

The Architecture of Virtual Learning Environments under the Conceptions of Bakhtinian Studies / *Arquitetura de ambientes virtuais de aprendizagem sob a ótica dos estudos bakhtinianos*

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ABSTRACT

Grounded on the conceptual framework of Bakhtin's architectonic form, we seek to demonstrate that the dimensions of a genre practiced in a virtual learning environment (VLE) are directly related to its design (conception, idealization, and form), that is, to its architectonic form as the design of a VLE, which can foster (new) multiliteracies, provide flexibility or not for multisemiotic genre practices in the contemporary world. To achieve this aim, we observed the design of two tools from two distinct VLEs; in one of them we found the influence of traditional school relationships of time and space (and power), generating an architectonic form of the traditional school characterized by its genres and literacies. In the other VLE, considering its architectonic form, we concluded that the design tends to favor the use of different modes of language - textual, graphic, sound, with static and dynamic images with easy communication/interaction in the contemporary technological media.

KEYWORDS: Architectonic Form; Technological Tools; Virtual Learning Environments

RESUMO

Embasados nas concepções de forma arquitetônica de Bakhtin, procuramos demonstrar como as dimensões dos enunciados praticados nos ambientes virtuais de aprendizagem (AVA) estão diretamente ligadas ao design (concepção, idealização e forma), ou seja, à forma arquitetônica de realização, defendido como o design de um AVA, que pode propiciar (novos) multiletramentos, flexibilizar ou não, em sua forma de realização, gêneros multissemióticos advindos do mundo contemporâneo. Para tanto, observamos o design de duas ferramentas em dois AVA distintos e concluímos que, no primeiro, o ambiente digital está baseado nas relações de tempo e espaço (e poder) da escola tradicional, gerando uma forma arquitetônica de realização de uma escola marcada pelos gêneros e letramentos escolares convencionais. No segundo, ao observarmos o todo arquitetônico, concluímos que o seu design propicia o uso de diferentes modos de linguagem – textual, gráfica, sonora, com imagens estáticas e dinâmicas, com fácil comunicação/interação com os meios tecnológicos da contemporaneidade.

PALAVRAS-CHAVE: Forma arquitetônica; Ferramentas tecnológicas; Ambiente virtual de aprendizagem

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Introduction

This article presents the outcomes of a larger research (TANZI NETO, 2014),¹ in which the main objective was to describe and analyze the design (conception, idealization, and form) of two virtual learning environments (VLEs). Under the conceptions of Bakhtin's architectonic form, we sought to understand, with the possibilities of using different semioses, if a VLE, with its tools, may, to a greater or lesser degree, foster (new) multiliteracies.²

In sharing this broader view of the research, we understand that distance learning (DL) has increased dramatically due to democratization of knowledge. The main factors for people to choose this mode of learning is time, mobility and autonomy. On this subject, virtual learning environments (VLEs) have been redesigned with the aim of providing different ways for people to interact with information, thus giving them a better opportunity to participate on the web.

In Brazil, due to its geographical issues and the urgent need to engage people in school, distance learning has grown rapidly, giving the population a chance to participate in this new context. Thus, the VLE has constantly undergone changes, mainly because it is one of the most important tools for distance learning. Yet, we should take into consideration what kind of learning this environment should provide. Considering that VLE is the classroom in distance learning, we seek to understand how the design of a VLE can provide digital tools and resources for (new) multiliteracies present in contemporary social practices, how they can support the insertion of young people in modern society, which brings news ways of working, living, producing, relating and delivering services.

Around the world, we can observe the internet's impact on the youth, which has taken them to create complex global, social and educational connections, collaborating to the development of "virtual societies."

¹ We would like to add that this article argues more broadly the discussion presented and published at EDULEARN 14, 2014, Barcelona, Spain - entitled "Design of virtual learning environments and the contributions of the Multiliteracies Pedagogy, Bakhtinian studies and Remediation." In: 6th International Conference on Education and New Learning Technologies - Edulearn14 Proceedings. Barcelona, Spain: IATED, 2014. v. 1602. p.6589-6595.

² The New London Group (NEW LONDON GROUP, 1996) discusses the future of literacy pedagogy, bringing to light a pedagogy which should include the multiplicity of texts and discourses characteristic of the 21st century.

The interaction among users in the technological media nowadays takes place on sites such as Wikipedia, Youtube, Twitter, Facebook, Tumblr, among others. Regarding education-related concerns, today we observe the important role of VLE in fostering the use of different modes of language for communication and interaction.

In education, school chats, VLEs, wiki³ for collaborative writing and educational social networks, etc. are all digital tools that are constantly made available to teachers, all of which can aid the user in the learning process of interaction and collaboration. However, having to rely on certain institutional VLEs can be a great obstacle when trying to take interaction and collaboration to the field of education.

