Authorship in Materials Design for Language Teaching

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1. Death and survival in materials design

The idea of materials production in language teaching has always been associated with cutting and pasting. In the pre-digital era, teachers used scissors to cut magazines and newspapers to prepare their activities. In the computer age, they use browsers to download files from the Internet, break them up into pieces and merge these pieces into a new file. The new process is apparently the same, but the final product is graphically very different, as the patchwork look of pre-digital era is removed. I will refer to the first process, originally with scissors and magazines, as bricolage. For the second process, with downloaded files, I will use the French word recyclage.

I will also argue that bricolage has not disappeared, but was reintroduced under a new form. Bricolage on paper was traditionally made up of small pieces put together side by side, as the parts, taken from separate wholes, were physically compressed on the page. Paper bricolage was centripetal, as the pieces from the outer world converged to the confines of the page. Bricolage on the Internet, on the other hand, is centrifugal; it is not made up of parts, compressed in one place, but of wholes, involving complete archives, which are connected to other archives, scattered all over the world.

Both bricolage and recyclage are closely related to the idea of authorship. I will try to assess to what extent the introduction of Information

and Communications Technologies (ICTs) into the field of language teaching has affected teacher's capacity to exercise authorship in materials production. Foucault's ideas on authorship and Barthes' considerations on the death of the author will be used here.

In recyclage, authorship is preserved, but the material produced by the teacher is dangerously simplified, as linguistic diversity is reduced. In bricolage, on the other hand, diversity is assured but authorship may be definitely lost.

The bricolage/recyclage dichotomy in materials production poses three challenges for the teacher. The first is the need to keep a balance between the centripetal and centrifugal forces, avoiding both too much diversity, which may confuse the student, and too much uniformity, which may be boring and kill student interest. The second challenge involves the decision between exercising authorship, thus having a grip over the activity that is being prepared, or relinquishing it, thus losing control to the student. The third challenge arises from the complexity of materials design in a net society, which entails the need to evolve from an individualized concept of work to a collective one, forming a team and sharing responsibilities with the others.

These three challenges are fused into one big challenge, which is the challenge of survival. Along with Barthes' idea that the reading of the book is the death of the writer, it can also be argued teaching materials produced by teachers are the means through which they survive. With materials design, teacher's actions can be extended beyond the classroom, both in terms of space and time. In the classroom, the teacher may discover the small pleasure of watching his or her students building knowledge with the artifacts that he or she has produced, which may be similar to the pleasure experienced by the poet when listening to his poems being recited by actors on the stage. With distance education, the teaching material can be broadcast to other places, making the teacher synchronously present even when physically absent. The new technologies also allow teachers to expand their actions not only in space but also over time, by having their activities stored in virtual repositories, from which they can be recovered at a later time. The capability of being present asynchronously is certainly more challenging for the teacher, demanding a better understanding of the technology involved and the ability to work cooperatively. What

Barthes describes as death, the moment when the artifact is produced, may lead to survival, when the artifact is used by other people, either readers or students. The universal human desire for life after death is somehow replicated in materials design.

2. Recyclage

Two basic movements should be considered first. The first movement is the evolution from bricolage toward recyclage with the advent of ICTs, which not only introduced the idea of recyclage but also brought a new concept for bricolage, that is, we have a new technology to produce materials (recyclage) and a different kind of bricolage. The second movement is built around the notions of center and periphery, with an emphasis on the two forces that operate between them: the centripetal force, pushing from periphery to center, and the centrifugal force, from center to periphery.

The first movement, from bricolage to recyclage, explores the idea of fusion, in which individual and discrete elements are melted into a unique body, with the consequent loss of their previous individuality. Word processors such as Microsoft Word, for example, can do to different pieces of text what a pot can do to leftover pieces of soap. When I was a kid, my mother used to collect small pieces of soap around the house, put them in a pot on the stove, melt them and pour the melted soap on a container, producing a new bar of soap. The original shape, color and scent were individually lost and incorporated in a new bar of soap. There was no possibility of ever returning to the original pieces after the recycling process.

