TECHNOLOGY AND CULTURE IN THE LANGUAGE CLASS: ADDING ANOTHER INGREDIENT TO THE OLD DILEMMA... AND A TAXONOMY AND A DATABASE STRUCTURE

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Abstract

This paper will discuss the problematic relationship between culture and language from the perspective of the second language learning/teaching process. This is not a new problem for the pedagogy of languages and there remains a traditional set of as yet unsolved epistemological questions to be answered. Although many of these problems and questions will be part of the reflections involved in this article, its main objective is to reconsider them from the perspective of new teaching philosophies and methods and the inclusion of modern computerized technology into the old already-troubled formula.

Keywords: second language learning/teaching, technology

From a cultural perspective, we could summarize some of the most important questions about the relationship between language and culture in the process of teaching/learning a second language as follows:

- 1. What is culture? How can one provide a useful definition for this purpose?
- 2. Must culture be taught/learned together with language? (Lian 2006)
- 3. If our culture is instilled into us by our community; should the learning of the new language be infused (at least to a certain degree) with elements of the new culture implicitly attached to the new language?
- 4. If language is the expression of a certain culture, which is the culture that provides the basis for a dialogue between two non native speakers of a given language which is being used as lingua franca (e. g. English)? (Lian 2006)
- 5. Is there a hierarchy in cultural text that could be taken as predetermined syntax? If so, is there an optimal starting point for the study of such a text?
- 6. Should the learning of culture be systematic, haphazard, learner-driven (what do all of these terms mean and how do they get translated into action)? How do we decide what is *essential*?
- 7. Which level or field, or social sector of a given culture is the right one to teach or learn? In other words: Which pieces or elements or levels of culture should be taught as useful communicative tools?
- 8. How can technology be of use in teaching language and culture?

Defining culture is a theoretical exercise historically practiced from many different perspectives and, of course, from all kinds of philosophical positions. The concept of culture is crucial in the set of epistemological systems which have become increasingly interdisciplinary in accordance with the practical and theoretical needs of every discipline; e, g, anthropology, sociology, linguistics, history, theory of culture, theory of literature, semiotics, etc.

Thus, instead of describing the evolution of the concept, it seems more important in our case to focus on considering the contrast between some of the different concepts of culture which might be useful for this paper. Russian semiotician Jurij Lotman (1979) had already studied culture from a discursive perspective. He argued that if culture can be considered as the sum total of all the non-biological information which constitutes the memory of a given community, it is possible to regard culture itself as a certain communicative operation. Therefore this operation can be thought of as a set of decipherable codes (p. 41). Lotman specifies that he uses the term "memory" in the sense of systematic accumulation and storage of information and defines text as any given communication within a certain system of signs (41).

From the point of view of an important anthropologist, not unlike Lotman, Clifford Geertz (1973), offers his ideas about the semiotic nature of culture and the polyphony of cultural texts in his work: *The Interpretation of Cultures* (P. 453). For him: "The culture of a people is an ensemble of texts" (452). Both Lotman's and Geertz's visions of culture as a text in the form of information are valuable approaches for the matter of learning/teaching a foreign language. Geertz' statement about every society as bearer of its own interpretations and the need for learning how to access this interpretation (P. 453) is also very important in the context of this paper because it is an acknowledgment of the semantic aspect of culture.

From our perspective then, culture is essentially discursive in nature as noted in the above arguments. Let us now examine more closely the problematic of cultural syntax. One of the epistemological challenges of connecting culture to the language learning/teaching process is how to better organize cultural information in terms of accessibility. The above-mentioned non-biological character of culture draws on the polemical concept of *meme* as "a unit of cultural information transferrable from one mind to another" (Meme 2007); because many of the proponents of this theory suggest that these units evolve in a way which is analogous to that of genetic information. That is the reason why we are inclined to discard the concept of meme as a possible unit of measure for the task at hand.

