Changing Topics and Communication Breakdowns

The effect of conversational topic shifting by partners on the occurrence of communication breakdowns in people with hearing loss

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Abstract

This study investigated the occurrence of communication breakdowns following conversational topic changes by normally hearing partners during communicative interactions with people with a hearing loss. Eleven adults with an acquired sensorineural hearing loss were videotaped engaged in 15-minute dyadic conversation. For each conversation, the partner's speaking turns were coded into four topic manipulation behaviors: topic initiation, topic shading, topic maintenance, and topic extension. The frequency of occurrence of communication breakdowns that immediately followed each type of partner topic manipulation was tallied. Results showed that few communication breakdowns occurred when partners used speaking turns that maintained or extended conversational topics. However, there was an increase in the number of communication breakdowns, and in the number of speaking turns devoted to repairing the breakdowns, when partners shifted topics, either through topic shading or topic initiation. Interestingly, breakdowns were more likely to occur when topics were shifted through shading than through the initiation of a brand new topic. Results have clinical implications for conversational fluency intervention for people with hearing loss.

Bedrosian (1993) described conversational topic as, “in nonvegetarian terms, the meat of conversation” (p.36). Indeed, topic plays such a vital role in conversation that one cannot have a conversational exchange without a subject matter or topic. The importance of topic is further evidenced by the fact that when one remembers a particular conversation with someone, it is usually the topic of the conversation that first comes to mind. Given the central role of topic, it is not surprising that skills in topic manipulation (that is, topic introduction, shifting, and maintenance) are essential for providing conversational coherence and continuity (Brinton & Fujiku, 1989; Mentis, 1994).

There is a fairly large body of literature on the conversational topic manipulation skills of various communication disordered populations (Bedrosian, 1993; Brinton & Fujiki, 1989; Fey, 1986; Garcia & Joanette, 1997; Mentis, 1994; Li, Williams, Della Volpe, 1995). In adults with a hearing loss, conversational topic has been examined in the context of strategies used to dominate conversations (Caissie, Dawe, Donovan, Brooks, & MacDonald, 1998; Tye-Murray, Witt, & Schum, 1995). That is, some people with a hearing loss have been observed to frequently introduce self-oriented topics (i.e., topics that relate to themselves or their own interests as opposed to their partners’ interests) as a way of controlling the conversation. Another aspect of conversational topic that is of importance to the hearing-impaired population is the possible relationship between topic shifting by conversational partners and message misperception by people with a hearing loss. That is, there is clinical documentation that suggests that topic
shifting by partners enhances the risk of misperception leading to communication breakdowns, and that partners need to be attuned to this increased likelihood of conversational disfluency at the time of topic change. In fact, a frequently cited recommendation for promoting communication with people with a hearing loss, and minimizing the risk of breakdowns, is that partners avoid changing topics abruptly or in an unexpected manner, but rather make introductions of new topics or shifts in topics clear during conversation (Erber, 1993, 1996; Lane & Molyneaux, 1992; Lubinski & Welland, 1997; Tye-Murray & Schum, 1994; Wayner & Abrahamson, 1996).

How are topics manipulated during conversation? The literature on topic management describes the various ways of establishing, maintaining, and shifting conversational topics (for example, Bedrosian, 1993; Brinton & Fujiki, 1989; Foster, 1985; Garcia & Joanette, 1997; Lund & Duchan, 1993; Mentis, 1994; Wanska & Bedrosian, 1985). A new topic may be initiated at the beginning of a conversation, after a previous topic has been terminated, or after a period of silence. Brief side topics (for example, triggered by some event or other person interrupting) may be introduced within a current topic. A former topic that was previously terminated may be reintroduced in the conversation at a later time. In these kinds of topic initiations, the new topic is not related to the immediately previous topic. Unless the topic initiation is preceded by a phrase such as “By the way....” or “Coming back to.... to signal the upcoming new topic, the topic change can be quite abrupt. In contrast, when topics are changed through shading of the current topic, the content of the new topic is derived from the immediately previous topic so that some continuity in the conversational flow is preserved. That is, topic shading involves a smooth transition in topic where the new topic is directly related to the preceding one. Let us consider the following example:

**Husband:** “I was thinking of asking the MacMillian girls to help us with the blueberry harvest.” [initiation of new topic]

**Wife:** “Oh that would be a good idea.”

**Husband:** “They’re old enough now, and I thought that they might be interested in a short summer job.”

**Wife:** “Yeah, they’d be good workers. Does their father still coach the baseball team?” [topic shading]

**Husband:** “Yeah, he’s a great coach.”

In this example, there is a shift in topic from “blueberry harvest” to “baseball team”, but the new topic is related to the previous one, i.e., both topics have the “MacMillian girls” in common.

