Interdiscourse Communication

Interdiscourse communication is an approach to intercultural communication that was developed by the linguists Ron Scollon, Suzanne Wong Scollon and Rodney Jones, drawing heavily on Hymes's ethnography of communication (EOC). Two key concepts of interdiscourse communication are: (1) people participate in discourse systems, and (2) language is inherently ambiguous. The **grammar of context** framework was developed to facilitate the analysis of interdiscourse communication.

Discourse Systems

While acknowledging that the word **discourse** has numerous meanings, Scollon et al. (2012, p. 8) chose to define it in general terms as "the broad range of everything which can be said or talked about or symbolized within a particular, recognizable domain". Based on this definition, they explained the concept of a **discourse system** in terms of groups of people using different discourses: "Any group that has particular ways of thinking, treating other people, communicating and learning can be said to be participating in a particular discourse system." Such groups can be extremely large, as with the discourse system of international capitalism, or quite small, in the case of a family. Scollon et al. (2012, p. 9) contrasted this with a **discourse community** or a **community of practice** by emphasising that the concept of a discourse system refers to "broader systems of communication in which members of communities participate". More emphasis is placed on shared systems of communication than on tightly defined boundaries to group membership.

A key assumption is that individuals simultaneously participate in multiple discourse systems related to their nationality, region, ethnicity, gender, age, social class, profession, organization, and so on. As a result, social interaction between participants in different discourse systems, which is termed **interdiscourse communication** by Scollon et al. (2012), is a fundamental part of almost all communication. This allows for a more flexible and nuanced approach to intercultural communication than was taken in previous studies that, for example, focused solely on the effects of **national culture**. The discourse system approach may be applied to the analysis of communication patterns in small groups. In a discourse analysis study of small-group decision-making meetings, Aritz and Walker (2010, p. 25) noted that differences in discourse systems can "affect group performance and lead to different levels of leadership, team identity, relational conflict, and satisfaction among members of multinational teams".

The Ambiguity of Language

A further important assumption underlying this framework is that language is inherently ambiguous in that speakers and writers are never able to completely control how their words will be interpreted by listeners and readers. In other words, "meaning in language is jointly constructed by the participants in communication" (Scollon et al., 2012, p. 11). Ambiguity may exist at word-level, sentence-level or discourse-level. Participants in the same discourse system communicate on the basis of shared assumptions and knowledge. This allows them to deal with ambiguity by making inferences about what their interlocutors mean. In cases of

interdiscourse communication, however, it may not be possible for participants to use inferences to cope with ambiguity because they do not have shared histories, backgrounds or experiences. Scollon et al. (2012, p. 16) summed up this line of reasoning as follows: "Two people from the same village and the same family are likely to make fewer mistakes in drawing inferences about what the other means than two people from different cities on different sides of the earth."

International civil aviation has developed into a global business with hundreds of thousands of operators from different countries and cultures. As a result, it is commonplace for pilots and air traffic controllers to be communicating with people who do not share the same assumptions and knowledge. This underscores the importance of using standard phraseology for pilot-ATC communications to reduce ambiguity.

Grammar of Context

As a tool to facilitate the analysis of interdiscourse communication, Scollon et al. (2012) proposed the grammar of context framework shown in Table 1. This framework is intended to provide a "common vocabulary" capable of embracing multiple aspects of context or culture. It was adapted from the EOC framework developed by Hymes.

Table 1: A grammar of context (Scollon et al., 2012, pp. 30-31).

SEVEN MAIN COMPONENTS FOR A GRAMMAR OF CONTEXT	
1. Scene	(a) setting (time, place, location, use of space), (b) purpose (function), (c) topic, (d) genre
2. Key	tone or mood
3. Participants	(a) who they are, (b) roles they take
4. Message form	(a) speaking, (b) writing, (c) silence, (d) other media (video, digital images, etc)
5. Sequence	(a) set agenda, (b) open agenda
6. Co-occurrence patterns	(a) marked, (b) unmarked
7. Manifestation	(a) tacit, (b) explicit

In their commentary on the grammar of context, Scollon et al. (2012) discussed concepts that may be incorporated from other strands of intercultural research. Within the "scene" component, for instance, the "setting" of an interaction includes the aspect of how participants view time, and may therefore be informed by the concepts of chronos and kairos time, drawing on the work of Hall (1990). Similarly, the different ways in which participants make use of space may draw on Hall's (1969) work on proxemics. In addition, Hall's (1969, 1990) concepts of monochronic versus polychronic time may inform the "purpose", "topic" and "genre" of the scene insofar as some participants prefer to work on one thing at a time while others prefer to engage in multiple activities. Significantly, Scollon et al. (2012) stressed

that these concepts should not be considered characteristics of an entire group of people from a particular culture, but rather as characteristics of the particular events or situations in which people participate.

