REFLEXIONES Y PLANTEAMIENTOS
METODOLÓGICOS
Reflections on Multi-method Research: developing an ethnohistorical survey of an indigenous community

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Abstract: This essay begins with reflections on the techniques used in previous research projects, which enabled the author to design an ethnohistorical census for his current work in Ahuehuepan, a Nahua village located in the region of Alto Balsas. This census posed a challenge for the researcher, an anthropologist who has handled several statistical and qualitative techniques in both Mexico and Canada. He shows how it is possible to combine quantitative and qualitative methods, including in a transnational community whose population is highly mobile and where there are few written sources. He includes details about his project to show how it is possible to carry out a study combining different methods and using various information sources.

Resumen: Este ensayo empieza con reflexiones sobre las técnicas usadas en anteriores proyectos de investigación, las que permitieron al autor diseñar un censo etnohistórico para su actual trabajo en Ahuehuepan, un pueblo nahua ubicado en la región del Alto Balsas. Este censo presentó un reto para el investigador, un antropólogo que ha manejado varias técnicas estadísticas y cualitativas tanto en México como en Canadá. Demuestra cómo se puede combinar métodos cuantitativos y cualitativos, inclusive en una comunidad transnacional cuya población es muy móvil y donde hay pocas fuentes escritas. Incluye detalles sobre su proyecto para mostrar cómo se puede llevar a cabo un estudio combinando diferentes métodos y utilizando diversas fuentes de información.

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Reflections on Multi-method Research: developing an ethnohistorical survey of an indigenous community

In their article about their study of transnational migration, Douglas Massey, Luin Goldring and Jorge Durand (1994: 1506) report that respondents from nineteen communities in central Mexico, including five rural ranchos with populations under 2,500 inhabitants, were interviewed using ethnographic methods. In an earlier article Douglas Massey (1987) argues that an ethnosurvey, which involves multi-method data collection, can overcome the limitations of immigration statistics that are prone to measurement problems. His comments on the advantages and drawbacks of his ethnosurvey (see Massey, 1987: 1515), led me to reflect on the research I am currently conducting in Ahuehuepan, a transborder Nahua community in the Alto Balsas region of Guerrero. This paper outlines the logistics of how one can generate both synchronic and diachronic data for statistical analysis in such a community, drawing on a variety of sources.

A multi-method approach combines the strengths of a survey, ethnography and archival research. These very different research strategies complement each other, yet constructing quantitative data out of information obtained through interviews, life histories, and analyzing written records can be challenging. Census figures on smaller communities included in a national population census are at best approximations and often include discrepancies and errors. Furthermore, one may not find much information on such communities in written records. Even conducting a short ques-
Reflections on multi-method research

A questionnaire or a household survey may not be as straightforward as one would think, particularly when working among people who cannot read or write and do not speak a national language. This is often the case for anthropologists studying indigenous communities in Mexico. In doing a study of Ahuehuepan, I faced all of these obstacles. Another logistic problem I encountered was how to combine ethnographic and statistical techniques when dealing with a highly mobile population whose members spend months and even years in other parts of Mexico or in the United States. Past experience using quantitative and qualitative methods, going back to over thirty years, helped me to design and carry out an ethnohistorical survey in many respects similar to Massey’s ethnosurvey.

Previous research using multiple methods

Anthropologists may employ any of many statistical techniques in addition to their ethnographic work. One example is the use of multidimensional scaling by Scott Cook, an economic anthropologist who used this technique to demonstrate that there was no association between ethnic identity and socioeconomic variables by re-examining survey data from the Oaxaca Valley Small Industries Project (Cook & Joo, 1995). In my first research project for my MA thesis I used Chi-squares to test a hypothesis regarding the political behaviour of middle peasants (Schryer, 1971: 105-211). My data came from a survey that I conducted in the town of Pisafllores. It was relatively easy to do that survey; everyone spoke Spanish as a mother tongue, and people only left their homes to work in other parts of Mexico for relatively short periods of time. In contrast, in my doctoral research I did not use any quantitative methods. I did not apply quantitative techniques again until
several years later. The most common statistical technique then being used by the sociologists in an academic department where I obtained an academic position was a multivariate technique called path analysis. Dr. Linda Gerber, who studies voting behaviour in Canada, encouraged me to use that technique to explore connections between property owned, literacy and the holding of public posts. I was able to explain my findings in the light of what I already knew about the economic and political history of the region under investigation (see Schryer, 1984), an example of combining ethnography and statistics.

