si:x.**
          On'th'**ground.**
          F'ga'**eighteen.**
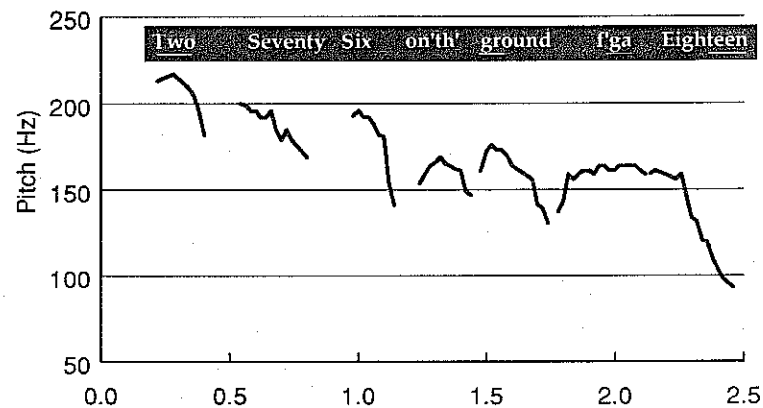


The *new* information in the utterance is the announcement that a particular *flight* has in fact arrived. The flight number is relevant for a particular set of individuals, those responsible for unloading baggage from it and fueling it. It implicitly functions as an address term, alerting those responsible for servicing a particular flight number that 'it's showtime'.[15] Other information in the announcement is highly predictable. Through information on documents called complex sheets, hard-copy versions of the day's schedule, as well as computer displays on monitors positioned in the bag-room, Ramp personnel (crew chiefs, as well as transfer drivers for whom the announcement is relevant) have access to the expected times of arrival of planes at particular gate destinations.

Salient information is highlighted throughout the turn. The flight number is positioned right at the opening of the announcement, in the first intonation unit. Not only is it delivered with relatively high pitch, but it also takes up roughly half of the turn. The time used to produce the flight number in the above example was 1.2 seconds out of 2.57 seconds for the complete declination unit.

The second intonation unit, *on'th'ground* produced with a small reset, indicates the state of the plane. Accelerated and phonetically reduced speech at the beginning of the utterance indicate the lack of salience of this part of the intonation unit. Rapid speech is indicated in the transcript through apostrophes separating words (indicating the speech is elided); the spelling of *th*, eliminating the vowel from the word *the*, indicates that the word *the* is barely discernible. Shortening or simplification has been identified as a feature of registers such as sports announcements (Ferguson 1983:160). Note that as in sports-announcer talk (1983:159) copula deletion occurs after the subject, so that essential information is highlighted, as in headlines or captions. This 'assimilated' (phonetically reduced) or rapid speech in the production of *on'th'ground*, stands in contrast to careful articulation over the words naming the flight and the gate.

In addition to separating the two parts of the utterance containing information delivered with numbers, the phrase *on the ground* stands in contrast to other sorts of identifications concerning the whereabouts or 'state' of the plane. For example, similar announcements making reference to the position of a specific plane and gate, use phrases such as *clear to land*, a formulation frequently used in communications from tower to pilot.

(17) Tower to Pilot: (      ) clear to land.
      FT:              Fifteen twenty **three's** cleared to land.
      RP:              Fifteen twenty **three's**
->                     clear to land
                       for **eighteen**.

Though the phrase *on the ground* was by far the most commonly used phrase of the second intonation unit, alternative phrasings include *just landed* or *on*.

(18) RP: Eight sixty **six**
         Just landed
         For gate **nine**.

(19) RP: Twelve o one
         Is **on**
         For Alpha **nine**.

Such phrases stand in contrast to others such as *cleared to land*, which would indicate that the plane is still in the air. The informa-

tion within the second intonation unit is quite predictable, as most announcements concern the arrivals of planes. One Ramp Planner (who frequently showed disrespect for traditional announcement forms) eliminated this part of the turn completely, specifying only the flight number and gate:

(20) RP: Five **sixty**.
         For gate **nine**.
         Shut **up**.

Note that although *Shut up* was added, the three-part rhythmic structure of the turn was nonetheless preserved.

The third intonation unit of the turn specifies the gate the plane is coming into. Through complex sheets and the flight information display terminals in the bag-room crew chiefs already know scheduled gates. However, given that gates *can* change in the course of the day due to airplane swaps (Jordan 1990) such information is still relevant, confirming that the expected gate is the actual gate. In the production of this intonation unit the nonessential information *for gate* is greatly compressed. In example (16) above *for gate* is produced as *f'ga* with *ga* eliding with the *ei* of *eighteen*.

