Educational Policy and Open Resources in Brazil: a Discursive Analysis

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Abstract

Discourse analysis is the French theoretical and methodological foundation of our research, in which we analyze the discursive operation of Open Educational Resources focusing on its potential destabilization effects in accessing cultural goods, educational assets and authoring processes. We understand that Open Educational Resources may become an educational policy, based on the principles of collaboration and openness, giving new meaning to the senses of authorship and learning materials. The current challenge is to intensify actions for a public debate on the relevance of open access. (Funded by São Paulo Research Foundation – FAPESP).

1. Introduction

Individuals are affected by technical issues, which we consider as political issues, since the existence of technological tools "is not located outside society and in its place, but in its own plot, in the constitution of a single inextricably tecnossocial tissue " (AUROUX, 1998).
Technology is understood as a social practice, as the instruments are not blanckly created, instead they are full of desires and interests, and they
[14]tend to dynamize, increase, generalize, modify or block relationships, processes and social, economic and cultural structures, present in all national and global spheres of society. In this sense they acquire the presence, strenght and scope of social techniques of organization, operation, change, control, management of sociability forms and of the games of social forces. (IANNI, 1998).

When discussing about the playfulness of artifacts in the S*cientific education and material culture - the playful artifacts* dissertation, Leodoro (2001) addresses the instruments as a social practice, capable of displacements that are not merely from a pragmatic order:
[12]The approach we find most suitable for the playfulness of artifacts takes into account the possibility of reversing such property, in the contextualization of the functionality of industrialized objects and the historical, technical and aesthetic conditions that support it. From this point of view, those objects are transformed into educational tools that do not talk only about themselves, but also about the techno-scientific reality of the society that produced them. They are models of the contemporary material culture. The artifacts belong to the artificial world, placed at our disposal by industrial society, assuming the role of instruments of knowledge.
Thus, as we have discussed elsewhere (Abreu, 2009), an instrument should not be considered independent of a theory or as a mere application of it (Pecheux (1980 Apud Henry, 1993). The instruments, as technical / policies issues, are also theoretical ones, because they are inherently linked to economic, social and cultural aspects. In other words, the instruments do not occur independently of ideology, applying this term in the sense brought by Orlandi (1997): "ideology is not hiding, but interpreting the meaning in a certain direction, the direction given by history."
We have thus a discursive perspective of technology that implies, according to Dias (2010):
[5] In considering their conditions of production, both in the strict and broad senses. But also the discursive memory, a rich concept to the Discourse Analysis that is connected to the form of textualization, the (semi-conscious) syntactic choices, and the enunciative ways of speaking, since it implies a relationship with

forgetfulness and that makes us formulate something one way and not in another way, because we believe that there is a "natural" relationship between words and things; and, still, makes us believe that what we say is what we want, because we forget that the senses are determined by the way we signed up ourselves in the language and history (Orlandi, 1999). Thus, the term technology means the memory functioning that determines it, for all that has been done (and forgotten) about it. (...) The meaning of the word technology is the effect of the way it is politically taken in the constitution of the artifacts of the world in an inseparable relationship with the form of social, political and economic relations.

We assume that the condition of access population has to certain technological devices can not be understood only at the individual level, but in a collective and public dimension. Being able to perform activities involving the use of technological devices and, in particular, being able to develop various ownership types of these assets can not simply depend on the financial situation of an individual, or be restricted to certain classes. We must have mechanisms, including legal ones, to enable the diversity of uses by different individuals.

Within the discourses about Internet governance, we discussed the meanings given to the theme *access*, during the second *Internet Governance Forum (IGF)* performed in Brazil (Abreu, 2011).

The senses of *access* slip between financial, legal, technical and administrative fields, all simultaneously ideally superimposed by the political field, since the IGF was created as a forum for policy dialogue related to Internet governance between the various levels of representativeness of society: government, international organizations, civil society organizations and business organizations.