My next research project, dealing with a violent struggle over land in another part of the Huasteca, was more ethnographic than historical. That social conflict lasted throughout the 1980s and 1990s. I did open-ended interviews with peasant leaders as well as landowners whose properties had been invaded, and at the same time carried out a survey of all men in Tlalchiyahualica, a Nahua village. This was the first time I conducted a survey in a community that is not a cabecera and where most people do not speak Spanish. The result of that survey enabled me to include some numbers (purely descriptive statistics) that were included in a book-length monograph (Schryer, 1990: 90). Little did I know then that the data from that survey were to be used later for logistic regressions, another multivariate form of statistical analysis. That exercise took place after I gave access to my Tlalchiyahualica survey data to Dr. Sally Humphries, at that time taking a course in advanced statistical technique at York University. She used my data to find out which factors could explain peasant militancy. The paper written for that course became the first draft of an article joint-authored by her, myself and Jonathan Fox (Schryer, Humphries & Fox, 1989). I will not dwell on the technical details, except to mention that we used a nested dichotomous independent variable, and that the failure to come up with an explanation for some solid statistical results made it necessary for
me to go back to the Huasteca to conduct more interviews and carry out more historical research before we could make sense of our findings. That research project illustrates the need to go back and forth between quantitative and qualitative methods, but I had not yet considered the possibility of simultaneously using contrasting methods.

Between the time of my project in Hidalgo and my work in Guerrero, I did research on Dutch immigrant farmers in Ontario, Canada. That research, based on long interviews, coincided with a period when I became better acquainted with the research done by Pierre Bourdieu (Bourdieu, Chamboderon & Passeron, 1991: 254), including his use of multiple correspondence analysis, which is a non-inferential, exploratory method used to explore large, messy data sets. That is why I chose to use an almost identical technique for identifying similarities and differences among sub-groups of Dutch immigrant farmers reported in a book (see Schryer, 2006: 213-242). When I resumed my fieldwork in Mexico in 2004, after a decade of research in Canada, I chose the Alto Balsas region in Guerrero, with the intention of combining various research strategies including participant observation, formal interviews, archival research and conducting a survey if feasible.

Research in the Alto Balsas region of Guerrero

My research in Ahuehuepan must be placed in the broader context of a region that includes at least 18 other Nahua communities (pueblos). This region came to the attention of both researchers and politicians in the early 1990s when several social scientists from Xalitla adopted the name ‘Consejo de los Pueblos Nahuas del Alto Balsas’ (CPNAB) in a political struggle to stop the construction
of a hydroelectric dam (Hémond, 2003: 332-333). One of these professionals, Eustaquio Celestino, is an anthropologist who later compiled a comprehensive bibliography of the research done by anthropologists and historians in Guerrero, including in his home region. That prior work allowed me to become more familiar with the Alto Balsas, although I found little information relating to Ahuehuepan. As far as I have been able to determine, only one researcher, José Antonio Flores Farfán, had done fieldwork there, and subsequently published a short booklet on the speeches given by elders (Ramírez Celestino & Flores Farfán, 2008).