Once a topic has been introduced, topic maintenance involves subsequent speaking turns in the conversation that contribute to developing the subject matter. As pointed out by Mentis (1994), topics may be maintained using two broad kinds of speaking turns: those that provide new content information to the conversation (e.g., responding to a partner’s question, providing new unsolicited information, or requesting information from a partner) and those that do not provide new content information to the conversation (e.g., repeating old information or simply acknowledging a partner’s previous contribution).

It is well known that contextual cues enhance the perception of messages for individuals with a hearing loss (Erber, 1996; Lind, Erber, & Doyle, 1999; Tye-Murray, 1998). For example, the environment in which a conversation takes place, the topic of the conversation, attributes of the participants, and language rules, all provide some degree of redundancy and supplementary cues that help people with a hearing loss make educated guesses about what their partners have just said or anticipate what they are about to say next. As argued by Erber (1996), during the development of conversational topics, new information about the subject matter and the participants’ opinions and attitudes is being accumulated. This leads to a progressively larger pool of contextual cues, which facilitate the perception of partners’ speaking turns. However, the initiation of new topics by partners likely creates perceptual difficulties for people with a hearing loss because a new topic generally comes with new semantic content, new contextual information, and therefore, at least initially, a reduced degree of redundancy. The ability of the person with a hearing loss to fill in the words that have been missed may be temporarily diminished until the new topic has been established over a number of speaking turns and more contextual information has become available.

Although no one would dispute that topic changes by partners can cause difficulty for people with a hearing loss, few researchers have investigated the occurrence of communication breakdowns following different types of topic shifts by partners during typical everyday conversations. It is not clear how much impact topic shifting has on conversational fluency, and whether certain types of topic manipulation behaviors by partners influence
the likelihood of communication breakdowns. For example, a smooth shift in topic (i.e., topic shading) may make topic transitions easier for the person with a hearing loss because the content of the new topic is related to the previous topic, and therefore, some contextual information is provided. In contrast, the initiation of a brand new topic, unrelated to the previous one, may create more perceptual difficulty. These issues have not received extensive investigation. Therefore, the purpose of this study was to investigate the extent with which different types of topic manipulation behaviors of conversational partners influence the occurrence of communication breakdowns in people with a hearing loss, during typical face-to-face conversations.

**Method**

**Participants**

Eleven adults, all males, with an acquired bilateral sensorineural hearing loss participated in the study. They ranged in age from 49 to 78 years (Mean = 62 years) and exhibited a pure tone threshold average of 57.5 dB HL (SD = 22.6) in the right ear and 47.9 dB HL (SD = 17.2) in the left ear. All participants were full-time hearing aid users.

Two female university students with normal hearing also participated in the study and served as unfamiliar conversational partners. Each conversed with approximately half of the adults with a hearing loss. Because both gender and age have been noted to influence conversational structure and content (Hallberg, 1999; Lane & Molyneaux, 1992; Stover & Haynes, 1989; Shadden, 1997), and because one's conversational behaviors may change depending on one's familiarity with the conversational partner (Caissie et al., 1998; Tye-Murray et al., 1995; Li et al., 1995), all dyads participating in this study were restricted to one older male conversing with an unfamiliar younger female so that possible effects of age, gender, and partner familiarity would be consistent across dyads.

**Procedure**

Each person with a hearing loss was videotaped engaged in a 20-minute conversation with a partner. The face-to-face conversations occurred in a therapy room in the presence of multitalker background noise (Auditec of St.Louis) delivered at 65 dB SPL through two loudspeakers located on each side of the person with a hearing loss. Noise was presented to simulate more typical real-life communicative interactions. The camera was placed in an adjacent observation room and filming was done through the one-way mirror so that the presence of the camera in the therapy room would not distract the participants. Each dyadic member wore an FM mic-transmitter which routed the audio signal to an FM receiver connected to the camera and recording equipment.