On the other hand, the idea of cultural field, proposed by the French sociologist Pierre Bourdieu is quite interesting. For Bourdieu (2008), the cultural field is "a social arena of struggle over the appropriation of certain species of capital [...] structured internally in terms of power relationships" (Bourdieu 2008). The reason that makes the idea of field attractive to a contemporary notion of linking culture and language learning lies in the volition of agency that Bourdieu attributes to a given cultural field. For him, "Agents subscribe to or participate in a particular field not by way of explicit contract, but by their practical acknowledgement of the stakes" (Bourdieu 2008). A later consideration of the learner's volition conditioned by his/her own cognitive interests (stakes) will demonstrate the potential value of the notion of agency in a contemporary approach to the language learning/teaching process.

Now, let us consider the cultural element as something which provides a certain reassurance and even peace to those who involve themselves in the communication process in a given community. For Tentori (1970), knowing what is wrong or right is part of the crucial non linguistic completion of the semiotic act (p. 217). Therefore, culture, or at least some of its signs, must be learned/taught together with verbal language. Another author who deals with the problems of teaching/learning culture simultaneously with language is Simon Greenall (2003). He prefers the culturological definition of cultureme as "a single or minimal manifestation of socio-culturally determined behavior, belief, attitude, custom, or tradition" (p. 2). He also amplifies the notion of culture beyond geographic, ethnic or political boundaries to include other referents such as gender, social class or occupation (p. 2). Using the cultureme as a meaningful unit in learning/teaching culture with language may be useful. This paper will reconsider later a broader idea about the ranking and categorization of these cultural elements for the process itself.

We should now like to weigh up whether the process of learning a language implicates the learner as an authentic bearer of the cultural values of the community which speaks the language and to ask which of these values are to be assimilated by the learner as a requirement for the communication. Obviously there is no definitive answer for such a question, because the answer will be casuistic in nature and will depend on the intention and the communicative needs of the learner. In fact, communicative needs and intention, together with the stakes of the learner will be the leading key in many of the epistemological questions addressed here.

We now address an interesting problem, which is obvious for some people: that of language and culture as precise expressions of community identity. Andrew Lian (2006) wonders whether, if language is the expression of a certain culture and provides constraints and contexts for making sense of discourse, then which is the culture which provides the basis for a dialogue between two non native speakers of a given language used as lingua franca (e. g. English)? (p. 26) In seeking an answer to this question, let us remember that the first great travelers and businessmen in history, like the Phoenicians or the traders on the "Spice Routes" were able to engage in a large amount of international dialogue by establishing multicultural rapport that was not necessarily based on the use of common languages. Therefore, there is no definitive answer for this either, but to produce a reflection on the communication process like the one above, which in our current global world is less and less hypothetical. The nature of communication itself is based in mutual consensus, in a negotiation of meanings that might be satisfactory for both sides of the semiotic channel. Here, Vygotsky's notion that human thought might be constructed in terms of dialogue is useful for approaching intercultural communication (Kozulin 1990). Thus we could think of the lingua franca as a set of loaned verbal signs used to solve a given problem of mutual human understanding.

In the first place, both sides must be aware of some information about the other's culture, despite the particular language which supports that culture. The rank and category of the above-mentioned cultural information must be based on two key criteria: First, the ability to distinguish what is considered socially acceptable or not in the other's culture. This is so important that ignoring this distinction could jeopardize the dialogue, potentially leading to what Greenall (2003) defines as a "Communication breakdown" (p. 3). Second, each interlocutor must be aware of which elements of such cultural information could be used to one's advantage in the dialogue? While this information is valuable, it is not enough to establish a satisfactory communication among third parties using a lingua franca as a verbal code. The missing element is not obviously the culture of this language out of its context as a lingua franca, but some... let us call it "cultura franca," established in terms of global communication. For this purpose, Bourdieu's (2008) concept of cultural field can be very useful to establish the pragmatics of this notion because the cultural field could be seen as "a system of social positions (e.g. a profession such as the law) structured internally in terms of power relationships" (p. 1). The same is true for other communicative contexts, such as the interpersonal one.

