INVESTIGATING MULTIMODALITY: AN ANALYSIS OF STUDENTS' DIARY JOURNALS

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RESUMO

Considerando a variedade de recursos multimodais atualmente disponíveis e os desafios para a integração desses recursos em contextos educacionais, este trabalho examina as práticas de letramento de alunos do Ensino Médio de uma escola pública de Santa Catarina, pela análise de seus diários. Com base na Linguística sistêmico-funcional (Halliday & Matthiessen, 2004) e na gramática visual (Kress & van Leeuwen, 2006), a discussão faz parte de uma pesquisa mais abrangente que incluiu entrevistas com alunos e professores, observação de aulas e diários de três escolas diferentes. Resultados apontam para uma diferença significativa entre as práticas de letramento nas escolas e em outros ambientes.

Palavras-chave: Recursos Tecnológicos/Multimodais, Multimodalidade, Ensino/Aprendizagem.

ABSTRACT

Considering the variety of multimodal resources currently available and the challenges of integrating these resources in educational settings, this paper examines literacy practices of high school students from a public school in Santa Catarina, Brazil, as manifested in their diary journals. Based on Systemic functional linguistics (Halliday & Mathiessen, 2004) and visual grammar (Kress & van Leeuwen, 2006), the discussion is part of a broader research which included analysis of interviews with teachers and students, class observation and diary journals from three different schools. Results show a significant difference between the literacy practices at school and in other environments.

Keywords: Multimodal/Technological Resources, Multimodality, Teaching/Learning.

1. Introduction

In contemporary society, people are surrounded by different types of multimodal resources besides written language, such as still and moving images, hypertexts in electronic media, videos, cartoons, and several other kinds of semiotic systems (Unsworth, 2001; Heberle, 2006; 2010). However, while on the one hand, in everyday life, students and teachers are engaged with information mediated by different semiotic systems, on the other hand, students are not usually taught at school how to read and be skilled in these other systems or engage in different types of literacy practices and develop their critical reading and writing skills.

Becoming aware of these new educational demands regarding literacy practices seems to be important for teachers, students, parents and all those involved in pedagogy and multiliteracies. We understand multiliteracies as the skills needed to interpret and produce meanings using an array of possible multimodal and technological tools (New London Group, 1996). As pointed out by Unsworth (2001, p. 8), "in order to become effective participants in multiliteracies, students need to understand how the resources of language, image and digital rhetorics can be deployed independently and interactively to construct different kinds of meanings".

For these reasons, the general objective of the present paper is to contribute to this awareness. The study is part of a broader ethnographically-based study, funded by the Brazilian Research Council (CNPq), which examined literacy practices of secondary-school students from three different schools in three towns in Santa Catarina, Brazil. Based on Systemic Functional Linguistics and on studies in multimodality and multiliteracies (Kress & van Leeuwen 1996; 2001; 2006, Unsworth, 2001), the study included analyses of interviews with teachers and students, class observation and students' diary journals.

In the present paper we narrow down our analysis and discuss the multimodal meanings as manifested in diary journals from six high school students[1] from one of the Brazilian public schools selected for the broader study. The diary journals these students wrote about their literacy practices at school and in other environments can be seen as narratives of experience (Meurer, 1998; Reichmann, 2001) and allowed us to see what meanings were foregrounded in these diaries. In the next section we briefly explore multimodality and subsequently present our findings and concluding remarks.

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2. Systemic functional linguistics and visual grammar

The theoretical background underlying the research and the data analysis concerns visual grammar (Kress & van Leeuwen, 2006), developed from Systemic Functional Linguistics (Halliday, 1985/ 1994). Being a powerful tool for the analysis of written and spoken texts, Systemic Functional Linguistics (SFL) (Halliday, 1985, 1994) views language as a social-semiotic system, i.e., language is seen as a system composed by a set of linguistic choices that are taken by an individual in relation to the context in which s/he is inserted.

The two main questions that are raised when analyzing a text through SFL are how people use language and how it is structured for use (Eggins, 2004). SFL advocates that the context influences the use of language. This means that the choices, which are taken by the speaker/writer, change according to the topic being discussed, the level of proximity between s/he and the other participants, and "the organization of the communicative event" (Eggins, 2004, p. 320).