Participants were simply asked to carry out a small conversation on any topics of their choice. Specific topics were not imposed on the dyads to allow for the interaction to be as natural as possible. Moreover, given that the focus of the study was on topic manipulation behaviors, it was felt that imposing conversational topics would have been unsuitable. Topics discussed included general subjects such as health, hearing loss, hobbies, travel, work, studies, grandchildren, or the participants’ recent activities. The conversational partners and participants with a hearing loss were aware that the investigation examined conversational difficulties in people with a hearing loss; however, they were not told that the focus of the study was on the analysis of communication breakdowns following topic manipulation behaviors by conversational partners.

The first five minutes of each conversational sample were used to let the dyadic members become more familiar with one another and were discarded from the analysis. The remaining 15 minutes of each sample were orthographically transcribed and coded. Coding first included the types of topic manipulation behaviors exhibited by the conversational partners. Four topic types were considered for the analysis. Both topic initiation and topic shading referred to topic shifting events. First, topic initiation was used to characterize the partner’s speaking turns in which a brand new topic, unrelated to the immediately preceding speaking turn, was introduced (e.g., “Are you from around here?”). This coding category also included the reintroduction of topics that were previously discussed in the conversation (e.g., “Coming back to...”). Second, topic shading was used to code transitions in topic, where the new topic was directly related to the content of the immediately preceding speaking turn (e.g., “Speaking of...”). The following segment, taken from a sample, provides another example of topic shading:
**Hearing-impaired**: “I just bought a drum for my youngest daughter.”

**Partner**: “You bought her a drum! Does she know how to play?”

Hearing-impaired: “Yeah, some. She takes it to the band practices at school. She’s going to a music camp this summer. She’ll probably bring it there.”

[the conversation continues about the daughter’s drum for a few more turns]

**Partner**: “How do you read drum music? Like, do they have notes?” [topic shading with the conversation shifting from the daughter’s drum to how to read drum music].

Third, partner speaking turns that maintained the current topic without adding any new content information were coded as topic maintenance. These include acknowledgements of the hearing-impaired person’s previous turn (e.g., “Oh yeah.”), and instances where a partner simply restated a previous contribution made by herself or by the person with a hearing loss without adding new information. Finally, topic extension was used to code partners’ contributions that extended the current topic by providing new information. Topic extension included asking questions to the person with a hearing loss, responding to questions asked by the person with a hearing loss, or commenting on the topic to provide new unsolicited information. The two segments below, taken from two different samples in this study, further illustrate the coding of partner topic types:

**Example 1:**

**Partner**: “So what do you do for an occupation?” [initiation of new topic]

**Hearing-impaired**: “I’m a tree surgeon.”

**Partner**: “A tree surgeon! What do you do as a tree surgeon?” [topic extension]

**Hearing-impaired**: “Well, just tree doctoring, tree removal, tree pruning, fertilizing… anything to do with trees really.”

**Example 2:**

**Partner**: “I just started learning how to play the cello.” [topic shading – previous topic was about musical instruments]

**Hearing-impaired**: “The cello! Isn’t that as tall as you and I?”

**Partner**: “No, no. It’s a little bit smaller than the big base. It’s like a big violin, but you sit down to play it.” [topic extension]

**Hearing-impaired**: “Oh, I was thinking of a harp.”

**Partner**: “No. It’s like a big violin and you sit down.” [topic maintenance]

All the partner speaking turns, except those used to repair a misperception by the person with a hearing loss, were coded into one of the above four topic categories, and the total number of occurrence of each coding category was tallied.

Next, all communication breakdowns experienced by the person with a hearing loss were coded. Communication breakdown was defined as a misperception of the partner’s previous contribution. Breakdowns were evidenced when the person with a hearing loss used a request for clarification (e.g., “What?”) or made a contribution to the conversation that revealed misperception of the partner’s previous turn (e.g., saying “Yeah, yeah” or nodding in response to the question “How many children do you have?”). The number of communication breakdowns following each partner topic type was tallied.

The number of clarification request-partner repair strategy sequences needed to successfully repair a communication breakdown was also calculated for each topic type. Communication breakdowns were divided into those that were resolved in one clarification request-repair strategy sequence, two or more clarification request-repair strategy sequences, and those that were never resolved (that is, there was a lack of clarification request by the person with a hearing loss despite an obvious misperception, or the partner’s repair attempt did not successfully resolve the misperception).