Today, a large number of teachers tend to get frustrated in the context of distance education when trying to use educational technological devices that do not seem to be compatible with the latest technological gadgets used by their students, making it even more difficult for the student to interact with the study object.

Therefore, having considered the challenges posed above we have opted for a problem-based approach to and an innovative theoretical framework in researching distance education - the concept of Bakhtin's architectonic form, which will be defined further on. In this study we describe and analyze the design (concept, idealization, and form) of two tools available (*discussion forum* and *post stream*) from two different virtual learning environments: TelEduc⁴ and EdModo.⁵

A first criterion for the selection of the two VLEs was their scope in terms of use: TelEduc is used in almost all Brazilian states and also in Chile, in universities, public schools, consulting institutions, etc. EdModo has over 20 million users, is available in six languages worldwide and has gained wide coverage in the Brazilian school context in recent years. A second criterion that led us to choose these two VLEs is related to design issues: such tools provided teachers and students with broad and better usability, flexibility, and human verbal interaction with their environments.

³ A wiki is a group of interconnected pages that can be visited and edited by anyone.

⁴ TelEduc is a virtual learning environment for creation, participation and administration of online courses. It was first created to provide teachers with educational courses on technology, based on a contextualized teacher's education methodology developed by researchers from NIED (Núcleo de Informática Aplicada à Educação) from Unicamp – Brazil. Available at <http://www.teleduc.org.br/>. Accessed on July 10th 2014.

⁵ EdModo is a virtual learning environment with social media characteristics for computers, mobiles and tablets.

In Bakhtin (2010), there is the fundamental thesis that the utterance is the device that streamlines all human verbal interaction, in that it presents the most different genres and tones, wherever language is used in oral or written form. Thus, we believe that Bakhtinian contributions can be applied to virtual learning environments, as we show below.

1 Bakhtin, Aesthetics and Architectural Form

Bakhtin, in his text *Art and responsibility*,⁶ published in 1919, refutes relativism and absolutism of *art for art's sake* prevailing at the time, proposing for the first time the difference between mechanical connection and architectonic articulation.

In his concise but dense text, he proposes that in architectonic articulation elements are constituents of a whole and that the whole is composed by an architectonic sense, with its internally connected parts and not disconnected from one another.

At that moment, Bakhtin seeks for the architectonic concept in the field of architecture, and proposes reflections on the field of music on the structural design of musical pieces, as well as in the philosophy, trying to understand the scientific systematization of knowledge. The author's ultimate goal is to understand the process of formation of wholes, an articulation grounded in meanings, not just a mechanical juxtaposition of the constituent parts (SOBRAL, 2008).

At that time, Russia was a fertile ground for valuable work in the study of art, especially in the field of poetics, leading literary criticism to flourish in the country. Bakhtin points out that such studies could not be included in any single discipline or in any objective unity of cognition, generating the so-called *wandering revelations* from casual and external order for the scope of art.

Bakhtin believes that the work done at the time was methodologically inaccurate by drawing only on general, systematic, philosophical aesthetics, that is to say, non-scientific philosophical aesthetics. The problem was the construction of a system of scientific judgments about art, regardless of the problems of the essence of art in general, features of the Formal method of that time.

⁶ TN. The English version of this article was published by the University of Texas Press. Reference in English: BAKHTIN, M. *Art and Answerability*. *Art and Answerability*. Austin: University of Texas Press, 1990, p.1-3.

The author highlights the importance of an aesthetic field, drawing on a systematic philosophy that differentiates the distinctive nature of cognitive and ethical relationships of the aesthetic. The construction of the science of every art should not be constructed “*independently of cognition and systematic determination of the distinctive nature of the aesthetic within the unity of human culture*” (BAKHTIN, 1990, p.259, emphasis in the original);⁷ the definition should be itself in mutual relationship to different domains of human culture; it is where the aesthetic concept should be extracted from. For Bakhtin

the absence of a systematic philosophical, general aesthetic orientation, the absence of a constant, methodologically thought-through regard for the others arts, for the *unity of art – as a domain of unified human culture* – leads contemporary Russian poetics to extreme simplification of its scientific task, to superficiality and incompleteness in encompassing the object under study. (1990, p.260-261; emphasis in the original)⁸

For Bakhtin (1990), the form understood only as a form of a given material, only in its natural-scientific, mathematical or linguistic definition and without its axiological moment becomes a “work of art, understood [...] as a thing” (p.264).⁹ The importance of the emotional-volitional relationship expressed by its form – rhythm, harmony, symmetry, and other formal moments - presents an extremely tense and active characteristic to be restricted only to the material. Thus, material aesthetics should see that “a given material in art is organized in such way as to become a stimulus of pleasant sensations and states in the psychophysical organism” (BAKHTIN, 1990, p.264).¹⁰

Aesthetic analysis, for the author, must be based on what the work represents for the artist’s and viewer’s aesthetic activity directed toward such activity and not only based on its sensuous givenness ordered by cognition. For that purpose analysis must go through three stages: i) understanding the aesthetic object in its uniqueness and purely artistic structure (contemplation); ii) understanding the work in its original

⁷ Reference in English: BAKHTIN, M. Content, Material, and Form in Verbal Art. *Art and Answerability*. Austin: University of Texas Press, 1990, p.257-325.

