15 Gaze in Conversation

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1 Introduction

Simmel (1969: 358) noted that "the totality of social relations of human beings, their self-assertions and self-abnegation, their intimacies and estrangements, would be changed in unpredictable ways if there occurred no glance of eye to eye." Seeing others and being seen has a special significance in human interactions, which goes beyond the mere perceptual or communicative functions of the eyes. Most research on how humans use their eyes has focused either on the relationship between eyes and perception (see, for example, Liversedge, Gilchrist & Everling, 2011, for an overview) or on the relationship between eyes and emotions. Two centuries ago Darwin (1872) had already claimed that feelings such as pride, humility, guilt, conceit, slyness, suspicion and others could be detected not just by the facial expression of an individual but simply by their eyes. Most research on facial expressions (e.g. Ekman, 1992, 1993; Ekman & Friesen, 1978; Ekman & Oster, 1979), including recent conversation analytic work (Ruusuvuori & Peräkylä, 2009), has looked at the role that eyes are said to play in the compositionality of facial expressions and considered not only the movements of the eyes, but also all the muscle movements going on around them, including the brows, to accomplish, for example, frowns. Despite the importance of the eyes in displays of emotion and in the composition of facial expressions, this chapter focuses instead on gaze orientation during social interaction and its communicative and regulatory functions, with an emphasis on turn-taking and the accomplishment of social action. It reports what we know about the relationship between eyes and social actions. Specifically, it describes how human beings use their eyes during face-to-face interactions and outlines what we know about the orderliness of that behavior.

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2 Background: The Gaze 'Machinery'

Before entering the details of how gaze is deployed in social interaction, a quick glance at the 'machinery' that gaze relies on provides background for the findings that are reported. In what follows, I outline what we know about the unique physiology of the human eye, the human capacity to detect gaze direction in a very precise way and the consequences this has for establishing joint attention, and finally, what we know about the salience of human faces from a perceptual and social point of view.

Human gaze behavior is a highly evolved system: unique among primate species, the human orbit has evolved to display the sclera, in humans also referred to as 'the white of the eye', and our eye outline is extraordinarily elongated in the horizontal direction. Among primates, only humans have a white sclera (see Figure 15.1). This physiological difference facilitates the detection of other's gaze direction at a distance and may therefore have a communicative function (Kobayashi, 1997, 2001; Morris, 1985). This claim is supported by empirical evidence from an experiment conducted by Tomasello, et al. (2007) in which human infants and other great apes were compared in terms of their tendency to rely on eye or head direction in following the gaze of a human experimenter. This experiment shows that while human infants rely mainly on eye direction, great apes rely on head direction, suggesting that the presence of a white sclera may have co-evolved with human cooperative interaction, to facilitate the perception of what others are looking at.

It has also long been established that humans can judge the direction of other humans' gaze to within a few degrees of arc (Gibson & Pick, 1963), a capacity claimed to be crucial for the development of joint attention and human social cognition (see, for example, Butterworth & Cochran, 1980; Scaife & Bruner,

Figure 15.1 Human eyes vs. chimpanzee eyes.

1975; Tomasello, 1995, 1999) and language acquisition (see, for example, Bruner, 1983; Tomasello & Farrar, 1986). Human infants develop the capacity to follow gaze as early as three months of age (D'Entremont, Hains & Muir, 1997), which enables the possibility of establishing joint attention with another individual. Establishing joint attention is particularly important from a developmental point of view because it helps in understanding others' thoughts and intentions (e.g. Baron-Cohen, 1995; Frith & Frith, 2001), and it strongly correlates with language acquisition (Brooks & Meltzoff, 2005). For example, individuals with autism appear to have a different way of engaging in gaze following and an impairment of joint attention (Charman, 2004; Dawson, et al., 2004; Loveland & Landry, 1986; Mundy, 1995; Mundy & Newell, 2007). These findings show that being able to detect the direction of another's eyes is, from an ontogenetic point of view, extremely important in the process of becoming social beings and acquiring language.

Additionally, looking at someone's face is interactionally more relevant than looking anywhere else during a conversation. People look at each other's eyes to threaten (aggression) and to flirt (create intimacy) (Eibl-Eibesfeldt, 1989), but most of the time during our daily interactions, we wish to present our gaze behavior as "ordinary" (Sacks, 1984b); that is, we do not want others to find our gaze behavior marked or deviant. This suggests that there are norms associated with our use of the eyes during social interaction and that there are practices we deploy to sustain "ordinary" gaze behavior—and thus by extension that there are divergences from the normal patterns which generate inferences about what is being done. These practices have to be learned and could be patterned somewhat differently in different cultures.

Studies based mainly on interactions in American English or other European languages (e.g. Argyle & Cook, 1976; Argyle & Dean, 1965; Argyle & Graham, 1976; Exline, 1963; C. Goodwin, 1981; Gullberg & Holmqvist, 2006; Kendon, 1967; Nielsen, 1962) show that participants spend a significant amount of time looking at each other's face when they interact. In dyadic interactions in laboratory settings, Argyle and Graham (1976) showed that while background stimuli had an unreliable effect on gaze, objects relevant for the subject's task attracted gaze for large amounts of time and therefore reduced gaze at the other person. C. Goodwin (e.g. 1981, 1984) has claimed that one's brief disengagement from looking at the other participant (i.e. looking at nearby objects used for the accomplishment of activities competing with the talk, for example, during drinking, smoking, eating, etc.) is less socially accountable than looking away in general. Nonetheless, the general claim that looking at another's face during a conversation is more relevant than looking at any other object in the environment not directly relevant to the task at hand has been challenged from cross-cultural work on gaze. For example, Rossano, et al. (2009) show how members of a Mayan community living in Mexico and speaking Tzeltal tend *not* to look at speakers' faces while listening to them, so that not looking at anything in particular while listening to somebody speaking is the default *home position* (Sacks & Schegloff, 2002) for the eyes. Moreover, looking at an object may be considered a sign of disattending the conversation.

