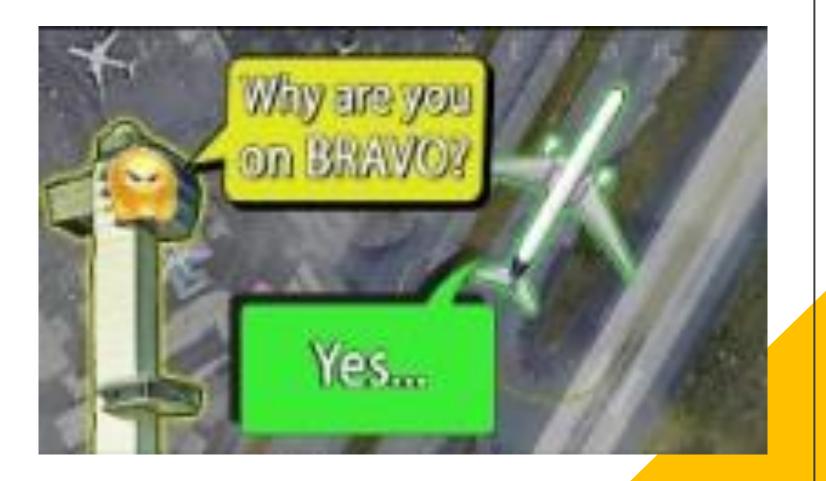
Reflections on raising communication awareness in pilot language training: attempts to bridge gaps based on real-life occurrences

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Trigger Point



Brief Remarks

- Title & Introduction
- Specific situation variables

JFK Controllers (NS) and LATAM Pilots (Brazilian, NNS)

• Historically, it is similar to AirChina 981, 2010, JFK

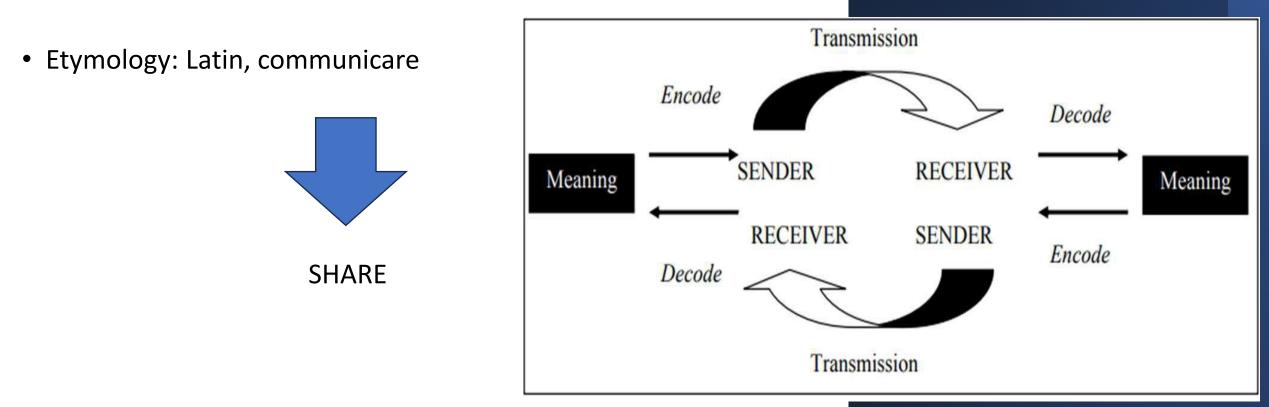


What am I (NOT) doing to avoid that?

- Language training
- LHUFT research work (articles and Oil & Gas Industry)



COMMUNICATION – Basic Principles



- Schematics of Two-way Communication (Flin, O'Connor and Crichton, 2008)
- KEY UNDERSTANDING: Communication is collaborative

Cooperative Principle



unsuccessful communication: violation of a maxim

GRICE (1975): 4 MAXIMS

- Quantity – Be informative

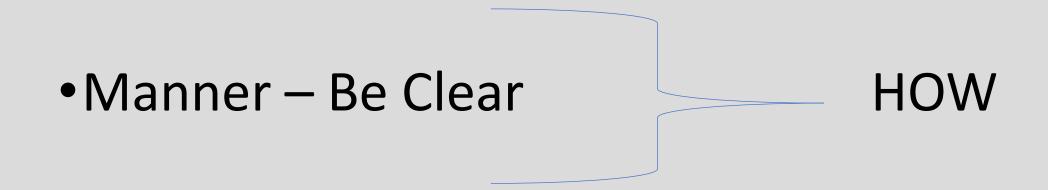
- Quality – Be truthful

- Relation – Be Relevant

- Manner – Be Clear

Quantity – Be informative Quality – Be truthful Relation – Be Relevant







Reflection Activity

1. Why communication was not effective?

• Lack of language proficiency on behalf of pilots

- communicative functions towards triggering actions: answering questions, confirming, readbacks, ...

• Lack of previous airport knowledge on behalf of pilots

- Coordination of communication: ramp Control, Ground Control

- Lack of collaborative skills regarding communication on behalf of controllers
 - sarcasm, passive-aggressive tone, rate of speech, plain English

Examples: Pilot There wasn't ANY correct readback with 4L. Consequently, wrong action. (Cognitive processing)

Did not manage to elaborate a clear message to ATC to explain his situation (at least twice)

Did not manage to identify a question: "Are cleared to the ramp"

<u>Examples</u> <u>Controller</u>

- *"That's <u>not for you, sir"; "That's not</u> what I said"* very well marked
- "OK. As instructed, turn left G,"
- passive- agressive tone, sarcasm
- "You're not even listening, sir. If you're talking to the ramp, stop talking. Turn left on G, ..."
- passive- agressive tone, sarcasm;
- politeness markers
- "I told you to enter runway 4L, why are you on B?