While little research has been done on Ahuehuepan, there is an abundance of information about several other communities, some of which border on, or are at short distance from, Ahuehuepan. One of those communities, Ameyaltepec, has hosted several anthropologist, going back to Peggy Gold (1963) who did research on aesthetic values and art style in this pottery producing village, comparing “z” scores for item pairs to test several hypotheses about styles and aesthetic preferences (see Gold, 1963, Appendix D, 67-81). The next person to work there is Catherine Good. Her book *Haciendo la lucha* (1988) covers the development of a craft and arts industry, including amate painting, for which the region became well known well before the early nineteen. In her book (p. 30) she mentions that the inhabitants of Ahuehuepan followed the example of Ameyaltepec in developing a successful craft industry. On the topic of international migration, including migration for Ahuelican, I consulted several articles by Martha García Ortega. The only person who seems to have done ethnographic fieldwork on the internal migration of agricultural workers, from Tula del Rio to the state of Morelos is Adriana Saldaña Ramírez (2004). I should also mention Aline Hémond (2003), who did most of her fieldwork in Maxela and Xalitla. Her book on amate painters, published in France, primarily deals with the aesthetics of Nahua arts and crafts, and art as an expression of resistance, but
her research also looks at ethnic stereotypes, local political conflict, and wealth differences and other forms of social inequalities within and among Nahua pueblos. Apart from Hémond, several other European scholars have done work in the Alto Balsas region: Jane Hindley (1996) from Great Britain, whose doctoral thesis deals with political mobilization and political reform; and Henry Kammler (2010), a German sociologist who examines religious conflicts in Ahuelican and Oapan, as well as the lack of such conflict in San Miguel Tecuiciapan. In preparation of my own fieldwork, which included learning a different version of the Nahuatl language, I drew on the work of Jonathan Amith, who did linguistic as well as ethnographic research (see Amith, 2002). He also wrote several chapters in a volume (1995) focusing on the role of popular art from the region in public protests, and later published a book (2005) dealing with the colonial history of Guerrero, with references to many Nahua towns in what is now the Alto Balsas region.

My fieldwork in the region started in 2004, with an initial goal to investigate the process of ethnogenesis, i.e. the formation of a regional identity associated with the process of political mobilization. I changed my focus when I realized that, apart from a handful of intellectuals, the inhabitants of this region do not identify themselves as Nahuas of the Alto Balsas. Instead I decided to investigate the transformation of this part of Guerrero as part of an ongoing process of globalization. One of the striking features of this region, in stark contrast to the largely agricultural and cattle producing economic of the Huasteca where I did my earlier research, is its diversity of occupations. The nature of migration is also very different. People from the Alto Balsas started moving to large urban centres in the United States as undocumented workers, starting around 1970, and as documented workers going back to the 1950’s (see also García, 2006). In contrast, seasonal migrant agricultural workers I had earlier encountered in the Huasteca
worked only within Mexico. Even internal migration is different, since the majority of Nahuas from the Alto Balsas travel to other parts of Mexico as craft vendors.

For the following three years I spent anywhere from three weeks to several months living in Ahuehuepan, with short stays of one or more weeks in Ahuelican, Xalitla, Amelaytepec and San Agustín Ostotipan. I also did interviews with craft vendors in Igualta, Taxco, Cuernava and La Peña. In 2006 I was ready to start presenting papers in public forums. I had by this time made my first trip to a larger urban centre in the United States after realizing just how many people from the region had been, or were still, living and working in the United States, mainly as undocumented workers. My preliminary findings were published in a Mexican on-line journal and in chapters in books that later came out of conference proceedings (Schryer, 2007, 2010a, 2010b). After 2009 I concentrated most of my efforts on Ahuehuepan.

AN EVOLVING RESEARCH PROJECT; DESIGNING AN ETHNOHISTORICAL SURVEY

Initially I lived in Ahuehuepan in order to master a form of spoken Nahuatl that was different from what I had earlier learned in the Huasteca. I had not planned to stay too long in that town, but in the end I made Ahuehuepan the focal point of my research. However, it soon became apparent that my fieldwork was going to be different from my earlier projects: a greater reliance on key informants; the need to find ways to collect data on a highly mobile population; and coping with mistakes and gaps in written records.

