

PRAGMATICS IN AERONAUTICS: TEACHING DIRECTIONS AND PROCEDURES

Sara Corrizzato, Giada Goracci

University of Verona, Italy

E-Mail: sara.corrizzato@univr.it; giada.goracci@univr.it

Abstract. *Once acknowledged the important role pragmatic plays in human interaction, pedagogues and linguists have suggested to include new educational approaches both in classrooms and in academic courses aiming at encouraging learners to acquire pragmatic competences. In addition to teach them how the context can influence communicative exchanges and which processes come into being during the development of dialogues, the function verbs have in the construction of reality and the illocutionary force they convey have to be included in students' curricula. In fact, developing pragmatic strategies is doubtless important to avoid misunderstandings and ambiguities in real work environments, where individuals are asked to be linguistically international using English as the global means of communication.*

The present article¹ illustrates a project thought for future pilots and air traffic controllers, whose communicative competences have to be excellent to permit them to interact with colleagues not sharing the same mother tongue. After a brief introduction to pragmatics in English Language Teaching and Speech Acts Theory, a detailed description of the project will be offered: theoretical explanations focused on "directive" speech acts have been merged with more practical activities and exercises to allow students' to understand the deepest function of directions – and procedures – and to make them able to use "directives" effectively.

Key words: *ESP, pragmatics, English for Aviation, directive speech acts*

1. INTRODUCTION

Thanks to the educational revolution carried out during the last part of the twentieth century by pedagogues and linguists (see Lee McKay 2002), the didactic pillars on which the teaching of English to students included in Kachru's expanding circle have been modified and even completely changed. Once acknowledged the leading role that English has recently gained both inside and outside the academic dimension as "lingua franca", several efforts to promote innovative didactic methods for the teaching of English have been encouraged. Yet from the very beginning of the educational path, the Italian system has strongly recommended to work with the English language as something concretely used outside schools and academic contexts. With the aim of fostering learners' awareness of the importance of learning the language and becoming good speakers of English the national Ministry of Education, Universities and Research, following the

¹ The article has been jointly planned by the two authors: S. Corrizzato has dealt with sections 1-2, while G. Goracci with sections 3-6.

international decisions taken by the Council of the European Union², has decided to focus on the relevance of the concepts of multilingualism and multiculturalism to help those who are asked to learn English – or any other foreign language – to fully understand that other linguistic codes different from their mother tongue are concretely and commonly useful to interact with individuals not speaking the same language.

Along with the multiple innovative approaches developed in the field of teaching English³, the central role played by pragmatics in the negotiation of meaning both in spoken and written cases has been fully recognized. From the first studies whose interest was in pragmatics and ELT⁴ in the new perspective of English as a global means of communication (e.g. House 2003, Vellenga 2004, Crandall and Basturkmen 2004), recent research on the topic has demonstrated that pragmatics is one of the essential pillars to take into account to become good and fluent speakers of English. As Murray (2010, 2012) testifies, indeed, teachers should incorporate an effective pedagogical pragmatics in their courses to allow students to internalize and develop useful strategies that could help them in real communicative exchanges.

2. PRAGMATICS: THE “WASTE-BASKET” OF LINGUISTICS⁵

With the aim of explaining the difficulty of giving a satisfactory definition of what pragmatics is for its complexity and multifaceted nature, Mey (1993) points out that “it is notoriously difficult to limit the field in such a way that can say where pragmatics stops, and the “beyond” begins” (XIII). Many are, indeed, scholars of different humanistic disciplines who devoted and still devote their attention to the pragmatic dimension of the human language: the first reference can be traced back to 1938 when the philosopher Charles Morris defines it as “the study of the relation between signs and interpreters” (6) to refer to the importance of the cooperation between language and its users. According to him, this field of study is in constant relation with syntax, seen as “the study of the formal relations of signs to one another” (6), and semantics, which he describes as “the study of the relations of signs to the objects to which the signs are applicable” (6).

