SYSTEMIC-BASED INSTRUCTION FOR COMPUTER-BASED TEXT PRODUCTION
O Uso da Teoria Sistêmico-funcional em Linguagem Instrucional para Produção de Texto em Inglês

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Abstract
This study aims at investigating the use of systemic theory as a supporting basis for the development of instructional approaches for text production, in particular Internet homepages. The theoretical basis underpinning this discussion is founded on the hallidayan levels of analysis and on the concepts of register and genre as proposed by Eggins (1994). The case-study of two teenagers in their process of re-writing a message sent by a youth network to its members showed that significant changes take place when the computer-based text is structured according to a systemic view.

Key-words: systemic approach; computer-based text; Internet; genre.

Resumo
Este trabalho investiga o uso da análise sistêmica como base para o desenvolvimento de uma abordagem instrucional para a produção de textos, mais especificamente de páginas para a Internet. A base teórica que orienta esta discussão parte dos níveis de análises hallidianos e dos conceitos de registro e gênero tais como propostos por Eggins (1994). O estudo de caso de dois adolescentes em seus processos de re-escrever uma mensagem enviada por uma ONG aos seus membros mostra que mudanças significativas ocorrem quando o texto de base digital é estruturado dentro de uma visão sistêmica.

Palavras-chave: abordagem sistêmica; texto digital; Internet; gênero.
1. Introduction

The Systemic Approach to language had its bases laid by seminal works carried out by Halliday (1994) and, more recently, Thompson (1996), Eggins (1994), and others. The definition of language lies on its social semiotic attributes, that is, as a cultural and social device actually used by members of constituted societies that have to interact in order to carry on their social activities.

This new view of language was of foremost importance to guide the development of the Systemic Approach (also known as the Functional Approach), a new way to analyze language in use. By contrasting the fixed structural analysis with a functional one, in which the grammatical structure was never taken in isolation from its context of production, the systemic approach settled sound bases for its use as closer to everyday life discourse. Language was, at last, considered both as a social process and an analysable code within the same theoretical framework.

So as to guarantee this shift from structural features to functional ones, Halliday (1994), in particular, proposed the idea of language as a system of choices at three levels: field, tenor and mode. They are always interrelated and interdependent, but they can be taken as parts to be analysed according to their textual characteristics.

The hallidayan levels of analysis contributed to a deeper and more global view of language both at its production and reception ends. It also enlarged the view of language as a semiotic production linked to the social cultural signs produced by a given society.

The systemic approach seems then adequate to analyse the array of digital, computer-based texts that are presently being produced, in their two relevant aspects: as a human product to be received by other humans, as well as their linguistic particularities, which stem from the production on a new medium.

No matter how useful and coherent this analytical framework is, it has not been much exploited as a teaching/learning tool, that is, the systemic approach has not yet been regularly taken into account when it comes to developing teaching/instructional material to be used in classrooms, especially in Brazil.
The aim of this article is to describe an experiment in which the systemic approach was tried out with a couple of teenagers who were engaged in producing a homepage text. The results, despite the shortness of data collection (three lessons) and the number of participants, showed that choosing a systemic view to help students re-write texts for the Web may be worthwhile both for teachers and learners.

The present article, then, aligns with the systemic theoretical frame and tries to provide practical basis for the establishment of some grounds to analyse texts on the new media, in the new era, that is, the digitalized ones.

In order to do so, we asked the following research questions:

- What contributions can the systemic-functional approach bring to the elaboration of a text-production classroom activity in the process of re-writing texts for the Web?
- How can the Systemic Approach help analyse the textual changes that are carried out by text producers in the new context of the Web?

As we can see from the propositions above, we take texts produced for the Internet as a fruitful source of investigation in terms of innovative social interactions mediated by computer-based texts. The choice for an analytical approach that takes language as a semiotic tool seems then to be the most resourceful one since it allows for a more thorough analysis of processes involved in producing texts for the digital media.