3 Gaze 'Machinery' in Social Interaction

Most of the detailed work on gaze in interaction has been conducted by social psychologists or kinesic researchers working on English or other European languages. The main focus of social psychologists has been to determine whether looking at the other's face during a dyadic interaction correlates with factors including personality, gender, age, social status, asymmetric relationships, seating arrangements and so on (see Kleinke, 1986, for a review of the research in this area). Alongside the social psychological approach, linguists and anthropologists, together with individuals interested in cybernetics and psychotherapy, shifted toward including visible behaviors in their analyses and descriptions (see Heath & Luff, this volume, on embodiment). Birdwhistell (e.g. 1970), the founder of the kinesic approach to social interaction, tried to provide a method and theoretical tools to produce an accurate and detailed description of body movements during an interaction, assuming their compositionality, communicative import and cultural variability. He assumed that there was nothing in people's behavior that should be disregarded *a priori* as meaningless, an assumption later embraced by conversation analysts as summarized in Sacks' phrase "order at all points" (Sacks, 1992: 483). Two more important insights came from the kinesic approach, as reported by Scheflen (1975), a close collaborator of Birdwhistell:

(i) The dichotomy according to which language is communicative, while every other visible behavior simply works as a cue for who is speaking or what is supposed to happen next is wrong.
(ii) A participant does not speak, gesture, smile and hold a posture simultaneously to form a single message with redundant parts. Rather, each modality is employed for specific purposes, some of which may be purely communicational, others might be regulatory and others again might be used to induce or sustain specific relationships between the participants in the interaction.

These insights have permeated most of the work on gaze in social interaction, in particular the work of Kendon and Goodwin, whose studies will be described in more detail below.

From a conversation analytic point of view, research on gaze in social interaction has focused mainly on three different dimensions: first, its relationship to participation in the conversation; second, its regulatory functions (e.g. its role in turn-taking); and third, its role in action formation. These areas, however, have received different amounts of attention, as will be clear from the following report of the main findings in each one of them.

3.1 Participation roles and participation frameworks, engagement and disengagement

A great deal of work has been dedicated to the relationship between gaze, participant roles in conversation and the participation framework in place. The idea that gaze is closely related to participant role (speaking, or being addressed, in

particular) is persistent across the literature. In particular, it has long been claimed that in dyadic interaction, people tend to look at the other participant more when they are listening than when they are speaking (Argyle & Cook, 1976; Argyle & Dean, 1965; Argyle & Graham, 1976; Bavelas, Coates & Johnson, 2002; Duncan & Fiske, 1977; Exline, 1963; C. Goodwin, 1981; Kendon, 1967, 1973, 1990a; Kleinke, 1986; Nielsen, 1962; Rutter, 1984). The first person to note this difference was Nielsen in his seminal work on self-confrontation (1962). Interested in the timing of visual behavior in face-to-face interaction, he not only found that there is a "tendency to look more at [the other] while listening to [him/her] than during one's own speaking periods," but that most of the dyads "show a striking regularity: looking [at the other] decreased when speaking increased and looking [at the other] increased while listening increased" (Nielsen, 1962: 141). Kendon (1967) provided a more precise description of the different patterns of speaker and hearer gaze. He claimed that hearers give speakers long looks interrupted by brief glances away, while speakers alternate looks toward and looks away from the recipient of approximately equal length.

These studies implicitly suggest that such gaze behaviors are independent of attributes such as race, culture and gender, for instance. There are, however, studies that claim racial differences with respect to the use of gaze to display engagement. Specifically, Black Americans have been shown to look at the recipient more while speaking than while listening, while White Americans follow the opposite pattern (Erickson, 1979; LaFrance, 1974; LaFrance & Mayo, 1976). Moreover, the recent work by Rossano, et al. (2009) mentioned earlier shows that the amount and type of gaze interaction between speaker and recipient may vary across cultures and may also be strongly related to the social actions the participants are initiating through their talk. Indeed, they find that in the context of question-answer sequences in the three cultures investigated (speakers of Italian, speakers of Tzeltal, a Mayan population from Mexico, and speakers of Yélî Dnye, from Rossel Island, a remote island of Papua New Guinea), questioners are more likely to look at their recipients than vice versa, and they tend to do so by looking toward their recipient from the very beginning of the question without alternating looks toward and looks away.

Returning to general claims about gaze patterns in face-to-face interaction, C. Goodwin proposed two rules (1980: 275, 287; 1981: 57) that would account for gaze behavior in conversation, according to a case-by-case analysis of his data, and further supported by quantification in a small corpus:

(i) "A speaker should obtain the gaze of [her] recipient during the course of a turn-at-talk."
(ii) "A recipient should be gazing at the speaker when the speaker is gazing at the hearer."

If the recipient looks most of the time, then the speaker will find him/her gazing back any time the speaker looks toward the recipient. If the recipient is not looking at the speaker, the speaker has resources (phrasal breaks, pauses, restart-

ing the turn) to solicit the recipient's gaze. By proposing these as "rules," Goodwin claims that participants' gaze behavior is interrelated rather than independent and suggests a normative order to which participants are oriented during any turn-at-talk. In his work on gaze behavior during the course of a storytelling, C. Goodwin (1984) emphasizes how participants' visible—and, in particular, gaze—behavior helps shape the unfolding of the telling. Moreover, he proposes that a way to understand why gazing away from the speaker during a telling is rarely sanctioned or treated as problematic is that there is a relaxation of the gaze rule due to the co-occurrence of competing activities. However, the very suggestion of a rule that can be 'relaxed' immediately calls into question the normative strength of the rule suggested and whether it would not be more appropriate to come up with a rule that would account for this behavior, rather than requiring its relaxation. It will be later shown how recent work on gaze in social interaction suggests that gaze might be mainly organized at a different level from the one proposed by Goodwin.

