This paper suggests that "Hispanic" populations are a diverse category. An undifferentiated comparison of the groups only creates a comparative "ecological" fallacy, which contributes to the creation of stereotypes rather than understanding. Each population must be placed within its appropriate historical, regional, and ecological niche in order to decipher the paradoxes and contradictions of relations between education, occupation, income, and schooling performance and completion. Mexicans are predominantly an employed, working class population concentrated in the Southwest United States. They attend schools that are largely devoid of either cultural understanding or cognizance of the family-based "funds of knowledge" that could be utilized for instruction. Schooling practices may contribute to the fracturing of literacy capacities among parents, and such fracturing contributes to parents' inability to transmit literate knowledge beyond their own generation. For Puerto Ricans, the regional context of the urban inner city has created boundaries of poverty, unemployment, poor labor occupations, and at-risk single-parent households. Such contexts, in part, limit educational success and performance, and undervalue educational attainment for occupational success. On the other hand, Cubans, because of their middle class origins and strong political support in the United States, were quickly accepted and integrated into U.S. society. In a short time they gained educational, economic, and political ascendancy in Miami, especially, and elsewhere. (KS)
Schooling Processes among U.S. Mexicans, Puerto Ricans, and Cubans: A Comparative, Distributive, and Case Study Approach

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Introduction

This work takes a broad anthropological perspective to the analysis of "Hispanics" in public school systems. From this perspective three important methodological premises are necessary for a proper analysis of the schooling process for these groups in the United States. First, the analysis should be comparative both historically and regionally because each group occupies quite different regional areas, and each group has specific economic and political relations within them. Second, the analysis must be "distributive;" that is, it is imperative to regionally disaggregate the complex social and economic factors which affect each group if we are to make sense of such schooling topics as "drop outs," disadvantaged, school delay, low performance and achievement, and the success of specific groups in the schooling process. Third, the educational experience should be contextualized within the cultural and social approaches to learning found within homes as these effect the substance of the educational process within the public school system.

This work will concentrate solely on three Spanish-speaking groups: Mexican, Puerto Rican, and Cuban. However,
this work will only detail the home schooling process among Mexican children in the United States since comparable historically and ethnographically-based research has not been accomplished among Puerto Rican and Cuban children. It should be noted, we use the term "Mexican" to describe both those born in Mexico and those Mexican heritage born in the United States. Although "Chicano or "Mexican-American" is also used to refer to this population, Mexican is the generally preferred term of self reference (See C. Arce, 1981:171-191; J.A. Garcia 1982:295-314; C. Vélez-Ibáñez 1983).

The Comparative and Historical Schooling Experience of Contemporary U.S. Mexican, Puerto Rican, and Cuban School Populations

In 1980, 75% of the Mexican population in the United States was born in the States while 50% of Puerto Ricans were mainland born (Bean and Tienda 1987: 90). On the other hand, only 22% of Cubans were born in the United States. In addition, the home language preference for each is not appreciably different with 86% of Mexicans, 90% of Puerto Ricans, and 96% of Cubans preferring Spanish (Bean and Tienda 1987:93). Yet neither language preference nor place of birth would seem to be the most important factors in understanding the school performance of
children for any of these ethnic groups. Rather as Bean and Tienda have argued foreign birth and limited English abilities of parents or children increase the chance of children being held back in school or dropping out. However they unequivocally state that both English abilities and foreign birth "are overshadowed by those of family background as measured by household income and parent's education" (Bean and Tienda 1987:277). One other crucial element, however, unstated in this fine work is that the region where families live and children emerge strongly influences their educational performance, and the more qualitative aspects of the educational experience itself.

Therefore it follows that in understanding the school performance and success of each group, class standing and regional context (as indicated by population concentration, labor sector participation, income, and occupation) will be the determinant factors. Yet as will be shown, this type of statistical explanation too masks many other processes. As the case study material among Mexicans will illustrate, there are schooling processes that "fracture" the possibility of the transmission of literacy across generations and which may contribute to that groups' lower school performance. As well, most educational methods and practices in the Southwestern
United States fail to take advantage of the fundamental knowledge these households contain, which we have termed "Funds of Knowledge."