2. **The new features: digital formats in register and genre**

Eggins (1994) presents the three levels of meaning in the hallidayan theory in the following way: *field*, as the one which tells us what the text is about; *mode* as the one which reveals the role language is playing; and, finally, *tenor* is defined as the level at which the interpersonal relations are established, i.e., the relationship between the interactants. All these three levels define the *register* of the text as the “immediate situational context in which the text was produced” (Eggins, 1994:26).
In brief, register is the concept that informs us about the **context of situation**. Hence, the three hallidayan levels are used to describe and identify “who was involved in producing the text, what the text is about, and what role language was playing in the event”. (Eggins, 1994:50).

On the other hand, there are other elements that include cultural and social aspects, the ones that refer to the **context of culture**. For this context, Eggins proposes the concept of **genre**, which accounts for the wider context in which the text was produced. It will, therefore, inform us about the realms of social human activity that can be cross-cultural and will vary throughout time and place\(^1\).

Hence, genre could be defined as the mould within which the hallidayan concept of register works its social-organizational meaning and can, therefore, be recognized as belonging to a particular group, in a particular society, in a specific time.

The notions of **register** and **genre** can, therefore, be useful to analyse the chosen context of production that makes use of computer-based texts for the Web because it embeds the categories of production and reception of messages, organized in a particular form according to the social environment in which it was developed. Besides, it enables the identification of textual features at its constituent parts, allowing for the establishment of patterns that are formed\(^2\).

If we consider the computer at one time as the medium which is used to produce texts and the one used for text conveyance, we will notice that it has very specific structures that shape new forms of text production. Hence, the hypertext, the possibility of adding images, the space-time relativity, as well as the reader’s power of intervention guaranteed by the digitalization of the text, actually interfere in the way texts are being produced, and, therefore, received. All this has to be considered when approaching the new texts in the new media bearing in mind the idea of the semiotic nature of language.

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1. This notion aligns with the bakhtinian notion of discourse genres (Bakhtin, 1982).
2. Halliday (1996) talks about this when presenting his definition of language as a social semiotic tool (Cf. bibliographical references at the end of this article).
3. Theoretical foundations: the three levels of meaning

The systemic approach defines three levels of meaning, also called metafunctions: the experiential\(^3\)(transitivity level), the interpersonal and the textual one. For the purpose of this article, we will only resort to the first and the last ones, i.e., the experiential and the textual levels. The reason for this is that the latter was used to instruct the students on how to depict the most important information from the original text (e-mailed discussion list), and the former helped analyse the changes occurred in the process of building up the new text (internet homepage).

At the textual level, we can analyse the way in which messages are organized, within their internal structure and in relation to other messages. In other words, the context of production and the adjustments made to shape up the message can be identified if we look at the order that some linguistic elements take. The concepts of Theme (the first constituent of a clause) and Rheme (what comes after the Theme) help, precisely, in the analysis of the structuring of a clause.

With digital texts, particularly if we consider the hypertext, the theme/rheme structuring offers the perspective of analysing choices made in a more dynamic form. Since there is a possibility of making up hyperlinks within a text, message organization acquires a flexible layout, in which the elements to take theme position may lead to more than one rheme, according, for example, to the reader’s choice when clicking on a link.

In computer-based texts, it is unlikely that the reader will follow one predictable, strict order, like for example, the top-bottom one. They can start by the end of a text and, if needed, go back to its beginning, or else stop reading top-bottom to go further into a certain topic that was highlighted as a hypertext.

By contrast, in traditional text production, such as in this article, there is very little chance that the reader chooses to stop at certain

\(^3\) That is the term used by Thompson (1996).
references to enlarge his/her view of some of the aspects or ideas presented here. In this way, *theme/rheme* analysis will probably be similar for both the reader’s and the writer’s choices of organization.

The flexibility in digital texts empowers the reader as an active builder of meaning, as well as broadens the author’s devices to make his/her text coherent using a different perspective. At the same time, however, it forces the writer to establish new cohesive devices other than connectors, referents and punctuation. The linking tools can now be a completely new text, whose activation will be on the reader’s hands rather than on the writer’s efforts to make his/her text cohesive.