In addition to his seminal paper on how gaze deployment affects the construction of an utterance in progress (C. Goodwin, 1979), probably the most important work on gaze in social interaction from a conversation analytic perspective is C. Goodwin's (1981) *Conversational Organizations: interaction between speakers and hearers*. In this book, he describes gaze behavior as a display of attention and (dis) engagement in the conversation, or more precisely, a display of the type of participation framework the participants are engaged in. From this perspective, looking away is noticeable and potentially sanctionable because it displays diminished engagement in the conversation. On the other hand, engagement in a competing activity (e.g. eating) provides a ready account for looking away rather than at the interlocutor's face and thus makes it less sanctionable. However, this claim also implicitly suggests that participants are relatively free to remove their gaze from co-participants, provided that they direct it toward another activity in which they are engaged. This appears to be problematic from a closer look at a larger number of interactions. Indeed, as Rossano (2012) shows, some activities require more sustained gaze by the recipient toward the speaker (e.g. tellings) or by the speaker toward the recipient (e.g. questions) than others, suggesting that this relative freedom actually depends on the gaze expectations associated with the ongoing course of action. Moreover, in the same work Rossano shows that different sequential positions might indicate that gaze withdrawal should have different import, as will be shown later with respect to the organization of gaze withdrawal at sequence possible completion. Finally, participants appear to calibrate their looking toward competing activities so that they do not disrupt the progressivity of the talk; that is, for example, they might look toward a glass and pick it up to drink when they expect they will not have to produce the next turn-at-talk (see Extract (1) below), so that drinking will not create a silence when talk would be otherwise expected.

Further work on the relationship between gaze and participation has been developed by Heath (1984), who showed how a gaze and postural shift directed toward a co-participant can be used to "display recipiency." As such, it

"is sequentially implicative for an action by a co-participant; it breaks the environment of continuous opportunity, and declares an interest in having some particular action occur in immediate juxtaposition with the display" (Heath, 1984: 253). In this sense, a body movement can elicit speech by the other participant or it can elicit a gaze re-orientation. In this way, the person who produced the body movement in first position can obtain recipient gaze and begin to speak, making the beginning or the continuation of a conversation possible. Focusing on gaze and body posture as a way of displaying (dis)engagement in a course of action has been used in a particularly fruitful way in the analysis of doctor-patient interactions (see, for example, Heath, 1986; Robinson, 1998), and in broadcast interactions (Ekström, 2011a).

More recent work has refined claims about the level of participation at which gaze behavior operates. Rossano (2006a, 2012) has shown how participants' gaze is used differently depending on the social actions and activities in which they are involved (on action, see Levinson, this volume; on activities and overall structural organization, see Robinson, this volume). Specifically, participants have different norms for gazing at their co-interactants depending on whether they are involved in extended multi-unit turns (i.e. extended tellings) or turn-by-turn talk. In the former context, within the completion of the first-turn constructional unit (henceforth TCU) launching the telling, recipients are expected to gaze at speakers (see Mandelbaum, this volume, on storytelling more generally). By contrast, in turn-by-turn talk such as question-answer sequences, recipient gaze is not treated as normatively required. This poses an interesting puzzle for how, within the first TCU, listeners ascertain whether or not they are hearing the first TCU of an extended telling or a single TCU announcement, for instance. The answer lies, at least in part, in the fact that listeners rely on "fast and frugal heuristics" (Gigerenzer & Goldstein, 1996) based on the semantic domains included in the utterance to recognize the sort of action the speaker is initiating. For example, while TCUs initiating tellings often have a first person (singular or plural) subject, contain time references to the past or the future, indicate epistemic access to the events reported and mention for the first time a third person not previously discussed, first TCUs that initiate adjacency pairs often have a second person (singular or plural) subject and contain deictics and modal verbs. The different categories of words that participants choose to design their sequence-initiating actions provide cues to the recipients about that turn being the beginning of an extended telling or rather the first-pair part of an adjacency pair sequence.

Rossano's work recontextualizes many of the prior claims about gaze and participation and suggests that prior studies did not control for conversational activity type. Moreover, his work is particularly important when compared to Goffman's (1981a) analysis of the different types of hearers that may occur in a social situation. Goffman distinguished between *official* and *unofficial* participants. Within official participants he distinguished addressed and unaddressed recipients and among the unofficial participants between eavesdroppers, overhearers, bystanders and audiences. Rossano's work shows that within the category of addressed recipients, we can further distinguish a recipient of an extended telling from a

recipient of the first-pair part of an adjacency pair sequence. This added specification refines our understanding of participation in a social situation and recognizes the specific behavior that an individual is expected to implement for acting as an attentive and proper recipient.

To summarize, the work reported above shows that participant roles (i.e. speaker vs. recipient) affect participant gaze behavior. It also indicates that there may be normative expectations of gaze by recipients toward speakers, at least when they are not involved in competing activities and are listening to an extended telling. Looking toward or looking away from the other participant is often a good clue in terms of participants' (dis)engagement in the conversation. However, as more recent work by Rossano has shown, research on gaze and participation frameworks may have not adequately addressed differences related to social action.

3.2 Regulatory functions of gaze

Much research on gaze in social interaction has focused on its regulatory functions. In what follows, I outline what we know about gaze in turn-taking, turn allocation, mobilizing response and sequence organization.

