Lesson 2
Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English (PAE)

Methodology:

1. Time organization
2. Lesson structure
3. Teaching method
Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

❖ Methodology:

1. Time organization

3rd week

1 session

Lecture: 1h

in-/out-of-class activities: 2/3 h

Lesson structure

1. Presentation of information

2. Explanation of content

3. Learning activities

4. Classroom assessment

Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

Methodology:

- Teaching method
- Lecture
- Problem-solving

MATERIAL: RECORD FOR THEORETICAL CLASSES

Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The lecture:

1. The introduction
2. The objectives
3. The outline
4. The content
Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The introduction

The different linguistic models to differentiate the specialization degree of professional and academic texts (horizontal and vertical variation)

Different features that distinguish specialized texts (pragmatic, linguistic and non-linguistic)

The objectives

1. Distinguish the different specialization degrees in texts.
2. Identify the pragmatic, linguistic and non-linguistic characteristics in specialized texts.
3. Describe the characteristics of a specialized text from the linguistic, pragmatic, and functional point of view.
Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The outline

1. the horizontal and vertical variation of texts
2. the most relevant pragmatic aspects of texts
3. some linguistic elements: the syntactic and the lexical ones
4. the non-linguistic elements

The contents

Does a clear-cut line exist between LGP and LSP?
Metamorphic rocks are those rocks that have altered their form as a result of changes in their physical environment. In general, these alterations, or recrystallization, are brought about either because hot magma comes into contact with cooler rocks, or by large-scale movements of the Earth’s plates that change the pressure and temperature of the rocks. Minerals within the original rock respond to these changing conditions by reacting with one another to produce a new combination of minerals that is stable under the new conditions. Since metamorphism represents a response to changing physical conditions, those regions of the Earth’s surface that are the most active in terms of earthquakes, tremors, and volcanoes, like the Pacific rim, will be the places where these processes are easiest to observe. And because the composition of minerals and the pressure and temperature they are subjected to can vary a great deal, there are many types of metamorphic rock.

Because protolith compositions and the pressure-temperature conditions under which they may be placed vary widely, the diversity of metamorphic rock types is large. Despite the wide range of processes involved in the recrystallization of sedimentary and igneous protoliths into metamorphic rocks, there are only three important variables that effect metamorphic change: temperature, pressure, and the original chemical composition of the protolith. Temperatures at which metamorphism occurs range from the conditions of diagenesis (approximately 150°-200° C) up to the onset of melting. Rocks of different compositions begin to melt at different temperatures, with initial melting occurring at roughly 650°-750° C in rocks of granitic or shaley composition and approximately 900°-1200° C in rocks of basaltic composition. Above these temperatures, metamorphic processes gradually give way to igneous processes.

Both texts have been taken from Cabrè, 1998
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The two texts demonstrate that there is considerable overlap between general language and special languages.
Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The contents - Horizontal and vertical variation of texts

Metamorphic rocks are those rocks that have altered their form as a result of changes in their physical environment. In general, these alterations, or recrystallization, are brought about either because hot magma comes into contact with cooler rocks, or by large-scale movements of the Earth's plates that change the pressure and temperature of the rocks. Metamorphism represents a response to changing physical conditions, those regions of the Earth's surface that are the most active in terms of earthquakes, tremors, and volcanoes, like the Pacific rim, will be the places where these processes are easiest to observe. And because the composition of minerals and the pressure and temperature they are subjected to can vary a great deal, there are many types of metamorphic rock.

Because protolith compositions and the pressure-temperature conditions under which they may be placed vary widely, the diversity of metamorphic rock types is large. Despite the wide range of processes involved in the recrystallization of sedimentary and igneous protoliths into metamorphic rocks, the factors that control metamorphic change—temperature, pressure, and the original chemical composition of the protolith—remain constant. Temperatures at which metamorphism occurs range from the conditions of diagenesis (approximately 150-200°C) up to the onset of melting. Rocks of different compositions begin to melt at different temperatures, with initial melting occurring at roughly 650-750°C in rocks of granitic or shaley composition and approximately 900-1200°C in rocks of basaltic composition. Above these temperatures, metamorphic processes gradually give way to igneous processes.