As the focus of this paper is to analyze students' diaries about their literacy practices, the visual meanings are explored, based on the grammar of visual design.

When referring to language as a social semiotic, Halliday (1989), points out that the inclusion of the word "social" in the phrase "social-semiotic" means that language is part of the social system, being a crucial component in the construction of society. And the grammar of visual design, with the term multimodality, has extended this perspective.

Multimodality is a fairly recent theoretical concept proposed by Kress and van Leeuwen (1996; 2001), in their grammar of visual design, extended from the framework provided by SFL. More recently, Kress (2010) describes multimodality as a social semiotic approach to contemporary communication, and explains that social semiotics is "a theory that deals with *meaning* in all its appearances, in all social occasions and in all cultural sites" (p. 2).

Nowadays, with the advance of different multimodal/ technological resources, literacy practices have changed from the predominant use of written printed texts to moving images in a screen (Kress, 2003). Literacy practices have thus become multiliteracies, understood as "competencies in the use of language, images, movies and computer-based resources to produce and interpret meanings…in different sociocultural contexts" (Heberle & Meurer, 2007, p. 1).

Likewise, according to Macken-Horarik (2004, p. 24), "[w]hatever the subject, students now have to interpret and produce texts which integrate visual and verbal modalities, not to mention even more complex interweavings of sound, image and verbiage in filmic media and other performative modalities". In countries such as Australia, the term multiliteracies has been explored in the educational context, where students deal with "the newer information and communication technologies (ICT) and computer mediation communications (CMC)" (Christie, 2005, p. 123).

Based on SFL, with the three metafunctions (ideational, interpersonal and textual), the Grammar of the Visual Design (Kress and van Leeuwen, 2006), offers a framework for describing images, also taking into account three meta-functions, called representational, interactive and

compositional, respectively. Images are considered texts, as they depict meanings by themselves. The first metafunction, ideational/ representational, has to do with looking at the contents expressed in the text. Interpersonal/ Interactive meanings comprehend the relationship between participants especially in relation to power distribution. Finally, textual/compositional meanings entail the organization and distribution of information in the text.

When analyzing the representational meanings, images can be classified as conceptual or narrative. Narrative images are characterized by vectors, which indicate that the participants represented are engaged in one or more processes, which may be: action; reaction; mental; and verbal. Action processes happen when there is the presence of vectors "formed by bodies or limbs or tools in action" (Unsworth, 2001, p. 73). Depending on the presence of other participants and their role in representation, the action may be non-transactional (when one participant acts alone) or transactional, where participants may be Actors or Goals, or still both can be Actors at the same time, called Interactors. The image in Figure 2, provided by Michele[2], is an example of a transactional image where the participant on the left is the Goal, and the one on the right is the Actor of touching and kissing (or biting).

FIGURE 2
By Michele's diary journal: a transactional Action process.

In the reaction process, the vectors come from the eye line of the participants and they may also be called non-transactional (when the participant, the reactor, is looking at a point which is not depicted in the image) or transactional (which includes the presence of another participant). Reaction transactional processes are performed by two participants called Reactor (the one who looks at) and Phenomenon (the one who is observed). Verbal and mental processes, which normally take place in cartoons, are represented by speech or thought balloons where the Sayer or the Senser says or thinks about something that may be represented in written text or in images.

Figure 3 was taken from another student's diary, Elisa's, and it presents three narrative representations taking place at the same time: action, reaction and verbal processes. The character

2. To illustrate these meanings we use images taken from our participants' diaries. All participants' names have been changed to preserve their identities.

Mônica, who is in the middle of the picture, performs the roles of Sayer and Reactor. Her dog, Monicão, is also a Reactor, which establishes a transactional bi-directional reaction process between Monica and the dog. Monicão also has the role of Actor in the action process of pushing the rug, which is the Goal. The participant on the right is also an Actor and a Sayer:

FIGURE 3
By Elisa's diary journal: Action, Reaction and Verbal processes simultaneously.

