ESSAY

A CRITIQUE OF THE CULTURAL ANALYSIS PREDOMINANT
IN EDUCATIONAL RESEARCH IN MEXICO

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Abstract:
This essay attempts to define two major anthropological currents that have influenced educational research in Mexico. The article suggests that the predominance of one of these currents has limited the role of the concept of culture in understanding the educational reality under study. By examining the type of cultural analysis employed in major educational research, I try to determine the limiting factors and the advantages of both anthropological currents presented. In addition, I clarify their possible usefulness for educational research and describe their scope.

Key words: educational research, anthropology of education, culture, interdisciplinary, Mexico.

Introduction

In this essay I argue that the predominance of a form of cultural analysis in Mexico’s educational research has contributed to generating two tendencies that are limiting, to a degree, the study of educational problems. In general terms, educational research has adopted ideas from two major currents of Mexican anthropology that can be distinguished by their manner of understanding the role of culture in the analysis of social and historical reality; i.e., by their form of cultural analysis. I shall call one of these currents interpretive anthropology and the other, historical anthropology.1

In this text, I shall synthesize the aspects of debate between the currents that are pertinent in understanding the predominance of one current’s form of cultural analysis and the consequences for educational research. Although I develop a discussion in the field of a specific discipline, I believe that the debate contributes to questioning aspects of educational research in Mexico in a broad sense, including issues like the institutionalization of lines of specialized research that relegate perspectives that are conceptually more holistic. In addition, many educational studies not part of anthropology use anthropological terms and concepts without having a broad perspective of the discipline. Therefore, this text attempts to contribute to effective interdisciplinary communication.

The first tendency I identify—favored in large part by the predominance of interpretive anthropology—consists of the extended demand for research to contribute to the solution of immediate problems and the intervention in educational processes and institutions, in order to lead them in a certain direction. This tendency implies that educational researchers are assigned roles as coordinators, planners, and solvers of problems indicated normatively by national policies and general principles on the international scale. Devising research that goes beyond the application of procedures to make institutions or educational systems as they should be or are planned to be, requires conceptual tools to explain why institutional or local processes continue to be developed far from the proposed ideal models.

The marginality of this type of studies indicates the recurring difficulty of educational research to recognize relations of inequality in global patterns that develop in specific institutions or regions; I associate this difficulty with the preeminence of interpretive anthropology. A second limiting tendency becomes evident in many studies’ theoretical difficulties in approaching the broad social processes that encompass the educational phenomena being researched. The influence of interpretive anthropology has meant that cultural analysis has not contributed notably to understanding the regional and local
political and economic processes in which the educational issues under study are immersed. The same influence has also hindered communication among lines of research that have been defined within disciplines like economics, organizational sociology, history, and linguistics.

My questioning of these two tendencies is based on a comparison of the two forms of cultural analysis mentioned. Without doubt, the problematic aspects I emphasize here can be studied in other ways. Such is the case of studies developed in other disciplines, like the sociology of education (Martin, 1998), which attacks these problematic aspects in educational research by emphasizing the role of cultural analysis. In this text, I shall restrict the discussion to the contribution of anthropology, a discipline that develops basic issues in the concept of culture.

In the first two sections, I shall describe the fundamentals of the forms of cultural analysis of each anthropological current mentioned, and shall synthesize the way one of these analyses is present in an educational study, as the basis of discussion. Although the article is not an exhaustive review, I develop the discussion by referring to the work of well-known authors in consolidated lines of research such as the ethnography of school, the sociology of organizations, education, and work, and the cultural history of education. Subsequently, I shall indicate the limiting factors that seem to encourage the predominant form of understanding the explanatory role of culture in educational research.

Although the dichotomous posture I present in this essay simplifies the diversity of cultural concepts employed in educational research in Mexico, the posture is useful for analyzing in an organized manner a fundamental difference between the two major currents of cultural analysis. It also serves as an initial approach to the problem for non-specialists in the theory of culture. I conclude the essay with various final considerations regarding the transcendence of the study.