⁸ See footnote 7.

⁹ See footnote 7.

¹⁰ See footnote 7.

cognitive givenness – regardless of the aesthetic object; and finally iii) by the teleological method, understanding the external work, called composition of a work, as a technical apparatus of aesthetic execution, in its distinctiveness and in its extra-aesthetic givenness.

For the author, aesthetic individuality is the architectonic form of the aesthetic object itself (BAKHTIN, 1990).¹¹ When we individualize an event, a face, an aesthetically animated object or the author-creator, the aesthetic object takes on a particular character, which cannot be described in purely aesthetic sense, for example, a face to a painting, a verbal whole etc. It is understood, therefore, that

*the form of self-sufficient, of self-containment, belonging to everything consummated aesthetically, is the purely architectonic form least of all capable of being transferred to the work as organized material. The latter is a compositional teleological whole in which every constituent and the entire whole are goal-directed, they actualize something, the serve some end (BAKHTIN, 1990, p.269, emphasis in the original).*¹²

To exemplify the treatment of architectonic forms, Bakhtin (1990)¹³ sees the novel as a compositional form of organizing verbal choices through which the novel constitutes an aesthetic object of artistic, architectonic consummation of a historical or social event. Another example would be drama, which is a compositional form - dialogues, division into acts, etc., but the tragic and comic are the architectonic forms of consummation. However, Bakhtin also considers that:

we must bear in mind that every architectonic form is realized through specific compositional devices; on the other hand, essential architectonic forms in the realized object correspond to the most important compositional forms (to genre forms, for example) (1990, p.269).¹⁴

Thus, “*humor, heroization, type, character* are purely *architectonic* forms” (BAKHTIN, 1990, p.270, emphasis in the original),¹⁵ held by specific compositional devices. The narrative poem, the tale, the novella – these are simply compositional

¹¹ See footnote 7.

¹² See footnote 7.

¹³ See footnote 7.

¹⁴ See footnote 7.

¹⁵ See footnote 7.

articulations constructed by the chapter, the stanza, the line (BAKHTIN, 1990).¹⁶ Another interesting example brought by the author is rhythm, which, if it is understood as a way of ordering the acoustical material, empirically apprehended, heard, and cognized, it is compositional; but the rhythm is architectonic if “it relates to the value of inner striving and tension that it consummates” (BAKHTIN, 1990, p.270).¹⁷

Architectonic forms are forms of the inner and bodily value of aesthetic man, they are forms of nature – as his environment, forms of the event in his individual-experiential, social, and historical dimensions, and so on. They all are achievements, actualizations; they serve nothing, they are tranquilly sufficient unto themselves. They are forms of aesthetic being in its distinctiveness (BAKHTIN, 1990, p.270).¹⁸

The compositional forms that organize the material should be subjected to purely technical evaluation to determine whether they fulfill the architectonic task properly. The choice of the compositional form is defined by the architectonic form. For example, the architectural form of the tragedy selects an appropriate compositional form for its purpose – in this case, the dramatic. That said, Bakhtin (1990)¹⁹ concludes that architectonic form cannot be realized independently of the compositional form, as they are closely intertwined.

However, the tendency to dissolve the architectonic form into the compositional one is worrisome. It is practically impossible to describe the fundamental difference between the architectonic and the compositional forms, by considering only the aesthetic material.

One of the most serious problems of aesthetics – the problem of style – is due to the lack of accurate distinction between architectural and compositional forms. This is probably because architectonic forms always constitute the entire domain of the aesthetic of all arts.

Bakhtin (1990)²⁰ argues that, for lack of techniques and organized material and because the form in most cases is neither objectified nor established, manifestations of

¹⁶ See footnote 7.

¹⁷ See footnote 7.

¹⁸ See footnote 7.

¹⁹ See footnote 7.

²⁰ See footnote 7.

aesthetic vision out of art fail to achieve methodological clarity and full uniqueness; they tend to become confused, unstable, and hybrid.

Therefore, we should not start an aesthetic construction from the aesthetics of nature or myth; rather, we should orient aesthetics through art. However, explaining the hybrid and impure forms of aesthetics is also the work of aesthetics, which is essential from a philosophical and practical point-of-view.