### Results

On average, the partners contributed 65.0 speaking turns (SD = 17.0) during each 15-minute conversation. As illustrated in Table 1, in each conversation sample, the majority of the turns were used to extend the topic of conversation. When topics were shifted, it was done primarily through shading of the current topic rather than through initiation of a new topic.
The number of communication breakdowns following each topic type by partners is also shown in Table 1. For each topic type, the percentage of turns that were followed by a breakdown was determined by calculating the ratio of the mean number of breakdowns following a particular topic type over the mean number of occurrence of that topic type, multiplied by 100. Overall, 11% of the partners’ speaking turns were misperceived by the person with a hearing loss, thus yielding breakdowns in communication. However, as depicted in Table 1, the proportion of communication breakdowns was greatest after topic shading by the partner. That is, 40% of the turns used to shade the topic of conversation were followed by a communication breakdown. In comparison, 18% of the turns that the partner used to initiate a new topic resulted in a communication breakdown. On the other hand, fewer communication breakdowns occurred after partner topic extension or topic maintenance (10% and 0%, respectively).

Table 2 shows the results pertaining to the number of clarification request-partner repair strategy sequences needed to successfully resolve the communication breakdowns. Because the total number of communication breakdowns following topic initiation by the partner (see Table 1) was too small to permit adequate analysis of repair sequences, this coding category was combined with topic shading. As both of these categories referred to a change in topic, the resulting category was labelled topic shifting in Table 2. It should also be noted that because there were no occurrences of communication breakdowns following topic maintenance by the partner, this coding category is not included in Table 2.

Overall, there was a total of 77 communication breakdowns that occurred in all conversation samples. As shown in Table 2, more than half of the communication breakdowns that occurred either after topic shifting (56%) or after topic extension (58%) were resolved in one clarification request-repair strategy sequence. The proportion of communication breakdowns that required two or more clarification request-repair strategy sequences was greater for breakdowns occurring after topic shifting (18%) than for breakdowns occurring after topic extension (7%). For some communication breakdowns, the person with a hearing loss did not attempt to request clarification despite a misperception, or the partner’s repair strategy was not successful in resolving the misperception. Instances where there was an unsuccessful resolution of communication breakdowns tended to be more frequent after topic extension (35%) than after topic shifting (26%).

Discussion

The purpose of this study was to examine the occurrence and resolution of communication breakdowns following topic manipulation behaviors of partners during typical social conversations. The results show that topic shifting by partners, especially when performed through shading of the current topic, creates considerable conversational difficulties for people with a hearing loss. In fact, not only did a greater number of communication breakdowns occur immediately after the partners extended the topic, but these breakdowns also took longer to repair, compared to those occurring after the partners shifted the conversational topic, even though the partners extended the topic. The pertinence of these results for people with a hearing loss is evident considering that daily social conversations are plagued with topic changes. That is, a typical conversation moves quickly from topic to topic (Erber, 1996). For example, in this study, there was an average of 8.7 topic shifts (topic initiation and topic shading) during each 15-minute sample, meaning that topics were shifted every 1.7 minutes on average.

Conversational topic shifting during adult conversational exchanges most often involves a change in the focus of the current topic; that is, people generally change the topic through shading rather than making a discrete transition in topic. In fact, topic shading is considered to be a smooth way of shifting topics that requires more sophisticated linguistic skills than the initiation of a new topic unrelated to the previous one (see Mentis, 1994). It was expected that topic shading by partners would have made topic transitions easier for the person with a hearing loss because in topic shading, the new subject matter is related to the immediately preceding topic, and thus, some contextual information is available. Surprisingly, the highest percentage of communication breakdowns occurred after the topic was changed through shading. In contrast, the initiation of a brand new topic, unrelated to the previous topic, was found to cause fewer communication breakdowns than topic shading. Unlike topic shading, topic initiation has a certain number of cues that signal that a new topic is likely coming up. That is, a brand new
topic is typically initiated at the beginning of a conversation, after
a period of silence, or after the previous topic is considered to be
terminated by both communicators (i.e., when the partners have
nothing more to contribute to the current topic). Moreover, if
the speakers are cooperative conversationalists, the new topic is
generally signalled using a phrase such as “By the way...” or “Not
to change the topic, but...”. These cues may help people with a
hearing loss anticipate a new content or subject matter at that
specific moment in the conversation; consequently, they may be
more attuned and may make an extra effort to concentrate on
the partner’s next speaking turn. Their greater effort may lead to
fewer communication breakdowns.