By way of contrast the actual number of the gate is produced clearly, in full form, and often accented (as indicated by the boldfacing in the text). This part of the utterance functions like an address term. As the Ramp is divided into different three- or four-person teams assigned to a particular gate, the gate number indicates the precise crew for which the utterance is relevant. In fact, in the third intonation unit, personal names designating for which crew chief the announcement is relevant, can occur *in place of* specific gates:

(21) RP: Two eighty **six**.
         Clear't'land.
->       Javier.

(22) RP: Seven eighteen.
         Just landed.
->       uh **Mark**.

As these examples indicate, an optional feature of the announcement is the use of a personal name, placed at the end of the
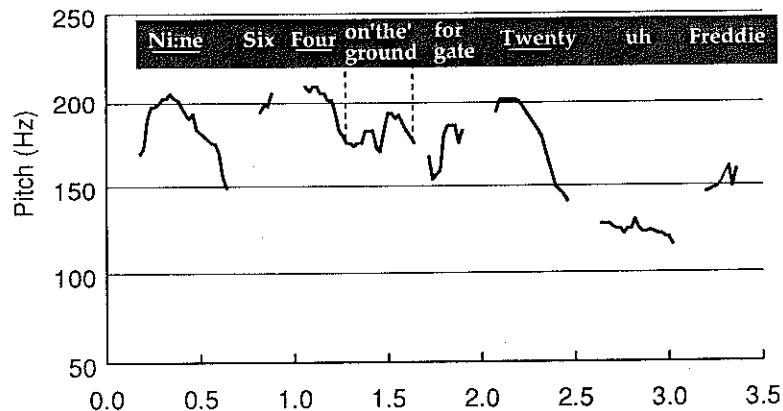
utterance. This also provides a form of address and serves to personalize the announcement.

(23) RP:          That i:s
                  Sixteen seventy **five.**
                  On'the'**ground.**
                  For'ga'**twelve**
                  Charles.
      Crew chief: **Thank** you **Joe.**

(24) RP: **Ni:ne** six **four**
         on'the'ground
         for gate **twenty**
         uh Freddy.

A pitch track of example (24) shows that the address term is produced as if a separate intonation unit:



On the word *ni:ne* of *ni:ne six four* the pitch drops and there is a slight pause before talk resumes. The Ramp Planner gives this part of the utterance extra emphasis not only through accent on the numbers *nine* and *four*, but also through the high percentage of turn time devoted to it (1.2 seconds, almost half of the total time for the basic announcement). In contrast *on'the'ground* and *for gate* occupy minimal time during the turn.

Though optional elements, such as address terms, can be appended to the basic announcement turn, and it can take a variety of different forms, the announcement's rhythmic triplet structure is typically preserved:

(25) RP: Gate **five.**
         Dwight **Lugeroff.**
         It's **showtime.**

Aviation textbooks explicitly instruct pilots in their communication with the ground or tower to 'State your intentions or your request for service – *briefly*' (emphasis in the original; Glaeser 1982:204). Such practices are carried over into less formal airport settings such as Operations. The announcement highlights important information; the aircraft flight number, which acts as a summons, is positioned in the initial part of the turn, and separate bits of information are conveyed in each intonation unit.

## 4 Conclusion

Talk about incoming planes in an airport gets changed as it is propagated through the system in different divisions of the airport. An overheard message on a scanner from air-traffic control to pilot about where to park is transformed into an *informing* (a prompting about the current state of the plane) to Ramp Planner and finally delivered as an *announcement* to the Ramp. Unlike the canonical single-focussed face-to-face encounter, in a multi-focussed setting such as Operations, speaker and hearer are not necessarily oriented to each other, so they may not have access to visual feedback. The problem posed is how to produce talk that can be heard above the 'sonic soup' noise of the Operations room. A solution which has evolved entails adapting the informing to the situation at hand through intonation contours, such as chants, which in Gumperz's sense (1982) contextualize talk as set apart from ordinary conversation. In the informing by Flight Tracker, the intonation contour as well as the specific words used vary from speaker to speaker and within a single speaker's repertoire. Informings are targeted for specific co-present others, and are adapted to the specifics of the interaction of the moment. For example, intonation contours can be more exaggerated – almost sung – and address terms appended when Flight Tracker perceives Ramp Planner to be engaged in talk which might impede hearing of the informing.

While a variety of types of signals and intonation contours may be used to summon a Ramp Planner in the informing, features of

the *announcement* are much more routinized. Though intended for specific crew chiefs (who have radios on their person), they can be heard and easily interpreted by any Ramp person in the baggage area for whom they might be relevant. These are typically one-way interactions which, in contrast to informings, are produced where the local environment is not known in detail. Whereas informings are delivered as a single intonation unit, announcements are usually produced as three intonation units packaged within one declination unit. Each intonation unit contains information useful for prompting crew chiefs, the most important information receiving the greatest salience. The three-part structure allows recipients to easily process the information conveyed. By producing talk with a distinctive intonation contour the announcement stands out from other talk in the bag-room (one of the noisiest rooms in the airport).