Early studies of the regulating functions of gaze in turn-taking argued that gaze works to show that speaker A has finished talking and thus is used to signal the handing over of the floor. Some researchers have focused on the importance of gaze in monitoring each other's behavior and facial expressions (e.g. M. H. Goodwin, 1980c; Kendon, 1967). Kendon (1967), Duncan (1975), Duncan and colleagues (1974, 1977) have argued that speaker gaze has a 'floor apportionment' function in conversation and can function as a turn-yielding cue.[1] In particular, they claim that speakers tend to gaze away at the beginning of turns and tend to look up toward the recipient when approaching turn completion in order to signal that they are ready to turn the floor over to the other participant. In his seminal work, Kendon (1967) not only claims that speaker gaze displays the relevance of response but also affects its timing. However, Kendon deals only with the general dynamics of turn-taking. He makes no distinction between sentence types (such as interrogatives or imperatives) nor between action types performed through those turns-at-talk (e.g. announcements, challenges, complaints), but rather writes only in terms of "long" or "short" utterances.

Beyond these early studies, subsequent work found no evidence that speakers use gaze as a turn-yielding cue. Beattie (1978, 1979) suggests that a speaker's looking away during early utterance production, and reengagement during final production, are occasioned purely by the need to reduce cognitive load and that they do not have any regulating function in terms of turn-taking.[2] In trying to verify previous claims about the occurrence of looking toward a recipient approaching the end of the turn, Torres, et al. (1997) found that, of all turn endings in their data, only 16% included a look toward the recipient by the speaker and these 'look-toward' only accounted for 15% of all the speaker 'look-toward'. Most recently, De Ruiter (2005), examining task-based dialogues, confirmed the lack of

a systematic relationship between gaze and turn-taking in general, thereby reminding us of the need for a better description of gaze functions in face-to-face interaction.

Another related line of research has focused on turn allocation in the context of multiparty conversations, rather than on turn transition. First, C. Goodwin (1979: 99) claimed that, while uttering a sentence, "the gaze of a speaker should locate the party being gazed at as an addressee of his utterance," and showed that the very construction of a sentence can be affected by whether recipients return the gaze of the speaker during the uttering of the sentence, thereby allowing for the establishment of eye contact between the participants. More recently, developing Sacks, Schegloff and Jefferson's (1974) work on turn allocation, Lerner (2003) compared gaze and address terms as ways of addressing a participant and showed that a speaker's look toward a participant is an explicit form of addressing a participant, but its success is contingent on the gaze practices enacted by the other participants, in particular on the fact that both the addressed individual and the non-addressed ones perceive the speaker's gaze (on turn allocation, see Hayashi, this volume).

A third, larger stream of research regarding the regulatory functions of gaze has adopted a somewhat different tack in suggesting that gaze works to solicit response. In their work on the social organization of word searches, M. H. Goodwin & C. Goodwin (1986) refer to the occurrence of speaker gaze toward a recipient in two examples of word searches, and they describe its function as a way of soliciting aid from the other participant. However, no systematic evidence for this claim is presented and, in both examples, this apparent solicitation through gaze is, in fact, unsuccessful.

More recently, in an experimental setting, Bavelas, et al. (2002: 576–7) find that "the listener tended to respond when the speaker looked at her, and the speaker tended to look away soon after the listener responded. Together, speakers and listeners created and used the gaze window [mutual gaze] to coordinate their actions." Their notion of the *gaze window* describes a mutual gaze situation in which it is not *just* that the speaker's gaze elicits a response, but rather the listener's response seems to terminate the speaker's gaze. By 'listener responses' they refer mainly to *mm hm*, *uh huh* and nods, which have been labeled *back channels* in the literature (Yngve, 1970) or, within CA, *continuers* (C. Goodwin, 1986b; Schegloff, 1982). Bavelas, et al. assert that one of the main features that distinguishes the gaze window from the pattern previously described in turn exchange (i.e. looking toward the recipient indicates that the current speaker is approaching completion of his/her turn and is ready to leave the floor to the other participant) is the fact that there is no exchange of roles between speaker and listener.

One of the main conclusions that Bavelas, et al. (2002) draw is that the speaker does not look at the listener to monitor him/her for action but rather to solicit a response. A second conclusion is that listeners displayed their recognition and understanding of the action performed through gaze by responding "immediately and appropriately." At the same time, it is unclear in which way the occurrence of a response before the withdrawing of gaze becomes evidence that listeners are

responding specifically because of the gaze. Indeed, because of the coding system adopted for this study, a participant could have been looking for 10 seconds and if s/he looks away after a response, then the response would be considered related to the sustaining of the gaze, while the actual talk is not taken into account. A further problem associated with this study is that other communicative behaviors to solicit a response were simply not taken into account, and, as such, the specific actions performed through talk ignored. This suggests that the claim of a relationship between speaker gaze and listener's response needs further specification, which has been provided, at least to some extent, by other researchers in more recent studies, to which I now turn.