Now, if we look at the experiential metafunction, that is, at the transitivity level of the message text, we will be considering the choices made by the text producer in terms of the processes that best fit his/her perception of the actions/events he/she is describing.

At this level, what is analysable are the options for certain types of processes: existential, relational, verbal, mental, behavioural or material. The predominance or variety of one or some of these processes in a text can help us understand what kind of experience the writer chose to use in a particular piece.

It seems to be particularly desirable to consider the experiential metafunction when analysing computer-based texts for at least two reasons. First, computer-based texts are usually displayed on a screen that must be scrolled up or down to show a text (and, frequently, only parts of it will be shown at each scroll). Appealing texts, such as ads, manifestos, activists’ letters, specially in the form of a homepage, will have to be carefully structured in terms of what processes should be privileged to persuade readers to get engaged or agree with the ideas proposed.

Second, digital texts, specially the ones produced for an Internet homepage, tend to incorporate features of both spoken and written forms of language. For example, we have, at the same time, delayed reception, as it occurs in traditional texts, and the possibility of almost immediate exchange of impressions about the homepage text via an e-mail message (which will be answered sooner than a hard-copy leaflet) or, in certain cases, with the opening of a chat session about it.
The ideas previously presented worked as a larger framework to guide our approach towards the data collected. In the next section, we will present a more detailed analysis based on the Hallidayan textual and transitivity metafunctions, which will guide, respectively, the instructional lesson for rewriting a text and the computer-based text produced for a Web page.

4. Methodological procedures

The experiment which is going to be presented in this section stemmed from a systemic-functional interest group, whose main focus was on language teaching. We set ourselves, as a team, the task of developing a teaching unit for the production of a text to be received via the Web, based on the systemic-functional approach to language.

Therefore, the proposed task was to engage students in an activity that would produce a text with a social function as well as make them aware of some features related to the structuring of the text itself.

The subjects were a boy and a girl aged 14 and 16 years respectively, attending a private language course at intermediate level. During the three-hour weekly lessons, both students developed different kinds of activities involving all language skills in both oral and written modes.

The investigation was carried out by two researchers, one acting as the classroom teacher and the other as an analyst and observer of the students’ development. A total of two lessons were video-recorded and later analysed.

The teenagers had full knowledge of the study aims and they were also aware of the researchers’ particular interest in the teaching/learning process of a computer-based task.

4.1. History of the investigation

Our investigation had as its initial aim the production of a letter of invitation in e-mail form based on a text that described a youth network
The text was a 10-page forwarded message informing about the youth network’s activities in the form of a list of contents and a lengthy discussion that followed each content item. Hence, the text was unsuited both for the medium (the Internet) and for the audience (teenagers).

After reading the original NGO’s text, the students were asked to rewrite it in the form of a letter to be read by young people of their age. The idea was to give a social meaning to the activity and to promote work on adapting the features of the original text in the light of a new audience, i.e., teenagers.

This initial aim was later revised and turned into the production of a homepage for the youth NGO. The shift was the result of the analysis of the first video-recorded class, which showed the unsuccessful attempt to transform the original text into a legible one for young people. Both students found it hard to read the text, not because of language difficulties, but because of its inadequacy to the computer screen.

At this point, our investigation reviewed the original target and established a new one: starting from the authentic material, we proposed writing/reading activities, still based on the systemic-functional approach, that would motivate students to re-develop the original text into a Web-page whose target public was other teenage Internet users. Among some of the class activities we developed based on the systemic view was to make the students approach the text from its constituents i.e., the function each title or subtitle had as well as the word choices made by the author(s). The classes were prepared to make students aware of textual features in context and not as a set of unrelated parts. We also guided the classes so as to bring students’ awareness about the social function of the text they were consuming and the one they were supposed to produce. Hence, the systemic approach helped both instructor and students to carry out the re-writing in a meaningful way.

Data was collected through video-recording during five weeks and included:
• the first class, which was not considered for the analysis, but guided the re-elaboration of the proposed activity;
• the exchange of the electronic message between instructor and students, during which the NGO’s text was read and commented on;
• the preparatory class, in which the proposed vocabulary and systemic structures were elicited from the text;
• the systemic-based lesson, in which they were asked to bring up the theme/rheme\textsuperscript{4} structure of the original text to guide their production of the new one;
• the actual production class, in which the students sat at the computer to produce a suitable draft of a homepage for the NGO, based on the changes derived from the systemic-functional analysis of the original text.