Consequently, interlocutors using a lingua franca need to be aware of all required specific contextual information in order to function properly in a negotiation, e.g. the nature of business, its jargon, its procedures, etc... that is to say, its whole culture. Hence, it will be more valuable for individuals in the French diplomatic world to be more aware of the French diplomatic jargon and the international rules of etiquette rather than the habits of night life in Paris. Technology wizards from different countries will find it more important in their dealings with one another to have information about state of the art computer terminology and the knowhow of this community (much of it based on American technical English) than being skilful in how to use a fork in Philadelphia or to be able to quote Noam Chomsky or Matthew Arnold in a social reunion.

In reference to the cognitive problem of whether grammar is culturally crucial for this process, and whether we can we believe we must circumscribe it to some extent and then sequence it, let us remember that Derrida (2000) disagreed with the notion of grammar as the Meta narrative of cultural discourse in

determining the essence of language (p. 396). On the other hand, Bourdieu (2008) considers knowledge of grammar as social capital which is crucial in the attaining of what he calls "social mobility" (\P 2). It is important to distinguish between those two views of "grammar" despite both authors using the same word.

To add another dimension to the problem, Du Bois (2001) considers that grammar:

- Comes to life in discourse, where its pervasive mediating role touches virtually every aspect of social life.
- Goes everywhere. In a given speech community the same grammar promiscuously participates in acts as diverse as intimate persuasion, work, gossip, sanction enforcement, religious speculation, joking, aesthetic play and other symbolic systems in social life.
- Mediates and thus partly organizes knowledge, information, social relations, texts, institutions, interactional practices and more (p. 86).

In other words, for Du Bois (2008) "to study grammar is to study culture" (p. 87). This idea becomes extremely handy if we reconsider it from the point of view of the textual character of culture and if we rethink grammar as no longer functioning as a normative leash for writing, but as a syntactic tool in a virtual reordering of the cultural text.

Let us now examine the last question to be addressed in this paper. The last three cognitive problems are intrinsically interwoven with one another so that a reflection on any one of them impacts on to the other two.

We will begin by considering which level or field, or social sector of a given culture is the appropriate one to be taught/learned with a specific language. In other words: Which pieces or elements or levels of culture must be taught as realistic and useful communicative tools? What must be the place in our culture-teaching system of "high" culture e.g. the place of basket weaving in Mayan literary works; or "popular culture" e.g. the place of "The Price is right" in Mexican society as opposed to other forms of culture like "practical culture" e.g. what does it mean when someone from another other culture is invited to a Mexican's house at 1 a.m.

For a more contemporary perspective of this hierarchy we have to go back to the point where the essential importance of the subject's own agency and stakes was established as a motivational engine in the language learning/teaching process. Andrew Lian argues that learning a language goes beyond the mere acquisition of some codes but to incorporate other synchronic systems which will complete the learner's set of constitutive meanings that will give sense to his/her individual representation of the world (Lian 2004). This learning process is not structured under any epistemologically guided external structure but through what he calls a rhizomatic approach whose hierarchy is founded on self driven will through a mechanism of personal needs and interests (p. 6).

As a consequence, if we consider the textual character of culture. It is obvious that in a constructivist process of learning a language, the learner must incorporate into his/her learning of linguistic information, the elements of cultural systems of his/her interest and need in the very same order that the linguistic information is learned and in a tight connection with it. This could solve not only the question of where to start, but also the question of what unit, level or segment of cultural information is important to be learned/taught with the language. The specific cognitive necessities and interests of the learner him/herself may provide a possible answer to this question in each case – and each may well be different

for each learner at every instant of the learning process and therefore not be amenable to pre-determined learning sequences.

The usefulness of technology in this context should be obvious, as a set of systems of textual information deeply interrelated with linguistic information. Data about culture can and must be fed into the same devices used to learn language. Of course doing this now brings out the vagueness and indefinable nature of culture; it is impossible to put in Cartesian terms of labeling and of measuring all its components but the rhizomatic process with its multiple dynamic connections and flows and multiple explanations will help students better to construct internal representations of cultural processes at work. Despite this vagueness, categorization of some kind is necessary in order for learners to understand. While such categorization may not be pre-determined, it may actually be constructed at the time of need by the student. Maybe the rhizomatic process must make this planning grow in new directions, in congruence with new learning needs, and in the case of culture the categorization must occur a little later than this social need but as immediately as possible so as to show new aspects of culture which were considered unimportant or even unknown until that moment.