Thus, the *access* issue covers *financial aspects* such as the cost of connections, especially international ones; *legal aspects* such as property rights regimes, and here we have the question of public domain repositories; *technical aspects* such as the development of operating systems and search systems that involve multi-lingual capabilities as well as the discussion about free software; *administrative aspects* such as the construction of workspaces for the development of contents.

It is in this context of studies that this chapter is located, in which we present some aspects of the development of the project "*Politics of Open Educational Resources in point:* authorship, teacher training and digital culture", focused on the *Open Educational Resources* (OER) and its effects of formulation. We seek to understand the discursive operation of *Open Educational Resources*, with its potential destabilizing effects of senses of teaching materials, teacher training and practices, access to cultural assets, processes of authorship, as well as its effects while setting a cultural and educational policy that arises as based on the principles of collaboration and openness.

According to the conceptualization of *Open Educational Resources*, UNESCO / Commonwealth of Learning in collaboration with the Community REA-Brazil, we have the following formulation (ROSSINI, 2011):

[6] Teaching, learning and research materials in any holder or media that are under public domain, or are openly licensed, allowing them to be used or adapted by others. The use of open technical formats facilitates the access and the potential reuse of digitally published resources. Open Educational Resources can include full courses, parts of courses, modules, textbooks, research articles, videos, tests, software, and any other tool, material or technique that can support access to knowledge.

We understand that this formulation turns out to destabilize the current directions of teaching materials - teaching and learning, especially - when set in motion directions of *potential adaptation and reuse of resources*, what implies in emphasizing a different way of understanding authorship and the movement of these materials, the one that values the open licensing - with the capabilities it brings to the reader - and the availability of resources in open repositories.

The slippage of senses from *teaching materials* to *open educational resources* symbolically displaces the teacher's position from a place of centralized decisions to a place of potential collaborative construction of knowledge. In the first scenario, with a heavily ingrained vision of the educational field, it is up to the teacher, and only to him\her, the decision on the content of the material to be used, as well as on the teaching sequence

to be established, in a perspective in which the teacher is the one holding all the knowledge, a vision marked by a technicality, which is today already being questioned, although in an incipient form.
The emergence of new capabilities in the digital space, as well as the reconfiguration of ancient instruments, bring other senses to the educational field, submitting questions to the area of Didactics, in a movement of reconsideration of its own epistemological status. The senses can move to the path of ratification of an educational model focused on the teacher and on the knowledge transmission, or may contribute to the redefinition of the teacher in the elaboration of conditions for the construction of knowledge by students.

The Open Educational Resources movement is guided by principles similar to the Free Software movement. These principles seek to secure four essential freedoms, according to the *Free Software Foundation of Latin America* (www.fsfla.org/svnwiki):
1 Run the program with the purpose you wish;
2 Study the source code and modify it to do what you want;
3 Copy the program and distribute the copies when you wish;
4. Publish or distribute a modified version when you wish.