The process can be described as the re-writing of the original bulletin into an appealing Web page directed to a young public, aiming at increasing the number of participants of an environmental-oriented NGO.

4.2. Data collection

The classes were video-taped and later analysed by the two researchers. The first recorded class showed that the original aim, that is, to write an e-mail letter of invitation to teens based on the reading of the NGO’s text (in the form of a topic list), was not feasible. First, because the text itself was lengthy and heavy with a lot of information presented in linear structure. Both teenagers found it hard to select what was relevant and where to get it\textsuperscript{5}. Second, the recording also showed that they were visibly unmotivated to carry on reading the text, not because of its language complexity, since they had no questions about

\textsuperscript{4} Though the concepts of theme and rhyme are explicitly mentioned here, the students were not formally taught them. They were simply asked to identify what the first part of each opening clause referred to and what followed it in the text.

\textsuperscript{5} We came to the conclusion that such difficulty did not stem from lack of linguistic abilities, since they re-wrote the same text without having to be assisted in terms of lexis and/or structure.
vocabulary items or unusual structures, but mainly because the text layout was dull and unsuited to a computer screen.

The original text, whose content is partially reproduced below, was 10 pages long and contained information about a lot of items. Its opening page looked like this:

CONTENTS
1 — Speaking Out (Editorial)
2 — Youth Workshop News
  • Youth Workshop Focus – Who are we?
  • * News from the Alliance for a Responsible and United World
3 — Recent Events Past
4 — Upcoming Youth Events
5 — Who You Are
6 — Youth Workshop Resources and Contacts

It is clear that the text offered no attraction for young teenagers: there were no pictures, no hypertexts and no friendly layout to facilitate its reading.

We then decided to work on its re-writing, taking into account the context of situation and the context of culture. So, we focused on developing an activity that led students to produce a text that fitted both contexts, that is, teenagers writing a computer-based text to be read on a Web-page by other young people. By doing so, we hoped to guarantee that the new text included all the features expected in a computer-based text as well as all the implications of language choices made for that specific text.

5. The systemic approach to text re-writing: the experience

The preparatory class consisted of guiding students to select the most important information to be displayed on a Web-page of the NGO. For this, we asked them to check the list of contents (see previous page) and re-write each title so that a teenager could read it more easily and feel more motivated to engage in the NGO’s activities.
So the items on the original list of contents were “translated” into the ideas that come second under each item below:

a) *Youth Workshop Focus – Who are we?* (the subtitle) – “They are describing them”

b) *News from the Alliance for a Responsible and United World* – “What they do”

c) *Recent Events Past* – “What they did”

Then, we guided the students to analyse how this information could be transformed into a legible text for the Web. It was suggested they should make a draft of a Web-page on which they would display the contents of the bulletin they were reading, keeping the essential meaning of the message.

### 5.1. Using theme and rheme to re-organize the message

After a long process of negotiation between the students, and with the teacher’s help, many changes took place. In this part, we reproduce and comment on the text that replaced item 2 of the original content list. The complete final production is at the end of this section.

The first change was produced by the very choice of a computer presentation tool (Powerpoint) that helped them transform the way the text was organized. A new title was created (*Teen Youth Workshop*, instead of *Youth Workshop News*), pictures were incorporated (*Screenbeans*) and most of the clauses were changed from statements into questions. We believe these two “visual” changes were a consequence of the process of raising students’ awareness to the fact that the text was to be read on a computer screen by people their age.