Conceptual images, on the other hand, have the absence of vectors. These types of representations may be Classificational, Analytical or Symbolic. Taxonomic representations may be covert (where the superordinate participant is implicit) or overt (the classifications are explicit). While analytical representations show the relationship between whole (Carrier) and parts (Possessive Attributes), symbolic images, the third type of conceptual representation, occur when there is a meaning beyond what is being represented. These meanings may come from the Attributes or from the character (Unsworth, 2001).

FIGURE 4
By Elisa's diary journal: Classificational and Analytical representations.

An example that presents the Classificational and the Analytical representations, also taken also Elisa's diary, is given in Figure 4. It is the photograph of a band, where its participants are Carriers of their Possessive Attributes, such as the clothes they wear, their hair, makeup, piercing, glasses, and other objects. At the same time, the participant in the middle is foregrounded and occupies the center position, which makes him the superordinate participant, and the other four subordinates.

The second meta-function, which deals with Interactive meanings, has to do with the relationship between the viewer and the participants of the image. When focusing on these meanings, the image may be analyzed basically in relation to five aspects: Interaction, Social distance, Attitude, Power, and Realism (Unsworth, 2001). When the participant of certain images is human, human-like or animal, these participants may be analyzed in terms of Interaction, being classified as offers or demands. There is a demand when the represented participant looks at the viewer, such as in Figure 4. The image represents an offer when there is no human, human-like or animal participants represented or if these participants' gazes are not directed to the viewer, such as in Figures 2 and 3.

In relation to Social distance, there is a continuum from close-up to medium to long shot, which determines the level of proximity between the participants in the image and the viewer. Figure 4 may be considered a medium shot whereas Figure 5, taken from Bia's diary journal, takes a closer personal distance:

FIGURE 5
By Bia's diary journal: Close personal distance.

The third aspect is Attitude, which establishes the level of involvement. It is determined by the angle, being frontal or oblique. In Figure 3, the Mônica is in a frontal angle whereas the other two participants are in oblique position. The following perspective, Power, may be of three kinds: high angle, low angle and eye-level view (Unsworth, 2001). At the eye-level (such as in Figures 2, 3 and 4), participant and viewer are placed at the same level. Low angles occur when the participant portrayed has power over the viewer, being projected above him/her. In high angles, the opposite happens: the viewer is in a powerful position in relation to the participant represented in the image, as exemplified in Figure 5. The fifth aspect, Realism, deals with color, shadows and light; it concerns the contextualization provided in the image through the background.

Finally, there is the third meta-function, which deals with the Compositional meanings. These meanings are related to the layout of the text (given/new, ideal/real, centre/margin), framing, and salience (Unsworth, 2001). Figure 6, provided by the student Elisa, presents a given/new representation, where the participant on the left is familiar to the readers of the teenage magazine from which she retrieved the picture, whereas the one on the right is the new one, causing the impact that he is very similar to the young man on the left.

FIGURE 6
By Elisa's diary journal: given/new composition.

Ideal/real compositions are organized with the ideal portrayed on the top and the real on the bottom, and the centre/margin ones have the main element in the centre and the remaining participants and circumstances at the margin. Framing deals with the connection among the elements of the image. In Figure 6, the two main participants are separated by a simple borderline between them, but they are integrated because there is no blank space between them, and there is a strong frame surrounding both of them. The last aspect, Salience, refers to size, color, contrast and shape which contribute to the salience of a certain participant in relation to the others. In Figure 4, the participant who is in the middle is foregrounded in relation to the others, meaning that he is the band leader, probably the singer.

With the support of this useful framework by Kress and van Leeuwen (2006), it is possible to describe images and understand their meanings systematically, and it can be applicable to critical reading and writing skills. We will now turn to the discussion of the study we carried out.

3. Methods

The broader study included the analysis of class observation, interviews with teachers and students, as well as diary journals collected from volunteer students from three different public high schools from three different towns in Southern Brazil, as already mentioned. In order to carry out data collection, it was necessary to obey certain requirements from the Ethics Committee at UFSC, including approval by the principal of the school where the research would be conducted, as well as the signed agreement to participate in the research by the volunteered students and their parents. During the period for data collection and analysis, we carried out meetings with the research team, when we discussed the research questions, the procedures for the verbal and visual analysis, based on SFL and visual grammar, as well as other relevant topics related to the study.