In a paper focusing on the resources that participants deploy to mobilize a response by a recipient, Stivers and Rossano (2010) identify *speaker gaze* as one such resource. They show that in face-to-face interactions, when the speaker is gazing at the recipient during an assessment or other non-canonical actions, the recipient usually responds to the initial assessment, while assessments that are not responded to are usually produced without speaker gaze or other response mobilizing features. The claim is that speaker gaze plays a role in mobilizing recipient response. Additional evidence for this claim comes from Rossano's (2010) work on question-answer sequences in Italian dyadic conversations. Rossano focuses on the resources that speakers deploy to indicate to recipients that they are producing a question (and, therefore, that they are pressuring recipients for some response). He finds that when speakers produce polar (yes-no) questions that do not have a prototypical interrogative intonational contour (i.e. a rising intonation), they are significantly more likely to look toward their recipient than when they are producing questions with prototypical interrogative contours. Given that polar questions in Italian can be marked intonationally but not morpho-syntactically, the occurrence of speaker gaze toward the recipient appears to work as an additional cue that the turn is something that should be responded to. Additionally, in work focusing on the timing of responses to yes-no questions in multiple languages, Stivers, et al. (2009) show that the occurrence of speaker gaze correlates with faster responses to participant questions. Although they do not take into account *recipient* gaze and the number of participants involved in the interactions varies (i.e. they are not all dyadic or triadic interactions), the finding is nevertheless supported in nine out of the ten typologically diverse languages investigated. Another recent cross-linguistic study that takes the sequential environment of talk and gaze into account provides additional evidence for the existence of a relationship between the occurrence of speaker gaze and the expectation and timing of a response. In their work comparing gaze behavior during questions in three unrelated languages and cultures mentioned earlier, Rossano, et al. (2009) show that, on average, speakers look at recipients during questions in 73% of cases.[3] They also show that speaker gaze behavior during questions is similar across the three cultures, while recipient gaze behavior differs. Moreover, they find that questions are overwhelmingly responded to and the ones that do not elicit response are typically produced with the recipient not looking at the speaker.

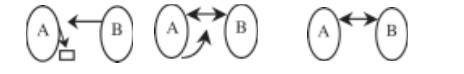
In terms of response mobilization, Rossano (2006b, 2012) provides a more fine-grained characterization of the contribution of gaze by looking at sequential environments in which a response is pursued by the speaker. Whereas previous work on pursuits of recipient response focused on the contribution of *vocal* strategies, he showed that, in fact, gaze alone is sufficient to mobilize interlocutor response. Example (1) is an illustration. In it, a couple is sitting at a table eating and chatting. Before the beginning of this excerpt, A accused her boyfriend B of having almost entirely eaten a chocolate rabbit she had bought for dinner guests that evening, which, after some denying, he eventually admits to having done. Then they begin eating again during the silence at line 1. Here our focus is the participants' gaze during the silence at line 3.[4]

(1) 2PLUNCH1 radicchio 9:10

01 (2.5)

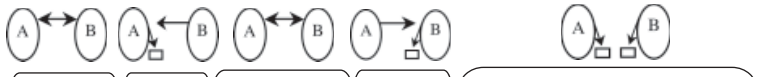
02 A: 

Io ci son rimasta male che non c' era la sorpresa.
I CL am left bad that not CL was the surprise
I was disappointed because there was not the surprise.
((Inside the chocolate rabbit))

03 → 

(2.5)

04 ((B makes gesture + facial expression like "what a pity")) (Figure 15.2)

05 

(7.5)

06 A: *Beh insomma Angela ha vinto l'Erasmus ad Heidelberg (0.2)...*
well in-sum Angela has won the-Erasmus at Heidelberg
Well Angela won the Erasmus for Heidelberg (0.2)...

A's turn at line 2 is both a complaint (not about B's actions) and an announcement (i.e. there was no surprise in the chocolate rabbit). A produces the talk at line 2 without looking at B and looks at him only one full second into the transition-relevance place. They engage in mutual gaze and sustain it for 1.3 seconds before B produces a facial expression and a mildly empathetic gesture that can be glossed as "what a pity," which seems quite ironic. They engage in a back and forth of looking toward each other, probably due to the ironic nature of B's response, until

Figure 15.2 Frame representing line 4 (Stivers & Rossano, 2010).

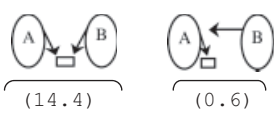
both of them look down and then re-engage in eating for some seconds. This example shows that a participant can pursue a response by gaze alone and the production of a visible rather than verbal response suggests that B was indeed responding to the fact that A was looking at him. As it turns out, gaze can be used to mobilize responses not only at the transition-relevance place, as in the example here, but also in other contexts as well (e.g. after a storytelling, a laughable or a try-marker; see Rossano, 2012). What these findings show is that gaze is a resource for doing far more in interaction than was previously thought. Whereas many of its functions in social interaction had been previously attributed solely to syntax or to prosody, these studies show that gaze from prior speaker to recipient can function to mobilize response even in silence.

Finally, within the range of the regulatory functions of gaze in interaction, Rossano (2005a, 2006b, 2012) suggests a different level of organization for gaze in social interaction: the sequential organization of action. Contrary to previous research, his work shows that gaze in interaction is not organized primarily by reference to turns-at-talk.[5] Gaze behavior seems instead to be mainly organized in relation to sequences of talk and the development of courses of action or ongoing interactional projects. This means that most of the shifts in gaze direction due to the social interaction (gaze shifts due to calibrating distances and reaching for objects do not occur because of the social situation, yet their timing might be affected by it) are observed at the beginning or at possible completion points of courses of action, accomplished through one or more sequences of talk. Some evidence for this claim comes from work that illustrates how speakers navigate the closure of sequences (Rossano, 2005a, 2012). Participants orient to the relevance of gaze withdrawal at sequence completion, particularly when this coincides with the completion of a course of action (for other means to project possible

completion of a sequence, see, Mondada, 2006a). In previous work, gaze withdrawal was described as a function of reduced engagement with a conversation (e.g. C. Goodwin, 1981, 1984), yet the suggestion here is that the level at which gaze works is more fine-grained than previously described. In their work on assessments, for example, C. Goodwin and M. H. Goodwin (1987) argue that gaze withdrawal is a way of displaying diminished participation in the activity, and discuss assessments as a resource for closing topics and mutual orientation. Interestingly, though, in all examples shown in that paper, gaze withdrawal is not followed by immediate topic closure but rather by further talk (at least an additional TCU) either by the participant who withdraws gaze (if s/he was the speaker) or by the current speaker (if the person withdrawing gaze is the recipient). As will be shown later in this chapter, gaze withdrawal is indeed a resource for making a bid for closure, or for displaying a specific understanding of the ongoing development of the course of action. By bidding for closure, participants display diminished participation in the activity.