**Comparative Characteristics of Schooling Development**

The median educational attainment of the three major Hispanic groups reflects in part their specific historical experience within the United States and their region. In 1980, Mexicans born in the United States, age 25 or over, were almost an entire grade (11.1 years) behind both Cubans (12.1) and Puerto Ricans (12.0), and non-Hispanic whites (12.0) (Bean and Tienda 1987:234). When "foreign" born Mexicans are included in this calculation, then a three grade differential (9.1) is noted (Bean and Tienda 1987:235). This pattern is further accentuated in college completion rates. In 1980, only 7.2% of the Mexicans born in the States age 25 or over had completed 16+ years or more of schooling as compared to 12.8% of mainland born Puerto Ricans, and 22.8% born Cubans in the United States completing the same level (Bean and Tienda 1987:238-239). For foreign born Mexicans in the United States, this difference becomes even greater with only 3.2% completing 16+ years or more (Bean and Tienda 1987:238).
Two outstanding schooling attainment conditions continue to plague Mexican and Puerto Rican youths in comparison to Cubans: drop out rates and school delay. For Cubans, failure to complete elementary school is infrequent, 7 to 9 percent, while for Mexicans and Puerto Ricans between 14 and 34 percent had not completed elementary school (Bean and Tienda 1987:249). Similarly, 60 percent of Mexicans and Puerto Ricans aged 25 or over had not completed high school as compared to 40 percent for other Hispanic groups (Bean and Tienda 1987:240). Although, among all three groups, high school completion rates increased between 1960 and 1980 (Bean and Tienda 1987:241), among both Mexicans and Puerto Ricans only had about 55% of adults under age 35 had received a high school education or more (Bean and Tienda 1987:240).

Moore (1988:9) has described Hispanics (aggregate, not Mexicans only) as suffering from among the highest drop out rates for all major ethnic groups: some forty percent drop out before the 10th grade and 3/4s score in the bottom half on achievement tests. For Mexicans specifically, Rochin (1989:12) shows that in the Los Angeles unified School District, 45% of the Chicano high school population drop out of school, and only 5% of those who graduate are academically qualified to enter the
University of California. Other literature shows that only 7 out of 100 Chicanos and Puerto Ricans (Commission on the Higher Education of Minorities, 1982:15) who entered the university from the same school cohort, graduate. In comparison, Cubans appear to emulate more closely the non-hispanic white graduation rates of 23 persons per 100. Some 17.5 percent of the Cuban population has completed 16+ years of schooling, a figure which is of the same order of magnitude as the 20.7 percent figure for non-hispanic whites (Bean and Tienda 1987:238).

Directly associated drop out rates is grade-delay. Except for Cubans, retaining students in the same grade has a direct effect on the probability of their dropping out of school. Rates of grade delay among American born Hispanics enrolled in school as of 1980 varied according to group with Mexicans showing grade delays of 9.8, Puerto Ricans of 10.9, and Cubans of 5.2. (Bean and Tienda 1987:262). Here delay is "a measure of the age-grade school achievement which could be determined only for individuals enrolled in school at the time of the census. This was computed by subtracting respondents' current grade plus six (for the first six years not in school) from their age. Values above zero indicate the number of years delayed" (Bean and Tienda 1987:261). For Cubans and especially Cuban-born students, who
have high completion rates, the effects of school delay is overcome in later years (Bean and Tienda 1987:269). For Mexican students, having foreign born parents was not associated with school delay while Puerto Ricans students whose parents were born on the Island were more likely to be delayed (Bean and Tienda 1987:269). These variances in school delay and eventual performance and retention among Hispanic groups point to further differentiation by region and context.

**Regional and Labor Sector Effects on Schooling Performance.**

Both variation and the distribution of schooling attainment between Hispanic groups suggest just how important the socioeconomic and historical peculiarities of each may be. In spite of the higher educational attainment of Puerto Ricans, the occupational profiles of Mexicans and Puerto Ricans show great similarities. Thus only 11.5% of Mexicans and 14.5% of Puerto Ricans ages 16 to 64 held upper white collar jobs as compared to over 22% Cubans in the same age cohort (Bean and Tienda 1987). Such distributions, however, do not explain the gross differences in median family income: in 1980 Mexicans earned $14,510, Puerto Ricans $11,168, and Cubans $18,650 (Bean and Tienda 1987:346).

Such characteristics, point to distinct regional differences in the relations among education, income, and occupational
participation-- factors which are closely associated with the probable educational achievements of succeeding generations.

Thus even though Puerto Ricans have a higher proportion of white collar participation and median educational attainment than do Mexicans, their median income is lower than for Mexicans and much lower than that of Cubans. What this implies is that global analysis of Hispanics schooling performance and attainment does not readily account for the observed differences in the relationship between occupation, income, and education between specific ethnic groups. Rather such differences can only be explained in terms of regional factors that affect schooling performance, class mobility, and economic success.

Regional differences are best characterized by two significant factors: ethnic concentrations and participation in distinctive labor markets. Of the 16.9 million persons of Spanish origin in the United States, 10.3 are of Mexican origin (Stoddard and Hedderson 1987:62) of whom nearly 80% reside in the five southwestern states (Bean and Tienda 1987:158-159). For Puerto Ricans, over 84% reside in the Northeast and Northcentral regions with the mass concentrated in the large urban centers of New York and Newark. Almost 60% of the total Cuban population
in the United States Cubans lives in Miami (Bean and Tienda 1987:158-159).