For the specific analysis discussed in the present paper, we analyze the diary journals produced by six high school students from one of the Brazilian public schools selected for the broader research. The six students are girls, aged between 14 and 18 years old, and there are two students from each

academic year, called, following the order of the three high school years: Bia, Elisa, Rute, Raquel, Carol and Michele.

As already pointed out, in this paper we concentrate on the verbal and visual analysis of these students' diary journals. The research question discussed here is: What does the verbal and multimodal analysis show in relation to the students' literacy practices and the construction of their identities?

4. Results and Discussion

When analyzing the diaries, the context of situation is looked at, followed by the transitivity analysis together with the answering of the selected research question, and finally, some of the images provided by the teenagers are analyzed according to the grammar of the visual design.

First we contextualize the diary journals according to the three dimensions of the context of situation in SFL. By looking at what is going on (field), the interaction between the participants (tenor) and the channel used during the performance (mode), it is possible to have an overview of the communicative event. Regarding Field, the diary journals concern the literacy practices performed by the student during one week: the students were asked to write about what they do, whether they read, watch TV, use the Internet, and other actions. In addition, they were also asked to show images of people/objects/places they identified themselves with.

In relation to Tenor, the level of formality was relatively informal because the high school students had been required by a research assistant to offer information, and they were free to do the task and organize it the way they wanted. For the selection of the images, the students were also in the role of giving information, positioning themselves as the ones who are identified through the images presented.

Looking at the last variable of the context of situation, Mode, the diary journals were built through the visual channel, with images and written texts. Most images were collected in magazines and glued in the paper the students had received. The diary journals were supposed to be organized having first the writings about each day, signaled by the date, the day of the week, or simply with ordinate numbers (1st day, 2nd day …), followed by the selection of the images and preferably the justification for each choice. Some students subverted the sequence, including the images along the diary or not justifying their choices.

The following sub-section deals with the written parts of the diary journals, focusing on the transitivity analysis and on answering about the literacy practices performed by each student during one week.

4.2. Transitivity Analysis of the diary journals

The objective of asking the students to write a one week diary journal and select images of things they identified themselves with was to investigate their main daily literacy practices and whether or not they were performed at school. We look at the main processes (in italics) and circumstances, starting with the first-year student Bia:

> (...) *assisti* televisão (...) *li* algumas vezes a matéria que iria cair na prova de história (...) *li* dois capítulos do livro que comecei a ler (...) *assisti* ao fim do jornal e a novela. (...) *escutei* a estação de rádio (...) *entrei* no site Orkut.com e no MSN, (...) *li* um capítulo do meu livro (...) *li* o texto "Meio ambiente e o desenvolvimento do Brasil", este cairá na prova de Estudos Regionais (...) *organizei* minha pasta de figuras e reportagens de bandas. (...) *assisti* a novela Malhação (...) *escutei* o CD da banda Jack Jolly (...) *estudei* para a prova de química (...) *assisti* desenho animado (...) *li* um pouco do livro "O longo adeus" (...) *assisti* ao final da novela "Paraíso tropical". (...) *assisti* o DVD do Armandinho (...) *assisti* o DVD do Green Day e *toquei* violão. (...) *assisti* Pânico na TV e *li* um pouco do meu livro.

All the processes in which Bia is involved are material ones. Through these processes, it is possible to see Bia's literacy practices, which involve watching cartoons, soap operas, TV news and DVD of shows, reading novels and texts for school, listening to music, accessing the Orkut and the MSN, studying, playing the guitar, and organizing her album/folder with images. It is possible to see that Bia performs several differentiated actions during one week, which often include studying.

Observing the circumstances in which the literacy practices described by Bia occurred, almost all of them take place at home, none at school. This is also perceived when Bia uses an existential process to say that at school the same things always happen:

> À tarde *fui* para a escola e lá *ocorreu* o de sempre.