Interactants, therefore, appear to be highly sensitive to where they are in a course of action with respect to their gaze behavior. As they approach sequence closure, they work to withdraw their gaze, and when both participants do so, the sequence does not get expanded in 84% of the cases (Rossano, 2005a, 2012). In contexts where gaze is not withdrawn, sequences are expanded until they can be closed in the absence of interactants' gaze. If both participants keep looking, they are expanded in 95% of the cases. Example (2) shows how sustained gaze at possible sequence completion leads to sequence expansion, until gaze withdrawal is coordinated before completion. In this case, one participant looks away before approaching possible completion and the other waits to withdraw until the last syllable of the last word of the turn. Moreover, this sequence is expanded twice before it is actually treated as complete. Prior to the 15-second lapse at the beginning of this extract, the participants (the same as in Example (1)) were discussing the location of a cinema, which was news for A. B looks at A before speaking and continues looking at him as she begins. The focus here is the participant's gaze behavior at the end of the turns at lines 4, 6 and 8.

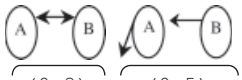
(2) 2PLUNCH1 Lezione 4:28



01 (14.4) (0.6)

(15.0)

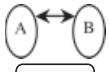
02 B: *Che lezione hai*
which lesson you-have
Which lesson do you have

03 

(0.3) (0.5)
(0.8)

04 A: 

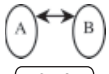
tch! *(0.3)* *Trigonometria*
trigonometry
tch! **(0.3)** **Trigonometry**

05 

((A picks up his glass full of water))
(0.7)

06 B: 

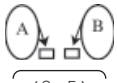
Che palle.
that balls
How boring.

07 

(0.9)

08 A: 

Laboratorio.= *E' l'ultima volta prima dell'esame.*
laboratory is the-last time before the exam
Laboratory.=It is the last time before the exam.

09 

(3.5)

10 B: 

E l'esame cos'e'?
and the-exam what-is
And what is the exam about?

While B inquires about a lesson A has to attend in the afternoon, A wipes his lips with a napkin. Before answering, he puts down the napkin while gazing at B. Then, he turns to the right averting her gaze, produces a click sound ("tch!") while apparently cleaning his teeth with his tongue and then turns back to her and answers the question: "Trigonometria" / *Trigonometry*. At the end of line

4, the sequence is possibly complete but both participants sustain mutual gaze. A then moves his right hand toward his glass on the table and B continues taking a bite of bread. If the sequence were complete, it would be possible for them to *just* do these actions, withdraw from mutual gaze and fully orient toward these competing activities. However, this is not what happens. During the silence at line 5, B chews his food and then offers a third-position assessment of A's response: "Che palle" / *How boring*. Thus, at a possible sequence boundary, participants are in mutual gaze and one expands the sequence with a minimal post-expansion. At the end of line 6, the sequence again reaches possible completion. However, at that point, and during the silence at line 7, B and A again sustain mutual gaze and what follows is another expansion of the sequence, this time by A.

During the sustained mutual gaze across the silence at line 7, A brings a glass of water toward his mouth. At this point, he could be drinking, and therefore display that he cannot, at least not in that moment, produce further talk, or he could hold the glass and say something else. This sustained gaze displays an orientation toward the sequence as not yet complete and invites sequence expansion by the other participant. Moreover, B's assessment at line 6 is a negative one and invites a second assessment that affiliates or disaffiliates with it (Pomerantz, 1984a). At that point, A does not lower the glass nor does he start drinking; instead, he holds it just in front of his face and produces the two TCUs at line 8. At the end of the turn at line 8, the sequence is yet again possibly complete. Both participants have withdrawn from looking at each other; A starts drinking and what follows is a lapse of 3.5 seconds and then a question that initiates a new sequence. In this example, at different points of possible completion of the sequence, the participants continue looking at each other, and what follows is not a new sequence, but an expansion of the current sequence. In this way, the participants display an understanding of the interactional project as not being over until the completion of A's turn at line 8, when both participants have finally withdrawn from looking at the other.

In this section I have shown how initial claims about the regulatory functions of gaze being organized with respect to turn-taking have been challenged. Recent work instead suggests that gaze behavior is organized with respect to the sequential organization of courses of action. Yet the role of gaze in selecting addressees in multiparty conversations appears to stand. Moreover, claims about the role of gaze in soliciting a response have been confirmed and partly refined, suggesting that this is the case in specific sequential environments, and not just at any point in time in a conversation.

3.3 Gaze in action formation and as a social act

A third line of research, largely developed within the last few years, and for the most part undertaken by Kidwell, has addressed the role of gaze in implementing social actions, depending on its context and delivery. Kidwell's work focuses, for example, on the recognizability of participants' looking practices in interaction, particularly in a childcare setting and in interactions with young infants. More

specifically, Kidwell (2005) investigates how very young children can differentiate two practices of looking by caregivers, termed a *mere look* and *the look*. While a mere look tends to be of short duration, alights briefly on a target and is usually produced concurrently with other activities that the caregiver is involved in, the look is relatively longer, is fixated on a target and is produced as a discrete activity. Kidwell finds that young children treat these two practices of looking differently: whereas they continue to engage in whatever they were doing when a caregiver directs a mere look at them, those same children treat the look as prefiguring sanctioning. As such, after a caregiver's 'look', children tend to inspect their own actions for its source (i.e. sanctionable behavior or activity such as harassing other children), and this often leads to a disruption of that behavior.