Many years later, Paul Grice (1957, 1975) puts the basis for the following development of the discipline by focusing on the concept of *implicature*; according to the

² Thanks to the Lisbon European Council of 23 and 24 March 2000 the importance of teaching and learning other languages different from their mother tongue has become essential for citizens included in the European Union: according to the members called to judge and modify the present-day situation, countries of the Union invited to respect cultural, religious and linguistic diversity, have to <http://eurlex.europa.eu/Notice.do?mode=dbl&lng1=it,en&lang=&lng2=bg,cs,da,de,el,en,es,et,fi,fr,hu,it,lt,lv,mt,nl,pl,pt,ro,sk,sl,sv,&val=471776:cs&page=&hwords=null>

³ Together with the recent didactic proposals which suggest the inclusion of cultural and linguistic diversity as an effective tool to promote intercultural competence (Knapp 1987; Byram and Leman 1990; Byram, Nichols, and Stevens 2001; Baker 2009; Seidlhofer 2011), a significant increase of the amount of research on the necessity of teaching English as Lingua Franca (Hüllen 1982; House 2002a; Jenkins 2005, 2006, Bruthiaux 2010) has been developed. In addition to these new approaches, McKay (2002), House (2002b) and Seidlhofer (2012) have suggested to abandon the native-speaker model fostering students to acquire and develop their own linguistic and cultural identity both as native speaker and Lingua Franca users.

⁴ English Language Teaching.

⁵ This challenging definition was given by Mey (2002: 15). He was inspired by the philosopher and linguist Yehoshua Bar-Hillel who, referring to semantics, stated that it was “the waste-basket of syntax”.

author, in fact, in human utterances two different parameters exist: what the speaker actually “says” and what the speaker “implies”. As Mey (2002) explains, “a conversational implicature is, therefore, something which is implied in conversation, that is, something which is left implicit in actual language in use” (45). Along with his new approach to the linguistic interaction, Grice also theorizes the so-called *cooperative principle*, which aims at guiding a successful communicative exchange: his “conversational categories”, as he defines them in 1975 (47), have become the pillars for effective communication. The philosopher distinguishes four different categories and for each of them he provides a number of maxims which contribute to make communicative exchanges effective:

1. *Quantity*: it refers to the number of information given by interlocutors. As the author suggests the speaker’s contribution has to be “as informative as is required” (45);
2. *Quality*: it is defined by speakers’ honesty. Contributions, according to Grice, need to be “genuine” to gain effectiveness (47);
3. *Relation*: Along with the previous maxims, this category focuses on the importance of being “relevant” to allow communicative exchange to develop (46).
4. *Manner*: transparency, clarity, conciseness and systematization are Grice’s four key-concepts that, melting together, contribute to reinforce a successful conversation.

It is in the early eighties that Levinson (1983) offers another definition of what pragmatics is, giving one of the most influential contributions to the modern discipline. He indeed focuses on the importance of the *context* maintaining that “pragmatics is the study of the relation between language and context that are basic to an account of language understanding” (21). Thanks to him, the context becomes one of the central key-concepts of pragmatics, highlighting the fact that the language is inextricably tied to the context in which it is produced. As inevitable consequence, any communicative exchange can only be taken into consideration within its context, both socio-cultural and situational.

Among the various other argumentations risen during the second part of the twentieth century in the field of pragmatics, the so-called *Speech Acts Theory* can be considered one of the most relevant approaches to the study of human interactions, so that it deeply influences the following language philosophers’ and linguists’ research.

2.1. Speech Acts

Theorized during the early sixties by Austin (1962), the concept of *speech act* contribute to completely revolutionize the contemporary linguistic landscape. Austin puts the basis to the theory - fully developed by Searle more than ten years later - by forming the hypothesis that the linguistic acts do not only exist as something merely abstract, but they have real consequences on reality surrounding interlocutors. In order to make the argumentation clearer, Mey (2002) explains that “uttering a speech act, I do something with my words: I perform an activity that (at least intentionally) brings about a change in the existing state of affairs” (95). Just in regard to this aspect, Austin maintains that in any human utterance three different factors cooperate:

1. *Locutionary act*: which consists in the actual utterance, therefore in its morphologic, syntactic, semantic and phonetic aspects. As Austin (1962) explains, the locutionary act can be simply summarized as “the act of saying something” (94).
2. *Illocutionary act*: which represents the authentic meaning of the sentence uttered by the speaker. The author (1962), in fact, points out that “we also perform *illocutionary*

acts such as informing, ordering, warning, undertaking, &c., i.e. utterances which have a certain (conventional) force (108).