For Bakhtin, the architectonic form is a construction or structure that unites and integrates material, form, and content. In his view, the architectonic form allows us to always ask who produced it, to whom and in what circumstances (SOBRAL, 2008).

Regarding the discussions presented so far about architectonic form and our special emphasis that seeks to understand the architectonic whole, because it may contain forms of the event in its particular social, historical life, we understand that the dimensions of the statements practiced in a VLE are directly linked to its conception, idealization, and form (design), also known, as its architectonic form of consummation. We will broaden the scope of this reflection further on.

2 Bakhtin and Speech Genres

Bakhtin (2010)²¹ understands that the use of language is directly connected to different fields of human activity. Therefore, such uses are as diverse as those fields of human activity.

Language is in the form of statements uttered by members from different fields of activity and each field of language practice develops its relatively stable types of utterances, which we call speech genres. Rojo (2013) proposes a diagram Fig.1 to synthesize the concepts of speech genres presented in Bakhtin (2010):

²¹ Reference in English: BAKHTIN, M. The Problem of Speech Genres. *Speech Genre & Other Late Essays*. Trans. Vern W. Mcgee. 12th print. Austin: University of Texas Press, 2010, p.60-102.

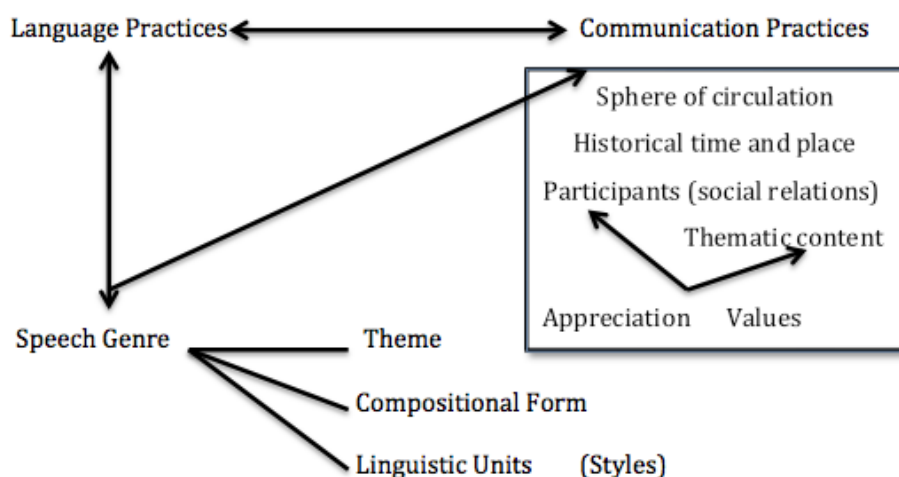


Figure 1 – Speech Genre Diagram
Adapted from: ROJO (2013, p.27)

We understand that language practices are determined by communication practices/field of human activity. It also includes the historical time and place and social relations between the participants, which engender particular genres with their relatively stable (thematic, compositional, and stylistic) types of utterances.

The thematic content holds the meaning of acts in human activity: the objects, meanings and content, arising from a communicative sphere that will always be present in a particular genre.

The style of language is shaped by “the selection of lexical, phraseological and grammatical resources of the language” (BAKHTIN, 2010, p.60),²² which we understand by the way the elements of a particular language organize discourse. Despite their individual character, which is directly linked to the speaker’s individuality, Bakhtin (2010, p.63)²³ proposes that “not all genres are equally conducive” to such reflection, as we should consider the individuality of the speaker in the language statement and their individual style. Yet, some genres seem to require more standardized forms, so style is still an integral part of the genre.

In essence, language, or functional, styles are nothing other than generic styles for certain spheres of human activity and communication. Each sphere has and applies its own genres that correspond to its own specific conditions. There are also particular styles that correspond to these genres. (BAKHTIN, 2010, p.64)²⁴

²² See footnote 21.

²³ See footnote 21.

²⁴ See footnote 21.

For the compositional form, on the other hand, it is the kind of construction from a set of different types of relationship that the speaker has with other participants in discursive communication – the relationship with listeners, with readers, with partners, with the discourse of the other, etc. (BAKHTIN, 2010).²⁵ Strictly speaking, it is related to the configuration or the organization of the utterance so that it meets specificities of a particular discursive sphere or a field of activity.

We understand that the compositional form is defined by the architectonic form, which means that, according to the architectonic form of communication practices, the compositional form, the styles, and themes are organized in a genre.