We can therefore say that the two codes intersect.
Analyzable linguistic features:

- The choice and usage of linguistic units at each level of the text grammar
- The overall meaning of the text
- The choice of words
- The differences in frequency of certain units and structures
- The presence and absence of some units
- The use of alternative codes, …

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The greatest divergences: vocabulary

In texts, 3 groups of lexemes:

- General language lexical items
- Rock types: metamorphic, sedimentary, igneous
- Chemical composition
- Pressure and temperature
- Metamorphic processes: recrystallization, recrystallization of sedimentary and igneous protoliths into metamorphic rocks, there are only three important variables that effect metamorphic change: temperature, pressure, and the original chemical composition of the protolith. Temperatures at which metamorphism occurs range from the conditions of diagenesis (approximately 150°-200° C) up to the onset of melting. Rocks of different compositions begin to melt at different temperatures, with initial melting occurring at roughly 650°-750° C in rocks of granitic or shaley composition and approximately 900°-1200° C in rocks of basaltic composition.
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The greatest divergences: vocabulary

In texts, 3 groups of lexemes:

- Specific lexical items specific to special texts
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Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The contents - Horizontal and vertical variation of texts

- Certain structures and categories appear more frequently in special texts than in general language texts:
  - A. Morphological structures based on Greek or Latin formatives:
    *diagenesis, igneous*
  - B. Abbreviations and symbols: °C
  - C. Nominalizations based on verbs: recrystallization
  - D. Straightforward sentence structure with little complex subordination
  - E. Certain units and structures characteristic of the general language are **not found** in special texts:
    * Certain affixes (those which are deemed colloquial),
    * Some verb forms (the second person forms, imperatives, etc.),
    * Some pronouns (second person pronouns), and
    * Some sentence types (exclamations, etc.).

Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The contents - Horizontal and vertical variation of texts

- Difference traditionally established between different LSPs: their special subject field
- Hoffman (1998) designed a model divided horizontally by subjects

| Electrical engineering | Medicine | Chemistry | Physics | Mathematics |

SPECIAL TEXTS ARE CLASSIFIED BY SUBJECT
**Vertical division by Hoffman (1998)**

<table>
<thead>
<tr>
<th>Height of specialization</th>
<th>Forma lingüística</th>
<th>Actores</th>
<th>Participantes de la comunicación</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Síntesis artificiales para elemento y relación</td>
<td>Científico</td>
<td>Ejemplo de investigación y comunicación</td>
</tr>
<tr>
<td>B</td>
<td>Síntesis artificiales para elemento, uso más profundo de elementos</td>
<td>Científico y Tecnólogo</td>
<td>Ejemplo de investigación y comunicación</td>
</tr>
<tr>
<td>C</td>
<td>Lenguaje natural, uso más profundo de elementos</td>
<td>Científico y Tecnólogo</td>
<td>Ejemplo de investigación y comunicación</td>
</tr>
<tr>
<td>D</td>
<td>Alto profesionales, uso más profundo de elementos</td>
<td>Profesional y Tecnólogo</td>
<td>Ejemplo de investigación y comunicación</td>
</tr>
<tr>
<td>E</td>
<td>Bajo, no científicos, uso más profundo de elementos</td>
<td>Científico y Tecnólogo</td>
<td>Ejemplo de investigación y comunicación</td>
</tr>
</tbody>
</table>

The model is based on the fact that the degree of specialization is characterized by a series of pragmatic determining factors which vary according to a particular communication setting.
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The contents – Characteristic features of PAE

- Pragmatic
- Linguistic
- Non-linguistic

Pragmatic characteristics:
- Participants (sender and receptor; expert, semi-expert, non-expert)
- Subject
- Communicative setting
- Communicative function
Any subject is specialized if:
- Is treated in a specific way
- Takes place within a professional context
- Has a formal register

Not the subject, but the scientific treatment or «conceptual control»:

Aunque de hecho un texto de física, de química o de matemáticas tenga más probabilidades de ser un texto especializado, cualquier materia o tema abordado desde este control previamente explicitado será un texto especializado desde el punto de vista de su contenido. Con ello concluimos que es el contenido, o mejor el tratamiento de ese contenido, y no el tema la condición necesaria para considerar que un texto es especializado (Cabrè, 2002: 29).