This is very similar to what we can do with a text processor today: different pieces of work, from different sources, can also be recycled into a new text, with a unified font and page layout. The patchwork look of pre-digital bricolage is replaced by a seamless text in which the borders between the pieces disappear. The individual contributions to the collective work, which was clearly marked before, when scissors and glue were used, disappear now and give place to a unified piece of work.

The second movement refers to the notion of centripetal and centrifugal forces. The opposition between center and periphery is probably one of the most frequent axioms in every field of knowledge, from

nanoscience, involved with matter on an ultra-small scale, to astrophysics, concerned with giant galaxies. Whereas in atomic chemistry, for example, the electrons turn around the nucleus, in astronomy we have satellites turning around planets, planets turning around suns, suns turning around central stars and galaxies turning around unseen centers. The center-to-periphery relationship is found in language as well, with nouns modified by determiners or topic sentences expanded into secondary ideas. The basic understanding is that center and periphery are kept in equilibrium by the use of two opposing forces: one that pushes the object away from the center (centrifugal force) and the other that pulls it towards the center (centripetal force). When these two forces are not in equilibrium the system breaks down, either by collapsing inward (imploding) or bursting outward (exploding). As usually happens with oppositions, one force cannot exist without the other.

De Beaugrande described the center/periphery opposition as one of the principles of reading. Bakhtin applied it to language in general, associating centripetal force with monologia, in which different genres are blended into only one rhetorical mode, officially enforced by government mechanisms. Heteroglossia, on the other hand, is a centrifugal force, moving towards diversity of rhetorical modes. Both forces are employed whenever language is used:

> [E]very concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear. The process of centralization and decentralization, or unification and desunification intersect in the utterance; the utterance not only answers the requirements of its own language as an individualized embodiment of a speech act, but it answers the requirements of heteroglossia as well. (Bakhtin 272)

Because these two forces are always in operation whenever language is used, it is not possible to associate any of these forces to one place or to one moment. Center or periphery here are not places to be held when we are involved in materials design, for example. The association between recyclage and centripetal force, on one hand, and bricolage and centrifugal force, on the other, is done for pedagogical reasons only. In recyclage, we are involved in producing something; therefore, we have the illusion of being placed at the center, in a centripetal direction, producing a unified

discourse. We tend to aggregate things around a given point, like particles of iron attracted to a magnet and producing a unique pattern. Bricolage, on the other hand, is centrifugal, moving outward in dispersion. Unity of discourse cannot be maintained. In the pre-digital age, the worksheet prepared by the teacher, with patches pasted from different sources, had the look of a patchwork quilt. In the computer age, mainly with the introduction of the Web, a new form of bricolage was produced, more diverse than the previous one. Students are no longer exposed to a page where pieces of paper are put together; they are sent to websites located in different parts of the world.

Recyclage only became possible with the advent of the Internet. Before Internet, information was centralized, using mass media communication such as radio, television, newspapers, magazines, etc. Information was concentrated in one place and characterized by restricted access and one-way communication. Restriction was imposed in terms of both space and time. Newspapers and magazines are unavailable in certain areas. Radio and television can only be used if we adapt to their schedules. Since communication operates in only one way, very few people have a chance to be heard or seen. The decision on what and when to inform does not depend on the millions of readers, listeners and watchers, who are exposed to these means of communication, but on the few who own them. Mass media communication is based on the podium metaphor, with the preacher traditionally standing above the silent audience, talking to them but not listening or even allowing for any dialogue to occur.

The printed word on newspapers and magazines, the spoken word on the radio, or the images seen on television can be described as hard information. They cannot be melted like the pieces of soap and molded into a different object. The technology usually available for the teacher in pre-digital times only allowed him or her to produce bricolages, either by cutting and pasting from newspaper and magazines or by tape recording pieces of audio and video from radio or television. The blocks – printed pages, audio or video – could be put side by side, but not fused into a new body.

