

Fig. 1. Traditional settlements of indigenous languages in Mexico, 2000 census



Fig. 2.1. Distribution of Otomanguean languages, according to Josserand (1983)

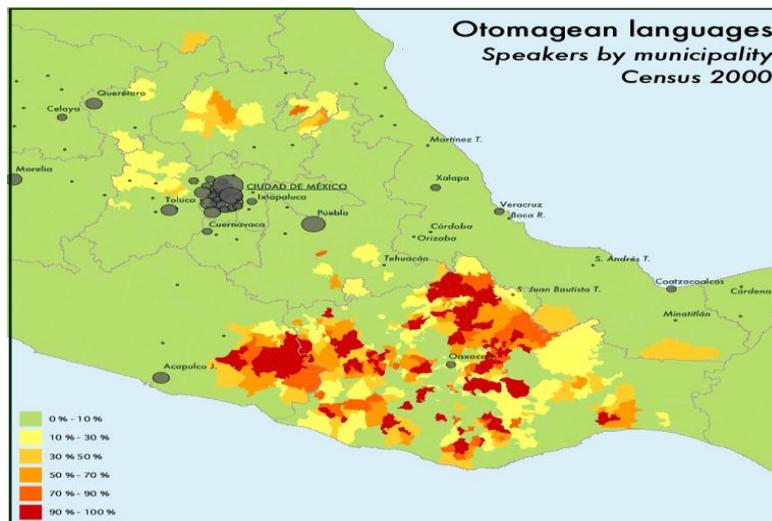


Fig. 2.2. Otomanguean languages in Mexico, 2000 census: density of speakers by municipality

These maps show how conspicuously the settlement areas are shrinking nowadays, in terms of demographic density: most indigenous languages of Mexico are now scattered and atomized within their colonial areas of settlement – without mentioning the extension of the pre-Columbian areas, in many cases, wider and much denser. Comparing both maps, one has the impression to see a former ocean converted into an archipelago – a metaphor fully confirmed by historical facts. A more detailed map would show how the “Popolocan archipelago” appears nowadays as an atomized language bundle, scattered between several

Mexican states (Oaxaca, Puebla): Mazatec would show up as a spot resembling a big ant on the right, whereas on the South-West, Ixcatec and Chocho would loom as tiny fragments.



Fig. 3. Mazatec and languages in contact in the Papaloapan basin, with data for the item n° 467 from Kirk's cognate sets (1966), as a sample of the ALMaz

The cluster of scattered spots on North-West stands for varieties of Popoloca (Northern, Eastern, etc.). The range of speakers goes from 4 (Ixcatec) to 250 000 (Mazatec), whereas Chocho has few hundreds of speakers left, and Popoloca no more than 8000. Ixcatec is therefore considered as a language doomed to extinction within the next decades. Chocho will disappear next, before Popoloca. Mazatec classifies as a “vulnerable” language according to UNESCO criteria, and will probably still resist during this century, but may reach the next century in a very different shape than nowadays, while many varieties will probably become extinct. Dialect variation in Mazatec is far stronger than between Estonian dialects, as verb inflection patterns depend on preverbs, whose variation happen to be strongly embedded in social and geographic networks of local vernaculars and regional koinès (such as Huautla, Jalapa de Díaz, San Pedro Ixcatlán, San Miguel Soyaltepec).

Mazatec is famous for being one of the most complex languages in the world, as far as phonological and inflectional patterns are concerned. Major contributions on Mazatec sound patterns, tonology, morphology and syntax, were made by such distinguished scholars as Kenneth Pike (1948), Eunice Pike (1956, 1967) or the association of both (Pike & Pike, 1947), George Cowan (1965), Paul Livingston Kirk (1966, 1996), Carole Jamieson (1982), Brian Bull (1984), Gudschinsky (1958, 1959a, b & c), Schram (1979a & b), Schram & Jones (1979), all of the Summer Institute of Linguistics: S.I.L., and more recently, by Daniel Silverman (1997) or Silverman & al. (1995), Chris Golston & Wolfgang Kehrein (Golston & Kehrein, 2004), Peter Ladefoged (Kirk & Ladefoged, 1993), etc. A fairly elegant spelling has recently taken stronghold in all the area on the basis of the former SIL typographic conventions used for Bible translation (Duke, s.d.; Regino, 1993). This outstanding attempt at codifying the language has a strong impact on bilingual education, which became official since 2003 – though it tends to remain more an intention than an actual practice, as we shall see soon. In the following argumentation, we'll take as granted that the Mazatec language area defines what we shall call an Open Small World (OSW). A Small World would be a monad (i.e. a monolithic, irreducible entity), whereas an Open Small World is a world of its own, though open to tropisms, integration with the outside world and neighbouring worlds, and has fuzzy boundaries. This piece of critical work is only part of a wider inquiry and