In the diary journal written by the other first-year student, Elisa, most of the processes found are material, with actions concerning her literacy practices, which include reading books, comic strips and magazines, studying for school work and tests, watching different programs on TV, textmessaging and listening to music. Elisa also includes emoticons from the Internet in her diary journal to express how she feels in relation to the events described:

> *Liguei* a TV, *assisti* uns clipes (...) *Li* uma revista (Capricho) (...) *Editei* meu filme para a escola (...) *peguei* meu livro (o que deu errado no oriente médio?), mas só *li* a introdução (24 páginas de introdução!) (...) *Ouvi* música. *Fiz* os exercícios de inglês para minha prima. *Li* uma revista de bordo da varing, (...) *Li* meu livro. *Fiz* os deveres. *Assisti* TV (Datena =D) (...) *Vi* uma placa bem bala (...) *Recebi* uma mensagem SMS! (...) *Estudei* para prova de química (ecaaaaa[3]!). *Li* o livro. (...) *Tentei fazer* uma música (...) *Li* uns quadrinhos da Mônica xD (...) *Reli* cartas que ganhei.

The same way as Bia, Elisa also only talks about actions taking place outside school. Not including the activities developed inside school may have been justified by what Elisa says about school – that nothing happens there:

> Aula =P Todo mundo *sabe* o que *acontece* na escola né, nada...

The following student, Raquel, wrote mostly about her routine. What she says in relation to literacy practices performed by her and her colleagues include accessing the Internet, specially the Orkut, watching TV, taking a book from the library, learning at school, talking and playing sports. Raquel also describes events that happened at school, and most of the processes presented by her are material and verbal:

> *Fui* para minha casa *assistir* um pouco de televisão (...) *fui* direto para a net. *Fiquei* um pouco lá no Orkut (...) *aprendemos* muitas coisas bem interessantes. (...) *fiquei conversando* com a minha mãe (...) *fiquei* a tarde toda na net de bobeira (...) *fui* ao campo de futebol (...) *fui* à biblioteca *pegar* um livro da "Ivana Ifraga" (...) *passamos* na internet para *dar uma espiada* no Orkut (...) *aprendemos* várias coisas, no intervalo a gente *foi jogar* vôlei (...) *liguei* a TV.

Another student, Rute, does not write the diary as the other students did, in traditional written text format. She describes her literacy practices in items. In addition, there are few relevant processes taken by her to be analyzed, because she shares the role of main participant with the teachers. Therefore, she is the actor in the main processes, which are material, where she is the actor. These processes involve watching TV, studying, and accessing the internet:

> *Vi* programas de TV, *entrei* no MSN (...) *vi* uma série policial na TV e depois *fui passear* com os cachorros. (...) *vi* uma série policial na TV (...) *fazer* exercícios para entregar.

The third-year student Carol seems to perform several literacy practices daily, such as watching TV programs and films, reading magazines, listening to music, accessing the Orkut and other websites, taking photographs, downloading songs, and sending cell phone messages. The parts transcribed below did not take place at school, because Carol just mentioned school when she had tests. Most processes Carol uses are material ones, where she and, in some moments, she and her friends are the main participants:

> *Fui ler* uma revista que eu adoro muito! a (Capricho) (...) *assisti* a Grande Família (...) para *ver* depois o Linha Direta (...) só *escuto* duas rádios, a Atlântida e a Jovem Pan (...) *olha* o Orkut, *fica entrando* no Orkut dos outros (...) *bate* foto para *renovar* o álbum no Orkut (...) *baixei* o Gimme more da Britney Spears (...) *faço* as tarefas (...) *passei* a tarde *pesquisando* um trabalho de português (...) *Assisti* ao filme do Harry Potter e a Ordem da Fenix (...) *olhei* meu Orkut, *postei* fotos novas, *li* meus recados, *apaguei* alguns, *respondi* outros (...) *coloquei* crédito no meu celular, *mandei* algumas mensagens (...) *li* revistas.

Michele, the last student, was not having classes during the week she wrote the diary journal, because it was vacation time. Therefore, the literacy practices described by her are not related to school, and the processes she mentions which have to do with literacy practices are material and verbal, involving watching a film, reading a magazine article, quitting her job, and talking:

> *Fui dar uma caminhada* na praia (...) *fui ler* um artigo da revista Veja (...) *fui* até a locadora *pegar* um filme para *assistir* (...) *peguei* a folha e *assinei* minha demissão (...) *fui* até a casa da minha cunhada *conversar* com ela.