From the beginning I had planned to do a household survey, but soon realized that it would be difficult to do so because half
of the adult population of Ahuehuepan does not live there year round, not counting entire families that have not been home for many years. When I discovered that about a third of its houses were shut closed, and that the people who live there were either children or people older than fifty years, I almost gave up the idea of doing a household survey. It did not make any sense to go from door to door or to personally contact everyone, as I had done in Tlalchiyahualica. My first lucky break came when a man who worked in the local health clinic showed me the original forms that were filled out when the national population census for 2000 was conducted. I asked him and two other men to indicate which names on those forms corresponded to each of the four barrios of Ahuehuepan. However, these forms were uneven; some were typed while others were hand-written in hardly legible script. I also discovered that at least ten people, including several older men whom I had met, had been left off the census forms. Moreover, on several pages boxes for level of education were not ticked off. On other forms occupation was left blank. I later discovered that most of the cases of people apparently without schooling or an occupation were living somewhere else at the time, and that eleven children in the census had actually been born in the United States and had never visited Ahuehuepan. Nevertheless I typed everybody’s names, plus their ages and any other census data, into an excel spread sheet. That spread sheet was later used to record new names.

As I got to know more people I became aware that in a town of less than 300 households almost everyone knows almost everyone else. So my next source of information became the memory of several people, particularly a woman who had lots of time to help me; she is partially paralyzed due to an accident many years ago and can no longer walk, but has a good memory and knows many people from her home town. With her help, and the assistance of several relatives, I was able to compile a complete
list of households, which enabled me to expand and correct the list I had obtained from the population census. They brought to my attention the fact that several names that I thought referred to different people actually represented just one person who had changed their surname. To make things more difficult, about a quarter of all individuals had more than one first name, and the names that showed up in the census and other records were not always the official ones. I next started making inquiries about the whereabouts of people who spent time in other parts of Mexico or in the U.S. For each person in our growing list I asked who were the parents and grandparents on both sides, which provided me with even more names that I could cross-reference later on, especially once I started my archival research.

Writing down information obtained by asking numerous questions and then writing down notes in the patio of an adobe house filled with the noise of chickens, dogs and loud music blaring from a neighbour’s house, was less than ideal. In the evening I transferred all information to a laptop in a room I rented in another house, and the next morning I would go back to the other house to sort out inconsistent or ambiguous information. At first I was still struggling with a new version of Nahuatl. When I was unable to finish going through the whole list after three weeks, I had to resume the work on my survey during my next trip, six months later. The task seemed never-ending, and I came to the realization that there was a limit to what people could tell me, especially when going back more than three generations. So we had to find older people who could provide additional information; but they too would eventually come to an impasse and say “maas yoowehkaaw” (‘it is too far back’). It also became evident that people sometimes did not know names of American-born children. Likewise, they could not tell me a lot about people who had left a long time ago.
In the case of people no longer alive, I was able to confirm the names I was given, and find more names, by looking at the records of the Registro Agrario in Chilpancingo. One of the binders I consulted includes an agricultural census taken in 1969, but it soon became apparent there were misspellings, as well as names my older informants did not recognize. On the other hand my informants were able to identify, and provide more accurate information on, women whose surnames had been left out of agrarian records, or people who had been given incorrect names. I subsequently found several other written sources: a typed list (circa 2010) of all the names of people more than 70 years old eligible to receive social assistance; and the names of all people who were born, married or died since 1992 recorded in the Ahuehuepan branch of the civil registry. In 2013 I found out that rezandero (a religious specialist), now deceased, had left a booklet where he had recorded everyone who died between 1988 and 2008. I had to pay many visits to, and negotiate with, his widow, before I could make copies of those names by hand. I have yet to visit a civil registry in a nearby city to find out the birth dates, names of surviving spouses, and the dates people passed away prior to 1988. Nor have I yet consulted school records.

Ahuehuepan is not a cabecera but it does have a juzgado, where local authorities, including a comisario municipal, conduct their business. Law enforcers, heads of committees and men who take care of church affairs, who are all elected or appointed for a one year term, also meet there. I wanted to include information on past as well as current post holders in my survey, but from the day I arrived in Ahuehuepan I had been told there were no written records. However someone did direct me to an elderly man who can recite from memory the names of all the jueces (another name for comisario municipal) and their alternates since the time Ahuehuepan became a pueblo in 1924. Not until my sixth visit, when I stayed for several months in Ahuehuepan, did I discover
the existence of a notebook with the names of all authorities, including minor posts, going back to 1987. In order to obtain information on political affiliation I asked a local teacher in charge of compiling a list and photo IDs for all eligible voters to let me use a camera to make a copy of a 30 page document. That document, which had people's names and ages, also listed each person's party affiliation, although no party affiliation was recorded for those who were then living in the United States. Instead they were shown as being “in the north” (norte). I subsequently discovered that some of those people had actually never been in the US, but rather had second residences as craft vendors in places like Mazatlán, Puerto Peñasco in the northern part of Mexico. This mislabeling illustrated that some of the people who provided information about absent family members did not have a clear sense of an international border.