survey of where and when people speak, write or read Mazatec as native speakers. Next stages of this survey will take into account migrant communities and individuals in Puebla Mazatec settlements (up to now, never surveyed), Tehuacán (the s.c. “Barrio Mazateco”), Federal District (Mexico City) and elsewhere – such as the new settlements of Lowland villages in Veracruz, after the building of the Miguel Alemán dam, which led to the actual deportation of part of the population of farmers involved in the *microfundio* system (Benítez, 1993, McMahon David, 1971), which had to give way to modern extensive agrarian systems such as sugar cane and herding in the Lowland plains, or café in the Highlands, until the eighties (Boege, 1988). For the time being, we shall cling to the situation the ALMaz project (*Atlas Lingüístico Mazateco* i.e. *A Linguistic Atlas of Mazatec*, in progress) made available to us about how Mazatec is handled in everyday life, socioeconomical and sociocultural patterns, and the plight for bilingual education will stand as a mirror of changes happening in the atomized and multilayered space and time where and when Popolocan languages are still spoken and thriving for survival in a globalizing world.

2. Mazatec as an Open Small World (OSW)

We'll now turn to Mazatec as a case study for the Popolocan plight in the decade 2010, as a linguistic stock in which three languages out of four are doomed to language shift in this century. Mazatec is all the more interesting to observe in detail, as it apparently has more chance to resist assimilation in the long term, thanks to its demographic weight (about 220 000 speakers, i.e. nearly a quarter of a million), and to emerging language engineering for literature and education through modern spelling conventions. Though, Mazatec, in spite of these assets, is still a very vulnerable language. Our attention was first called on this state of things when we were eliciting data for the ALMaz (*A Linguistic Atlas of Mazatec*) in Huautla and San Jeronimo Tecoatl in 2010. Our pessimistic impression has ever since been confirmed by facts we could observe during fieldwork elicitation in 2011. In a few words, poverty hits strongly the whole Mazatec area, the collapse of the more recent agrarian systems of café crops and cooperatives, the consequences of the Miguel Alemán's dam in the years 1950, still to be seen, and a constant drive to migration to urban centres such as Tuxtepec, Tehuacan, Oaxaca, Puebla, México DF, or the USA, make the situation of the Mazatec language paradoxical. On the one hand, everyone in the area is proud to speak such an impressively articulate and undoubtedly aesthetic language, extremely well preserved from contact with Spanish in its lexicon and grammar (purism, with its inhibitive correlates to speak and improve the functionality of his/her language, as to be seen in the Nahuatl area, seems alien to Mazatec speakers, as far as we could observe). On the other hand, everyone is fleeing from the area, as economic depression gets bitter and bitter everyday, and more and more parents address their children exclusively in Spanish. By and by, the illusion of Mazatec sociolinguistic continuity is vanishing in front of raw facts, and many young parents nowadays even realize that they cannot pass on the language to their children for the simple reason they were never given the opportunity to speak it with their own parents, aged 40 or 50...

Some remain optimistic and do not seem upset, others enter in a kind of panic, realizing how the inner world of Mazatec society has been changing within the last 20 years. “Language Nests” or *Nidos de Lengua* are being created, school masters are desperately trying to keep on pace with new teaching materials published by the SEP (Secretaría de Educación Pública: *Public Education Board*), or to fulfil the requirements of the law issued in 2003. Though, they also realize how little they know about Mazatec grammar and spelling, or