The announcement exhibits certain features which resemble those of oral-formulaic speech or what anthropologists have described as 'ritual speech' (DuBois 1986, Fox 1988, Briggs 1988). According to DuBois (1986:317) ritual texts are uttered 'with a high degree of fluency, without hesitations, in a stylized intonation contour'. In the production of these utterances, in contrast to the more conversational talk, the speech is extremely fluent, and there is no hesitation (no *uhs*, *uhms* or sound stretches). In addition, the intonation contour of the announcements to the Ramp is quite regular across the talk of different speakers. Though generally the parallel elements characterizing ritual speech are found to be paired, semantically related lexical items or grammatical structures (Jakobson 1987:173–179; DuBois 1986:316; Fox 1977:78), here repetition exhibiting poetic features is achieved through intonation units with similar falling contours.

In ritual speech a form of 'authoritative voice' is conveyed through what DuBois (1986:330) describes as the 'obliteration of ultimate personal source'. For example, shifters, especially those which index the speaker as an individual, are avoided. As Olson (1980:103) states, the ritual orator does not express his personal views, but rather acts as a spokesman or messenger. He proposes that an important feature of establishing authority for ritual speech is to make it appear to be derived from a 'transcendental' source. DuBois (1986:330, 333) argues that an important feature of establishing authority for ritual speech is to make it appear to be of

apersonal origin – that the words appear to be in some sense 'god-given', derived from some timeless source whose authority is self-evident. Following Turner (1967:19), DuBois (1986:314) states that he understands ritual as 'prescribed formal behavior for occasions not given over to technological routine, having reference to beliefs in mystical beings or powers'. Interestingly, in the announcement sequences examined here it is *over technologically mediated speech channels* with their feature of only one person speaking at a time that talk becomes routinized. Radio communication in particular seems to promote this ritualization.

DuBois (1986:333) argues that parallelism promotes the perception of the utterance as an artefact – a 'speech tool' rather than a 'speech act'. In a similar vein, Bruce and Touati (1992:457) argue that 'parallelism facilitates monologue processing by reducing information density and increasing redundancy'. The three-part format for delivering the announcement is a powerful way of conveying information. It is easily produced so that anyone can say it (examples 10 and 13–15 show novice Ramp Planners competently using it on the second day of the job), and it is very brief. While relayed informings can be tailored or adapted to take into account the targeted addressee's situation of the moment (by, for example, moving to chant in a particularly busy sound environment), announcements get their force from the highly regularized way in which they are routinely produced over and over for different audiences where the local environment is not known in detail. Simultaneously the special register of Ramp Planner's announcements unambiguously cues Ops personnel (Flight Tracker in particular) that prior information has been received and understood.

This chapter has attempted to describe the complex phenomena that must be attended to simultaneously by personnel in an airline's Operations room. Producing an informing requires not only competence in the prosodic production of talk which is distinctive, but also intensive monitoring of one's physical environment (computer screens which display information about incoming planes) as well as auditory environment (the scanner which broadcasts calls between pilots and tower). The historically constituted material world in which information is transferred is an essential part of the participation framework within which this talk occurs. In producing talk in its environment, participants do not merely sequence

utterances, but, in addition, juxtapose a variety of resources – technologically mediated communication as well as written documents – to formulate appropriate next moves. The speech actions discussed here are constitutive parts of activity chains, which can rally a number of participants to assist in carrying them out. Participants must be able to juggle the simultaneous demands placed upon them, as the situation in the Operations room differs from the accepted view of encounters as single-focussed engagements (Goffman 1963; Kendon 1985). In producing parts of information transfer sequences, Ops participants must find solutions to the problem of targeting communication to co-workers which will carry over the other talk being attended, yet not place undue demands on them. The crafting of utterances within information transfer sequences provides strong evidence for the claim that language is a powerful social tool. Indeed language constitutes ongoing work in the Operations room workplace, and therefore, as argued by Malinowski (1959:312–313), should be considered 'a mode of social action rather than a mere reflection of thought'.

## Appendix: transcription

Data are transcribed using the transcription system developed by Jefferson and described in Sacks, Schegloff and Jefferson (1974:731–733).
Punctuation symbols are used to mark intonation changes rather than as grammatical symbols. A period (.) indicates a falling contour, a question mark (?) indicates a rising contour, and a comma (,) indicates a falling–rising (list-like) intonation.
A dash (-) marks a sudden cut-off of the current sound.
A left bracket ([) marks the point at which the current talk is overlapped by other talk.
Double slashes (//) provide an alternative method of marking overlap.
Colons (::) indicate that the sound just before the colon has been noticeably lengthened.
The equals sign (=) indicates *latching*; there is no interval between the end of a prior turn and the start of a next piece of talk.
Rapid speech is indicated by an apostrophe (') between words.
Numbers in parentheses (0.0) mark silences in seconds and tenths of seconds.
Capitals indicate increased volume.
Underlining or bold face indicates accented syllables.
Low volume is indicated by a degree sign (°).
Material in parentheses (  ) indicates problematic hearings.