The analysis of the written parts of the diary journals related to literacy practices allows us to conclude that the six teenagers make use of different multimodal/technological resources in their daily lives, specially outside school, such as accessing the Internet, sending and receiving textmessages, downloading songs, taking pictures and posting them on their social networking profiles.

The following section shows the analysis of the images provided by the teenagers on the perspective of the Multimodality theory. In addition to the multimodal analysis of the images, the contextualization about the choices taken by each student is included.

4.2.3. Multimodal Analysis

The student Bia selected thirteen pictures of people, characters and objects she identifies herself with. This means that she probably has much access to magazines and also that she likes images, especially the ones related to music. Among the images she provided, two of them were selected to be analyzed according to the grammar of visual design.

Figure 7 presents the pop-rock singer Avril Lavigne, whose songs Bia is not very fond of, though she appreciates Avril´s dressing style:

Não curto muito o som dela, gosto mesmo é do estilo.

FIGURE 7
Singer Avril Lavigne

Starting with the representational meanings, the image portrays the singer in a narrative representation in an action process, as it can be seen through the vectors formed by her arms and legs. As she is the only participant in the image, it is a non-transactional action. Besides being a narrative representation, there are some features of conceptual representation in the image, because the participant has possessive attributes (the things Bia identifies herself with). In relation to the interactive meanings, there is a demand because of the singer's gaze towards the viewer. The social distance is closer to a medium-shot, because, although her whole body is depicted, the picture is big and it was taken close to her, which gives the idea that Avril is near the viewer. In relation to attitude and power, the singer's body is in an oblique angle (but with the face turned to the viewer), and at the eye-level view. About the compositional meanings, the participant in the image is centralized, framed and neatly cut by Bia. Salience is also achieved through the combination of the black and white colors and the size.

Figure 8 presents a second singer Bia admires, this time not for his dressing style, but because of his songs and ideas:

Ele é um ídolo para mim (...) curto as músicas e também suas ideias.

FIGURE 8
Singer Kurt Cobain

Kurt Cobain is represented in two narrative processes: in a non-transaction reaction process, looking at something which is not shown; and in a transactional action process, holding a cigarette, which is the goal. Moving to the interactive meanings, the picture is an offer, taken in a close personal distance, the angle is frontal, and the singer has power over the viewer, as he is represented a little over the eye-level view. In relation to the compositional meanings, the singer is at the centre, being the only participant represented. There is a framing around him and the salience is given by the color of his t-shirt (black and white) in contrast with the light color of his eyes and hair (blue and yellow).

The next two images belong to Elisa's diary journal. Elisa represents herself as an "emo-chore" person, for liking "emo-chore" bands and dressing according to their style. Therefore, most images presented by her are of her idols, such as the members of the Panic at the Disco band, in figure 9, and Gerard, from My Chemical Romance (Elisa's favorite band), in figure 10, who she says to be her "source of inspiration":

O Gerard é minha fonte de inspiração, ok?

FIGURE 9
Band Panic at the Disco

The four participants in Figure 9 are in a conceptual representation, in a classificational process. In relation to the interactive meanings, all the participants are demanding, in a close personal distance, frontal angle and at the eye-level view, which intends to make them accessible to the viewer, establishing a closer relationship with him/her. The compositional meanings are given through the location of each participant, in a centre-margin layout, where the main participants are probably the two who are at the centre. In relation to framing, the four participants are separated by blank spaces, and salience can be seen through the contrast between the participants dressing in black and white and with make-up, and the dark red color behind them, in the background.

FIGURE 10
Gerard: Elisa's "source of inspiration"

In Figure 10, there is an analytical conceptual representation, where the only participant that is being represented is posing with his attributes. Interactive meanings are expressed with a demand, a medium-shot, oblique and low angles, which shows certain detachment between Gerard and the viewer, and power over the viewer. About the compositional meanings, in the layout aspect, the participant is at the centre, the frame is around him, and salience is given through the black color of his clothes contrasted with the blue background.

In Raquel's diary journal two images are shown which she said to have been drawn by her. They show things she identifies herself with, related to nature and to going to beach (one of the things she mentioned twice during the diary journal). Figure 11 is about a girl surfing, and Figure 12 presents a landscape.