Let us now think of a possible computer based implementation approach to our proposal for learning culture. We have already identified a critically important idea for what this paper proposes: the conceptualization of one of several potential taxonomies for systematizing cultural data connected to a specific contextual target language.

In turn this contours the following guidelines:

- We take as point of departure the concept that learners are meaning-making individuals with unique logical and representational systems. This is because human beings make sense of the world only through their own representational and logical experience; through a process of convergence from multi-channel experience and feedback. Therefore, setting data in order to provide them with cultural information associated with language must always be based on a consensus of socially negotiated cultural functions. Although semantic representation is internal and individual, it is culturally produced at the level of human interaction.
- Learning needs will always be unpredictable because they involve "infinite combinations of mutually reinforcing modalities and are thus very likely to be different from one learner to the other. It is not logically possible to offer a sequenced (or externally scaffolded) intervention strategy capable of simultaneously meeting the needs of all. Entry points to solving individual problems are likely to be different from person to person" (Lian 2004).
- Therefore there will never be an absolutely sufficient database i.e. a database which will meet every learner's needs in every conceivable context or situation. On the contrary, all possible taxonomies must be conceptualized in terms of openness and dynamism. There will always be new growing rhizomes, i.e. connections between database items, and in many cases some of the old ones will eventually become socially obsolete.
- Data systems must be abundant and diverse; their content must be useful for very different needs. They must provide a response wider than the specific learner's query and its interconnectivity must lead in other directions of knowledge. They must also display socially active language in variable contexts because these contexts determine social roles and consequently important nuances of language and cultural behaviors. They must be based on multimedia and offer a combination of textual and audiovisual realia, quasi authentic materials and educational guidance, it means the closer to real life data is the more accurate use of it will be incorporated into the learner's representational universe. Accessibility, flexibility, connectivity speed and independence of methodological approach will be main features.

Accessibility is crucial in terms of gathering information; the ability to link elements is the essence of the meaning construction process; speed implies efficiency. On the other hand, the uniqueness of the learning process does not allow any imposition of a pre-established order in the approach to knowledge. Consequently, learners must have technological skills and train themselves to be self-driven and motivated. It implies a real pedagogical problem in practical terms. It would mean the epitome of the student centered method and would require an almost ideal kind of student, far from the current reality in the majority of the existing educational systems. The question of whether it is possible for an average student to attain, in the short term, the right amount of cognitive independence so as to function properly with this approach is very complex and would be best dealt within the context of another research project.

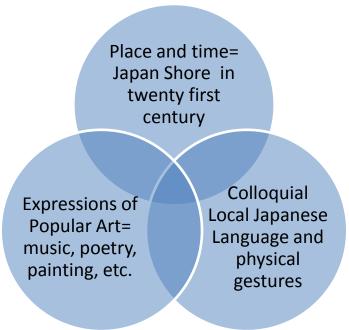
Now that we have set the groundwork for this paper, we face the old dilemma of how to categorize the components of culture in order to adapt these categories to our needs. Shall we agree on a given minimal unit of cultural data? What should be the criteria for these categorizations? Would they be satisfactory?

In comparing two different theories about identity, Identity Theory and Social Identity the authors Hogg, Terry and White (1995) have agreed that both theories "address the social nature of self as constituted by society [and] regard the self as multiple identities that reside in circumscribed practices" [like norms and roles] (p. 255). They point out that the two theories which they compare "place their major theoretical emphasis on a multifaceted and dynamic self that mediates the relationship between social structure and individual behavior" (p. 255).

When we think about cultural roles as the set of expectations that a given community places on individuals (as part of the symbolic culture inherent to that community), it becomes clear that these expectations must be fulfilled in terms of certain behaviors (which include language). It is possible to consider approaching a taxonomy of language on the basis of the interaction between the individual role (which defines tints of overlapping circumstantial identity) and these contextual expectations. In other words, and bringing this to the process of language learning, the learner's interest for a certain piece of cultural information could be triggered by the need for solving a specific communicative situation. This need will act as the motivation for linking multiple pieces of informative data which will provide that student with the communicative tools which, in turn, will empower him/her to function in terms of social communication according to the above mentioned set of cultural expectations. Hence, the rhizome will never exist in any database. It will be in the inquiring action of learners.