Such concentrations reflect the divergent historical processes which have shaped each of these cultural groups and is a product of the type of regional labor markets to which each group has had to adapt. For Mexicans, the Southwest has been the principal arena since the region’s conquest by the United States following the Mexican American War in the 19th century. Continued population movement from Mexico’s northwestern border states to former Mexican territory was stimulated by technological changes and demand for Mexican labor in the gold fields of California, the mining camps of New Mexico and Arizona, the agricultural fields Texas and California, and the railways from the entire Southwest to Topeka, Kansas.

Throughout the borderlands the Mexican population has been part of major transformations. While mining, farming, and ranching had been developed in the region under Spanish and latter Mexican rule, the American conquest brought the introduction of large-scale, industrially organized mining, construction, commerce, and animal production and with these activities large scale land clearing, land speculation, control of mineral, water, and natural resources by
national corporations, and state ownership of more than half of the available land area. As new capital and technologies that have penetrated and transformed the ecology of the borderlands, the labor market created need a cheap supply skilled labor and unskilled labor. As a result, the 19th and 20th centuries have been witness to periodic large movements of Mexicanos moving north and east and west, enlisted or attracted by farming, mining, and railroad recruiting agents and contractors, or pushed out by the Mexican revolution, depressions, natural calamities, and great economic changes. This has stimulated lineal and cyclical migrations of Mexicanos between border states (Vélez 1980:218) so that in the California gold fields alone, 20,000 Sonorans had already moved to California to work the newly discovered fields in 1848. In the period 1917-1921 alone, 72,000 Mexican farm workers were admitted to the United States without the restrictions of the Immigration Act of 1917 (an $8 head tax, literacy test, and prohibition of contract workers). Such restrictions were also waived for non-agricultural workers from Mexico for the railroads, mines, and construction companies. In that period, Mexicans worked in iron and auto works in the Midwest, building trades in Arizona, railroad building in
Southern California, and slaughterhouses in Kansas and Chicago (Vélez:1980).

Periodically, as the economy cools off, Mexican labor has also been voluntarily or forcefully pushed back across the border when no longer needed. During these cooling periods and during periods of high industrial and building development in various states, Mexicanos migrate from New Mexico, Arizona, and Texas to California, and most recently from California, New Mexico, and even Wyoming are moving into Arizona.

By 1980, this history had produced a Mexican population in which most households were supported by working-class occupations. Only 22.5% of the Mexican labor force in the U.S. Southwest held upper white-collar and upper blue-collar occupations; the largest percentage (75%) is concentrated in the secondary and tertiary labor sectors: low white-collar (21.3%), low blue-collar (32.5%), service (15.5%), and a small portion as farm workers (5.8%) (Bean and Tienda 1987: 323).

The characteristics of this working class population in the borderlands also has a regional distribution. The poverty rate for U.S. Mexicans in the border region was slightly less than 22%, a drop of 4.5% from 1970, but poverty was very much concentrated in the southern counties on the U.S. border. The
probability of higher income is greatest in the western coastal counties and decreases consistently as one moves east toward the Lower Rio Grande Valley of Texas. Poverty among Mexicans is concentrated in female-headed families, persons over 60, and children under 18. The probability of poverty in households headed by a single person is twice as great as in those headed by a married couple. Of U.S. Mexican households in poverty in 1980, only 17.1% were headed by couples and close to 40% were headed by single persons.

Thus, while approximately 1 in 5 households are in poverty, it is also true that the income of 3 household in 5 is largely derived from employment by several household members, members having two jobs, and using scarce resources in innovative and creative ways. Also more households contain more adults than non-Hispanic white households, and thus there are more earners per household. This advantage, however, is offset by a larger number of children per household, greater unemployment than among the non-Hispanic white population, and, probably for the first 10 years of a household cycle, intermittent employment.

Last, 1 in 5 households are largely part of the primary labor sector in income, stability, and security of employment.
In other words, this is largely a working, working-class population with poverty rates of about 22% and made up of mostly intact family households. (Spanish Origin Population, No.46: 1982). Figures from the National Center for Health Statistics’ Hispanic and Nutrition Examination Survey (HHANES) show that most U.S. Mexican single heads of household were middle aged (45 to 64 years) and that their single status resulted from divorce or separation rather than from widowhood or from never having been married (Trevino et.al. 1989: 9). This finding seems to be borne out by the fact that only 12.8% of Mexican households were composed of single females with children under 18 and no spouse present as compared to 37% for Puerto Rican households (Spanish Origin Population, No. 46:1982:41).