In Figure 11, there is a narrative representation, where the girl is taking the action of surfing. The circumstance involving the girl surfing is a beautiful landscape on the beach. In relation to interactive meanings, the participant is to be observed (an offer). The image is a long-shot, in a low oblique angle, since the girl seems to be above the viewer. Compositional meanings show a centre-margin layout, where the girl on the surfboard is at the centre, and the sea and the other elements of the beach are at the margin. There is no framing between the participants, only around all of them, and the salience element can be perceived through the foregrounding of the girl, and the light colors that are predominant: blue, green and yellow.
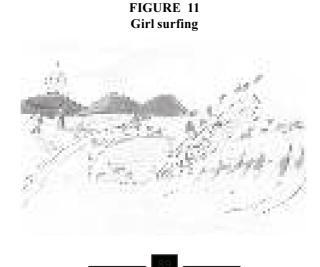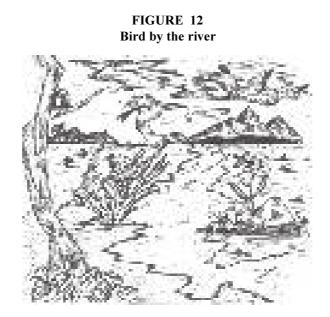
FIGURE 11
Girl surfing

Figure 12, which presents two main participants (the bird by the river and another bird, flying), may be considered to be narrative in the sense that there is a beautiful landscape as circumstance, the bird flying is in a non-transactional action process, and the bird by the river is standing in a plant, drinking water (transactional action process). In relation to interactive meanings, the picture is a long-shot, at the eye level and oblique, which represents nature as something that must be left alone, without human interference. The compositional meanings are, in the layout aspect, centre-margin, with the bird drinking water at the centre and the other participant and circumstances at the margin. The framing does not separate the participants, but it is interesting to notice that the tree trunk frames the left side of the image. In relation to salience, the colors are black and white, and it seems that there are five most evident levels: where the tree is; where the flower is; where the bird drinking water is; where the bird flying is; and where the mountains are.
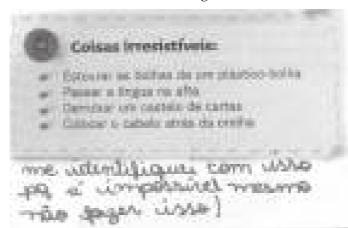
FIGURE 12
Bird by the river

The student Rute did not select pictures, but written parts of magazines she reads. In Figure 13 it is written "accessing the internet". The participant justifies her choice by arguing that she is not able to live without Orkut.

FIGURE 13
Accessing the internet

Figure 14 is also a written text presenting a list of "irresistible" actions to take, which Rute identifies herself with, such as destroying a castle of cards and bursting plastic bubbles.

FIGURE 14
Irresistible things to do

Two images were also selected by the student Carol to represent what she likes: the first is a picture of a drawn girl biking, practicing sports, and the second image is a picture of the singer Britney Spears, who Carol says to like:

Eu gosto muito dela.

FIGURE 15
Girl biking

Figure 15 is a narrative representation, being a transactional action process because of the vectors formed by the girl's arms and legs towards the bicycle, which is the goal. It is also a non-transactional reaction process, for the girl's eyes are being directed to a point that is not depicted in the image. Regarding the interactive meanings, the girl is to be observed (an offer). The girl is in a medium shot, oblique angle, and the power aspect is likely to be low angle, which gives power to the participant. In the compositional meanings, she is at the centre, with the frame around her, and with salience given through the light colors she is composed by.

FIGURE 16
Singer Britney Spears

Figure 16 presents the singer Britney Spears in both narrative and conceptual representations. In the narrative one, she is the senser of a non-transactional reaction process, with her eyes turned to a point that is not shown in the image. In the conceptual representation, she is involved in an analytical process, being the possessor of attributes. In the interactive meanings, the singer is presented in offer (to be observed), at a close personal distance, frontal angle, and at the eye-level, which means that she is portrayed as being intimate to the viewer, but at the same time not facing him/her. At the compositional meanings, the layout is central, framings are built around her body, and salience is given by the red color of her dress.

The student Michele chose the Figure 17 because she enjoys watching movies, which is a moment that she forgets about what has happened during the day and has fun:

"Gosto muito de ver filme! É uma hora da minha vida que eu esqueço tudo que passei durante meu dia."