**Interpretive Anthropology**

Interpretive anthropology has ethnological interest, according to the original meaning of the term, since it attempts to characterize and distinguish cultural aspects that permit classifying different human groups. Recognizing the cultural peculiarities of each group facilitates understanding the meaningful actions of a social actor as a member of a specific sector. The identification of a group's cultural patterns—shared schemes that orient individuals' social action—by interpreting the meanings used by individuals during their interactions, is fundamental in cultural analysis. The emphasis on interpreting the meanings involved in individuals' experiences allows us to state that this type of cultural analysis is phenomenological. Interest in the unique “cultural patterns” of each group subordinates the study of social processes through which different groups have been in interaction and have exerted a mutual influence.

An observer can detect that the influence of this anthropological current in Mexico’s educational research is based primarily on *La interpretación de las culturas* by Geertz (1973). Most studies of real school activities generally employ the term, “ethnography” as a synonym of Geertz’ “thick description” and use terms by the same author such as “cultural frame” or “cultural patterns”, while restricting the task of anthropologists/ethnographers to identifying such patterns through the interpretive analysis of face-to-face interactions that occur in situations limited by time. Although the theoretical bases of ethnographical educational research are broader, they do not expand cultural analysis in the sense I am questioning in this essay. And although some micro-ethnographical studies of classroom discourse propose linking the analysis of school practices with sociological analyses to improve teaching and lessen the reproduction of social inequality at school (Cazden, 1991; Erickson, 1986), when they focus on documenting the differences of cultural groups, they establish limitations that cause their situational analyses not to be permeated with an explicit conception of the relations between culture and power. In spite of the use of this perspective in research classified as classroom ethnography (Mejía y Sandoval,
1986; Bazdresh, 1999; Fierro et al., 1999), a wide range of studies turns to interpretive procedures and the identification of cultural patterns or schemes as the basis of anthropology’s contribution to educational phenomena.

An early example of this form of understanding the contribution of culture to the explanation of social reality, which comes from the broad production of ethnography in the classroom, is the study by Bertely (1992). In this case, the identification of socialization patterns unique to the Mazahua ethnic group serves to explain the interaction between the teacher and students that the author identifies at their school. Through observation, logging, and the analysis of patterns in the interaction between adults and children at home, Bertely defines elements of socialization between parents and children as part of informal education—education that apparently makes children responsible for actions from a young age and therefore eliminates the need for adult intervention in children’s behavior through restrictions or direct orders. Such patterns of socialization for children are the peculiarity of a specific group: the Mazahua ethnic group, which makes the fundamental contribution of this type of cultural analysis.

A book published subsequently by the same author (Bertely, 2000) refers to her study of 1992, and is particularly interesting because it expresses her intent for the research to contribute to the study of the hegemonic exercise or the struggle for the control of instruments of meaning. The author attempts to contribute to the analysis of the dynamics that occur in the classroom between a hegemonic school culture and local cultures; in other words, a matter of relations between power and culture. However, precisely since the bases of her cultural analysis are of an interpretive nature, the perspective restricts her ability to contribute to such issues. The basic reason is that from this perspective, an anthropologist’s work is not centered on interactions and the mutual influence maintained by culturally different groups, nor on their unequal, symbolic and material capacities.

A second example of the use of cultural difference as a basis for explaining the development of socio-educational processes comes from a notable sociological study that addresses in a complex manner the relations between education and employment (Hualde, 2002). In this case, an explanatory role is attached to culture, which is rooted basically in recognizing an “organizing culture”, “a culture of participation” or distinctive “regional identities” of concrete regions. The presence or absence of an organizing culture or unique regional identity that is compatible with a form of business development, would contribute to explaining a region’s economic development.

Hualde (2002) quotes the example of a study on the region of Emilia-Romagna, Italy, where the researcher identifies:

[... an associating, artisan-based culture rooted in certain values: support of extended family in work; non-standardized pace at home and work; reorientation of rural skills and values; ideology of work (above the ethics of benefit) and entrepreneurial pride (2002:50).]

The argument is that the peculiar cultural aspects (values, ideology) of regional institutions would be an additional component for explaining the elevated development of the above-mentioned region—a component that is added to or juxtaposed against the density and number of institutions, type of industry, human capital, and the financial, technological, and communications infrastructure in the region.