Fig. 4.1. An orographic and hydrographic map of the Mazateca area

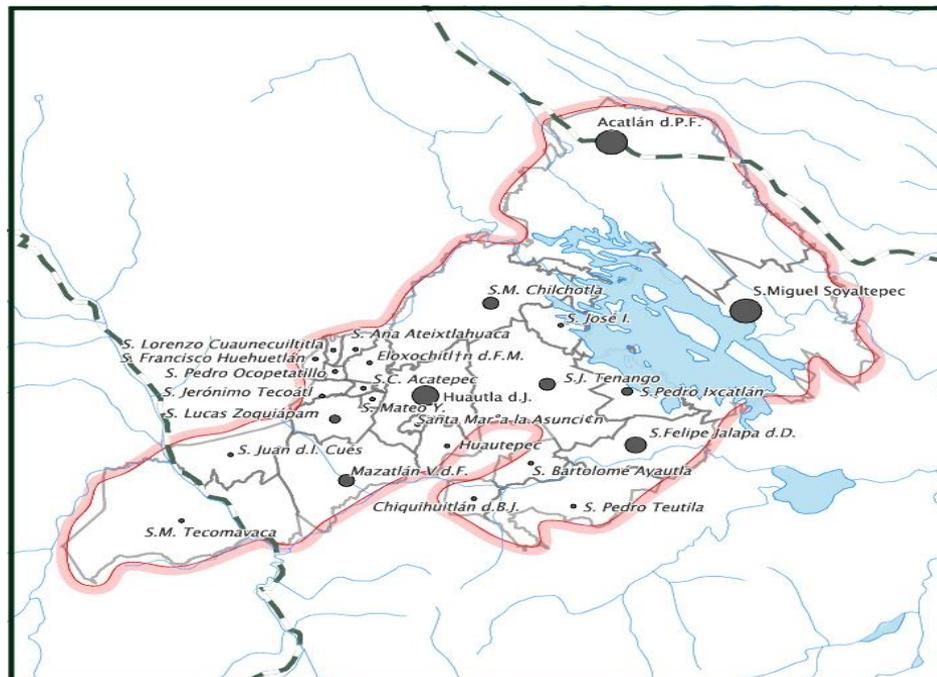


Fig. 4.2. Map of municipalities, Mazatec area

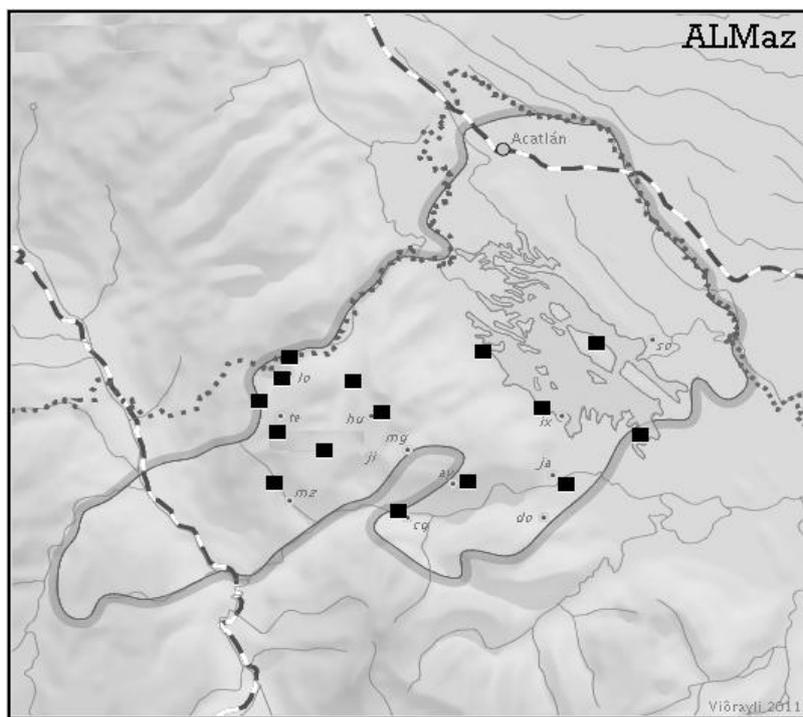


Fig. 4.3. Localities surveyed in 2010-12 by the ALMaz staff doing fieldwork (Jean Léo Léonard, Antonia Colazo-Simon, Fabio Pettirino)