In a related study, Kidwell (2009a) shows how, in the context of children harassing other children, a gaze shift by the harassed child may be interpreted alternatively as "looking to" the caregiver as an appeal for her assistance, as "noticing" that the caregiver is approaching or as "searching" her out. The "looking to" gaze shift is "one in which the peer, when he or she shifts her gaze, continues her concurrent activities, readily alights and holds on a target, and directs action to the target" (Kidwell, 2009a: 150). The "noticing" gaze shift is "one in which the peer halts concurrent activities, readily alights and holds on a target, but does not produce action for the target" (Kidwell, 2009a: 153). Finally, the "search" gaze shift is one in which "the peer may stop or continue a concurrent activity, does not readily alight and hold on a target and makes appeals for assistance" (Kidwell, 2009a: 156). Thus, each type of gaze implicates a distinct social action with different responses relevant on its occurrence.

Focusing this time on gaze withdrawal, Kidwell (2006) shows how it can be differentially interpreted depending on whether it occurs during a conversation or when it is responsive to an imperative to comply with a directive action (e.g. an order) such as the ones a police officer might produce during his line of duty. Gaze withdrawal in this case can be taken as an act of resistance, and is thus dispreferred. Evidence is provided in that mutual gaze is pursued via both *embedded* methods (e.g. speech cut offs, gaze-tracking and embodied summonses) or via *exposed* methods (e.g. verbal commands to *Listen* and *Look*). Finally, Haddington's work (2006) focuses on how gaze can be used, in relation to the production of assessments, to display specific stances toward what has been assessed. He presents three types of gaze behavior (looking together at an assessable, mutual gaze during an agreeing second stance and cut-off gaze during actions that display divergent stances) and describes how they achieve stance-taking by interacting with what the participants are saying and doing during the interaction.

While this work on gaze and its relationship to social action remains relatively new, research has sometimes touched on the importance of mutual gaze or eye contact in conversation in *ad hoc* situations, while focusing on other interactional practices. For example, Egbert (1996) suggests that in German, the use of the repair initiator *Bitte?* is highly context sensitive. In particular, Germans tend to use *Bitte?* when there is no mutual gaze between the participants (including situations in which eye contact is impossible, such as phone conversations), while they tend to

use other repair initiators such as *Was?* when they are co-present and have mutual visual access. Sidnell (2006) also touches on the relevance of gaze in his investigation of how recipients identify and distinguish re-enactments from the main reporting of facts during a telling. In particular, he shows that during re-enactments speakers tend to look away from the addressee and keep their eyes away from the audience. By doing this, the speaker shows that s/he is doing something different from addressing the other participant (cf. C. Goodwin, 1979), and indeed s/he is doing a re-enactment. Finally, in an examination of interviewee laughter in broadcast news interviews, Romaniuk (2009) suggests that interviewers withdraw their gaze during the production of interviewee laughter in such a way as to systematically terminate the relevance of responsive laughter.

This section briefly described more recent studies that focus on how gaze and other embodied displays can be used by themselves to accomplish specific social actions, and also presented research that shows how specific gaze behaviors are constitutive of specific social actions, even ones performed mainly through talk.

4 Future Directions

Exciting work has been done on gaze and its contribution to social interaction, yet much remains to be done. While the current areas of investigation are broad, as outlined above, it is remarkable how few scholars within the conversation analytic perspective have directly focused on the role that gaze plays in social interaction. Gaze, indeed, is used to perceive the world, to control the accuracy of our own body movements and those of others, as well as to display attentiveness and engagement, but it can be used for structural communicative purposes as well. Often two different functions of gaze behavior are emphasized in scientific investigations: gaze behavior as responsive to environmental demands (e.g. attention), or gaze behavior as shaping the interactional environment and the actions accomplishable in it (e.g. projecting a next action). To simplify this dichotomy, one could say that gaze is usually either studied as 'a measure of' or 'a means for' something. Yet it is clear that in a single stretch of interaction, the same individual will be confronted with the need to pay attention to the environment and still use his/her eyes for communicative needs. A more complete analysis of gaze behavior in social interaction, then, should try to unravel the gaze machinery, the system of norms, biases and habits that guide people's eyes and actions during a conversation. Once this system is unraveled, we may be able to more fully understand what participants in a specific interaction are trying to accomplish through their use of gaze.

Many open questions remain, only marginally addressed until now. For example, what do we know about cross-cultural differences in terms of gaze behavior? Most of the previous claims about gaze from a cross-cultural perspective are premised on an expectation of universality. While this might be true for some behaviors, partly related to our perceptual needs, cultural differences might

emerge, for example, with respect to the engagement of mutual gaze. If this is the case, rather than seeing eye contact as fundamental for human sociality, as Simmel's quote at the beginning of this chapter suggests, we might find that eye contact is an epiphenomenon of different behaviors implemented by speaker and recipient during a conversation. Related to this is the use of gaze during interactions between deaf people using sign language. Few linguistic works have reported how gaze can be used to regulate turn-taking (Sutton-Spence & Woll, 1999) or display role shifting by looking away from the addressee (Herrmann & Steinbach, 2007) or have a grammatical function in marking verb agreement (e.g. Neidle, et al., 2000; Thompson, Emmorey & Kluender, 2006), yet more conversation analytic work in this domain would be needed. Another domain certainly worth further investigation concerns the acquisition of the gaze practices currently identified. If gaze behavior in social interaction is a learned behavior, when do children learn to behave like adult members of their culture? And how do they use their eyes before being socialized into an adult gaze behavior?

A further rich domain for future research concerns the relationship between gaze, affect displays and facial expressions, which has only received minimal attention thus far. From a conversation analytic point of view, we know very little about the effect that social relationships, hierarchy or power asymmetries and dominance might have on gaze behavior. Much work has been done within Social Psychology about this topic, but social psychologists have neglected the importance of the conversation and what participants do by talking. Also, we do not know whether these factors necessarily modify the norms suggested in the works of Kendon, Goodwin and Rossano, for example. Finally, while an initial suggestion concerning the role of gaze in turn-taking has been contested by more recent work that concerns the sequential unfolding of courses of actions, it may be that other levels of organization play a role, perhaps even more significantly so than the ones currently debated.