For Puerto Ricans on the other hand, Bean and Tienda (1989:280) have documented that they have "poverty, labor force participation and unemployment rates, and average earnings comparable to those of Native Americans and southern Blacks who have the highest poverty rates in the nation." These conditions are directly related to school success. In fact the concentration of Puerto Ricans in metropolitan areas of the Northeast has much more to do with their poverty rates and school performance. Puerto Ricans tend to be city inhabitants with most living in
inner cities. In 1978, the fact that four of five Puerto Rican families live in the central city is not unrelated to their socioeconomic conditions including their occupational participation and unemployment. (Lent 1982:12). Of all Hispanics, Puerto Ricans have the lowest labor force participation and the highest unemployment rates both of which are directly associated with the decrease in traditional sectors of employment in the textile and garment industries between 1960 and 1980 (Bean and Tienda 1987:286).

Cubans, on the other hand, are considered "golden exiles" (Stoddard and Hedderson 1987:62) whose acceptance and integration into U.S. society was based on the group's middle class origins as well as its political acceptability and the availability of short term subsidies and support. Tied with this acceptance, however, were two schooling innovations that were of paramount importance for the continuation of the "golden exile" paradigm—the replication of the private and parochial educational system in Miami of those in Havana and the creation of coordinate bilingual programs in public schools in Dade County as early as 1965. Both innovations provided the basis of economic and political control of the schooling process—the former with the tuition receipts of parents and the powerful support of the
church, and the latter with instructional practices accepting of
home, language, and culture. Tied to these instructional
innovations as well was the creation of occupational niches for
Spanish speaking Cuban professionals. Such niches created the
political and cultural relations between home and public
schooling important for achievement.

However, of greater importance is that Cuban men have
participated in upper white collar occupations at more than twice
the rate of either Mexicans or Puerto Ricans since 1960 (Bean and
Tienda 1987:323-325). Thus one year after their arrival from
Cuba in 1959, Cuban men were part of professional occupations.
Cuban women too participated in the same occupations at twice
the rates for Puerto Rican and Mexican women. Twenty years
later Cuban households suffered from only a 12.7% poverty rate in
1980 and only 16.0% of households were headed by women (Bean and

What we may conclude by comparing schooling achievement or
performance characteristics between different "Hispanic" groups
is that regional variation is of such importance that the lumping
of them under a general category of "Hispanics" and the sole use
of such indices as educational attainment, dropout rates, and
university completion only contributes to the creation of the
worst sorts of "ecological" fallacies. Therefore, for the purposes of public policy or educational reform, any analysis that is not regionally specific and stratified will not only lead to faulty conclusions that supports old stereotypes but will be bereft of context, history, and other crucial variables of analysis essential for the analysis of achievement.

**Historical Dimensions of Funds of Knowledge for U.S. Mexicans: A Regional Case Study in the Home School Process.**

Instead, each group's cultural and historical presence should be delineated in a case study so that such stereotypes are not only prevented but others do not replace them. The key to understanding the performance of Mexican children in schools lies in understanding the struggle of Mexican households for control of their labor, resources, and for economic security. We shall argue that in this struggle such households have been shaped by the economic and political transformations which have accompanied the rise of capitalism in the Southwest. Since the late 19th century, the historical forces of industrialization and their accompanying immigration policies have contributed binationally to the manner in which Mexican households are integrated into the schooling process. Moreover, these historical forces have led to the formation of binational
families and to the distribution of Mexican households in residential clusters. These forces have also led to repeated transformations of the cultural and behavioral practices or "Funds of Knowledge" which form the core of regional Mexican cultural survival and adaptation.

The best way to explain what we mean by funds of knowledge is to relate them to Wolf's (1966) discussion of household economy. Wolf distinguishes a number of funds which households must juggle: caloric funds, funds of rent, replacement funds, ceremonial funds, social funds. Entailed in these are wider sets of activities requiring specific strategic bodies of essential information which households need to maintain their well-being. If we define such funds as those bodies of knowledge of strategic importance to households, then we may ask pertinent questions such as: How are such assemblages historically constituted? How variable are they? How are they transformed as they move from one context to another? How are they learned and transmitted? How are they socially distributed and importantly how are they connected to the manner in which Mexican children learn and emerge? Finally, what are the implications for educational performance and literacy?
Formation Processes

The dynamic processes of the border economy directly impact the way local populations respond to the loss of control over the means of production. One manifestation of this loss is an increasing separation between the functions of knowledge in the work place and the home. We may better understand the impact of this separation by examining their previous integration. For example, most Mexican families in the Southwest, either have ancestors who were farmers and ranchers, or were engaged in commercial or craft and manufacturing activities in a rural setting, or have relatives engaged in these activities.