Components of the Mazatec OSW

At this point, let us make clear how these spots on the map cluster into significant sub-areas. Behind the dam stands San Miguel Soyaltepec, a very important centre from ancient times, which was probably connected through the plains to the Coastal zone of the Papaloapam Basin. The size of the spots in fig. 4.1 & 4.2 giving a hint at demographic weight, we can state that it is still the biggest urban centre in the Mazatec lands. The town of Acatlán, at the north of Soyaltepec, is more Spanish speaking than Soyaltepec. Inhabitants of the archipelago inside the artificial lake – within the huge pool created by the dam – use the same variety as in San Miguel Soyaltepec, as do the new settlements, such as Nuevo Pescadito de Abajo Segundo, in the South. A dialect network probably as intricate as that of the North-West Highlands (around San Jerónimo Tecoaatl) probably existed before the flooding of the microfundio agrarian society of the Lowlands. Most of these dialects merged into mixed dialects, apparently under the strong influence of the Soyaltepec koinè (we use this term as “local speech standard”, i.e. pointing at an oral, more than at a written koinè, though nowadays a Soyaltepec written koinè does exist, strongly supported by local poets and school teachers). We’ll call this first segment of the Mazatec world “SM LL” (San Miguel Soyaltepec LowLands). This label entails therefore a strong urban centre, with strong local dialect intercourse and mingling, in a region whose agrarian structure has been straightforwardly drowned by a pharaonic dam project sixty years ago. The consequences of this dramatic redistribution of agrarian resources and property, and of the displacement of over 22 000 peasants, are still to be seen. Linguistically, this event partially enhanced acculturation and assimilation to Spanish under the influence of urban centres such as SM Soyaltepec, but before all, Temascal, Acatlán, and Tuxtepec.

The second area, from Lowlands to Highlands, covers the Western shores of the Miguel Alemán lake, as a stripe, from S. M. Chilchotla and San José Independencia to San Pedro Ixcatlán, in the continuity of the plain where stands the important urban centre of Jalapa de Díaz. This Lowland region displays a whole range of small urban centres, dominated by sugar-cane and herding (the agrarian couple *caña y ganado*). Though we should consider

Jalapa de Diaz as a sub-area of its own, because of its size and its links with other regions, such as the Highlands (Huatla) and the so called *Cañada* or Canyon (Chiquihuitlán and beyond), we may lump both sub-areas as the Western Plain.

The Highlands qualify as the third main area, after the subdivisions of the Lowlands into the SM LL and the Western Plain. In turns, it divides into two sub-areas: central, with huautla, and the Western Highlands – a dense network of small urban centres such as San Lucas, San Jerónimo Tecoatl, San Lorenzo, San Francisco Huhuetlán, San Pedro.

We'll call the fourth complex “the Cañada Connection”, where the most conspicuous urban centre is Mazatlán de Flores, on the periphery of the Canyon, and Chiquihuitlán. This is a region of intense language contacts: from Chiquihuitlán downhill through the Canyon, Cuicateco, a Mixtecan language is spoken. Nowadays, the zone seems to have fallen in the hands of the *Narcos*, and the road to Chiquihuitlán is no more an easy to trip from Jalapa de Diaz, as the ALMaz staff experienced in February 2011. The dialect of a spot such as Santa Maria Tecomavaca, on the Western plateau, has still never been documented, though it is not so far from neighbouring centres such as Mazatlán or Teotitlán del Camino. Though, it forms a sub-area on its own in the Canyon region, because of the low rate of Mazatec speakers, as compared to the central area of the Mazatec world, and its location on the plateau, with a tropism outward the Mazatec area (towards Teotitlán, Tehuacán, etc.).

3. Facts and figures from an Open Small World: the Mazatec OSW

3. 1. Vitality zones

Areas and sub-areas could even be defined by the sole criterion of the rate of speakers, as in fig. 5: H = High rate of Mazatec speakers (over 75 %), mh = mid-high value, i.e. 50% of the population speaking Mazatec, ml = mid-low density of speakers, i.e. 25%, L = low density, i.e. 0-25%, in territories considered as traditionally Mazatec. At first sight we can see that the core of the Mazatec OSW still uses the language intensively (H index), whereas the periphery does not (L on the Eastern shore of the dam and in the Canyon. Two pockets have medium scores: *ml* at San Juan de los Cúes and *mh* at Chiquihuitlán – though the ALMaz team, visiting San Juan de los Cúes in May 2012, could not find any speaker in urban surroundings, and was told that only a fringe of Mazatec households of newcomers from Mazatlán stood in rural areas at the border of both municipalities.

