Language, culture and effective radiotelephony communications: Analysing case studies from aviation stakeholders’ perspectives

Ana Lúcia Tavares Monteiro
ICAEA Workshop – Dubrovnik, Croatia
April 25, 2017
Workshop Purpose

- This workshop aims to explore cultural differences in international pilot-air traffic controller radiotelephony communications and to better understand how culturally influenced factors may impact the safety of air-ground communications.

In this intercultural and occupation-specific context, would a wider range of knowledge, skills and attitudes be required for effective RT communications?
Our practical activity: addressing cultural diversity

- Participants will be divided in groups, each including ideally at least one representative of each stakeholder category: an operational participant (pilot or ATCO), a teacher/material developer, an examiner/test developer, a researcher, etc.

- In light of:
  - The taxonomy of intercultural factors;
  - The model of intercultural RT communications;
  - The AE, ELF, ICA and IC overlap...

- ... each group will analyze a case study (a pilot-ATCO interaction involving NS-NS, or NS-NNS or NNS-NNS), guided by a few questions (30 minutes) and then will share their comments and responses with the presenter and the other groups (30 minutes).

You are all welcome to participate in this multicultural activity!!!
Case Studies

Case 1: NS x NS
(Available at https://www.youtube.com/watch?v=uWg7IpphPc8 )
With 8 in sequence for runway 28 at Dublin, a British Airways pilot flying an A319 interacts with a female tower controller at Dublin at its peak, mid-day.

Case 2: NS x NNS
(Available at https://www.youtube.com/watch?v=2t_NT7aUrE0 )
Kennedy Ground control and tower interacts with SingCargo 7997 (PILOT 1) and Avianca 020 (PILOT 2), at JFK International Airport.

Case 3: NS x NNS
(Available at http://www.planecrashinfo.com/cvr900125.htm )
Avianca aircraft was put in a series of extended holding patterns as it approached New York. The crew informed APPR they were running out of fuel but did not declare an emergency and were cleared to land. After a missed approach and during a go-around, the plane ran out of fuel and crashed in a wooded area (73 out of 158 aboard were killed).

Note: Only the most relevant excerpts of each case have been selected for discussion, not the complete transcriptions.
Case Studies (cont.)

Case 4: NS (?) x NNS
(Available at https://www.youtube.com/watch?v=ZWOOKQJEm5s)
JFK Ground controller, in New York, interacts with two pilots: one from Etihad 503 (United Arab Emirates) and the other from Asiana 222 (South Korea).

Case 5: NNS x NNS
(Available at https://www.youtube.com/watch?v=P9WzQRxf3uM)
Air France pilot interacts with the air traffic controller at Ezeiza International Airport, Buenos Aires, in a situation that generated an operational limitation to the aircraft regarding fuel endurance.

Case 6: NS x NS
(Available at https://www.youtube.com/watch?v=ZWOOKQJEm5s)
A pilot requests assistance to an air traffic controller at John Wayne Tower, California.

Case 6b: NS x NS
(Available at https://www.youtube.com/watch?v=UCtcpXvusiM)
JFK Ground controller interacts with two pilots: one from Cactus (US Airways) and the other from American Airlines (US).
Filling in the form

Example: A group of six participants

Group 1: Please write the number of each type of participant in your group. If anyone has overlapping roles, include him/her in the option that best represents his/her main activity:

(1) pilots (1) ATCOs (1) aviation English teachers
(2) examiners/test developers (1) researchers
( ) regulators ( ) other: ______________________________

How is your group composed of in terms of language background?

(2) native speakers of English
(4) non-native speakers of English
Questions to guide your discussions:

1) Is communication effective? How do pilots and/or ATCOs assess this interaction?

2) How does the cultural background of interlocutors affect the outcome of this communication?

3) How might the interaction have been improved, in terms of awareness, knowledge, skills, and attitudes?

4) How could the identified awareness, knowledge, skills, and attitudes be addressed in terms of teaching and learning activities aiming at more effective and safer communications?

5) Are all identified awareness, knowledge, skills, and attitudes aligned with the current ICAO testing policy?

6) How could they be operationalized into Aviation English test design?
## Taxonomy of intercultural factors (Monteiro, 2016b)

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORIES</th>
<th>SUB-CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intercultural factors in international pilot-ATCO communications</strong></td>
<td>Power Distance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Face-work strategies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conflict management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication styles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-collaborative behavior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collaborative behavior</td>
<td></td>
</tr>
<tr>
<td>THEME</td>
<td>CATEGORIES</td>
<td>SUB-CATEGORIES</td>
</tr>
<tr>
<td>-------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Intercultural factors in international pilot-ATCO communications</td>
<td>Power Distance</td>
<td>Power relations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deferential role</td>
</tr>
<tr>
<td></td>
<td>Face-work strategies</td>
<td>Self-face concern</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mutual-face concern</td>
</tr>
<tr>
<td></td>
<td>Conflict management</td>
<td>Conflictual direction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neutral direction</td>
</tr>
<tr>
<td></td>
<td>Communication styles</td>
<td>Expectancy violations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Directness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indirectness</td>
</tr>
<tr>
<td></td>
<td>Non-collaborative behavior</td>
<td>Unprofessional tone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unprofessional attitude</td>
</tr>
<tr>
<td></td>
<td>Collaborative behavior</td>
<td>Professional attitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supportiveness</td>
</tr>
</tbody>
</table>
References


References (cont.)


______ (2016a, March). *Pilot-air traffic controller interactions and intercultural communicative competence: An issue for non-native speakers alone?* Poster session presented at the 11th Annual Graduate Symposium of the Society of Applied Linguistics and Discourse Studies, Carleton University, Ottawa, Canada.

______ (2016b). *Exploring intercultural factors in international pilot-air traffic controller communications: Validating a taxonomy using mixed methods research.* Unpublished manuscript in ALDS 6102, Carleton University, Ottawa, Canada.

______ (2016c). Exploring the role of intercultural awareness and interactional competence: The case of aviation English as a lingua franca. Unpublished manuscript in ALDS 6109, Carleton University, Ottawa, Canada.

Thank you for your participation!

anatavaresmonteiro@cmail.carleton.ca
ana.monteiro.icaea@gmail.com