Historically, these households not only produced or bartered for much of what they consumed, but their members had to master an impressive range of knowledge and skills. In order to cope in such contexts, and adapt to changing circumstances household members had to be generalists and posses a wide range of complex knowledge. In the countryside, many segments of the population understood the characteristics of local ecosystems--soils, plants, animals, pests, hydrology, and weather. Given the frailty and complexity of arid land environments, water

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1 Portions of this work will appear in Anthropology and Education Quarterly, Vélez-Ibáñez and Greenberg, Forthcoming.
management, flood control, and climate variations were important parts of the knowledge base for survival. As cattle producers, animal husbandry, range management, and veterinary medicine were part of the "natural systems" of household information. The maintenance of equipment made knowledge of blacksmithing and mechanics essential. To avoid reliance on specialists, knowledge and skills in construction and repair were mandatory. This required bodies of knowledge about building plans, masonry, carpentry, and electrical wiring, as well as formulas for mixing cement, mortar, and adobe. The lack of physicians or where medical costs were prohibitive, rural and folk medical knowledge of remedies, medicinal herbs, and first aid procedures were often extensive. In time of economic and labor crises such skills become crucial in adjusting income and the search for work so that after the "Great Arizona Mine Strike" of 1983 (see Kingsolver 1989) many of the striking Mexican miners who were also still skilled in ranching became cowboys to make ends meet (O'leary 1990).

Taken together, these largely working class rural and industrial skills, experience, technical knowledge of habitat and survival which demanded originality and manipulation, made up the
adaptive methods of approach, that we have termed as "funds of knowledge" for much of the Arizona-Sonora Mexican population.

Social Distribution of Funds of Knowledge

Significantly, "funds of knowledge" become part of the implicit operational and cultural system of daily life. Friends and kin often provide a safety net and substantial aid in time of crisis. Yet, most exchanges occur in such a routine and constant fashion that people are hardly aware of them, and may even deny they 'help' or receive 'aid' from anyone when asked. Because these terms denote monetary forms of assistance or extraordinary kinds of help as well as dependence, such denial is understandable. Exchange, however, takes a variety of forms: labor services, access to information or resources (including help in finding jobs or housing or dealing with government agencies or other institutions); and, various forms of material assistance besides money, such as putting up visitors.

Although small prestations are a constant feature of exchange relations, as they are reciprocal, they balance out, and are of less importance economically than is the exchange of information, and special funds of knowledge. Indeed, help in finding jobs, housing, better deals on goods and services, and
assistance in dealings with institutions and government agencies is of far greater significance to survival than are the material types of aid these households usually provide each other.

Because households depend on their social networks to cope with the borderland’s complex political and changing economic environment, they are willing to invest considerable energy and resources in maintaining good relations with its members. One way they do this is by participating in family rituals: birthdays, baptisms, confirmations, quinceaneras, showers, weddings, Christmas dinners, outings, and visitations. Not only do these events bring members of one’s network together to ritually reaffirm their solidarity, but to stage them, they often require members to cooperate by investing their labor or pooling resources. Moreover, such rituals broadcast an important set of signals both about the sponsor’s economic well-being and the state of social relations with other members—both through lavishness and attendance.

The willingness of others to help organize in such family rituals is a measure of whom one may count upon for other things. These rituals form a kind of calendric cycle in which Christmas, New Years, and Easter are major rituals in which almost everyone participates. Life cycle rituals such as
baptisms, confirmations, quincenearas, weddings, and funerals mark a secondary level of major/minor rituals that fit in between the major rituals. Interspersed throughout these are myriad other minor/minor celebrations such as birthdays, anniversaries, house warmings, and ritualized visitations. This entire calendric cycle is carefully monitored by the households involved and gives meaning to the social relations articulated. Great efforts, resources, and energies not only go into organizing such events, but also into evaluating their social success.

Such formal rituals are but one mechanism through which social networks are maintained. As important are household visits, which themselves are informal rituals. Like their more formal counterparts, the frequency of visiting and the treatment the visitor receives are important signals about the state of social relations. This frequent contact helps both to maintain social ties, and provides a context for the exchange of information through which funds of knowledge are constantly renewed and updated.

Because each household operates within a cluster of relationships rather than only in a single biologically associated unit, these "Household Clusters" have accumulated and discarded funds of knowledge which form the basis of material
survival, and so contain within them much of the previous
generation's repertoire of information and skills. These funds
have important historical and contemporary reference points. By
paying attention to such funds, we may gain considerable insight
into how funds of knowledge are mobilized and deployed daily in a
broad range of relationships and the manner in which Mexican
children emerge.

Our study of Mexican households in Tucson, Arizona (Moll et
al., 1988), show that although the nuclear family is not the
primary locality for social life, it is in that setting that
confianza (mutual trust) is most likely to emerge. Like Keefe
(1979), and Keefe and Padiila (1987), we have found that the
Mexican populations operate within a cluster of kin relationships
connected to other local households as well as to households
across the Arizona-Sonora border.