At textual level, students were initially asked to observe how the message was organized and to consider alternatives to it based on the information they had about the target-reader and the medium used. They started by the sub-item “Youth Workshop Focus – Who are we?”. Table 1 below shows a comparative frame of the main changes.
Title: Youth Workshop News

Youth Workshop Focus – Who are we?
The Youth for a Responsible and United World is an international network of local and regional youth partners working to identify young people’s concerns and develop a common language as we all face common worldwide problems. The Youth Workshop’s 19 regional coordinators from around the world currently maintain an active email forum (distribution list), INTERACT (a news print newsletter), a Web site, and this electronic bulletin. In addition to their own organization’s meetings, coordinators have participated in almost every major international conference with “youth” on its agenda since the autumn of 1998.

To learn more about the Youth Workshop, its regional coordinators and the upcoming events, and/or to be included on the email distribution list and receive INTERACT, please check out the Web site http://www.echo.org/~bmm/english/interact.htm and/or write to the appropriate coordinator (see list below in section 6 “Youth Workshop Resources and Contacts”).

Table 1 – Original and final production: overall textual organization

As an overall impression, Table 1 shows there was a significant change in terms of establishing what piece of information was more important and how it related to the others. Paragraph length and lexical items were reformulated to fit the producers’ (and, hence, their target-readers) expectations more adequately.

Firstly, the clause What do you think about the world we live in? was introduced as the first part of the opening page, and resulted from the students’ conclusion that the text was not appealing and would not catch a teenager’s attention the way it was.

Table 1 – Original and final production: overall textual organization

<table>
<thead>
<tr>
<th>ORIGINAL TEXT</th>
<th>FINAL PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title: Youth Workshop News</td>
<td>Title: Teen Youth Workshop</td>
</tr>
<tr>
<td>Youth Workshop Focus – Who are we?</td>
<td>(opening page)</td>
</tr>
<tr>
<td>The Youth for a Responsible and United World is an international network of</td>
<td>What do you think about the world</td>
</tr>
<tr>
<td>local and regional youth partners working to identify young people’s</td>
<td>we live in? Do you worry about</td>
</tr>
<tr>
<td>concerns and develop a common language as we all face common worldwide</td>
<td>environmental conditions? If you</td>
</tr>
<tr>
<td>problems. The Youth Workshop’s 19 regional coordinators from around the</td>
<td>do, come and join us!</td>
</tr>
<tr>
<td>world currently maintain an active email forum (distribution list),</td>
<td></td>
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<tr>
<td>INTERACT (a news print newsletter), a Web site, and this electronic</td>
<td>WHO ARE WE (link)</td>
</tr>
<tr>
<td>bulletin. In addition to their own organization’s meetings, coordinators</td>
<td>(linked page)</td>
</tr>
<tr>
<td>have participated in almost every major international conference with</td>
<td></td>
</tr>
<tr>
<td>“youth” on its agenda since the autumn of 1998. To learn more about the</td>
<td></td>
</tr>
<tr>
<td>Youth Workshop, its regional coordinators and the upcoming events, and/or</td>
<td></td>
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<tr>
<td>to be included on the email distribution list and receive INTERACT,</td>
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<tr>
<td>please check out the Web site <a href="http://www.echo.org/~bmm/english/interact.htm">http://www.echo.org/~bmm/english/interact.htm</a></td>
<td></td>
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<tr>
<td>and/or write to the appropriate coordinator (see list below in section 6</td>
<td></td>
</tr>
<tr>
<td>“Youth Workshop Resources and Contacts”).</td>
<td></td>
</tr>
</tbody>
</table>
The next clause - *Do you worry about environmental conditions?* - was, again, complementary to the first one and aimed at involving the reader into the spirit of the NGO by illustrating what the original clause “*to identify young people’s concerns*” meant.

Finally, the last clause on the opening page - *If you do, come and join us!* – replaced a complex text in which a lot of detailed information on how to join the NGO was displayed.

The second main change in the original text was about the strategies to bring the reader into action, by creating a link between him and the organization. So, the sub-item *Youth workshop focus – who are we?* was turned into a link to a hypertext *Who are we?*

This hypertext, in turn, assumed a totally different organization: most of it was descriptive of actions and features of the NGO. In this part the clauses are mainly directed to the audience by means of using referents like *we* and *us* to describe the NGO.