In contrast, cues signalling an upcoming topic shading are
generally not obvious. Therefore, there may have been a greater
amount of perceptual difficulties associated with topic shading,
as compared to topic initiation, because the participants with
a hearing loss may not have been anticipating a change in
the subject matter at that moment in the conversation, and
hence may have been taken somewhat by surprise. Even if
the new subject matter was related to the previous topic, the
unsuspected, sudden change in focus of the current topic may
have contributed to the perceptual difficulties causing breakdowns
in communication.

Results pertaining to the proportion of communication
breakdowns following topic initiation versus following topic shading
should be viewed with caution because the total number of
occurrence of topic initiation was small. That is, there was a small
number of data points to derive the percentage of breakdowns
after topic initiation. The small number of occurrences of topic
initiation was not surprising considering that, during natural
conversation between adults, topics are primarily shifted through
shading. Perhaps the occurrence of communication breakdowns
after these two types of topic shifts could be further examined by
investigating structured rather than natural conversations, where
the partners would be instructed to initiate new topics frequently.

On the other hand, when conversational topics have been
established and are in the process of being developed, the
likelihood of communication breakdown is reduced. As pointed out
by Erber (1996), “The more two people talk, the more predictable
the content of the conversation is likely to be, unless of course
the topic is changed...” (p. 172). As expected, the proportion of
communication breakdowns that occurred immediately after
topic maintenance or topic extension by the partner was very
small. In fact, topic maintenance did not create any perceptual
difficulty, which is not surprising considering that this type of
topic manipulation does not provide any new information to the
conversation. Although new information is contributed with topic
extension, this topic type did not create substantial perceptual
difficulties. When the topic is extended over a number of speaking
turns, an abundance of contextual cues is generated, which likely
enhances the perception of new information.

The participants with a hearing loss tended to request clarification
less frequently for communication breakdowns that occurred after
topic extension than for breakdowns that occurred after topic
shifting. When the topic is known and is extended over a number
of turns, people with a hearing loss may feel more comfortable
letting some misperceptions go by, as they may feel that these
do not pose a significant threat to conversational fluency. That is,
because they know the topic under discussion, they can contribute
a turn that is topically relevant regardless of whether they fully
understood the partner’s immediately preceding contribution or
only got the gist of it. However, when topics are changed, people
with a hearing loss may feel a greater need to request clarification
of misperceptions to ensure that they know what the current
topic is and the new direction that the conversation is taking.

Each dyad used in this study consisted of one older male adult
and one younger female adult. It was felt that it was important to
control for possible effects of dyadic members’ age, gender, and
familiarity with one another, on conversation structure; therefore,
these participant characteristics were kept constant across dyads.
It should be stressed that the results of this study reflect the
communication behaviors of older males with a hearing loss in
conversation with younger females. It would be interesting for
future research to examine the effects of topic shifting on the
occurrence of communication breakdowns with other types of
participants, such as husband and wife dyads.

There are a number of ways that partners can be cooperative
conversationalists during communicative interactions with people
who have a hearing loss. Many conversational difficulties can be
avoided when partners use clear speech, use language structure
conducive to conveying their message in a clear manner (e.g.,
simpler syntax), and use appropriate repair strategies in response
to communication breakdowns (Caissie & Gibson, 1997; Erber, 1996; Tye-Murray, 1998). In addition, partners may have considerable power in reducing the likelihood of communication breakdowns by paying attention to the way that they change topics during ongoing conversations. Results of this study suggest that the frequently cited recommendation that partners simply avoid shifting topics in an abrupt manner may not be sufficient for reducing the occurrence of communication breakdowns. In fact, the results show that even when topic shifting was done smoothly, i.e., through shading, there was nevertheless a high incidence of communication breakdowns. When partners are introducing a new topic, it would be desirable for them to confirm that the person with a hearing loss is aware of the topic change before they expand on the new topic. Confirmation strategies have been found to be very successful for avoiding communication breakdowns (Caissie & Gibson, 1997). Using simpler syntax or emphasize a key word to change the topic, and then confirming accurate reception before expanding on the topic, undoubtedly would help promote conversational fluency specifically at the time when people with a hearing loss are vulnerable to conversational disfluency, that is shortly after topic transitions by partners.

Source: The Volta Review, 2002