Usually focused on a "core" household of active and largely
employed middle-aged-to-older adults, the peripheral households
carry out their life cycles very much in relation to a centrally
located grandparent or parent. The core and peripheral households
create social "density" not only from the fact that members of
such networks are kin and in their daily lives add layers of
relationships based on other contexts. The person to whom one is
cousin is also the person with whom one exchanges labor assistance, has a fictive kinship relation of compadrazgo (co-godparenthood), shares in recreational activities and visitations, participates in religious and calendric activities, and in many instances may live nearby.

The Emergence of the Mexican Child in Social Density

There is one other dynamic aspect that should be considered. The probability that such clusters will be constructed and their attending funds of knowledge will continue to be generationally transmitted and reproduced, rests partially not only on an appropriate economic and social context to which such clusters become rooted but also on the expectations for behavior that children learn early in such contexts. It is highly likely that, based on the empirical evidence presented from our Tucson studies (Moll et al., 1988) that Mexican children will emerge within social platforms in which they will learn and internalize analogous “thick” social expectations of confianza and mutual trust.

The empirical record on Mexican children, however, is scant in regard to early childhood socialization, and the emphasis has

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Portions of this section were previously published in Vélez-Ibáñez (1988).
been on non-observational attitudinal studies. The recent study by M. T. Vélez (1983) of mother-infant interaction, however, has provided an insight crucial to understanding the possible genesis of Mexican expectations and potentialities. Her work provides the probable link between early childhood experience and the formation of these expectations in clustered household settings and establishes the theoretical basis for understanding the phenomenon.

The original postulate in the work asserted that there would be significant variations in the mothering styles of Mexican-American mothers and of Anglo mothers that could be attributed to cultural expectations and that such expectations included the probability of Mexican mothers’ providing more proximal stimulation to infants, being more responsive to their infant’s signals, and expressing such differences about infant rearing in their beliefs and values (M.T. Vélez 1983:11).

In her findings the actual interaction between mothers and infants showed little significant differences in frequency and quality. Yet of greater significance for the emergence of the social personality of the Mexican infant was in the social context in which such interaction actually took place and the role of others in the infant’s early social experience (M.T.
Vélez found that even though she introduced a variety of social and economic controls to match her sample, the Mexican mothers' social density was much greater, contact with infant and mother by other relatives was significantly more frequent, and greater stimulation of the infant by others was also statistically significant. Thus, the Mexican infant had a social context packed with tactile and sound stimulation, was surrounded by a variety of relatives, and at the behavioral level was seldom really alone. This last finding was also supported by the fact that even though Mexican children had their own rooms available, 92% of the Mexican children slept in their parents' room while 80% of the Anglo children slept in their own room.

Although this was a working class sample, we have the impression from our studies (Vélez-Ibáñez and Greenberg 1984, Moll et al., 1988) that the same phenomenon extends to middle-class Mexican American households. If this is the case, then it appears that the early "thick" social contextual surrounding may lead to the emergence of social expectations and dimensions different from non-Mexican populations that do not have equivalent social characteristics. Such differences, we would suggest, include the internalization of many other significant object relations with more persons, an expectation of more
relations with the same persons, and expectations of being attentive to and investing emotionally in a variety of such relations. Within such psychodynamic and psychosocial processes, the cultural expectation of confianza is cradled and from whence the anticipations for exchange relations emerge. Such early experiences give such a cultural expectation its substance, verification, and reinforcement throughout the life cycle as conditions select for its possible emergence.

Such "thick contexts" are the social platforms in which the Funds of Knowledge of the cluster of households are transmitted. Thus some understanding of their models of transmission gives an insight into the possible basis of cultural conflict with formal educational models that seek to shape Mexican children culturally and socially to the appropriate industrial model for the region and nation.

**Fund Transmission and the Basis for Cultural Conflict**

The way information is transmitted to children in Mexican households strongly suggests the existence of culturally constituted methods of instruction. Because such culturally embedded models have emotive implications for children and their self-esteem; analysis of them identifies possible sources of cultural conflict for Mexican children in the schooling process.
Because funds of knowledge are ensconced within "thick" multiple relations, Mexican children not only have the opportunity to visit other households but learn about other domains of knowledge contained within them. Such clustered households provide the opportunity for children to become exposed to an array of different versions of such funds. However, what is of particular importance is that the child not only is exposed to multiple domains but the child is also afforded the opportunity to experiment in each domain. From our findings in current and past studies (See Moll et al., 1988), the transmission process is largely an experimental one in which specific portions of the fund may be manifested by an adult but the manner of learning is in the hands of the children themselves. Children will be expected to ask questions during the performance of the household task. Thus the question-answer process is directed by the child rather than the adult. Once the answer is received, the child may emulate the adult by creating play situations of the learned behavior.