Hualde (2002:50) employs the idea of the crucial nature of the so-called “non-mercantile interdependencies” “that take the form of conventions, informal rules and habits that coordinate economic actors in uncertain conditions”; however, he says nothing about the economic or political bases that influence the transformations of these interdependencies.
The problem with this idea is a conception of cultural aspects that does not believe that transformations over time can influence or be influenced by economic and political processes. Although the author incorporates aspects of social organization and conflictive collective negotiation in his analysis, these aspects remain conceptually removed from the establishment and transformation of conventions and the values of social actors. I believe that the interpretive or phenomenological perspective implicit in Hualde’s proposal causes him to emphasize the differences and contrasts among various groups; in this case, he groups the actors that reside in a region and compares them with actors outside of the region, instead of focusing on the participation of culturally different groups within the region, and on the conflicts and negotiations by which values and partially shared ideologies are established and transformed in a region.

Hualde’s perspective limits his possible contribution to understanding reality through the cultural analysis that guides the study, since the absence or presence of certain values or ideologies is not explained in relation to other aspects that the study analyzes.

Historical Anthropology

Historical anthropology emphasizes interaction and the mutual influence between culturally different groups that are linked economically and politically. More than twenty years ago—nine years after the proposal by Geertz (1973)—a critical perspective began to develop in anthropology with regard to the interpretive study of culture (Roseberry, 1982). In contrast with the ethnological vision of Geertz, who was more interested in differences within a certain cultural group, various authors have underlined the histories that engender and link different cultural groups, thus emphasizing the struggles and negotiations that occur in the joint construction of frameworks of interaction in which these groups converge (Wolf, 1987). A conflictive, dynamic vision of the ideological articulation, due to the economic and political links of cultural and class-based regional groups, underlies the proposed regional analysis, as in the case of Lomnitz (1995). Based on this proposal is the perspective of historical anthropology, which attempts to situate within specific historical processes the social construction of individual awareness and social interaction; in other words, it attempts to explain the “historical development of quite specific types of social relations” (Smith, 1999:9).

Analyzing educational institutions in this manner leads us to study concrete social relations, the control of resources, and the social organization that involves interactions among diverse cultural groups in hierarchical relations. In addition to the fieldwork, which logs face-to-face situations in the ethnographical present, documentation must be carried out of major changes in the landscape, the flows of merchandise, energy and people in the places where these interactions occur, and the transformations of meanings and signs in the organization that permit the articulation of diverse groups and affect the appearance or disappearance of identity groups, meanings, and signs that are the subject of disputes and negotiations. Ethnography, in this case, is more than a methodological strategy for identifying the peculiarities of a cultural group, since the description of the social construction of cultural differences is analyzed as part of the processes of struggle and power relations in which the actors in distinct cultural groups participate (Mallon, 1995).

Therefore, social space and historical time are two aspects of social reality that this type of studies attempts to include and understand. In terms of the spatial dimension, it is pertinent to understand the constitution and transformation of regions and regional cultures that participate in conforming the nation-state and the concrete forms taken on by predominant global patterns at the local level. In particular, regional dynamics—in political, economic, and cultural dimensions—affect the definition of fundamental issues in national educational policy. From the perspective of historical anthropology, local processes can be linked with emerging dominant patterns in the national and global settings in which all
educational institutions are immersed. “Cultural dynamics” in this case do not refer to non-historical cultural patterns that explain the actions or ideologies of the actors at an educational institution. Instead, they consist of specifying the social processes that have involved the economic and political organization in the regional setting, and the conformation of ideologies that have linked different cultural and class-based groups in a certain period.

Historical anthropology conceives the state organization and “worldwide system”—with their consequences on individuals’ daily lives—as perennially unfinished processes. Flexible capitalism or the neoliberal state does not provide an explanation; instead, it is the study of local cases that aids in understanding the real development of global patterns conditioned by such regional fields of force (Roseberry, 1992). According to Roseberry (1994), the issue is about “inflections” of ideal patterns that occur in specific regional cultures; understanding them as a product of interactions and exchanges among cultural and class-based groups in an economic and political zone focuses on the specialty of these processes, prevents an essentialist conception of regional matters as simple “ways of being” or “traditions” foreign to any actor’s intentionality, and makes an analysis of the relations between culture and power pertinent.