3. *Perlocutionary act*: which focuses on the effect the words uttered have on the listener. To define the idea in detail, Austin (1962) explains that perlocutionary acts can be seen as “what we bring about or achieve *by* saying something, such as convincing, persuading, deterring, or even, say, surprising or misleading” (108).

This three intertwined forces helps the philosopher to present a preliminary classification of illocutionary acts, which include five classes of verbs:

Table 1 Austin’s classification of speech acts

Verbs	Examples
Verdictive	estimating, finding, pronouncing
Exercitives	voting, appointing, ordering, urging
Commissives	promising, undertaking
Behabitives	apologizing, congratulating, cursing
Expositives	replying, assuming ⁶

As anticipated in the previous paragraph, Austin’s classification is considered intuitive and not totally complete, so it is later examined in depth by Searle, whose theoretical observations contribute to change the way in which philosophers of languages analyze communicative exchanges. His investigation, called *Speech Acts Theory*, aims at explaining the most complex linguistic mechanisms at the very basis of the human interaction. Assuming that verbs are the grammatical category which allows any utterance to have a illocutionary - and therefore a perlocutionary – function, Searle (1977) classified *speech acts verbs* in five categories:

Table 2 John Searle’s classification of speech acts

Verbs	Examples
Representatives	Assertions about a state of affair in the world (reciting a creed)
Directives	Verbs whose aim is to get the addressee to do something (requests, instructions, commands)
Commissives	Verbs which aim at creating an obligation (promises, oaths)
Expressives	Expression of the speaker’s inner state (thanks, congratulations, excuses)
Declarations	Verbs which change reality (pronouncing someone husband and wife, baptisms, verdicts) ⁷

⁶ For a more detailed description see John L. Austin. *How To Do Things With Word*, (Oxford: Oxford University Press, 1962), pp. 150-151.

⁷ Explanations and examples are taken from Jacob L. Mey’s *Pragmatics: An Introduction* (Malden/Oxford/Carlton: Blackwell Publishing, 1993).

Although different classifications have been offered during the second part of the twentieth century, linguists agree with the fact that words are not just something abstract, but they convey deep meanings which contribute to bring concrete changes into reality. Therefore, as explained in the first paragraph, allowing students to understand the importance of pragmatics and, above all, of speech acts seems to be relevant. Learning how to communicate effectively can help them become good and fluent speakers of the English language.

3. PRAGMATIC APPROACH TO TEACHING INSTRUCTIONS

In the light of the information given above on pragmatics, it is worth remembering that aviation pilots are required to provide and, at the same time, receive instructions over the radio, often in noisy environments and situations. Therefore, when planning a lesson on instructions and procedures, teachers must be aware of the potential mistakes and misunderstandings that the communicative acts could undergo. Specifically, since English has become the international language of aviation, the question also implies a language-based focus on non-native English speakers to reduce and, if possible, to avoid, miscommunication errors. Thereby, teachers should consider the different variables that interact with communication such as, for instance, hearing conditions, audio conditions and native language while planning their lessons.

The following section aims at fostering a project addressed to non-native English pilots of an upper secondary school and focuses on the role of pragmatics when coping with instructions and procedures. This project will describe the approach used to plan the lesson, the tools (students' book) techniques involved in the teaching/learning process (work in pair and groups of work) and, eventually the students' evaluation system.

4. PLANNING A LESSON ON INSTRUCTIONS/PROCEDURES: THEORETICAL IMPLICATIONS

Aviation is a technology-based subject that implies a wide range of activities, all requiring specialised uses of English. Aviation English is therefore prominently employed in aerospace education, and represents a pivotal source for aviation professionals whose work depends exclusively on the use of language. As English has become a *lingua franca* throughout the second part of the nineteenth century, a greater awareness of the importance of acquiring this language has come under scrutiny as well. Hence, the concern with language in general, and with aviation English in particular is due to the fact that, as outlined by Ragan (1997), English language "is concerned about the safety hazard caused by pilots' inability to communicate sufficiently by radio and to deal adequately with air traffic control" (25). On this premise, it is worth remembering that the use of English in aviation represents a factual challenge for professionals as well as for students preparing to enter this field. As a consequence, the variety of language uses in aeronautics involves not only a zero-tolerance level of error, but also the multifaceted range of human emotions, physical skills and technical knowledge and competence that can be referred to as "pragmatic implications". In this light, to understand the effective uses of Aviation English is fundamental to consider both behaviours and environments of making and sharing meaning. Thus, the questions "who is using the language", "what kind of activities are going to be performed" and "what