Recyclage was extremely costly and practically available only to large enterprises. The COBUILD English language database, for example, a project from the University of Birmingham in the 1980's, was only possible because of a partnership between the university and the publisher

Collins. The project had a building of its own on the university campus, an infrastructure of computers and a whole staff dedicated to it. The textual database that was then made available for the production of dictionaries, grammars and textbooks, at the cost of a multi-million pound investment, corresponds to a fraction of what is available to a teacher today, at practically no cost. In other words, the individual teacher can use resources that are of a much greater magnitude than the resources created by the COBUILD Project, producing teaching materials to meet the individual needs of any group of students.

It is also obvious that if teachers decide to unite and work together, they can embark on larger projects. We are all familiar with Wikipedia, the on-line free encyclopedia, cooperatively produced by thousands of people who generously submit their contributions on their areas of specialization. There is no reason to suppose that groups of teachers could not produce wikitextbooks, wikigrammars, or even wikidictionaries, to be freely used by other teachers.

Repositories of learning objects, containing activities prepared by teachers, are becoming popular. The MERLOT (Multimedia Educational Resource for Learning and Online Teaching), for example, has more then 15,000 learning objects. These repositories are places on the Web where teachers can store the activities they have prepared, so that they can be retrieved and used by other teachers. Repositories can be seen as educational trading posts where learning objects are displayed and bartered by interested teachers.

Typically, materials prepared by teachers are recycled from other materials. The idea is that authentic texts, as they exist in the world, have to be pedagogically treated before they can be presented to the student. Reading texts, for example, may be preceded by questionnaires to activate student previous knowledge or by some kind of language work to facilitate the reading task, usually involving unknown vocabulary or some syntactically complex structures.

Although meddling with the text itself has usually been regarded as something that should be avoided, it has also been done, mainly by removing some paragraphs and replacing some infrequent words. Editing the text, which was impossible with scissors and glue, is now done with some clicks of the mouse, graphically unifying the appearance of any text,

even if totally collated with pieces from other texts. Passages can be presented with blanks to be filled in by the student, or fragmented into smaller parts and scrambled to be reassembled later. Text reconstruction techniques through cues and hints have also been tried.

Comprehension questions, usually to be asked after the reading task is finished, have also been done. The student may be asked to recover explicit textual data, to understand between-the-lines information or even to interpret beyond-the-lines allusions.

These are obviously sensitive issues and reflect the difference between what teachers do and what they are told to do. Teachers apparently tend to overprotect their students by controlling the language they should be exposed to, in terms of lexis, syntax and topic. This is usually referred to as the aquarium metaphor. On the other hand, teachers are often told that students should be exposed to authentic language, as it is actually used in the real world, even if the students may not be able to understand it fully; usually referred to as the open-sea metaphor. The difference between theoretical approaches, usually based on some epistemological principles, and practical solutions, derived from classroom heuristics, is one of the challenges that language teachers have to cope with.

Recyclage is specifically concerned with the idea of a common core language, a unified set of lexis and structures that pervades all manifestations of language and its different genres. This may be seen as monologia, in Bakhtinian terms, as it sanctions the idea of unification. Teachers and textbook publishers tend to be seduced by the possibility of producing one piece of teaching material that can serve the needs of different students in different places and times. Much of their endeavor is spent on the quest of these unique and do-all language-learning materials, which can save teacher's time in planning their classes and increase publisher's profits in designing their textbooks.