In this sense, the contribution of cultural analysis in research that attempts to understand the role of culture in local or institutional processes of transformation, would be extremely restricted if it were based on an interpretive perspective. In contrast, productive lines of discussion can be established by considering the perspective of the cultural analysis of historical anthropology.

For example, in terms of the notion of social space, a discussion can be established regarding the concept of the social field employed by Miranda (2001), who studied a transformation in the social value of knowledge that is organized and produced at Universidad Pedagógica Nacional (analyzing as three different cases the main Ajusco campus and the two regional campuses in Durango and Hidalgo), due to the appearance of a new form of regulating the budget of public universities and a change in the student profile. Using the term, “field of force”, Miranda bases his study on the social field developed by Bourdieu, in terms of a set of capital that is valued by the actors who participate in asymmetrical relations, as in a securities market where the “exchange rate” of each type of capital is questioned. It is an outstanding study that researches the impact of certain national processes on specific institutions, considering issues of educational policy and the economic interests of institutions and concrete actors.

Historical anthropology would indicate that the notion of social field employed by Miranda is limited in that the spatiality of the processes he analyzes is not dealt with in a systematic, explicit form. On one hand, the author (2001:536) alludes to a type of frontier between the internal processes of educational institutions and their fields of force, and patent external requirements or factors in national educational policies. In the case of UPN, he affirms that the field of force—which was constituted in the institution and organized knowledge in a certain way until 1993—was splintered “when the university became subject to the same requirements for validating its academic programs and for research as other universities”. Thus no proposal is made for institutional and local political processes to participate actively in national policy.

On the other hand, when Miranda discovers regional variations, his explanation does not include the factors that intervened regionally to motivate a certain type of actors to promote a specific university project. In the case of the Durango campus, he identifies that there were “aggressions from the traditional groups of normal school graduates and the teaching profession” (2001:520), without explaining why such a situation occurred precisely in Durango. In the case of the Hidalgo campus, he finds evidence of “political and budgetary support from the political coalition that directed the elementary/secondary and normal school education in the state” (2001:522), but again does not explain the conditions that brought about such a process.
The concept of social field as a field of force or “structure of positions and dispositions” that assumes “social interactions and relations mediated institutionally by the power derived from the interest and will to compete and struggle for capital that is considered valuable for social existence” (Miranda, 2001:514), provides important elements for understanding the effects of the new educational policies, while ignoring the regional conditions that generated diverse events. The notion of social field that I support, understood as networks of regional social relations, permits employing this dichotomy between the “institutional” and the “external” while anchoring—in historical time and social space—an educational institution’s processes of development.

On the other hand, the interest of historical anthropology in what is called historicity or historical profundity does not consist of seeking a simple chronological chain of events. Instead, it is interested in explaining and making explicit the processes of cultural transformation, so that the forms of being and the conventions that seem “natural” in a certain moment and place, may be recognized as unique to such a context, and therefore, changing. Fundamental to the analysis of the processes of transforming values and ideologies is the emergence of new cultural groups and the disappearance of others, due to mutual influence (Lomnitz, 1995).

A good example of this perspective is the research report prepared by Rockwell (2001), which presents the emergence of a new type of social subject in an historical moment and determined social place: the post-Revolutionary teacher in Tlaxcala. Although the research is of an historiographical type, this form of analysis is feasible for contemporary social processes. In the case at hand, the study of the sources of financing, the transformations in the control of public resources, and the administration of the federal government versus the municipalities are elements that caused the teaching profession to become a collective subject in the post-Revolutionary era. The formation of a sole union modified the relative power of an identity group that originally revolved around the profession, and linked it to a state party while freeing it from the civil authorities at the local place of work.

Over the years, historical anthropology has proposed ways of incorporating interest in the interpretation and symbolic interaction of what I have called interpretive anthropology (Roseberry, 1998). In fact, fundamental actions in historical anthropology are making interpretations and inferences of the meanings of certain social actions or symbols for different actors, and thus do not underestimate the type of problems that can be addressed from the interpretive perspective. However, in spite of the long trajectory of the historical perspective in anthropology, in educational research—perhaps because of the diverse disciplinary origins of its participants—its proposals have remained marginal.