FIGURE 17
Minha nada mole vida **DVD cover**

The image is the front cover of the DVD *Minha nada mole vida*, a Brazilian sitcom. By analyzing the representational meanings of this picture, it is possible to notice that it is a narrative representation, being action and reaction simultaneously. It is an action process because the two participants (the actors Luiz Fernando Guimarães and the boy) are moving their legs and arms, dancing. It is also a reaction process in which the boy is the senser and Luiz Fernando Guimarães is the phenomenon, the one who the boy is looking at to imitate. Luiz Fernando Guimarães is also looking at something, which is not shown in the image, establishing that he is in a non-transactional reaction process. In relation to the Interactive meanings, the participants are both offers, the social distance may be considered a medium-shot, the angle is likely to be frontal, and the power aspect is eye-level view. In the compositional meanings, the information value given/new seems to have been subverted for right/left (instead of left/right, which normally happens), because Luiz Fernando Guimarães is more familiar to the Brazilian public than the boy, who is new. In relation to framing, the two participants are connected and inserted in a frame around them.

FIGURE 18
People biking

Michele chose Figure 18 because she said she enjoys riding bicycle, which is a moment she dedicates to relax:

Andar de bicicleta, é uma hora que eu tiro um tempo só para mim.

The picture presents people sitting in their bikes looking at the place around them. Therefore, it is a narrative representation of a transactional reaction process, where the landscape is the phenomenon. In relation to the interactive meanings, the participants are presented as offers, in an oblique angle, at the eye-level view, and in a long-shot. In the compositional meanings, the layout of the image is centre-margin, the framing surrounds all the participants, and, in terms of salience, the colors of the participants' clothes are contrastive among them and with the lake.

From the verbal and visual analysis of the teenage girls' diary journals, we could perceive that the girls engage in different but somehow traditional literacy practices, with the exception of their activities on the Internet. We were able to see these girls' identities as being naïve and conforming to what is usually expected of students. Their narratives did not offer discussions or criticism on their lifestyles, their conflicts or tensions, their Brazilian sociocultural environment, living in a

small town or still on their interactions with other teenagers[3]. Furthermore, the pictures they chose emphasized mainly foreign singers, not Brazilian ones. Another important result shows that these teenagers are not enthusiastic about their school and its demands, which may signal a warning for us as educators to develop more interesting tasks and challenges for our students and to raise awareness regarding the importance of multimodal literacy practices.

5. Final remarks

Through the SFL and multimodal analysis presented in this study, it was possible to identify the literacy practices the students perform daily at school and in other environments and indirectly how they position themselves in relation to the school and the teachers.

From the broader study, as pointed out in the students' interviews, one of the causes for the differences between the varied amount of multimodal literacy practices outside school and the lack of them inside school may be related to the absence of some multimodal/ technological resources at school, such as a resourceful computer lab, multimedia projectors, televisions and videos in class, a science lab and a better library available to all the students. Besides these difficulties in infrastructure, we can also mention that there is no explicit concern towards the development of technological multimodal literacy practices inside school.

To conclude, we point out pedagogical implications: 1) the recognition that multimodality is present in the students' lives outside school whereas inside school students are taught mostly through traditional practices; 2) the understanding that school subjects cannot be separated from the students' practices outside school, but connected; and 3) the understanding that multimodality can be used in class even with the absence of modern resources, with the use of what is at reach, such as newspapers, magazines, television, pictures, among others.

As suggestions for further research, we believe it would be pertinent to carry out a qualitative analysis similar to this one with other students from other schools in Brazil. However, specifically related to diary journals, instead of paper and gluing images, we suggest the use of digital narratives on the Internet or blogs. Furthermore, it would be very productive to investigate what kinds of multimodal/ technological resources are demanded in different school subjects.

From an educational perspective, becoming aware of the multimodal/ technological resources, as has already been raised in other studies (Christie, 2005; Heberle, 2006; Heberle & Meurer, 2007; Royce, 2007; Stein, 2000; Stenglin & Iedema, 2001, among others), may contribute to make students literate in different semiotic systems and to enable them to read and produce different texts critically.

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