purpose the language is serving” lead to a further element to ponder over, that is the concept of register. Indeed, tower communication between pilots and air traffic controllers represent a significant example of restricted register, in that both language and situation/environment become more specific. Undoubtedly, air traffic controllers and pilots routinely use Aviation English to inform, direct and perform actions that require a high-proficiency knowledge of the language. It is primarily for this reason, as Ragan (1997) points out, that the burden that such requirements “place on the first-time user or learner can be great indeed, especially for a person with limited English proficiency, and, in times of stress, even for the native speaker. Even pilots who are native English speakers have difficulty with the process of learning the language of tower communications” (27). In this light, teachers’ main concern should be, not only instruct about a language, but develop learners’ skills to make them capable of using English for a variety of purposes. Indeed, the difference between teaching about the language and communicating in the language is fundamentally to be found in the pragmatic competence; as Kasper (2004) further clarifies, “pragmatic competence is not a piece of additional knowledge to the learners’ existing grammatical knowledge, but is an organic part of the learners’ communicative competence. [...] this is particularly true of advanced learners whose high linguistic proficiency leads to other speakers to expect concomitantly high pragmatic competence”.

Given the importance of the specific use of English, teachers have to take into account a fundamental issue when planning a lesson, that is the “restricted register” of the language. A restricted register may be defined as a “specialized variety of idiosyncratic language use offering a narrow range of options to the user and showing a high predictability in use” (Ragan, 1997:27). As the definition shows, this specific use of English implies a limited wording, vocabulary and structure, therefore the linguistic combinations and choices are very limited. As a consequence, restricted registers are also predictable because, as Ragan (1997) further puts it, “there are few options in terms of the content, the way the language is exchanged, and the way in which it is organized” (28).

In the light of these premises, when planning a lesson on instructions and procedures it would be useful to concentrate on the three areas of meaning that are content, exchange and organization (Halliday, 1994). The content normally refers to the wording of the communication (who and what takes part in the act speech), the action (what is happening) and the circumstances (how the action is being performed). For instance, checklists, job-cards, test procedures and removal/installation procedures are all technical documents that imply the use of a restricted register. Generally, utterances are short and each sentence corresponds to an action that is conveyed through the imperative form. The following scheme (Shawcross, 2000: 27) shows some examples of procedures/instructions:

Table 3 Examples of Procedures / Instruction

Instruction	Examples
de-energize	(the)*aircraft electrical network
disconnect	electrical ground power unit
close	refuel/defuel panel access door
remove	refueling hose
install	caps on coupling
remove	access platform

As the extract highlights, the articles “the” and “a” are omitted and the sentences used are very short and clear. This element could help avoiding misunderstandings in that the exchange of meaning normally depends on many aspects of the situation in which the language is being used and on the organization of the wording to combine appropriate verbal sequences. To this extent, students should be given the possibility to approach the subject through an initial theoretical approach that combines the learning of the restricted register (content, exchange and organization) and technical skills accompanied by hands-on experience.

5. PROCEDURES/INSTRUCTIONS: FOCUS ON THE LESSON

After having taken into account the impact of the pragmatic variables on the use of language when giving instructions or following procedures, it would be worth offering some practical examples on how to plan a lesson.