Materials in double parentheses e.g. ((nonverbal actions)), indicate nonverbal actions of speaker, or transcriber's comments.

## Notes

1   Though Ferguson (1983) notes that features of tempo, rhythm, loudness, intonation and 'other characteristics of voice' distinguish radio-announcer sports talk, his discussion of announcements is primarily concerned with syntax rather than prosody.
2   Linguists have looked at speech acts largely with reference to the underlying preconditions and intentions of a speaker. Here, however, talk between tower and pilot has relevance for an unintended audience. Though the message from tower to pilot provides no indication that it should be used by the Flight Tracker for relayed messages to the Ramp Planner, it has the possibility of being used in this way, as a resource for other planning. For a critique of speech act notions of intentionality from an anthropological perspective see Duranti (1988).
3   Goffman defines an encounter as 'a type of social arrangement that occurs when persons are in one another's immediate physical presence' (Goffman 1961:17).
4   Example (5) occurred during a conversation about an upcoming noon gathering; it involved several co-present people, including Ramp Planner (line 2):

((Flight Tracker is looking at her monitor, flight information display screen and at the row of monitors))
1     FT:   Two seventy si:x is on the gr:ound,
                                                [
2     RP:                        Probably have food there too:.

3    RP: **Thank** you. ((slight head bob as a 'take' of the prior
         message from Flight Tracker))
4    FT: **You're** welcome. ((typing on computer))
         (0.8)
5    RP: **Two:** seventy **si:x.**
6        On'th'**ground.**
7        F'ga'eighteen.

5   I am indebted to Cynthia McLemore for her help in providing an
    auditory analysis of this utterance.
6   See also Haiman (1991:59) for his description of chants as
    'quintessentially ritualised or stereotyped contours'.
7   Kroskrity (1993:4) describes Arizona Tewa announcements with
    respect to their 'attention-getting style', and states they involve not
    only increased volume but also a distinctive intonational contour
    which contrasts with the more general gradual intonational lowering
    from beginning to end in everyday speech. See Gibbon (1976:276–277)
    for a discussion of 'hailing', 'greeting' and 'formulaic shouting', which
    possess intonation forms similar to 'calling'.
8   See Heritage's discussion of change-of-state tokens in response to news
    (1984).
9   Terasaki (1976:21), citing Sacks, notes that '[t]he preference not to tell
    known news manifests itself in an apparent preference to, as Sacks
    [personal communication] has it, "undertell and over-suppose"'.
10  In their study 'Units of intonation in discourse: a comparison of acous-
    tic and auditory analyses', Schuetze-Coburn, Shapley and Weber
    (1991) showed that 99% of the acoustic unit boundaries coincided
    with auditory unit boundaries.
11  Couper-Kuhlen (1986:75–80) uses the term 'tone-unit', which she
    defines following Crystal as 'a stretch of utterance which has at least
    one prominent syllable with major pitch movement'. She argues that
    cues which establish the boundaries of a tone-unit include a short
    pause, and phonetic lengthening or aspiration at the end of the tone-
    unit (ibid.:75).
12  This format was also used in a computer airline, where Ramp Planner
    had to talk to (i) pilots of incoming aircraft, giving them parking
    instructions, and (ii) crew chiefs responsible for meeting incoming
    planes. In the initial part of the announcement, Ramp Planner distin-
    guished addressees by identification of a three-digit *aircraft number*
    (printed on the side of the aircraft) for Ramp, and *flight number*, fre-
    quently four digits, for pilots. In the second intonation unit, Ramp
    Planner either indicated the state of the plane for Ramp crew
    (through *here*) or provided a directive for the pilot (*Come in*). In the
    third intonation unit, Ramp Planner indicated the gate the plane was
    headed for, specified by words standing for letters (Delta=D) rather

than numbers as was customary for the larger commercial airline. For
example:

    ((to Ramp crew chief))
RP:  Three sixty
     here
     for Delta.

Immediately following the announcement, the Ramp Planner pro-
vided parking instructions for the pilot:

    ((to pilot))
RP:  Fifty two fifty seven.
     Come in
     for Delta.

13  Quite similar components – specifications of addressed audience, infor-
    mation concerning location, and a directive feature – occur in Tewa
    announcements (Kroskrity 1993:14).
14  Stephan Schuetze-Coburn provided the pitch tracks for the acoustic
    analysis in this chapter and helped clarify many issues on prosody for
    me.
15  Alternative versions of announcements may use an explicit address
    term in the first intonation unit of the announcement turn, as in

RP:  Mamason.
     Three o four
     is on the ground.

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