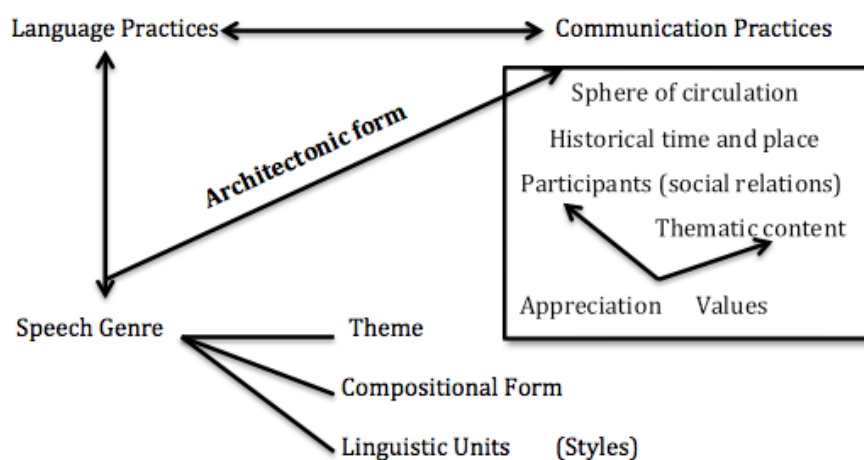


Figure 2 – Speech Genre Diagram with the architectonic form
Adapted from: ROJO (2013, p.27)

As we can see from Fig.2, the architectonic form is in between the communication practices and the speech genre.

To make this clearer, let us imagine, for example, the classroom with its architectonic form, which means, with its ergonomics, which allows a specific organization of chairs, structure, space, whiteboard, walls, etc., and it provides a unique way of interaction: one to many, teacher-centered, etc. This ergonomics or architectonic form allows certain genres to fit, while others not so. This is where we believe that the architectonic form defines the compositional form, as both are closely connected to the theme and style in every genre (BAKHTIN, 2010).²⁶

²⁵ See footnote 21.

²⁶ See footnote 21.

3 Bakhtin and the Circle: Contemporary Genres

Observing the new and numerous practices stemming language of contemporary media and technological resources available, one might think that only the concepts of gender presented above would not account for the language of modernity that we observe in virtual environments. Certainly, the concept of genre speech does not encompass all forms of communication – as an omnipresent, omnipotent, self-sufficient concept – although we understand that its incompleteness can make the concept more open and flexible. In that sense, the contributions of the Bakhtin Circle can also be applicable to defining the emerging utterances in the digital context. Bakhtin states that

the wealth and diversity of speech genres are boundless because the various possibilities of human activity are inexhaustible, and because each sphere of activity contains an entire repertoire of speech genres that differentiate and grow as the particular sphere develops and becomes more complex (2010, p.60).²⁷

Thinking about the complexity of a particular field, as pointed out, and its most open and flexible characteristic, the concepts of speech genres can have their applicability to new utterances, known as contemporary genres (multimodal/multimediatric). As stated by Rojo

the multisemiotic characteristic of contemporary texts/statements do not seem to strongly challenge the concepts and categories proposed by the concept of speech genres. Furthermore, if we widen our Bakhtinian readings of texts about genres that focus on flexibility, in plurilingualism and pluri-vocality of utterances in genres such as the text of 1934-35/1975 (*Discourse in the Novel*), broader and more effective our tools become for the analysis of contemporary texts (2013, p.26-27).²⁸

We can see from the diagram of speech genre concepts presented above (cf. Figure 1, above) that the situation of communication helps determine language practices. Rojo argues that there are

²⁷ See footnote 21.

²⁸ Text in the original in Portuguese: “O caráter multissemiótico dos textos/enunciados contemporâneos não parece desafiar fortemente os conceitos e categorias propostas pela teoria dos gêneros. Além disso, se ampliarmos nossas leituras bakhtinianas sobre os gêneros para textos que apresentam um foco mais centrado na flexibilidade, no plurilinguismo e na plurivocalidade dos enunciados em gêneros, como o texto de 1934-35/1975 (O discurso no romance), mais amplas e eficazes se tornam nossas ferramentas para a análise dos textos contemporâneos” (ROJO, 2013, p.26-27).

spheres that use different media (print, radio, television, digital) for the circulation of their speeches and also select different semiotic resources and diverse possible combinations between them to achieve their purposes and their themes resonate, causing changes in the genres. This is the case of a news story in digital media, which freely combines the choice of “reader-author,” written in hypertext, with photos and pictures, videos and sometimes audio in podcast. Thus, media and technologies are choices, presented in a well-thought-out way in the spheres of circulation of discourses. So, they have immediate effect in the compositional form and styles of statements, inclusive in terms of multimodality (2013, p.29).²⁹

For the author, the speech genre concept, with the knowledge of various semioses, seem to be able to articulate changes in the texts and forms of circulation in contemporary discourses. The diagram shown in Figure 3 attempts to synthesize this discussion:

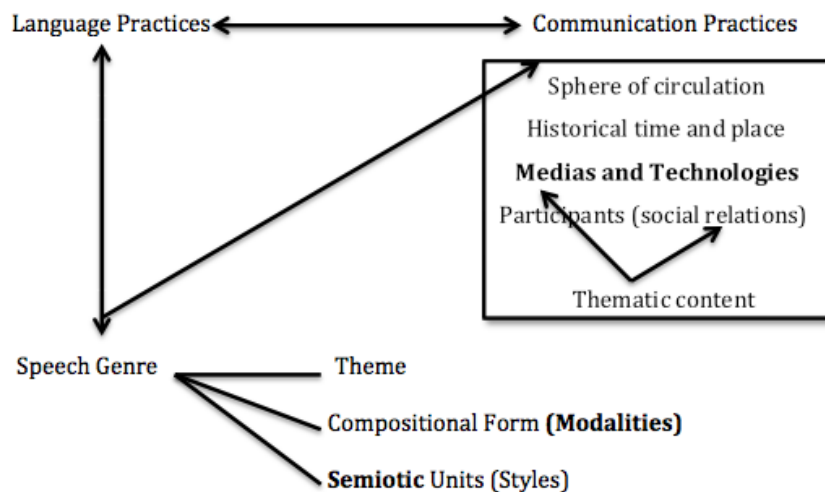


Figure 3 -Diagram of the speech genre for analysis of contemporary texts.
Adapted from: ROJO (2013, p.30)

²⁹Text in the original in Portuguese: “as esferas que se valem de diferentes mídias (impressa, radiofônica, televisiva, digital) para a circulação de seus discursos e também selecionam diferentes recursos semióticos e diversas combinatórias possíveis entre eles para atingir suas finalidades e ecoar seus temas, provocando mudanças nos gêneros. É o caso de uma notícia em mídia digital, que combina livremente, à escolha do “autor²⁹”, a escrita em hipertexto, com fotos e imagens, vídeos e, por vezes, áudio em podcast. Então, as mídias e as tecnologias são escolhas, e de caso bem pensado, das esferas de circulação de discursos. Mas têm, de imediato, efeito nas formas de composição e nos estilos dos enunciados, inclusive em termos de multimodalidade” (ROJO, 2013, p.29).

In contrast, Rojo (2013) argues that, for the analysis of texts/contemporary utterances, not only should the concepts of speech genre in (thematic, compositional, and stylistic) dimensions be considered, but also some conceptual tools developed by the Bakhtin Circle, which can help detect both the flexibility of statements in genres such as ideological reflection and refraction, resulting in *evaluative appraisal*, *plurilingualism*, *polyphony*, *voices of a genre*, *chronotope*, *reported speech*, and *active response*.

On the one hand, this shows a wider opening, preventing a tight classification of genres and it puts us in touch with many possibilities of statements, utterances, texts, and discourses.

That said, we seek to sharpen our theoretical lenses to help us to understand the architectonic form of what we propose to examine in this article – two tools of two distinct virtual learning environments, in their designs (conception, idealization, and form), because we believe (that) in them there are forms of language in its social, historical aspects of particular life, in what should be a new field of human activity. We believe that after understanding these issues, their specific compositions, we can undertake further reflections on the uses of these tools in digital environments in education.

4 The Analysis of the Design in Question

For our discussion, we will analyze one tool available in each virtual learning environment and then try to grasp its architectonic form. However, due to the scope of this article, we will not observe all the tools available for each VLE. Consequently, we chose two tools in which much of the interaction between students and teachers take place so that, in our analysis, we can understand the architectonic form of each virtual environment. Thus, for TelEduc, we chose the tool *discussion forum* and for EdModo, the *post stream* tool.

On the TelEduc platform, the *discussion forum* tool allows access to a page on which topics are under discussion at the time student is taking a specific course. Participation in the discussion as well as follow-up takes place through participants'

sending and exchanging messages, which are organized according to the topics in only alphabetic writing mode of communication (cf. Fig.4). The great difficulty in this tool is following the discussion, as it occurs in lines/clickable boxes of contribution of each student and not in a typical visual, sequential conversation that is typical of contemporary technological media.



Figure 4 –Discussion Forum TelEduc – opening page (example).

We can infer that the architectonic form of TelEduc provides an environment with little flexibility for the user, as the tool is based on compartments (cf. Fig.5); besides it is not visual, as it does not make use of different representational icons, but only the alphabetic mode, which hampers collaboration between participants because their participation will be fragmented into small units and unique itineraries in boxes/lines of interaction. Moreover, the environment fails to foster interaction between the study object and the user, as it allows little interaction among different users, once everything needs to be clicked: in the environment, in the *discussion forum*, in the *mail box*, on the *student's schedule*, *activities*, etc. So, all fields of discussion are in isolated boxes of interaction due to its compartmentalized form of givenness; interaction becomes artificial with the simple goal of accomplishing a task. Thus, the environment can be defined as a repository of digital information: it is static, with pre-defined roles and pathways for its users, where only one mode of language is established – the alphabetic mode of writing – as already mentioned (cf. Fig .6).