3. Bricolage

The introduction of ICTs not only caused the evolution from scissors-and-paste bricolage to digital recyclage, but also introduced a different kind of digital bricolage. What was originally one process (paper bricolage) developed into two different processes (digital recyclage and

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digital bricolage). The new bricolage is constructed on different concepts of both time and space, based on the general idea of ubiquity: everything is everywhere all the time. The physical world in which things have weight and dimensions (length, height, width) is redefined in terms of light. Digitally speaking, reality is a matrix of dots that are continuously turning on and off. There are no borders, no here and there, and the concept of place itself is lost. Nothing is fixed. The computer screen, like Hemingway's Paris, is a moveable feast: it goes with us wherever we go. The information we read on the screen is not located in one place in the world; it is located everywhere, because computer files are usually multiplied, leaving behind copies of themselves. The planet has the size of the computer screen. In digital bricolage the pieces of information we cut and paste on the screen are not placed side by side, on a bi-dimensional surface, as it happens in paper bricolage; on the computer, they are piled one behind the other, at the same time visible and invisible. With a click of the mouse, they can be brought to the front or sent to the back.

In paper bricolage and even in the early days of computing, everything was held in one visible place, either on the printed page in our hands or the desktop on the table. The desktop computer introduced light and invisibility, but we knew the information was somewhere inside the CPU or on the floppy disk. We learned how to save or record everything we wrote, making them invisible to our "yes," and we learned how to retrieve our written words back from invisibility. We had some glitches in the learning process and we all heard stories of writers who lost whole books to the inner recesses of their machines. Visible or not, we knew, however, that the data were produced and kept in one place.

With the introduction of the Web, the individual desktop computer was connected to other computers. We started with the primitive BBS (Bulletin Board System), connecting our individual computers to a small computer system over a phone line to download software, read news or exchange messages with other users. We soon evolved from BBS to WWW, moving from one system to millions of interconnected systems and to what has been termed as the second deluge, the deluge of information. In this deluge we are not all put together in the same Noah's Ark, but have individual arks to save and protect ourselves from the flood (Lévy, "Cibercultura"). We not only were flooded by information, but also

moved from the receiving end of information to the producing end, in which every memory pool, every group, every individual, every object, independent of diversity or location, can be turned into a producer (Lévy, "Tecnologias da Inteligência" 160).

It is because of this deluge that information is everywhere and nowhere at the same time. Much of the information we consume is scattered over different sources and most of the time we don't care to check who produced it. We are more interested in content than in the author. When we look for something in the Wikipedia, we usually have no idea about who produced the articles. Whenever we use a search engine (Google, MSN Search, Yahoo, etc.) we only look for the authors' name if they happen to be the topic. We may be interested in articles on osteoporosis, DNA tests, or Paris hotels, but not on the people who wrote these articles. The most frequent search words in Google refer to topics. We may go to the Web to read about Shakespeare, but not Shakespeare himself. If we are interested in reading what he wrote, we would probably go to a printed book. Authorship is not a concern on the Web. What Roland Barthes said of the printed text is truer on the Web: language knows a subject, not a person.

The concept of time also changes, along with the growing discontinuity of objects in the Web, where nothing is permanent. "Now" can no longer be associated to a time of the day. We can no longer say "Now it's three o'clock," for example, because in other places "now" is four, seven, nine, or any other time of the day. Permanence is also lost forever. Words are no longer engraved in stone, but in light, and may change at the speed of light. A text we download from a site may change overnight. Software is constantly updated. The most frequent search words used to access search engines change not only from one country to another, but also from one day to the next. Google's "hot trends" site, displaying what Web surfers are concerned with, is updated almost in real time. People's interests change with the flow of events and cannot be engraved in stone.

The use of information is not limited to reading but also to writing. As we get used to write connected to the Web, our productivity falls down when we are disconnected. What we write becomes one with what we read. Setting the border between what is ours and what is citation will probably have no purpose in a few years' time. Access to any chunk of text

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will be so easy that anyone, at any time, will be able to segment text and associate the parts to different authors. What T. S. Eliot did in 1922 in *The Waste Land*, producing a poem that the uninitiated reader would appreciate best in hypertext format, for its innumerous references to other places, times and authors, is now recurrent on the web. *The Waste Land* is a previous version of Wikipedia. We now live in a permanent state of bricolage.