Certain degree of formality

Most usual channel
- The written one (thesis, articles, books, etc.),
- The oral (conferences, lectures, seminars, etc.).
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The contents - Pragmatic characteristics – The function

❖ Functions:
  ▪ the diverse purposes/intentions that we assign to utterances when producing them

❖ Intentions can be classified as (Sager et al., 1980:25)

<table>
<thead>
<tr>
<th>1. Informative</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Evaluative</td>
</tr>
<tr>
<td>3. Directive</td>
</tr>
<tr>
<td>4. Phatic</td>
</tr>
</tbody>
</table>

1.1 speakers concentrate their efforts on conveying information to his interlocutor
1.2 is topic oriented, and speaker, listeners and situation all rank second in importance
1.3 artificial language manifestations are extreme examples of informative speech acts
1.4 Linguistically, informative intention is signalled through the simple assertion without evaluative words
1.5 Non-linguistically, informative intention is signalled by such text categories as the abstract, the index of a book, the classification table, the experimental report
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The contents - Pragmatic characteristics – The function - intentions

1. Informative

2. Evaluative
   2.1 Evaluative speech acts exploit the classificatory potential of a language, but may also involve informative and emotive uses
   2.2 may be seen as the category which account for reviews, critical essays, leading articles, test evaluation, etc.
   2.3 Linguistically, evaluative intention is openly expressed in comparative or contrastive statements
   2.4 Non-linguistically, it is represented by text categories, e.g. test report, book review.

3. Directive

4. Phatic

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The contents - Pragmatic characteristics – The function - intentions

1. Informative

2. Evaluative

3. Directive
   3.1 Directive speech acts are designed to cause and modify behaviour and in order to specify that behaviour they draw upon the referential nature of language.
   3.2 Any request, order, instruction, prohibition, exhortation, or warning is directive

4. Phatic
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The contents - Pragmatic characteristics – The function - intentions

1. Informative
2. Evaluative
3. Directive
4. Phatic

4.1 produces speech acts intended to establish and maintain relationships between members of a community and occurs frequently in spoken language

4.2 Social small talk at meetings of specialists is conducted in general language, and even in monographs or articles the phatic element contained in dedications, prefaces and acknowledgements is more akin to general than to special language.

Lesson 2: Linguistic, Pragmatic, and Non-linguistic Characteristics of Professional and Academic English

The contents - Linguistic characteristics

- Linguistically, some elements characterizes specialized texts:
  - Syntactic level (Rondeau, 1984: 28):
    - Concision/conciseness
    - Precision
    - Depersonalization
    - Systematization
  - Lexical level
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The contents - Linguistic characteristics – Syntactic level - Concision

❖ **Concise, in form and content:**
  - they “come to the point”
  - there is no informative redundancy
  - use of a high number of terms

Basic hornfelsed dike
Hornfels from a small, roughly tabular body within the wollastonite is a dense, fine-grained, dark rock. Field relationships suggest that it was emplaced as a dike, but its precise date of intrusion relative to the enclosing rocks is unknown. It has a mainly even, granular texture, although there is some preferred orientation of hornblende and mica. Minerals are diopside, hornblende, phlogopitic mica, plagioclase (basic oligoclase to sodic andesine), accessory titanite and apatite, and minor secondary pyrrhotite, epidote, prehnite, and calcite, the last two interleaved with mica.

Concise, in form and content:
- they “come to the point”
- there is no informative redundancy
- use of a high number of terms
- Word economy, no redundancy, no repetitions, no evaluative adjectives
- Rigid and controlled syntax
- No coordination and subordination and, instead, short sentences and paragraphs are preferred
- Traditional syntactic order is maintained: Subject+Verb+Objects
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The contents - Linguistic characteristics – Syntactic level - Precision

❖ **Precise**

- Focus on the reference
- Look for an objective approach towards the observed reality
- Aim: to transmit precisely the data without ambiguities

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PR EN 14147. Natural stone test methods - Determination of resistance to ageing by salt mist

**Scope**
This European Standard specifies a method to assess the relative resistance of natural stones to ageing by salt mist.