Another important aspect of this behavior is the wide latitude allowed for error as well as encouragement to take responsibility for further experimentation. For instance, a child's observing and "assisting" an adult to repair an
automobile leads to attempts by the child to experiment on other mechanical devices as well as on "junk" engines that may be available. The usual adult direction is to "finish it yourself and try your best, no matter how long it takes." Even when the child is stuck at one point, the adult usually does not volunteer either the question or the answer. In such a sequence children are taught to persevere, experiment, manipulate, and to delay gratification.

Because there are multiple occasions available for experimentation, there are also multiple opportunities to fail and to overcome that failure in different domains. Such opportunities provide Mexican children with a variety of different kinds of domains where they may observe, experiment, and learn to perform tasks successfully.

A major and important characteristic in the transmission of Funds of Knowledge is that multiple household domains provide an opportunity for a child to be part of a zone of comfort that is familiar yet experimental, where error is not punitively dealt with and where self-esteem is not endangered. Multiple domains increase the probability of non-stressful and generally neutral zones of comfort where little criticism is expressed and a child cannot be faulted. When an adult is
impatient and judgmental, the child often has the opportunity to experience other adults in different domains where such behavior is not present. The child thus learns very early to use a comparative approach to evaluate adults and to avoid discouraging or punitive persons because there are others available who are not.

Such zones of comfort also allow self-evaluation and self-judgment because the feedback process is in the hands of the child. The only exception is when the child is in danger or cannot physically perform the task. But the outstanding characteristic that eventually develops for the child is contextual familiarity that is predictable and manipulable. If the probability of error may be costly, then the child is not encouraged to experiment.

The child learns quickly that there are constraints, but these are so obviously in his/her favor that such an understanding becomes the underlying basis for zones of comfort.

Such zones of comfort, as well as the relationships that support their expression, become the basis for generalized reciprocity. Cast in the idiom of confianza (mutual trust), such relations place the child within the appropriate cultural frame for adulthood (See Vélez-Ibáñez 1983).
Such zones of comfort and their cultural frame are threatened by the introduction of the traditional pedagogical approach to learning. From our observations, female children’s play is very much marked by the emulation of teacher-originated and-directed “playing school” sequences in which there is little active student-controlled interaction, as well as expectations of rote or uncreative responses to instruction. (Tapia n.d.). In addition, the school model of learning and transmission is emphasized by parents during homework periods, with strong punitive measures either threatened or carried out if tasks are not completed. This use of the school model created one of the few sources of adult-child conflict in households observed. Such basic cultural conflict becomes further exacerbated when understood within a larger cultural framework of human emergence. For the Mexican adult, who has emerged within both culturally constituted zones of comfort and formal educational settings, self-doubt, negation, and cultural resistance will emerge together. However, there are processes beyond any adult’s control that mitigate against even zones of comfort and institutionalized process of literacy fracturing within each household.
The Fracturing of Literacy Comprehension and Cognitive Development

Within one of our studies we found high rates of literacy in Spanish, (Moll et al., 1988) which schools would find advantageous but for important economic and legal functions are no longer efficacious. For example, we found that 68 % read Spanish "well or very well;" and an equal percentage wrote Spanish "well or very well." On the other hand, 59 % read English "not at all" or only "a little," while 62 % wrote English "not at all" or only "a little."

John Ogbu argues that for any child "there is discontinuity in the social-emotional socialization received in the home and school" (1982:292) and goes on to detail the discontinuity in the home of home language use, contextual learning, and as well of the stylistics involved. Citing Cook-Gumprez and Gumprez (1979) who contend that there are shifts from the largely oral tradition of the home to the literate tradition of the school, Ogbu considers these as part of the larger problem of discontinuity. Within the context of literacy fracturing, however, we suggest a yet further type of discontinuity: literacy fracturing; that is, the elimination of the process, possibility, and practice of literacy activities in Spanish within the Mexican household. In
the non-Ethnic English-language dominant home, no such structural condition is liable to occur other than illiteracy.

Rather than assuming, as does Ogbu (1982), that literacy and comprehension is found wanting in these households, it is the shift from the Spanish use context to an English one which interrupts and "fractures" an extended development of Spanish literacy and comprehension in reading and writing. For parents, most economic functions as well as legal ones demand English dominance and use and except for letter writing and popular literature, Spanish dominance in writing and reading is of limited utility in the English dominant world. Spanish literacy and its attending comprehension not only begins to suffer from disuse but its important legal and economic functions no longer are efficacious. Thus there is a marked shift from a written and reading tradition in Spanish to largely an oral one in which only household situations demand the use of Spanish.