In terms of Education and language teaching, a good example of bricolage in materials production is the "WebQuest" model, created by Bernie Dodge. A WebQuest is an inquiry-oriented activity in which the information needed to complete it comes from resources on the Internet. A typical WebQuest, according to Dodge, contains six blocks: Introduction, Task, Process, Resources, Evaluation and Conclusion. Optionally, a Teacher Page block, to help teachers on how to implement the WebQuest, and Credits may also be included. The basic six blocks should contain the following:

- Introduction: guides the student on the content of the WebQuest and raises interest;
- Task: summarizes what the student will have accomplished at the end of the activity;
- Process: describes the steps to be followed to complete the task;
- Resources: displays a pre-selected list of Web pages with information on the topic;
- Evaluation: describes the criteria that will be used to evaluate performance;
- Conclusion: summarizes what learners will have accomplished.

Bricolage, which was bi-dimensional with scissors and glue, becomes an event with the WebQuest. Students are not exposed to pieces of paper glued on a page, but sent to Websites that may be located anywhere in the world. Considering that these pages are constantly updated, the event is a moveable feast that cannot be predicted. The material produced by the teacher is no longer that static page of collated pieces of paper, but a dynamic event that may change from day to day without teacher's later intervention.

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4. Authorship

As far as the concept of authorship is concerned, five aspects are relevant in terms of this discussion: (1) the role of authorship in academia, where having a name under the title of an article is a question of life or death, the proverbial "publish or perish;" (2) the author's presence in text, expanding from Buffon's idea that "style is the man himself;" (3) the original idea of author as transgressor; (4) author as person and author as a represented figure, designation versus description in Foucault's terms; (5) and, finally, the death of the author, based mainly on Barthes' ideas.

In Academia, authorship has been traditionally associated with the idea of responsibility and credit for academic work. You are an author when you produce something of your own mind and you can put your name under the title, followed by your institutional affiliation. Being affiliated to a famous university contributes to your prestige, but you are exclusively responsible for your work. You have to abide by strict rules about how far you can go in respect to other authors, how to give them credit, how to cite them in your text, so that you cannot be accused of committing plagiarism, for example. In Academia, an author is a physical person in the real world, with a Social Security Number, bills to pay, kids in school, higher or lower levels of cholesterol. Authorship, in this case, involves a professional community, with rules and division of labor that tell you what you have to do to become an author, usually through some kind of an initiation process conducted by senior authors. The uninitiated students are prepared in these career-track courses to accomplish a pre-determined set of tasks that routinely transforms them into professional authors. Unlike fairy tales, folk stories, legends or jokes, scientific texts have to be attached to an author. In the words of Foucault, the author's name assigns status and cultural value to a text, bringing more attention to it. In the publish-or-perish syndrome of the Academia, an academic journal publishing articles without author's identification would probably be rejected by both readers and authors. Anonymity does not exist in Academia.

Author in text plays with the idea that authorship can be defined as personal traits that authors leave on what they write. The idea is that there is some kind of Joyceness in what James Joyce wrote, for example, that identifies the text as exclusively Joycean, some kind of psychological fingerprints scattered on his writings. Tracking authorship, based on these

traits, is a favorite whodunit in literary criticism, as seen in the detective work that has been conducted around the authorship of many poems and plays that have been alternatively assigned and unassigned to Shakespeare, along centuries of literary history.

Author as transgressor relates to the idea that behind a text there is always somebody that is responsible for it. According to Foucault, authorship started when the author became subject to punishment, by producing heresy, for example. Heretical thoughts, when expressed, are just words, and since words cannot be punished, the juridical and institutional system had to look for somebody that could be punished, the author behind the words. The idea of ownership is established; the author is held responsible for the words he wrote, as if he owned them. Later, the same idea of ownership gave rise to copyright rules.