Other concepts discussed by Scollon et al. (2012) include face systems, kinship, and ingroups and outgroups. All of these may inform the identities, roles and relationships of participants. In this framework it is understood that the importance of the components shown in Table 1 varies depending on the speech situation. Different components are salient in different speech situations. For example, participant roles and the use of space may be more important in a courtroom than at a cocktail party.

Applications to Business Communication

The grammar of context framework does not appear to have been applied to aviation communications, but Pan, Scollon & Scollon (2002) described its application to the analysis of professional communication in four typical business contexts. One study focused on business telephone calls and analysed three calls made by a Hong Kong IBM representative. The researchers concluded that the structure of the calls was influenced by many factors including: telephone technology, the nature of the situation, the relationship between the caller and his clients, and the monetary significance of the business they were discussing.

The telephone calls in this study were mainly in Cantonese but featured code mixing with English expressions. Pan et al. (2002, p. 47) related how focus group discussions were conducted with participants from Beijing who reacted strongly to the **code switching**. These participants thought that switching between Cantonese and English was acceptable for calls between Hong Kong people (ie: an ingroup relationship), but not for calls involving mainland Chinese because it was annoying and might "create distance in interpersonal relationships" (ie: ingroup versus outgroup). The researchers noted that practices acceptable in one context may create problems in another.

In their analysis of the phone calls, Pan et al. (2002, p. 49) mentioned politeness markers such as "please" and "thank you". They observed that in Chinese these markers would be replaced by "prosodic factors such as tone of voice, intonation, or rate of speech, with appropriate pauses and other discursive features". Another point of difference was self-identification. The authors noted two completely different situations in which Chinese people do not identify themselves on the telephone: firstly, when the callers are intimates; and secondly, when there is a low trust situation. The same signal being sent in two different situations may lead to ambiguity and possible misinterpretations.

Implications for Pilot-ATC Communication

There are parallels between the analysis of business telephone calls and pilot-ATC radiotelephony. Firstly, in both contexts the participants are in different locations using two-way mediated communication. However, in the case of pilot-ATC communication multiple speakers are sharing the same radio frequency. Each participant may send a message (in the role of a speaker), which can be heard not only by the intended recipient (addressee) but also by other participants (audience).

The message form in both cases is speaking through an electrical channel that only permits oral communication: a telephone for the business calls and VHF radio for aviation. The absence of a visual channel means that gesture, posture and gaze information is not available. Since participants cannot see each other, there is a need for self-identification. For pilot-ATC radiotelephony this is realised through the use of designators identifying ATC facilities (eg: "New York Approach" and "Kennedy Tower") and call signs for individual aircraft (eg: "Avianca zero five two").

One significant difference between business calls and pilot-ATC radiotelephony relates to participant relationships. When an airliner enters a new sector of airspace, a pilot contacts the air traffic controller. It is likely that the pilot and controller have never spoken before, or at least they are unaware of having done so. This limits the amount of shared information available to them and further emphasises the importance of standardized procedures.

A second difference is that in pilot-ATC communication the sequence of speech acts is prescribed. Exchanges of messages typically follow specific patterns, such as three turns initiated by the controller, with repetition conventions whereby a pilot reads back a message to confirm correct reception. Furthermore, one radio frequency is often shared by many aircraft so there is pressure to keep messages short to avoid frequency congestion. As a result, pilot-ATC exchanges typically consist of only two or three turns. The time pressure in commercial aviation is echoed in the oft-repeated mantra that the goals of pilot-ATC radiotelephony are "clarity, conciseness and correctness" (eg: ICAO, 2010, p. 5-5).

A further idiosyncrasy of pilot-ATC communication is that only one speaker can transmit at a time. In the event of simultaneous transmissions, part or all of a message is liable to be blocked. However, the message sender may not be aware that blocking has occurred.

Table 2: Grammar of context description of pilot-ATC radiotelephony.

COMPONENTS OF AIRLINE PILOT-ATC RADIOTELEPHONY	
1. Scene (setting)	Pilots: seated in the cockpit of an aircraft moving through the air or taxiing/stationary on the ground
	Controllers: stationary in ATC facilities on the ground
3. Participants	One pilot (captain or first officer) communicates with a series of controllers while the other pilot controls the aircraft
	Controllers are responsible for a sector of airspace and communicate with a series of aircraft flying through the sector
4. Message form	Speaking through an electrical channel
5. Sequence	 Message sequence and format are prescribed by standard phraseology Only one speaker can transmit at a time and messages should be short

Table 2 uses the grammar of context framework to summarise key features of the radio communication between airline pilots and air traffic controllers. This framework may be used to analyse instances of pilot-ATC **communication breakdown**. It may also be applied to other

aviation contexts, if appropriate adjustments are made to the components. For instance, in the case of a private pilot flying a light aircraft, there would be a single pilot participant rather than the captain and first officer shown in the table. Alternatively, a modern airline flight using **datalink** technology would also include communications with a written message form.

References

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