Access to these additional sources of data helped me flesh out my survey; however, this new information also presented problems. While the civil registry and a few other documents record date of birth, the voters’ list and both the 1969 agrarian census and the 2000 population census mention chronological age. In comparing ages from three sources for the same person, I often found conflicting birth dates. For example, someone would have the same age in 2000 as they did six years later. In general the 2006 voter’s list, probably compiled at least a year earlier, makes people look two or three years older than they are. However, the age of very old people (over 70) is invariably exaggerated, especially if such people “look really old”. This is not surprising given that most of these older people are illiterate and often do not know what year they were born. In about half of these cases, I was able to obtain a more accurate birth date by using age as reported in the 1969 census, when such people were much younger. In other cases I had to look at other lists or to go back to the civil registry records.
For my ethnohistorical survey I wanted to not only include the names of people going back as far as I could go, but to match the names of people with specific parcels of land. Every ravine, *loma* and mountain top has its own name in Nahuatl, as well as each place where people grow maize and keep their animals. However, most of those names are not shown in any map. In order to obtained accurate information on the land to which each person has access, I started to travel on foot or by mule through the different parts of the territory of Ahuehuepan. I used a GPS unit to take readings and at the same time asked a guide to tell me about the places I visited and the names of people associated with each place. I subsequently linked that ethnographic and historical information to a map using a GIS (Geographical Information System) program. I have already ascertained that some people have access to much more land than others in a rather complex legal system of land tenure. Ahuehuepan is unique in the Alto Balsas in having at least five forms of rural property: *comunal, ejido, ampliación de ejido*, and two types of *pequeña propiedad*. Ownership of animals, including oxen or *machos* for ploughing, is another matter. All these indicators of productive wealth will be included as data for my ever growing ethnohistorical survey. This additional information helped me to better interpret the documents from the *Registro Agrario*, as well as the few references to Ahuehuepan in the writings of scholars (e.g. Amith, 1995: 140). I have already done two trips to finish my GIS map, with one more trip that will probably be done around the time this article appears in print.

At an earlier stage of the project it became clear that the process of creating my ethnohistorical census was going to take a long time. Hence, I arranged to conduct between one and two hour weekly phone interviews from the apartment where I live in Toronto starting in the fall of 2011. I call the same woman in Ahuehuepan, who in turn directs any questions she cannot answer to her sister-in-law who is more familiar with Ahuehuepan’s
population through daily visits and attending meetings. On several occasion they find an older informant to join our weekly conference calls to clarify any discrepancies or omissions. At the beginning of each interview I am usually first told about any recent weddings (often young couples who have already been living together in the U.S.) and recent deaths. I anticipate that these phone interviews, as well as ongoing visits to Mexico and the U.S., will continue for at least another year. Finally, in order to make sure that any information I had about families living in the U.S. is accurate, I compiled three lists, one for Los Angeles, one for Houston and another for several towns located close to Sacramento. In each place I know someone willing to go over those lists, make corrections, and provide new names. I am still inputting this data, and now have 4000 names, including the names of children.

**Ethnosurvey versus Ethohistorical survey**

Only after I was well under way in my research project did I realize that Massey’s ethnosurvey is similar to my ethnohistorical survey. Both forms of collecting and organizing data are good tools for achieving a greater understanding of such social processes as status attainment, occupational attainment, changing class relations and residential mobility (see Massey, 1987: 1515). An ethnohistorical survey is better suited for research that is largely inductive in nature. However, in some respects the two approaches are quite different.