The actual person, who is punished as a transgressor, or rewarded as an author with copyright revenues, exists in the real world, having an address somewhere, paying taxes, etc. The coupling between the name and the actual person was defined by Foucault as designation; the name Shakespeare, for example, identifies the person who lived in Stratford-upon-Avon. This is different from description, which is used to define the relationship between name and author. The name Shakespeare in this case would identify much more than the physical person who wrote poems and plays in England; it would apply to what he wrote. Thus, if we say that Shakespeare died in 1616, we are in the domain of designation; on the other hand, if we say that Shakespeare is still alive today, we are in the realm of description.

All this concern about authorship, either as a person collecting copyright royalties, a writer trying to infuse an individual style in his text, a scientist putting his name under the title, or a poet sacrificing his life to become immortal, started with the invention of writing. When we talk to people and tell them a story or a joke, we do not usually try to collect royalties for it; unlike novels and poems, most jokes are anonymous. We feel rewarded by making our friends laugh or enjoy what we tell them. When we write, however, our interlocutors disappear; we usually do not have our readers in front of us as we do with our listeners. We do not know when, how and by whom we are read. Our reader may be enjoying our text, or reading it for obligation's sake as a course assignment. Our contact

with our readers happens in absentia. We do not even have to be alive to be read. Most authors have been more read after they have died.

The idea that the invention of writing brought the death of subjectivity is not new of course. There are many ways to disappear in writing. The docile will disappear by following the norms taught in textbooks; the eager beaver by getting lost in a multitude of citations; everybody by surrendering to the reader: "The birth of the reader must be at the cost of the death of the author" (Barthes 146).

We obviously have to follow norms when we speak, but, in speaking, we can resort to a lot of collateral support such as gestures, eye contact, our own voice coming out of our mouth, the interlocutor's presence, besides other contextual props that contribute to project our subjectivity. When we tell a joke, for example, we can enrich it with many details (choice of lexis, intonation, etc.) that match with the traits of our personality and the immediate context, including the interlocutor we talk to. A joke told by a shy person, for example, may be very different from the same joke told by an extrovert; the same way as a joke told to a close friend may be different from the same joke told to a large audience. All these variables change with context and interact with our subjectivity. When we write, however, most of these aids are gone and we are left with a set of rules that are practically the same for everybody. A joke, written to be published in a book, tells very little about the person who wrote it. Unlike speech, writing is less affected by the immediate context and by our subjectivity. In some genres such as writing a petition, for example, the norms we have to follow are so rigid, that our subjectivity has no sway at all.

Writing does not derive from the author but from innumerable other texts, which we resort to as we write. We not only do not own the words we use; we do not own the texts we write. Writing is an exercise in bricolage. According to Barthes,

> [A] text is not a line of words releasing a single 'theological' meaning . . . but a multi-dimensional space in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centers of culture. (145)

And finally a text is created not by the supposed creator, the author, but by the reader, who gives it its final shape. A text does not depend on

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the inspiration and creativity of the writer. The author does not matter in the text; it is the reader that matters. That is where the meaning of the text can be found. Again, according to Barthes,

> [A] text is made of multiple writings, drawn from many cultures and entering into mutual relations of dialogue, parody, contestation, but there is one place where this multiplicity is focused and that place is the reader, not, as was hitherto said, the author. The reader is the space on which all the quotations that make up a writing are inscribed without any of them being lost; a text's unity lies not in its origin but in its destination. (146)

Foucault and Barthes are talking about printed texts, but their ideas can be easily moved to what teachers do when they produce materials for their classes. Teachers become authors only when they transgress or try to claim copyright revenues for their work.

It is extremely easy to commit transgressions when we teach. There are many government regulations we have to abide by, there is the educational system with guidelines of its own such as the National Curricular Parameters in Brazil, and there is always a dominant methodological paradigm (Audiolingual, Communicative, etc.) that teachers are supposed to adopt. These different systems constitute a code of belief that is very strong and operates like dogma. Producing teaching materials that diverge from it may be seen as heresy and the teacher may be punished: by criticism from colleagues, by being ignored or even by losing his or her job.