Figure 5 –Discussion Forum TelEduc– sequence of messages (example).



Figure 6 –Discussion Forum TelEduc –opened message (example).

In EdMódo, this tool is replaced by the *post stream* tool, in which the reflections on the study object itself are posted, by using comments and emoticons,³⁰ videos, texts, images and prezis,³¹ in the embedded³² function, or not, as shown in Fig.7.

³⁰Form of paralinguistic communication arising from the junction of the English emotion and icon (emotion+ icons). The emoticons available on EdMódo for the teacher are: “excellent, you are a rockstar, admirable, yes you can, nice try, better luck next time, spelling errors, incomplete, needs of improvement.” For students they are: “very good, I liked it, interesting, difficult / challenging, it was not taught in class, I need more time, boring, I need help, I lost interest.”

³¹Tool for creating dynamic presentations that is not limited to slides.

³²A Hypertext Markup Language (HTML) function for images, sounds, videos and other media, in which files are inserted into the HTML document and not just the link.



Figure 7 –Post Stream (object of study) on EdModo (example).

The tool *post stream* on EdModo (Fig.8) presents students' discussions also in chronological order. However, all posts are located on the EdModo group homepage with a picture of the user who posted it. When sending a message on the discussion in progress for the group or for individual post, the user will have the options to place links, pictures, files, videos, material from his/her personal library/backpack,³³ all incorporated to the page without the need of external links, offering different modes of language to communicate. On all posts, the emoticons function can be used for their group to react, comment and interact with everything that is happening in the classroom. In the environment of the *post stream* tool, the student can find various posts from learning communities, from different social networks in which the student can participate, as well as from other courses in which he/she is taking part, and also individual messages from colleagues; such messages can be filtered at any time only for a specific group discussion. Due to these and other features already mentioned, the *post stream* on EdModo becomes a multimodal tool, which means that different forms of language are established, not only the alphabetical one.

³³Tool that allows the insertion of files stored in the cloud, from large servers like Google drive, Dropbox, etc.

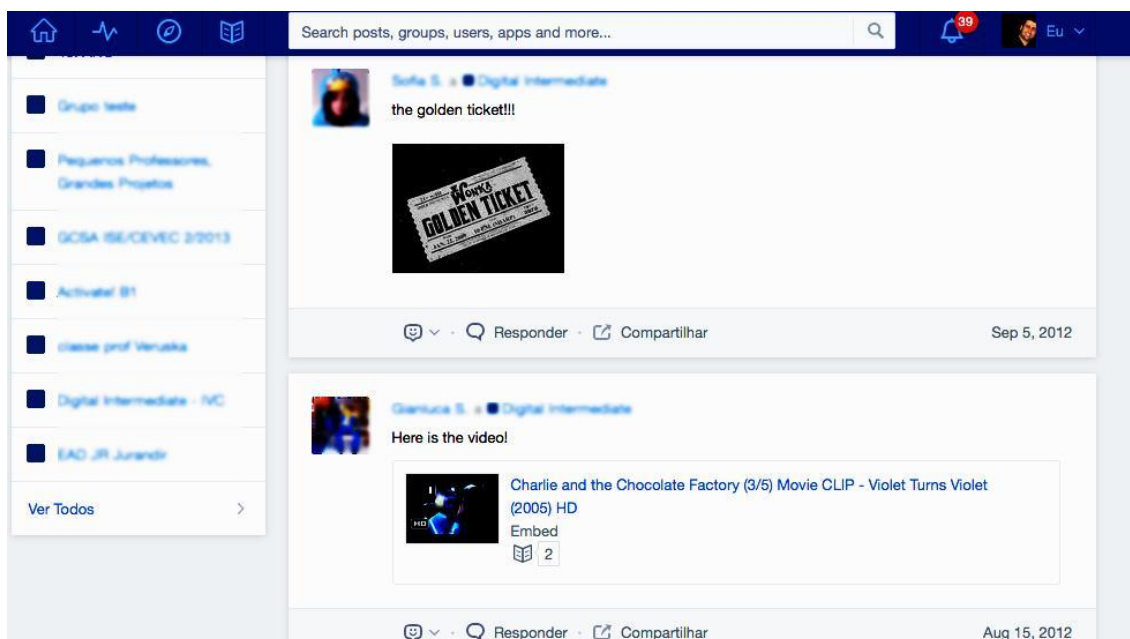


Figure 8 –Post Stream (comments) in EdModo (example).