The free software is configured as an instrument that offers some important advantages over the others, according to Afonso (2009), from which we highlight the possibility of the programs to be adapted to the needs of the users as well as the possibility of updating the codes directly with the developers of a specific application in open Internet environments.
In this sense, Okada (2010) defines Open Educational Resources as:
[1] Designed to be widely used as reproducible and flexible resources that can be easily found (addressable); and therefore can be adapted several times and in various ways for multiple purposes in different shapes and in different contexts by multiple users.
We know about the relevancy of the instruments in educational environments, both for teaching and for researching. The way these instruments are designed brings in itself certain conceptions, but the users can offer them new significance during the practice, since the senses are not administered in its entirety, because "one meaning is in the means of others" as stated by Orlandi (2001). This comprehension that the senses are not already given leads us to the *reader-effect*, a concept presented by Orlandi (2001):
[9] The *reader-effect* occurs in the recognition - identification of the subject, act of interpretation – of a reading in the middle of others. As we know, there is no closure and there is no definitive beginning. These are imaginary boundaries that constitute themselves in formulations whose materiality will attest to the need built by them. Once set, they work as if they were necessary and justified. At first, there are no strict limits, but as a meaningful (imaginary) unit, the text has a limit.
The possibility of accessing a resource that presents in its materiality more opening spaces, providing the reader with the freedom to edit, remix, adapt, as he can place himself, during the process, in the condition of author, opens more conditions for us to reinforce the conception of reading as a symbolic process in constant construction and that is constituted in variety, in which what matters "is not a matter of quantity, but a relation of senses in the (qualitative) formation of files (...). What matters is to make the user realize that there are relations of meaning in transit. There are senses that entangle themselves, that form affiliations "(Orlandi, 2001). Thus, the act of interpretation or of authorship can gain new contours both by the formulation and by the movement of resources to which the subject has access.
It is also noted the concept of reusability, used in the field of Open Educational Resources (OKADA, 2010).
[1] Reusability is, therefore, an essential feature for the design of OER to create the ease and flexibility for the adoption and / or adaptation. In this context, Reusability can occur through: adoption or adaptation. Adoption is referred as the process of the selection of material or part of the material as it is. To adopt involves finding, accessing and making a resource available to be used. Adaptation means small or significant changes in the

content. The reuse process of OER can be described in many ways [as shown below] which define, and therefore clarify the many ways the learning content can be adopted or adapted

We highlight from this concept the term *adoption* that remits us to the textbook, a classic material in Brazilian classrooms, this book is adopted by the teacher and by the school, and many times, in its usage, it does not go to the adaptation scope, here understood as a proposition of changes to its content; this happens because of several factors related to the production conditions of the subjects in Brazilian school environment, taken here in a broad sense.

Figure1 "Níveis de Reutilização e formas de reutilizar REAs, por Okada (2010)".

Níveis de reutilização		Formas de reutilizar REAs
	Recriar o conteúdo e contribuir para novas produções	• **Re-autoria:** Transformar o conteúdo adicionando sua própria interpretação, reflexão, prática ou conhecimento.
		• **Contextualização:** Alterar o conteúdo ou acrescentar novas informações, a fim de atribuir significado, sentido através de exemplos e cenários.
		• • **Redesenho:** Converter um conteúdo de uma forma para outra, apresentando o conteúdo pré-existente em um formato de entrega diferente.
	Adaptar parte do conteúdo	• **Síntese:** Reduzir o o conteúdo, selecionando as idéias essenciais.
		• **Reaproveitamento:** Reutilizar para uma finalidade diferente ou alterar para tornar mais adequado para diferentes objetivos de aprendizagem ou de resultados.
		• **Versão:** implementar mudanças específicas para atualizar o recurso ou adaptá-lo para o cenário diferente.
	Adotar o mesmo conteúdo, mas adaptar a estrutura,formato, interface,ou idioma	• **Tradução:** transpor o conteúdo de um idioma para outro.
		• **Personalização:** agregar tecnologias para contribuir com o progresso individual e personalizado.
		• **Reordernação:** Alterar a ordem ou seqüência.
	Adotar o mesmo conteúdo (parte, total ou combinação)	• **Decomposição:** Separar o conteúdo em diferentes seções, quebrar o conteúdo em partes.
		• **Remixagem:** Conectar o conteúdo com novas mídias, interfaces interativas ou componentes diferentes.
		• **Montagem:** Integração do conteúdo com outro conteúdo a fim de desenvolver módulo ou nova unidade.

Levels of reuse and ways to reuse OERs by Okada (2010)

Levels of Reuse

•To recreate the content and contribute to new productions;

• To adapt part of the content;

• To adopt the same content, but adapt the structure, format, interface or language;

• To adopt the same content (part, full or combination);

Ways to reuse OERs

• Re-authorship: Transform the content by adding your own interpretation, reflection, practice or knowledge;

• Contextualization: Change the content or add new information in order to assign meanings through examples and scenarios.