Transgressions may be committed not only by refusing to submit to dominant values but also by infringing some copyright law. There are so many laws protecting so many potential resources available to teachers that it is almost impossible not to break any of them. Pictures, speeches, songs, videos, texts are all interesting resources for materials production, but most of them are protected by copyright and may not be used in practice. Using them without paying royalties may lead to severe punishment.

One possible way to revert this situation is to adopt the rules of the game, moving from the losing side to the winning side, by trying to produce materials and claim copyright for their production. Although this is practically impossible from an individual perspective (one person producing and selling teaching materials), it might be feasible if a collective approach is adopted (with division of labor); good quality material for

online learning typically involves three kinds of specialists: a language teacher, a graphic designer and a code programmer. Repositories for learning objects such as MERLOT and RIVED are a first step in this direction, not necessarily in terms of revenues, but in terms of recognition.

5. Challenges

The need for materials production becomes clear with the trend towards contextualization and the move from Communicative Language Teaching to Task-Based Language Teaching (Kumaravadivelu). Instead of consuming teaching materials produced by other people in other places, teachers can design their own materials for their own classes. The chances for meeting students' needs are greater, as are the challenges for the teachers. These challenges involve mainly the ability to move from bricolage to recyclage, the decision on how to exercise authorship and the need to work collaboratively.

The difference between production and reproduction may have a bearing on the recyclage versus bricolage dichotomy. Production relates to the idea of creation, viewing text as a message of the Author-God, in Barthes' terms (145), as if the universe, or parts of it, could be initiated over and over again. Reproduction is more humble: what authors do is a rearrangement of things that already exist in the universe. Teachers, as producers of teaching materials, may be placed along the continuum from production to reproduction. Authorship is a matter of degree; all other things being equal, authorship is probably more intense in recyclage than in bricolage. In recyclage, teachers should be aware of the horizons of expectations that students built around them, in the sense that teachers, as authors in their own right, are expected to add something on what they borrow from others; responsibility is higher. In terms of bricolage, responsibility is lower; after all, teachers do not own the pieces of paper they cut and paste from magazines to produce teaching material for their classes, as they do not own the websites they use as links for a WebQuest activity.

Language learning is an exercise in diversity, and students should be given chances for experiencing different worlds, which can be provided through bricolage as a centripetal force. But students should also be given

a place in the world, a locus from where they can integrate the diversity around them without getting lost; this is provided by recyclage as a centrifugal force. The ability to strike a balance between the centripetal and centrifugal forces in materials production may one of the greatest challenges the language teacher has to face, considering things such as educational paradigms that may favor one approach to the exclusion of the other, contempt for practical solutions advanced by teachers, and even unreasonable privileges in copyright laws.

Foucault's original idea that authorship was both invented by society to punish the writer and by the writer to glean benefits from society, such as prestige or copyright royalties, could be revisited and targeted towards the idea of community. The romantic metaphor of writers as lonely wolves working by themselves in their dens is false; wolves are social animals that survive because they have developed a highly organized social system. Authorship needs to be seen in collective terms. The challenge, for teachers, is to get a good command of different tools that are now available for materials production (from authoring systems to podcasting software) and develop the ability to work in teams (set up common goals, implement division of labor, draw up rules, etc.). It might be interesting to consider that intelligence and creativity are distributed not only among the members of a community but also among the artifacts available in the community.

Barthes' idea of the death of the author could be revisited. Do teachers die when they produce teaching materials? If so, aren't they reborn when the materials come to life in students' hands? It is possible that the work of the teacher, originally restricted to the four walls of the classroom, not only expands to the world, reaching other students in other places, but also survives over time, producing a time-warp effect. The new technologies suggest that the teacher may be present not only in different places but also in different times.

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