The linked page also shows a high occurrence of consequence connectors (*so* appears twice) and statements, instead of questions (five in six clauses against one in four on the opening page), which also reflects the change in the building of the text within a new genre (homepage).

In brief, the overall analysis of the choices made towards text organization after the producers were guided to look at it as a social product, bearing in mind its reader, shows that the re-arrangements of information placement and lexis took place in a satisfactory manner.

Now, if we look at the *Theme/Rheme* system, we can also notice a shift from more ideational themes in the original text to more interpersonal ones in the final production. Table 2 summarizes the changes on the re-structured page.
Table 2: Theme analysis of the final production

The theme analysis of the opening page shows the higher occurrence of questions both in ‘wh’ and ‘yes or no’ forms, quite diverse from the original piece. This feature can be interpreted as a means to persuade the reader to notice the relevance of the proposed topic (i.e. the Teen youth workshop). It can also be argued that, by using questions, students motivated the readers to carry on selecting and getting relevant information for themselves.

In the case of the yes/no-form, students assumed a positive response (“yes, I do”), since the focus of the interrogative clause is on ‘common-sense’ appreciation of environmental issues, i.e., ‘do you worry about environmental conditions?’ (theme 2). This question enforces a generic reader, whose most probable answer would be ‘everybody does’, and this will tend to lead them to go on reading the next clause.

On the other hand, the ‘wh’-question in theme 1 (What do you think about the world we live in?) works as a rhetorical proposition, as the ‘answer’ comes embedded in the next ‘yes/no’ question (Do you worry about environmental conditions?). This strategy empowers the
reader as a critical, opinative interactant, whose reaction will then be sequenced by the question that follows, and so on.

The ‘if-clause’ (theme 3) that follows also implies a yes/no question dynamics, since the reader will have to answer ‘if you do (worry about the world you live in)’ then he/she will check out the things they can do about it.

In traditional written/printed texts, the textual metafunction usually unfolds in a predictable way. For example, we could choose to structure the following message bringing the ‘most important piece of information’ to the first part of the clause: ‘We are part of a group that care...’. In this case, it is evident that ‘we’ - the theme - has a referent that must have been mentioned before, so as to guarantee full understanding of the entity that is being talked about.

On the net a different and special function is played by the theme. As shown on the opening page, the clause built with ‘we’ (theme 5) has a link to a hypertext that displays to a thorough explanation of the people referred to as ‘we’. The function of the theme in this case is widened. It works, at the same time, as an anaphoric cohesive device (remitting to previously mentioned parts of the text) and as a cataphoric forwarding tool that preserves the reading flow as well as offering detailed information at a second level of the hypertext structure.

Therefore, the clause for theme 4 ‘Who’ (Who are we?) when clicked, leads to another page that displays relevant information about the persons referred to in the question. Whether the reader follows the traditional reading flow, from left to right, or chooses to read transversally – by reading the ‘next page’ – is impossible to tell. This embedded choice, however, re-defines and turns it into a dynamic resource for the reader, who is able to interfere in the way cohesion and coherence are built in the text.

Finally, the theme analysis of the opening page shows that the three main clauses present interpersonal themes and show that the thematic development aligns with the projected reader’s expectations. The themes signal an attempt to establish a bonding between writer and reader by using questions that invite for debating (What do you think...;
Do you worry) and acting (If you do, come..). The ideational aspect, that is, the factual one, is hence transferred for a second level in the hypertext structure built by the students.

In fact, the position of theme/rheme seems to acquire a more dynamic configuration in computer-based texts, and, in particular Internet texts, because the message organization allows us to read a text transversally. Such thematic development is closer to the definition proposed by Fries (1995) of “progression with derived texts”. In this kind of theme development, there is a main theme that represents the general notion of the text. Other themes spring from, or associate with it a network that can be traced by means of the cohesive mechanism or links that fulfil the thematic function. This dynamics seems to be particularly efficient with hypertexts since they offer the physical structure to allow for theme progression, that is, they host themes that can introduce full texts that will complete the functional systems network.