As stated above, checklists, instructions and procedures indicate the results of an action or the state of a system, usually expressed using the past participle. Thus, a useful way to start a lesson could be to plansituationally-based inputs that combine the use of restricted register and real circumstance/s in which the language is used. Teachers present students with sample dialogues, followed by the evaluation of the pragmatic factors affecting the actions performed. For instance, in the first part of the lesson the teacher gives the students some prompts (Shawcross, 2000: 27) as follows:

Table 4 Prompts given to students

Instruction	Component	Results, State
Ensure	Engine Instruments	Stabilized
Check	CSD PRESS Light	Extinguished
Set	Engine ignition	As required
Make sure	Pack valve	Closed

The next step is to make sure that the students know the words and their specific meaning so that they can form the possible instructions in the right order. Moreover, it would be useful to identify the basic structure of the technical sentences taken into account. Basically, their form follows the scheme SUBJECT – VERB – OBJECT – MEANS – PURPOSE as in the example (Shawcross, 2000: 31):

Table 5 Basic Structure of Technical Sentences

Subject	Verb	Object	Means	Purpose
The delta P switch	transmits	a signal	via the ECB	to shut down the APU
The hot air	supplies	the slats	through the manifold	for leading edge de-icing

Another feature that generally characterizes technical instructions and procedures is the presence of the passive form, even though there is an increasing tendency to use active sentences as in the “Simplified English”.

After having introduced and analysed the structure of the sentence, the students should practise the theory applying it to both oral and written exercises and role-play/group work activities that finally lead to feedback and discussion. Below, some examples of activities are offered⁸:

Use the example in the notes to identify the subject, verb, object, means or purpose in the five sentences below:

1. The forward mount comprises four attach bolts.

SUBJECT _____

VERB _____

OBJECT _____

2. The actuator assembly has two electrical DC motors.

SUBJECT _____

VERB _____

OBJECT _____

Additionally, other exercises on the structure of the sentence should be included:

The parts of these sentences are in the incorrect order. Put them into the correct order as in the example:

is moved to the up position/to retract the gear/the control handle

The control handle is moved to the up position to retract the gear.

1. Are connected/to the steering cables/the rudder pedals

As regards the use of the restricted register, here follows an example of activity for the students:

Choose the correct verb for each instruction in the procedures listed.

INSTALL - TIGHTEN - CLOSE - RELEASE - OPEN - REMOVE

1. _____ the access panel

2. _____ the four fasteners

3. _____ the faulty unit

4. _____ a new unit

5. _____ the four fasteners

6. _____ the access door.

The samples quoted above have also the function of evaluating the actual acquisition of the “wording in specific situation/s” and consolidate the students’ competence in using it through experience-based activities.

⁸The exercises quoted in this part of the article have been taken from Philip Shawcross, *English for Aircraft, System Maintenance 1* (Paris: Belin, 2000).

6. CONCLUSION

Since pragmatic competence represents the combination of linguistic elements and social context/factors, teachers and books alike should emphasise the fact that the development of the pragmatic ability is one of the primary teaching aims. When we talk about Aviation English it is worth remembering that many external factors may impede effective communications to different degrees and knowing how to handle English becomes an essential priority, in that its use is directly associated with the activity that is, simultaneously, taking place. Thus, the purpose that teachers equally share when planning lessons and activities on the topic is to help their students to become more effective, fluent and accurate in the target language and eventually avoid mistakes in a profession like aviation, where communication represents, undoubtedly, a critical element to ponder over.