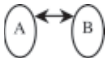
Most investigations on gaze in social interaction are connected by the belief that, to understand gaze in interaction, one must take into account what the social situation is and what people are trying to do, not just in terms of physical actions but also through their talk. If there are multiple levels of order that potentially play out simultaneously, and if it is possible to make sense of them through a careful and detailed analysis of people's use of their eyes during conversations, then we need to begin investigating these levels.

NOTES

I would like to thank Peter Auer and the Freiburg Institute for Advanced Studies (FRIAS) for providing me with an ideal intellectual environment for completing the writing of this manuscript. I would also like to thank Tanya Stivers, Jack Sidnell and Tanya Romaniuk for their insightful suggestions about how to improve the clarity and quality of this chapter and for their patience. They are not responsible for what I have made of their suggestions.

1 Duncan (1975) and Duncan and colleagues (1974, 1977: 211) actually refer to a shift in head direction as a turn-yielding cue, but specify that this should be taken as a proxy for "eye direction."
2 In a direct response to Beattie's paper, Kendon (1978) argues that Beattie's data (conversations between a student and her/his supervisor) were not comparable to his (ordinary conversation between Oxford undergraduates), indicating that the kind of interactional situation participants are dealing with may well affect the deployment of gaze.
3 Notice that this percentage is compatible with the one presented by Kendon (1967: 45, 47) for "short questions" produced with speaker gaze in dyadic interactions in English (75%), and by Beattie (1978: 13) for questions produced with speaker gaze in dyadic interactions in English (76.9%).
4 The transcript conventions, and, in particular, the meaning of the oval symbols, are provided in the Appendix at the end of this chapter. Basically, the arrows indicate the direction of the participants' gaze (i.e. whether they are looking at each other, up or down, or at specific objects in the surrounding environment).
5 Notice that the completion of a sequence also represents the possible completion of a turn, the completion of a TCU, the completion of a word, the completion of a syllable, etc., yet it is doubtful that anyone would suggest that gaze behavior is organized primarily by reference to syllables. Space constraints prevent the presentation of further evidence in support of the claim about the relationship between gaze and sequences of actions vs. gaze and turns-at-talk.

APPENDIX: Symbols for Gaze Orientation



Mutual gaze.

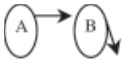
A looks away and B looks away.

A looks down oriented toward B. B looks away.

A looks away. B looks down oriented toward A.

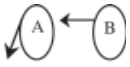
A and B are looking down in front of them.

A looks at B. B looks down.



A looks at B. B looks away.

B looks at A. A looks down.



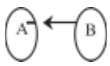
B looks at A. A looks away.

A looks down. B eyes closed.

A eyes closed. B looks down.

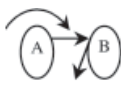
A eyes closed. B eyes closed.

A looks at B. B eyes closed.

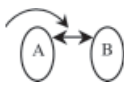


A eyes closed. B looks at A.

A away. B eyes closed.



A turns toward B who is looking down.

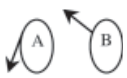


A turns toward B who is already looking at A.

A raises gaze toward B who is looking down.

A raises gaze toward B who is already looking at A.

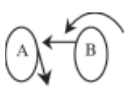
A looks away. B looks mid distance up left.



A looks away. B looks mid distance up right.

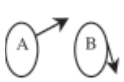
A looks down. B looks mid distance up left.

A looks down. B looks mid distance up right.



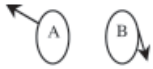
B turns toward A who is looking down.

A raises gaze toward B who is looking down.



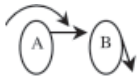
A looks mid distance up left. B is looking away.

A looks mid distance up left. B is looking down.

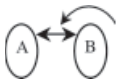


A looks mid distance up right. B is looking away.

A looks mid distance up right. B is looking down.



A turns toward B who is looking away.



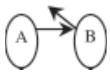
B turns toward A who is already looking at B.

B raises gaze toward A who is looking away.

B turns toward A who is looking away.

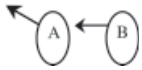
B raises gaze toward A who is already looking at B.

B raises gaze toward A who is looking down.



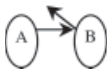
A looking at B. B looks mid distance up right.

A mid distance right. B eyes closed.

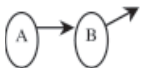


A mid distance right. B looking at A.

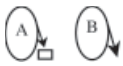
A mid distance left. B looking at A.



A looking at B. B mid distance right.



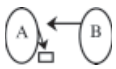
A looking at B. B mid distance left.



A looking at object. B looking away.

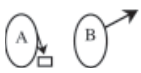
A looking at object. B looking down.

A looking at object. B eyes closed.



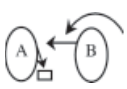
A looking at object. B looking at A.

A looking at object. B raises gaze toward A.



A looking at object. B mid distance left.

A looking at object. B mid distance right.

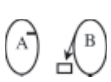


A looking at object. B turns gaze toward A.

A looking at one object. B looking at a different object.

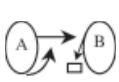
A looking away. B looking at object.

A looking down. B looking at object.

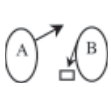


A eyes closed. B looking at object.

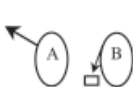
A looking at B. B looking at object.



A raises gaze toward B. B looking at object.

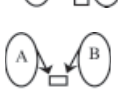


A mid distance left. B looking at object.



A mid distance right. B looking at object.

A turns gaze toward B. B looking at object.



A and B looking at the same object.