Massey’s ethnosurvey was created as a way of analyzing data obtained from nineteen communities. The members of their team were trained in ethnographic methods so that they could learn about the broader context, including the history of each commu-
nity, as well as extended households. This knowledge enabled each interviewer to better solicit information from the individuals they interviewed. They did not use a standard set of questions; however they still had come up with data that could be coded in such a way that they could make both valid and reliable statistical inferences about migrants from all communities. They also established a set of variables prior to conducting their final interviews. In contrast, my project is more open-ended and exploratory, which gave me more leeway for adding additional variables as I came across new information and insights. However, that also means going back and filling in additional data for people already recorded on a single data sheet. Since not all of those variables (like legal status as immigrants) applied to people in different time periods, I will not be able to apply inferential statistical techniques for my entire longitudinal data set as I did in my study of the political involvement of property holders in Pisaflores.

A unique feature of my approach is that the data itself keeps changing over time, until such time that I put a stop to it. Consequently some young people still attending school when I started my survey were married and had children by the time I met them working in the U.S. or living in other parts of Mexico ten years later. Sixteen people included in my ongoing survey have died over the past decade, so I have to constantly re-input data, specifically age and whether someone is alive or dead. At the same time, new variables are added. Over the last six years eight new columns were added, which in turn required inputting additional data for those individuals included during an earlier phase of the survey. Hence my spreadsheet now has 36 columns, some of which are composites. At some stage some of those columns might be merged, a common procedure for producing a contingency table. Once the final data is ready for statistical analysis, I will use multiple correspondence to identify clusters. With that non-inferential statistical tool the model follows, or is derived from, the data, rather than
the other way around. Other, inferential, techniques will then be used for sub-sets of the data, depending on the kinds of research questions posed and the causal assumptions I can make.

Massey points out his ethnosurvey, which “made improvements on data obtained from the conventional sources of immigration statistics”, could have been better (Massey, 1987: 1515). He would have liked to select his communities randomly, and randomly administer his semi-structured interviews in each place to create a representative two-stage cluster sample. Ideally my ethnohistorical survey should have been a team project and included more towns in the Alto Balsas. Massey also comments on the high costs and professional demands his ethnosurvey has. These same drawbacks equally apply to an ethnohistorical survey. My current research project began when I still had the teaching and administrative duties associated with being a tenured faculty member, and later as head of a large department. I spent most of a sabbatical leave and several research and development semesters gathering data until both funding and my free time ran out. Fortunately I was able to find an alternative source of funding for my research, enough to cover the cost of trips, including per diem expenses, until the project is completed. However, I would not have been able to spend as much time on the project as I have, nor would I still be doing so today, if I had not accepted an offer from my university to take early retirement and instead become professor emeritus. Indeed, most of the work for my ethnohistorical survey was done during the last three years.

In some respects my ethnohistorical survey is similar to my ranchero study, which consisted of a retrospective historical survey constructed from data obtained from archival sources. In other respects my ethnographic survey it is more like the household survey for my MA study or the survey of Tlalchiyahualica. Given the many different sources of data, my ethnohistorical survey is a hybrid concoction as well as an ongoing process.
Summary and conclusion

In doing my study of Ahuehuepan, I had the advantage of years of experience doing multi-method research, including prior work in indigenous communities. I was also able to draw on the findings of other researchers who had already done work in the Alto Balsas region. My ethnohistorical survey, which involves creating a data set derived from multiple sources, makes it possible to overcome the many limitations of doing research in a small town with a highly mobile population. My research in Ahuehuepan is far from over; I anticipate that my research, including any statistical analysis, will be completed in about four years, at which point I will be ready to start writing a book-length monograph. At this stage of the project it was useful to reflect on the methodological implications of my evolving ethnohistorical survey in the light of a somewhat similar ethnosurvey developed by Massey. That exercise also led me re-examine the techniques I had used in the past to collect data from different sources, and how my previous research was different from my current work in Guerrero.

I hope that social scientists doing research in remote rural communities will gain some insights from my methodological reflections on my past research, and a detailed account of my ongoing ethnohistorical survey in the Alto Balsas region. My message is that it is feasible to produce quantitative data suitable of statistical analysis in an indigenous community with a highly mobile population and a paucity of archival records; but the task requires patience and perseverance.

Citations

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