We now face one of the biggest challenges in materializing this approach: how to establish a practical and useful system of information which could enable the achievement of the linking process. First, we must insist on the principle of the impossibility of anticipating the potentially infinite needs of learners in terms of specific cultural/linguistic information. If we plan to construct a database which could eventually serve that purpose, it can be conceived only on the basis of an extremely dynamic and elastic interaction in which those pieces or chunks of information requested by the learners and not yet available to them must be very rapidly gathered and incorporated into the database. Let us think, for example, that a certain European business student is particularly interested in how to establish trade connections with some mid size fishing companies on the shores of Japan. The student would request not only specific linguistic background about entrepreneurial style of communication but would also seek many other cultural elements at the symbolic level which could be useful for his/her goal (manners and social habits, legal frames, social taboos, terms for addressing people in writing and speaking, etc.). At the same time, a Latin American student of anthropology could be interested in artistic work at the level of popular culture in the same geographical area and time. Obviously, the latter's needs in terms of language and culture would be different. This student will play a different role and his/her query will require from the database a very different set of linguistic and cultural information. (e. g. Local folklore, oral colloquialisms, musical patterns, mythology, etc.).

In both cases the rhizome would be constructed very differently in their minds, and they might only share some spatial and cultural settings in the database but nothing else. It may be that only part of the information requested would be available in the database at the time of the request. The response in gathering this information must be very rapid and should be made available as soon as possible. Ideally, all possible textual and audiovisual data has to be gathered, sorted and put immediately within the learner's reach. This implies the necessity to have a permanent team for updating the database with an extremely dynamic capacity for responding to the needs of users. The taxonomy ought to be conceived in a manner that data entered at the simple level will be recombined into Boolean queries to produce complex Linguistic/cultural rhizomes set in terms of specific social roles under specific communicative situations and other constraints. A Boolean query is based on the notion of "AND" and "OR." Such a query might look like this: If the Latin American student of Anthropology needs to learn how to interact with the people of that area then he/she must learn to talk (orally and bodily) to them and to behave in a proper way according to the local symbolic cultural rules and principles. He/she must gather information in order to learn about specific geographic areas, the colloquial language and gestures and their folklore. For this to happen, the Boolean search must include the terms "Japan Shore in the twenty first century, "colloquial and body language" and "expressions of popular art forms." Putting all of this under the operator "AND" the result could be expressed in a Venn diagram as follows:



And the required information will be found in the area of intersection. The operator" OR" would add some alternative choices and the operator NOT would eliminate the unwanted ones. Obviously, Boolean logic is the very principle used in Internet search practices; and this makes it essentially familiar to the majority of contemporary students.

On the other hand, just the mention of an immediate response-updating team brings up a huge management problem, which at the same time will generate many other, very practical, management issues. At this stage, we are still approaching the ideas at the theoretical level. Let us say that the management matter is a crucial one in this case. There are obvious things like the impracticability of a central unique database. Instead, one would have to construct a distributed network of databases connected by queries and very smart indexing. There is also a theoretical side to other tasks of this hypothetical team (or rather teams), which is not only serving the queries but also assisting learners in their formulation of the queries in order to help them to attain the optimum data response.

Some of the variables that could be devised for one possible database taxonomy may be conceived in the following general terms:

- Patterns (community grouping)
- Settings (space and time)
- Individual position (power related)
- Topic (purpose of the roles).

Patterns are the social constraints which hold together a given number of individuals. Group members behave and communicate with each other according to certain rules and social habits. This notion encloses groups of people with the same interests into different kinds social communities; from the idea of a nation and all its citizens to a social class, a professional attachment, being classmates, being of the same age or gender, being inmates in the same prison, being member of any organization, etc. and all the consequent roles implied in these contextual interactions. Settings are the spatial and temporal locations of the data. Their degree of detail is determined by how sophisticated the sets of cultural patterns and all their nuances are. The role of every individual belonging to a specific pattern is always power related. We could think of it in terms of being empowered, having no power or possessing an equal amount power. Power must be seen as the agency for interacting with the group under a favorable use of social patterns.