- "Tam 8180 heavy, hold short of Foxtrot, contact the ramp, and you did <u>not</u> do what I instructed."
- need to emphasize the error; 1st person
- "I have no idea of what you're saying, sir"
- "Ok, then you can't go to the ramp, then"
- -passive-aggressive tone
- "I need to know, though. When you get there, are you cleared in? There's aircraft blocking the alley. I want to know if your ramp and all that is open, otherwise they cant get you there."
- -rate of speech: to someone who did not understand the question "Are you cleared in?"

2. How could these problems be associated to the Cooperative principle/ the Maxims?

Pilot: WHAT (quantity not informative) Controller: HOW (manner)



3. If you were the pilot/ATC, what would you have done?

- "Tried to explain the situation"
- "Asked him to say again, repeat, speak more slowly, ..."

Native and Non-native speakers of English

*Non-native speakers of English:

easier perception of Aviation English as a specialized language

- lower self-esteem and confidence

* What if the international aeronautical community decided to speak Aviation Portuguese?

- How would we change?



WHAT IS THE BEST RATE OF SPEECH FOR SAFE, EFFICIENT R/T COMMUNICATION?

Paul Stevens, August 2023

Speed in which we speak

ICAO says 100wpm – Aviation Community ?

25% 100wpm - **150w/min 60%**

Variables: accents, standard phraseology, non-routine situations

Ideas to improve: text communication, A.I,

Non-native speakers: need to improve language skills

Native Speakers: lack empathy, don't stick to standard phraseology, don't pause enough, don't speak clearly

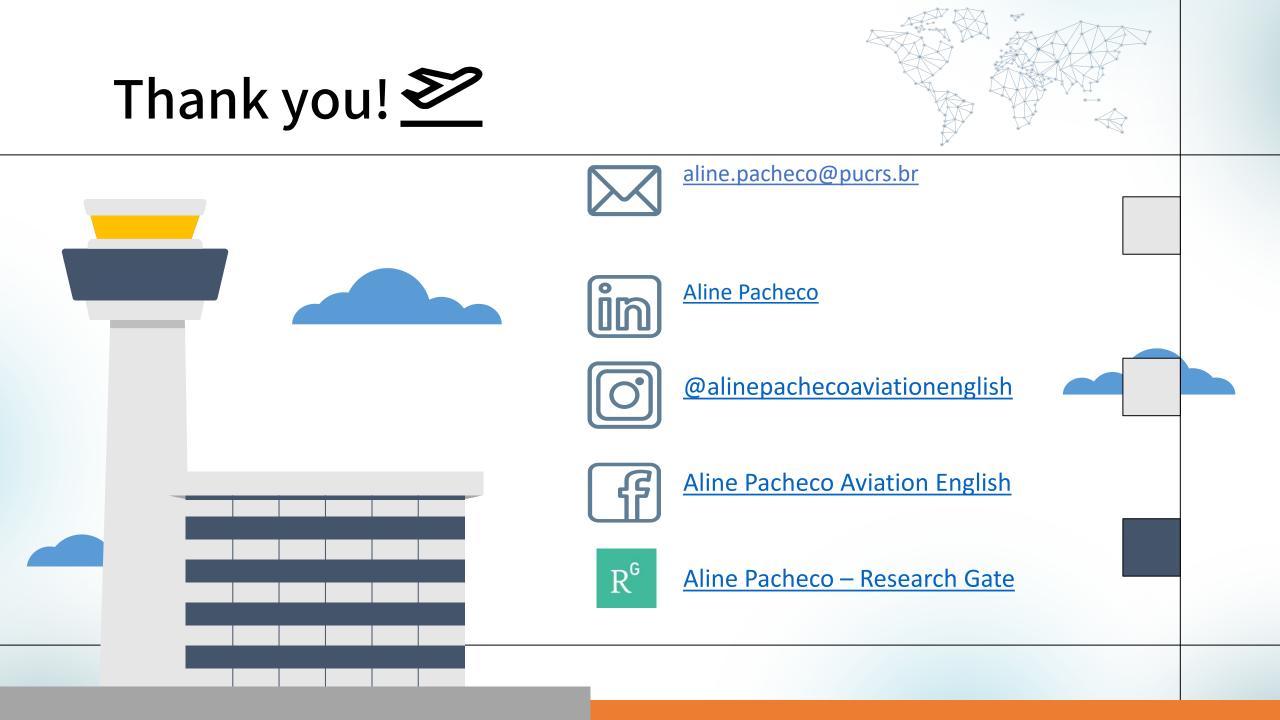
"HOW CAN WE TRAIN PEOPLE (ESPECIALLY NATIVE ENGLISH SPEAKERS) TO SLOW THEIR RATE OF SPEECH AND BECOME BETTER COMMUNICATORS?" (Stevens, 2023)

FINAL REMARKS

Research on linguistic AND metalinguistic aspects

Language as a Human Factor in Aviation (LHUFT Taxonomies, Prof. Elizabeth Mathews)

- Native and Non-native speakers of English need to
- BE AWARE that communication is collaborative and
- BE WILLING to compromise
- Integration of metalinguistic activities to training (? Mandated) so that we can promote a broader mindset regarding strategies to deploy in intercultural communication – "shared responsibility"





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