**Principle**
The specimens are placed in a chamber and spayed with salt solution for 6 hours and afterwards dried for 8 hours.

**Symbols**
- MO - Is the mass of the dried specimens in grams.
- Mn - Is the mass of the saturated specimen after n exposure cycles in grams.
- Ap - Percentage of mass loss.

**Apparatus**
- A chamber with a salt atmosphere, capable of maintaining the temperature of (40 ± 5)°C
- A ventilated oven capable of maintaining a temperature of (70 ± 5)°C
- A weighing instrument capable of weighing the specimens to ±1g.
- A conductivity meter, if needed, capable of measuring the conductivity of the rinsing water.
Precise

- Focus on the reference
- Look for an objective approach towards the observed reality
- Aim: to transmit precisely the data without ambiguities
- High use of terminological units

The late Cretaceous (Maastrichtian) emplacement of the Kocali–Karadut ophiolite complex induced subsidence in the northwestern zone of the Kastel Basin during the early Alpine Orogeny and influenced the structural evolution of the foreland area.
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The contents - Linguistic characteristics – Syntactic level - Depersonalization

❖ **Depersonalization**

- Specialized texts are not emotional
- The author avoids every personal reference as he/she wants to present the reality objectively
- Certain structures are not found (exclamations, colloquial expression, etc.)
- Reflected in the text through:
  - Use of passive voice
  - Impersonal forms of verbs
  - The "humble we" (pluralis modestiae)

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The contents - Linguistic characteristics – Syntactic level - Systematization

❖ **Systematic in their structure when presenting the information as they try to conform to an organizative and/or classificatory method:**
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The contents - Linguistic characteristics – Syntactic level - Systematization

Example: test norms

![Systematization is achieved through the repetition of certain units throughout the text:](attachment:image)

Systematization is achieved through the repetition of certain units throughout the text:

Technological test (Test A)
Where the test is carried out to determine the effect of freeze/thaw cycles on performance characteristics the specimens shall be in accordance with the appropriate standard.

Identification test (Test B)
The specimens are in the form of rectangular prisms with dimensions of 50 mm x 50 mm x 300 mm. The long axis shall be parallel to the anisotropy planes.

Putting reference marks on the specimens
To ensure that the various dynamic elastic modulus measurements performed before and after the freeze/thaw cycles are done at the same points on the specimens, make indelible marks, in the form of points, on the relevant faces of the specimens.
Artificial Language Units:

The free vibration method results generally present a logarithmic damping ($\Delta$) given by Eq.

$$\Delta = \ln\left(\frac{\delta_n}{\delta_1}\right)$$

(1) where $n$ is the number of peaks; $\delta$ is the amplitude of the first peak and $\delta_n$ is the amplitude of the final peak analyzed.

The storage modulus ($E'$) was obtained for a rectangular specimen having 250 mm of length, 25 mm of width and 2 mm of thickness, according to equation 5

$$E' = \frac{E}{\sqrt{\frac{1 + \frac{f^2}{\omega^2}}{2}}}$$

where $E'$ is the elastic modulus; $f$ is the natural frequency; $\omega$ is the inertial moment; $M$ is the accelerometer weight; $m$ is the specimen weight and $L$ is the specimen length.

Lesson 2: Linguistic, Pragmatic, and Extralinguistic Characteristics of Professional and Academic English

The contents – KEY POINTS

- There is a considerable overlap between LGP and LSP.
- Some linguistic features reveal differences between LGP and LSP.
- The greatest divergences are in vocabulary, which can be divided in 3 groups.
- The horizontal model classifies texts by subjects.
- Vertical model is widely used to establish and define the specialized nature of a text.
- There are pragmatic, linguistic and non-linguistic features that help to characterize LSP (and APE)
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The contents – References