• Redesign: Convert content from one form to another, presenting the pre-existing content in a different delivery format;

• Summary: Reduce the content by selecting the essential ideas;

• Reuse: Reuse it for a different purpose or change it to make it suitable for different learning or outcomes

objectives;
• Version: Implement specific changes to update the resource or adapt it to the different scenario;
• Translation: Transpose the content from a language to another;
• Customization: Add technology to contribute to the individual and customized progress;
• Reorder: Modify the order or sequence;
• Decomposition: Separate the content into different sections, break the content into parts;
• Remixing: Connect content to new media, interactive interfaces or different components;
• Mounting: Integration of the content with other content, in order to develop new module or unit.

One challenge in the field of open educational resources is to understand how they are configured as output and file reading in the sense brought by Pecheux (1994) that, referring to databases, discusses about whom currently seems to be able to provide data for interpretation, in computerized databases.

Pecheux (1994), from the observation of cultural detachment between "writers" and "scientists" – A separation that mutedly remits to " underground cleavages between different ways, or at least contradictory ways to *read the file* (understood in a broad sense as 'field of relevant and available documents about an issue') ",states that "we are facing a new division of the reading labor, a real social reorganization of intellectual labor, from which the consequences will directly reverberate on the relationship of our society with its own historical memory", because "the phobic arrogance and the condescendence of writers [people of letters] threat to isolate them more and more (culturally and politically) while facing the patient and scathing 'utilitarian' modesty of the scientists of file [technologists], who have the future before them.

We then have two discursive orders: one of the scientists which is configured on the computer science and one of the writers which is configured in the printed books. The fact is that the power of computers to build files is surprising, even inserting books on databases. Thereby, it is the discursive order of the computer science that ultimately prevail today, determining, by the clippings in the file, what is really known on the databases, whether they are configured in the printed or in the virtual mode.

We situate here, the act of reading also as the act of production, and one of our concerns is to what extent a division between authorized and unauthorized producers is intensified in the Brazilian educational policy model. Pecheux (1994) reminds us that:

[10] Since the Middle Ages the division began among the clergy, among some of them, authorized to read, speak and write in their names (so, carriers of a reading and of an own work) and the set of all the others, whose tirelessly repeated acts (of copy, transcription, extraction, classification, indexing, coding etc) also constitute a reading, but a reading that requires the subject-reader to be erased by the institution that employs him: the large number of private and public scribes, copyists and "continuous", was constituted through the Classical Era until today, over the renunciation of all claim of "originality", and over this erasing of themselves in the silent practice of a reading devoted to a church service, to a king, to a State or to a company.

Thus, the ways the platforms that present educational resources are configured and who, historically, can provide digital content (universities, companies, NGOs) indict, in its materiality, important ideological effects. It has been occurring, in recent times, a whole movement around the initial and continued teacher training in Brazil with various federal programs - PRODOCÊNCIA (Consolidation Program of Licentiate degrees), OBEDUC (Observatory of Education), PIBID (Institutional Scholarship Program of Initiation to Teaching) – that marks an educational policy in Brazil. The issue of open educational resources has emerged in incipient form, and we could not say that there is a strong public policy in this direction, although there have been some public notices, proposed by MEC (Ministry of Education), for the creation of educational technologies, defined as:

Pre-qualified tools, materials and processes that are available to schools and public systems of state and municipal education. Since 2007, the Ministry of Education has prequalified 89 technologies and has produced another 53; all of those are available in the Guide of Educational Technologies. (http://portaldoprofessor.mec.gov.br/conteudoJornal.html?idConteudo=1013).

The proposition of greater openness and greater possibility of interoperability, in the model under discussion in Brazil, searches a balance with the discourse of property of the author. If it does not happen, there will hardly be a displacement of the picture presented by Branco (2010):

[17]At the current time, in which digital technology has been absorbed by the entire society, it would be natural to use the internet, cameras and mobile phones to make students create their own intellectual property. However, an educational project that would encourage students to create intellectual works from other works, even though only for academic purposes, would come up against legal barriers imposed by LDA, especially if students wished to disclose the final work in networks of content sharing, such as YouTube, for example.