Such fracturing, however, has a number of unintended and intended consequences. First, the parent whose basic comprehension is in Spanish is unable to participate in the "incipient literacy" (Scollon and Scollon:1979) of their children. Since the school demands that an English literacy "script" be followed, the comprehensive abilities of the parents
are unintentionally denied as efficacious or are unrecognized as existing. Second, from the point of view of the parent, such abilities lay unused and unreinforced except on occasion such as in letter-writing to relatives in Mexico and in the reading of popular magazines. The lack of use and opportunity of such literacy resources then "fractures" parental ability within their own generation and prevents the transmission of the literate tradition in Spanish to the following one. Third, their own children then receive only the oral version of the literate tradition and the transmission of knowledge and language is largely confined to household vocabulary and terms. In this sense, then the "literate" world is denied the children of Spanish-literate dominant parents.

The implications of such a process is of enormous significance to the acquisition of literacy abilities, cognitive understandings, and complex organizational thought. In a very specific sense, children in such situations are reduced to learning codes of expression in Spanish that for the most part are devoid of a literary tradition except in the most exceptional cases of which there are a few. The language learned will perforce be largely constrained to an immediacy that largely excludes broader arenas of application. Children will be largely
exposed to language directly associated with household functions and relations and not to broader economic, political, social, and cultural activities that provide substantive reinforcement to conceptual and cognitive development.

The English version learned within the school setting will itself be largely disconnected to a reinforcing literate tradition since its constraints are directly defined by institutional requirements focusing on skills, coding, and specific problem solving applications. For other than manipulative, functional, and immediate application, English is unconnected to a previous generation and in fact children function largely as translators for parents whose own traditions both oral and literate are in Spanish. This "fracturing" process between generations then may be partly responsible for the type of negative academic performances too often associated with Mexican children. In the long run, the cumulative impact of such processes is to create pockets of populations in which the problem becomes not one of illiteracy but rather aliteracy in English and Spanish.

From an evolutionary point of view it may be suggested that this process is a devolutionary one in which succeeding generations are placed at greater and greater risk and learn to
be less able to manipulate its environment efficiently and productively than the generation that preceded it.

**Conclusions**

This work has sought to provide clear conceptual dimensions from whence an appropriate comparative perspective may be gained. We have suggested strongly that to compare "Hispanic" populations at the level of social, educational, and economic statistics by themselves creates a comparative "ecological" fallacy which contributes to the creation of stereotypes rather than understanding. Rather each population must be placed within their appropriate historical, regional, and ecological niches in order to decipher the paradoxes and contradictions of relations between education, occupation, income, and schooling performance and completion. We have shown that Mexicans are predominantly a working, working class population concentrated in the Southwest and attending schools largely devoid of either cultural understanding or cognizance of the "Funds of Knowledge" that could be utilized for instruction. We have demonstrated that schooling practices may contribute to the fracturing of literacy capacities among parents which contribute to their inability to transmit literate knowledge beyond their own generation.
For Puerto Ricans, the regional context of the urban inner city has created boundaries of poverty, unemployment, poor labor occupation, and at risk single parent households. Such contexts in part define the limits of educational success and performance as well as the meaning of the relationship between educational attainment and occupational success. In spite of upper white collar participation, as a group the greatest percentage of Puerto Ricans are distinctly at risk educationally, economically, and ecologically.

On the other hand, Cubans began with a "jump start" and quickly gained educational, economic, and political ascendancy in Miami especially and elsewhere. Their wholesale transfer of religious, educational, and occupational institutions and practices facilitated their rapid mobilization and deployment in the upper occupational and labor sectors.

This paper has also provided a case study of a single population with very specific historical, economic, and labor characteristics which have been constant since the 19th century and which remain unappreciated for their "Funds of Knowledge," their historical place within the region, and their cultural and social potential beyond the medians and means of income and educational standing. We would hope that future comparative
studies would fill in the missing contextual pieces not presented here in order to more fully understand not the "differences" between population that normally arise in a comparative exercise, but rather the common imperatives of historical time, labor and occupational participation, and the "Funds of Knowledge" that contribute to a discovery of the most salient factors within each group.
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Suggested Readings


Biographical Sketches

Carlos G. Vélez-Ibáñez, (Ph. D. University of California at San Diego in 1975) is Professor of Anthropology at the University of Arizona, where he serves as Director of the Bureau of Applied Research in Anthropology. He has received fellowships from the National Science Foundation, (Percy Andrus Gerontology Center), and an Advanced Fellowship from the Ford Foundation. He was a fellow of the Rockefeller Foundation and is an invited Fellow at the Center for Advanced Studies in the Behavioral Sciences at Stanford. His research interests include urban anthropology, political anthropology, aging, education,

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