In my opinion, knowledge of the interpretive perspective is widespread because it coincides with a popular notion of culture as a unique way of existing, and of the role of anthropologists as “discoverers of rarities” and connoisseurs of exotic cultures. Thus the notion of ethnography is reduced to the identification of cultural uniqueness through the interpretation of the meanings of objects and actions for individuals. I believe historical anthropology permits broadening and making more complex the forms of comprehension that are generated in educational research, while helping to situate conceptually its scope with regard to the role it plays in the explanations of cultural analysis. Such a proposal understands ethnography as a form of analysis. It attempts to identify the dynamic social construction of cultural differences, while clarifying the use of such differences in the power relations in which actors are immersed.

**Limitations of Interpretive Anthropology**

In this section, I shall develop the relations that I identify between the predominance of cultural analysis of an interpretive type and the two tendencies of most educational research, which concede an explanatory role to culture. My posture is that historical anthropology does not oppose carrying out
interpretive or phenomenological studies, or situational analysis of face-to-face interactions; on the contrary, it includes such studies in a broad focus that also situates actors and interpretations historically.

I also believe that only concepts that foster an understanding of historical relativity and the development of cultural patterns in a dynamic, conflictive manner—through interconnections between culturally different groups, or conceptual tools equivalent to those developed in focuses like historical anthropology—allow a productive comparison of these two limiting tendencies of educational research.

In terms of the first tendency, analyses of a phenomenological type favor assuming roles of social engineers or educational interveners because an explanation based on cultural peculiarities—which excludes conflictive social construction and dynamics from its statement of the problem of study—allows the researcher to generate the illusion that a culturally peculiar “way of being” is a factor in the problem and/or the solution under study, independent from the political and economic relations in which diverse types of actors are involved. This manner of conceiving problems fosters the illusion that solutions can supposedly exist outside the relations of power—changing over time—among the actors involved in the phenomenon under study. To analyze culture, it is important to note that such a procedure omits from the research the relations of power involving the establishment or transformation of conventions or meanings partially shared among different cultural groups. Although a cultural pattern can be considered as relatively stable in a synchronic study, this question is not simple. Cultural patterns are immersed in historical processes with diverse rhythms, unforeseen situations, and temporary units of change of varying magnitudes.

How does historical anthropology face this restriction? A possible example is the study carried out by Levinson (2002) in a federal secondary school in a small city of Michoacán, to research the development of student identities. During the study, a change occurred in the school’s administration, and the new authorities proposed transformations in the organization of daily activities that questioned aspects of the relations between the sexes. With the proper conceptual tools, the author is able to document how a situation in an institution—such as the change of authorities and the reorganization of activities they projected—can lead to adaptations and resistance from students and teachers. Levinson links such adaptations and resistance to political and ideological processes that go far beyond the temporality of administrative periods and the limits of interactions that occur in the scholastic institution.

By giving such an explanation of the transformations in the cultural patterns that orient relations between the sexes, Levinson avoids using the cultural uniqueness of that city’s adolescent boys and girls as a factor in the explanation, and demonstrates instead the deceptiveness of stating research problems or solutions to educational problems centered on an institutional organization that is adequate for the actors’ “cultural characteristics”. The reason is that reorganization affects such characteristics and actors react by intentionally promoting transformations of the characteristics’ underlying principles.

In general, cultural patterns or schemes cannot be considered simply in an apolitical and atemporal form. Yet neither is it sufficient to enunciate and affirm the historical or political character of culture. Theoretical tools are required to make patent the relations between ideology and power in each case under study. In the cited study, Levinson (2002) analyzes the school culture that promotes, in the federal setting, an ideology of equal citizenship. The author shows how the students assimilate this ideology in a unique manner by introducing local cultural principles; he also indicates how differences in sex, ethnic group, and economic level increase the possibility, in an immediate future, that the inequalities of six cases will generate rejection or lack of meaning of the equalizing ideology, while in other cases, the principles will be accepted. Upon accenting power relations among actors (in this case,
relations based on each student’s different social capacities), cultural patterns lose the simple causal nature that interpretive anthropology might attribute to them.