As stated by Pecheux (1990), "the idea that the stabilized spaces would be imposed from the outside scenario, as coercions to this pragmatic individual, only by the power of scientists, specialists and management staff, proves itself unsustainable." Thus, we understand that the stabilized spaces are not static, but they change historically by the construction of the subjects, that in a feedback effect, make a "scramble" on the stabilization, filling their holes, not without resistance, with other discursive practices. As we know, technology issues do not blankly occur, but they compose a discursive place whose effectiveness we feel on the skin. So, understanding this scenario, that today is being constituted in Brazil, is a political act in motion.

REFERENCES

[1] A. Okada, A. Mikroyannidis, I. Meister, and S. Little. "Co-learning through OER and Social Media"**.** 2010. Available in http://oer.kmi.open.ac.uk/?page_id=1479. Accessed on 13 October 2011.

[2] A.S.C. Abreu. "National Forum Copyright - an analysis of its happening", Proceedings of the IX Latin American Congress of the Discourse Studies - ALED**,** UFMG, Belo Horizonte, 2011**,** pp. 1-13.

[3] A.S.C. Abreu. *Copyright Policies: between regulation and failure*. Rua Magazine, 2009. Available at: www.labeurb.unicamp.br/rua. Accessed on July 2009.

[4] A.S.C. Abreu. "Governance, State and Democracy in the discourses of Internet Governance", *Proceedings of*

the VI International Congress of ABRALIN.. Idea, João Pessoa - PE, 2009.

[5] C. Dias. "Space, technology and information: a view of the city" In RODRIGUES, E. A. et al. (Eds.). *Analysis of Discourse in Brazil*: *Thinking the unthinkable ever*. *A tribute to Eni Orlandi*, RG, Campinas, 2011.

[6] C. Rossini." Digital learning, open educational resources and citizenship", *Citizenship and digital networks*. Sergio Amadeu da Silveira, Education and Technologies, Maracá, , 2011.

[7] E. Orlandi, "*Acts of Reading*: from history in the discourse". Translated by. Bethânia S. Mariani et al, Editora Unicamp. Campinas - SP, 1994.

[8] E. Orlandi, "The Forms of Silence - On the motion of the senses", Editora Unicamp , Campinas – SP, 1997.

[9] E. Orlandi, "Speech and Text: formulation and circulation of senses", Bridges, Campinas – SP, 2001.

[10] M. Pecheux, "Reading the file today." E. Orlandi. *Acts of reading - from history in the discourse*., Editora Unicamp, Campinas - SP , 1994.

[11] M. Pecheux **,** ***"****The discourse: structure or event*". Translated by. Eni P.Orlandi., Pontes, Campinas - SP,1990.

[12] M.P Leodoro. "Scientific Education and material culture - the playful artifacts", Master Thesis, Department of Education, University of São Paulo, São Paulo, 2001.

[13]O. Afonso. *Copyright Law: Essential concepts*, Manole, Barueri - SP, 2009.

[14] O. Ianni, "The Electronic Prince." , IFCH, Campinas - SP, Unicamp, 1998.

[15] P. Henry. "The theoretical foundations of the "Automatic Analysis of Discourse" Michel Pecheux" (1969). In Gadet, F,. HAK.T. *For an automatic analysis of discourse*: *an introduction to the work of Michel Pecheux*. Translated by Bethany S. Mariani et al, Editora Unicamp ,Campinas – SP, 1993.

[16] S. Auroux, *The Philosophy of Language*. Translated by. Horta José Nunes, Editora Unicamp, Campinas-SP, 1998.
[17]S. Branco. *Right to education, new technologies and limits of copyright law***.** Available in 2010 http://www.culturalivre.org.br/artigos/direito_educacao_novas_tecnologias.pdf Accessed on September 15, 2011.