The topic is seen as the purpose of the roles or the purpose of the culture. In seeing culture as a game, sometimes it is possible to perceive the reason for the very existence of the group.

Let us imagine a very specific query about language and culture as a necessity for a given learner. An Indian college student of Portuguese language needs to know how to speak and interact with his/her future classmates in a Brazilian university. In this case the pattern would be the community of young male and female college students. The setting could be a general one, like the country, Brazil, or a narrower one, like a certain type of university in a given Brazilian city, let's say Sao Paulo. Chronological setting could be the present day. The individual position could be his/her status as a registered student (of course there is the issue of how foreign students are accepted and whether they interact equally in the group that could be an information variable itself). Finally, the topic or purpose is the reason these students conform to the behaviors of a specific group (they feel or need to think- they are special, they share the same kind of hobbies and preferences, etc.).

To summarize, in this article we have reconsidered the already established notion of the need for learning specific cultural settings when learning the corresponding language. This reflection has been made from the perspective of a rhizomatic approach to language learning and the relevance of the use of contemporary technology in this process. Finally, we have proposed a theoretical model for the application of these ideas.

References

- Bourdieu, Pierre. (March 2008). *Field*. Wikipedia. Encyclopaedia on line. Retrieved October 9th, 2008, from http://en.wikipedia.org/wiki/Pierre_Bourdieu#Field
- Derrida, Jacques. (2000). Différance. In Julie Rivkin and Michael Ryan (Eds.), *Literary Theory:* an Anthology. (385-407) Oxford: Blackwell.
- Du Bois, J.W. (2001). Grammar. In Alessandro Duranti (Ed.), *Key Terms in Language and Culture*. (87-90). Oxford: Blackwell.
- Duranti, Alessandro. (Ed.), Key Terms in Language and Culture. Oxford: Blackwell.
- Firth, Alan. (October 2006). *Discourse, Language and Culture*. Retrieved April 2007 from http://www.hum.aau.dk/%7Efirth/Research/cultbookSage.html
- Geertz, Clifford. (1973). The Interpretation of Cultures; .Selected Essays. New York: Basic Books,
- Greenall, Simon. (2003). Current Concerns in Socio-Cultural Training in the Classroom.
 - *The Language Teacher*. Retrieved from April 2006 from http://www.jalt-publications.org/tlt/articles/2003/07/greenall
- Greenblatt, Stephen. (1995) Culture. In Frank Lentriccia and Thomas McLaughlin (Eds.), *Critical Terms for Literary Study* (225) Chicago: UP.
- Hogg, Michael A, Deborah J. Terry and Katherine M.White. (1995). A Tale of two theories: a critical comparison of Identity Theory with Social Identity Theory. *Social Psychology Quarterly*. 58(4), (255-269).
- Kozulin, A. (1990). *Vygotsky's psychology: A biography of ideas*. Cambridge, MA: Harvard University Press.
- Lian, Andrew. Language, Culture, Meaning, Learning and Technology. (April 2006) keynote address at the 2006 (9th) Conference on English Language Education. Retrieved April 2007 from http://www.andrewlian.com/andrewlian/prowww/fortune 2006/fortune talk 01.mht
- Lian, Andrew. (2004). Technology-enhanced language learning environments: A rhizomatic approach. In Jeong-Bae Son, (Ed.), *Computer-Assisted Language Learning: Concepts, Contexts and Practices*. (1-20). New York: Universe. Retrieved April 2007 from
 - http://www.andrewlian.com/prowww/apacall_2004/apacall_lian_ap_tell_rhizomatic.pdf.
- Lotman, Jurij. (1979). Semiótica de la cultura. Madrid: Cátedra
- ____ (October 2007). *Meme*. Wikipedia: Encyclopedia on line. Retrieved October 2008 from http://en.wikipedia.org/wiki/Meme
- Tentori, Tullio. (1970) Cultura y transformación social: Cuestiones de sociología. Barcelona: Herder.