REFERENCES

- Austin, John L. *How to Do Things with Words*. Oxford: Oxford University Press, 1962.
- Baker, Will. "The Cultures of English as a Lingua Franca." *TESOL Quarterly* 43/4 (2009): 567-592.
- Bruthiaux, Paul. "World Englishes and the Classroom: An EFL Perspective." *TESOL Quarterly* 44/2 (2010): 365-369.
- Byram, Michael, Adam Nichols, and David Stevens. *Developing Intercultural Competence in Practice*. Clevedon: Multilingual Matters LTD, 2001.
- Byram, Michael, and Johan Leman, eds. *Bicultural and Trilingual Education*. Clevedon: Multilingual Matters LTD, 1990.
- Cole, Peter, and Jerry L. Morgan., eds. *Syntax and Semantics 3: Speech acts*. New York: Academic Press, 1975.
- Crandall, Elizabeth, and Helen Basturkmen. "Evaluating pragmatics-focused materials." *ELT Journal* 58/1 (2004): 38-49.
- De Houwer, Annick, and Antje Wilton, eds. *English in Europe today: sociocultural and educational perspectives*. Amsterdam: Benjamins, 2011.
- Grice, Paul Herbert. "Logic and conversation." In Cole, Peter, and Jerry L. Morgan (1975): 41-58.
- Grice, Paul Herbert. "Meaning." *The Philosophical Review* 66 (1957): 377-388.
- Halliday Michael. *An Introduction to Functional Grammar*. London: Arnold, 1994.
- House, Juliane, "Communicating in English as a Lingua Franca." in Foster-Cohen, Susan, ed. *Chapter in Eurosla. Yearbook 2*. Amsterdam: Benjamins, 2002: 243-261. (b)
- House, Juliane. "Developing pragmatic competence English as a Lingua Franca." In Knapp, Karlfried, and Christine Meierkord, eds. (2002): 245-267. (a)
- House, Juliane. "Teaching and Learning Pragmatic Fluency in a Foreign Language: The Case of English as a Lingua Franca." In Martinez Flor, Alicia, Esther Uso Juan, and Ana Fernandez Guerra, eds. (2003): 133-160.
- Hüllen, Werner. "Teaching a Foreign Language as a Lingua Franca." *Grazer Linguistische Studien* 16 (1982), 83-88.
- Jenkins, Jennifer. "Current Perspectives on Teaching World Englishes and English as a Lingua Franca." *TESOL Quarterly* 40/1 (2006): 157-181.
- Jenkins, Jennifer. "Implementing an International Approach to English Pronunciation: The Role of Teacher Attitudes and Identity." *TESOL Quarterly* 39/3 (2005): 535-543.

- Kasper, Gabriele. "Can Pragmatic Competence be Taught?" Honolulu: University of Hawaii: Second Language Teaching & Curriculum Center. Retrieved 02, Nov, 2004.
- Knapp, Karlfried, and Christine Meierkord, eds. *Lingua Franca Communication*. Frankfurt am Main: Peter Lang, 2002.
- Knapp, Karlfried. "English as an international lingua franca and the teaching of intercultural communication." In Lörcher, Wolfgang, and Reiner Schulze, eds. (1987): 1022-1039.
- Levinson, Stephen C. *Pragmatics*. Cambridge: Cambridge University Press: 1983.
- Lörcher, Wolfgang, and Reiner Schulze, eds. *Perspectives on Language in Performance*. Tübingen: Narr, 1987.
- Martinez Flor, Alicia, Esther Uso Juan, and Ana Fernandez Guerra, eds. *Pragmatic Competence and Foreign Language Teaching*. Casstello: Publicacions de la Universitat Jaume I, 2003.
- Mckay, Sandra Lee. *Teaching English as an International Language*. Oxford: Oxford University Press, 2002.
- Mey, Jacob L. *Pragmatics. An Introduction*. Malden/Oxford/Carlton: Blackwell Publishing, 2002.
- Morris, Charles. *Foundations of the Theory of Signs*. Chicago: University of Chicago Press, 1938.
- Murray, Neil. "English as a Lingua Franca and the Development of Pragmatic Competence." *ELT Journal* 66/3 (2012): 318-326.
- Murray, Neil. "Pragmatics, Awareness raising, and the Cooperative Principle." *ELT Journal* 64/3 (2010): 293-301.
- Ragan, Peter H. "Aviation English: An Introduction". In *The Journal of Aviation/Aerospace Education & Research* 7/2 *JAAER* (1997): 25-36.
- Searle, John R. "A Taxonomy of Illocutionary Acts." in: Günderson, Keith, ed. *Language, Mind, and Knowledge*. Vol.7. Minneapolis: University of minneapolis press, (1975): 44-69.
- Seidlhofer, Barbara. "Anglophone-centric attitudes and the globalization of English." *Journal of English as a Lingua Franca* 1/2 (2012): 393-407
- Seidlhofer, Barbara. "Conceptualizing 'English' for a multilingual Europe." In De Houwer, Annick, and Antje Wilton, eds. (2011): 133-146
- Shawcross, Philip *English for Aircraft, System Maintenance 1*. Paris: Belin, 2000.
- Vellenga, Heidi. "Learning Pragmatics from ESL & EFL Textbooks: How likely?" *TESL-EJ* 8/2 (2004): 1-18.