In fact, resorting to interpretive anthropology reduces the ability of educational research to address fruitfully the broader social processes in which the problem under study is inserted; the cultural analysis is limited while the sources of information consulted are not adequate for identifying the place occupied by the involved identity groups or their orientation regarding the partially shared ideologies within the economic and political relations that articulate them. Therefore, no precise definition can be given of the relative power various actors would have as part of identity groups or coalitions of groups with regard to intervention at the level of educational strategies or curriculum innovations. This observation can be made in the research by Bertely and Hualde, mentioned above. Therefore, if researchers intend to contribute to the study of hegemonic school cultures, they will have to use methodology oriented to sources of information that permit this sort of approach.

Such a need becomes evident in studies that document processes of transformation in concrete practices regarding educational policies and language policies. In both Mexico and the United States, linguistic diversity—and the ways it is confronted or developed through the government’s institutional strategies—has led to a broad range of research that shows the possible power of establishing consensus through the spread of ideologies regarding the distinctive characteristics of culturally diverse but politically and economically articulated groups. An example is the proposed laws to institutionalize educational strategies and legal actions against any opposition.

Such is the case of the study by Stritikus (2002) of Proposition 227, which established monolingual education the public schools of California, in the United States. In that study, although Stritikus recognizes the importance of political processes involving linguistic diversity and national identity in order to understand the consensus at hand, it is fundamental to identify the positions of relative power of the actors who participate in such processes, as well as the objective conditions that systematically favor disadvantageous relations for certain groups.

In a concise manner, reference can be made to the type of concepts necessary for understanding the complex, dynamic relations between culture and power, which go beyond the scale of face-to-face interaction. The problems introduced by bilingual education offer a clear example. The concept of diglossia, proposed by sociolinguistics, allows distinguishing an individual condition of bilingualism from a socially established condition in which the language of one group is systematically excluded from formal social situations, during long historical processes involving culturally differentiated groups (Garza, Kalman and Makhoulf, 1982).

A proposal for developing relations between culture and power from an anthropological perspective was outlined by Wolf (1990), who differentiated four “modes of power”: the power derived from individual abilities; the power to control the action of others in face-to-face interactions; organizational power, which permits the differential control of resources due to roles or positions occupied by the actors in a social organization; and the structural power derived from the structuring of social relations, separate from the immediate intentionality of any actor, through the establishment of values, acceptance and legitimacy, or the naturalization of principles of a social order. I believe that an approach of this type can noticeably enrich the contribution of cultural analysis in understanding the social reality of educational research in Mexico.

**Final Considerations**

I would like to clarify that while I do not believe this form of cultural analysis is the only valid form in educational research, I find that such a discussion permits delineating some fundamental points of reference for evaluating the objectives and scope of our research. To give an example, in the recent
surge of studies on “intercultural education”, most authors assume a politically correct discourse on differences, and some authors design strategies to make people sensitive, reflective, and tolerant with respect to cultural differences in daily life (Saldívar et al., 2004). Most of the studies of this type, however, have no way to refer in an explicit and coherent manner to the social and historical construction of differences; even more importantly, they are unable to refer systematically to the social and historical use of cultural differences to legitimate or occult asymmetrical relations between groups and individuals (Ávila, 2004).

In the event issues of culture and power are addressed, the challenge for educational research is to carry out studies in which regional identity or organizational culture is not a static factor lacking in explicit relations with processes of economic and political change in the analysis. This perspective will permit taking advantage of the immense potential anthropological research has in education for forming links with the socioeducational problems of other disciplines like sociology, economics, and pedagogy.

The challenge is great, since the interpretive perspective requires techniques to observe and analyze social interaction—techniques that imply many hours for repeated observation and detailed transcription for subsequent analysis. Any desire to integrate both currents completely would need to plan for a research team since a single researcher would be overwhelmed.

The difficulties of attempting to classify studies that analyze the development of contemporary educational policies in educational institutions, considering unequal social relations and historical processes, within the organization proposed by Mexico’s Educational Research Council (Consejo Mexicano de Investigación Educativa) could be a sign that this type of focus is being relegated. The current essay is an invitation to review the underlying concepts of culture and power in our research in the educational field.

Notes
1 Although these terms are not widely used in the discipline as I define them here, I cite the theoretical references that permit identifying the type of studies or focuses than can be included in these two major currents.
2 Numerous references cite authors like Mead (1972) and Goffman (1986), who established the bases of symbolic interaction in sociology, and Heller (1970), regarding the documentation of daily life at school.

Bibliographical References

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