Another characteristic for both pages is the higher frequency of theme unmarkedness, which is unusual in persuasive texts. This could be explained by the fact that the text layout includes other elements besides the verbal text (drawings, images, etc.) and markedness would then be unnecessary. Another possibility would be the fact that students at this stage are not always competent to manipulate the use of marked forms in the process of text building.

Reference also influences text dynamics. A good example is the use of WE and YOU alternately in the development of the text. An interpersonal analysis would show that this change was significant to the way the message would be perceived. However, it will not be considered for analysis here.

5.2. The draft: changes at the experiential level

The experiential level of analysis is related to the content of the message conveyed and, therefore, it takes into account the choices made to represent the world as the writer sees it.
In the task of representing the world, processes are crucial. They bridge the choices between participants and the circumstances under which processes develop.

Processes are explained by the system of transitivity, in which choices are related “to the dimension of Field, with the choice of process types and participant roles seen as realizing interactants’ encoding of their experiential reality: the world of actions, relations, participants and circumstances that give content to their talk” (Eggin, 1994:220). Processes are classified according to the activity they represent and are divided into four main kinds: material, mental, relational, behavioural and others

In texts that aim at promoting ‘environmental awareness’, the number of mental and behavioural processes is expected to be higher than any other. The projected audience here is one of active people, who have access to information and care about life conditions in their country and should, therefore, be easily persuaded to ‘act’.

<table>
<thead>
<tr>
<th></th>
<th>Opening Page</th>
<th>Linked Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental</td>
<td>think, worry (elliptical)</td>
<td>care</td>
</tr>
<tr>
<td>Existential</td>
<td>live</td>
<td>live</td>
</tr>
<tr>
<td>Behavioural</td>
<td>come, join</td>
<td>join</td>
</tr>
<tr>
<td>Material</td>
<td>∅</td>
<td>run, promote, bring, fight</td>
</tr>
<tr>
<td>Relational</td>
<td>∅</td>
<td>are, are</td>
</tr>
<tr>
<td>Verbal</td>
<td>∅</td>
<td>talk</td>
</tr>
</tbody>
</table>

Table 3: Experiential level, transitivity analysis

Table 3 indicates trends of choices in both pages. The opening page addresses a more ‘thinking’ reader, whereas the linked page builds up a ‘doing’ reader. The trend seems to be founded on the perception that the original text might lack ‘options for action’, a hindrance to
motivate readers to act. A focus on material processes on page 2 is then a strategy to turn the reader from a thinker into an actor.

Another feature is the balance between mental and behavioural processes on the opening page, which indicates the authors’ effort to raise the reader’s awareness for the subject \( \textit{the world we live in} \). The absence of material processes reinforces this aim. By contrast, on the linked page there is a higher occurrence of material processes that calls a conscious reader for action.

Like the system of theme and rheme, transitivity also seems to work in a particular way when it comes to producing texts for the World Wide Web. When in that context, it is important to highlight the producer’s choice of processes as determined by the paradox of \textit{distance} (in space and time) and \textit{proximity} (in terms of speed of response) between reader and writer. In other words, although the text is far from the place where it was produced (similarly to what happens with a printed book), the reader can immediately respond to the textual message with a click on the e-mail address that usually comes at the bottom of the page.

This will then require from the text writer a clearer perception of who their readers will be and how they are going to receive the message. Because of this particularity – the possibility of immediate response – the choice of processes must meet new needs: as the reader can be turned into an active co-writer, the processes must connect more clearly to concrete and material actions.

The final production that follows shows the occurrence of the described transformations:
6. Final remarks

The analysis carried out shows that a systemic approach to the teaching of writing can help students produce texts that are adequate to specific contexts. In this particular case, the students managed to create a text that is suitable for the Internet.
This is apparent in the changes promoted by the learners to
the traditional form of texts. It was made into a dynamic, interlinked
digital text, perfectly adequate to the reality of the Internet.

As a semiotic model, the systemic view can potentially explain
the function of image, sound and hypertexts in the composition of texts
for the Web. It is up to us to conduct systemic analysis with Web materials.

Therefore, using a systemic approach to language teaching can
empower students as active text producers, since it helps them understand
language as it is: a social tool.


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