There is not a tool for a *forum* in EdModo; this is due to the fact that discussions center on the object of study that is presented in the *post stream* itself with an embedded function, and different possibilities of interaction, as already mentioned. The tool is similar to the collaborative spaces known to students in blogs, such as Facebook and Twitter, where participation of members is given in the object itself, as in a video, an image, etc. This multimodal structure, known as the juxtaposition of different linguistic modes, can provide contemporary communication practices experienced by users in their day-to-day lives.

Final Considerations

In this study we have examined and discussed the theoretical contributions which help define that architectonic form is realized in the communication situation and organizes the compositional forms that take place in a genre. In our analysis, we found that the compositional forms that constitute the VLE TelEduc (tool and genres allowed/supported) would be forms originating from a school context of the twentieth century, as its architectonic form has little flexibility towards the demands of the contemporary world; in other words, its conception, idealization, and form are based on alphabetical

texts. Besides, VLE TelEduc is seen as relying on students' basic skills, while its text content format is fragmented into units or boxes of interaction.

As we have observed through the architectonic form of the virtual environment, its tools, and flexibility for different modes of language, TelEduc can be said to contemplate the 1.0 school, which means Mindset 1 proposed by Lankshear and Knobel (2006), in which the world is centered and hierarchical, while production is based on infrastructure and centers or units (compartments).

Therefore, to understand the architectonic form as proposed by Bakhtin (1990),³⁴ we observed, in the tool *discussion forum* in TelEduc, a gap between its architectonic form and the contemporary reality of users engaged in new technologies. By understanding the unique givenness of that VLE, we understand that its structure is based on a hierarchical, technicist, Fordist school of the past; and from their exterior features, known as extra-aesthetic, we can see that not much learning interaction can take place due to the limitations of the environment itself, unless in the *forum* the tutor or teacher begins using, for example, links and hyperlinks for students to access the multiple possibilities on the Web. Even so, the discussion would become broken and open in many different environments, making it difficult for the students involved to interact and collaborate.

As for the internal dimension of the architectonic form, we observed that the compartmentalized layout of the individual student's dialogues is part of a model of lecture and teacher/tutor as the sole holder of knowledge and power of seriation, classification, evaluation, and promotion.

We believe that, in educational spaces supported by new technologies, new genres are established, transformed, reconfigured, and new forms of communication and new language arise.

That said, when we analyze the architectonic form of EdModo in its architectonic form, we can see in the design of the tool *post stream* that different communication formats may happen – textual, graphic, sound, static, and dynamic images – due to its easy communication/interaction with other technological means. In EdModo, there is still a flexible adaptation of content presentation, the navigation system and interaction in terms of objectives, knowledge, skills, and interests. The

³⁴ See footnote 7.

conception of language is seen as a complex process of reconstruction of content with the mental activity that the student engages in and which involves basic cognitive abilities, prior knowledge, strategies and learning styles, motivations, goals, and interests. Thus, we believe that the compositional forms presented in this environment, due to its architectonic form, may be genre-based as it addresses communication situations of contemporary users.

We can conclude that EdModo is based on the logic of the world that is not centered; it is focused on a continued participation, and the authorities are collective and distributed in a more open, fluid and collaborative space, characteristics of the 2.0 school, known as mindset 2, proposed by Lankshear and Knobel (2006). The EdModo supports various aspects of learning, search, content management, and production of all participants with a broad community and with research partners in which students and teachers can share their resources and achievements.

EdModo can foster multiliteracies for its users with the immersion of students in meaningful practices within the digital community so that they become able to participate in multiple and different situations based on their knowledge and experience of the contemporary world. It is in this sense that the VLE can provide a contextualized, critical and experimental teaching and learning practice - essential characteristics for (new) multiliteracies.

Looking at the original givenness/cognitive of VLE, as proposed by Bakhtin (1990),³⁵ EdModo structure is based on the model of social networks, proposing a more interactive learning process, and dialogical construction of collaborative and distributed intelligence for different communities across the globe. In the outer dimension of this VLE, we observed its flexibility of dialogue/interaction with other resources available in cyberspace. Such features, photos, image, icons, graphics, etc. are part of day-to-day contemporary students, introducing new and multiliteracies in the field of collaborative learning.

We conclude that EdModo, in its architectonic form, brings up new issues of temporality and spaces or cyberspaces in which we are living. On this basis, the VLE provides renewed meanings of the school of the past and creates new meanings for the school of the future, which now falls on new, open and constant transformations arising

³⁵ See footnote 7.

from the contemporary space-time. We believe that that is a first step for a contemporary VLE, making use of cognitive distributed collaboration technologies, semantic and immersive networks – characteristics already present in the emerging social practices of the contemporary human being.

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