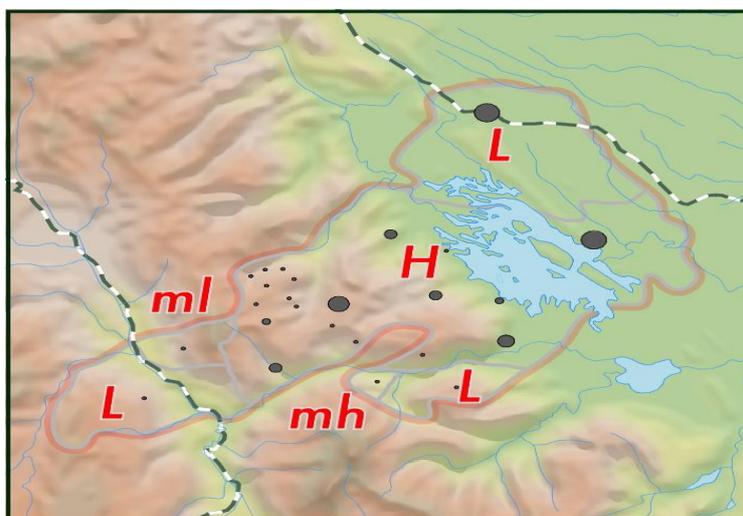


Fig. 5. Levels of practice of Mazatec as mother tongue: High, Low, mid-high, mid-low (data from 1999 and 2000 Census)

In fig. 6 we see first an illustration of the following principle: the more Mazatec is spoken in an area, the poorer the area. The rate of human development, a major variable in socioeconomic statistics, correlates both low standard of living and vitality of Mazatec. Areas with a L index on the map, such as the peripheries of Acatlán and Santa Maria Tecomavaca, which stand on the way of a railroad (thus, on an axial logistic line, as railroads in Mexico only serve for goods, not for people), make up a “wider circle” of acculturation, where Mazatec has no longer – or never had – a strong position in local society.

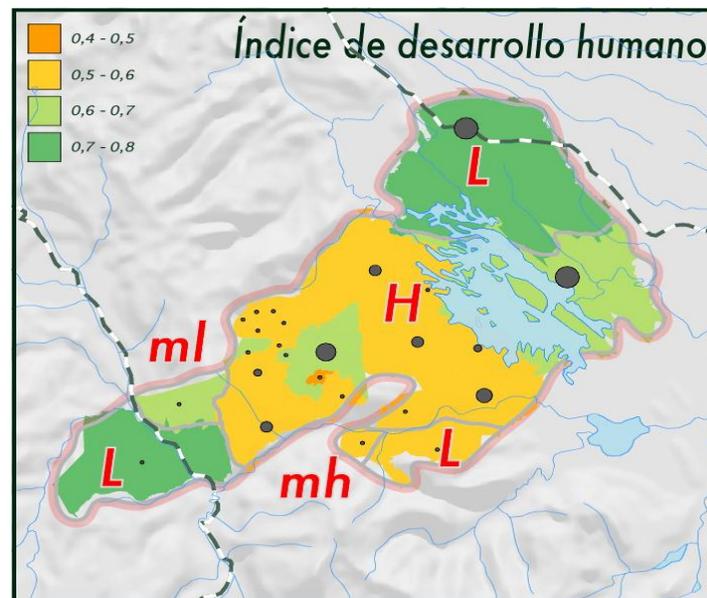


Fig. 6. Rate of human development in the Mazatec area (data from 1999 and 2000 Census)

Second, not unfamiliar too, we see that important urban centres such as Acatlán, San Miguel Soyaltepec and Huautla have a better standard of living than rural areas. Welfare on the dam (over the immersed peasant world, the former microfundio region) concentrates to the Eastern shore and to such new settlements as Nuevo Pescadito de Abajo Segundo. But it does not reach the Plain and the Western shore of the artificial lake. This hints at the impact of government subsidies and infrastructures – mostly as a compensation for the drowning of the former peasant society (McMahon David, 1971).

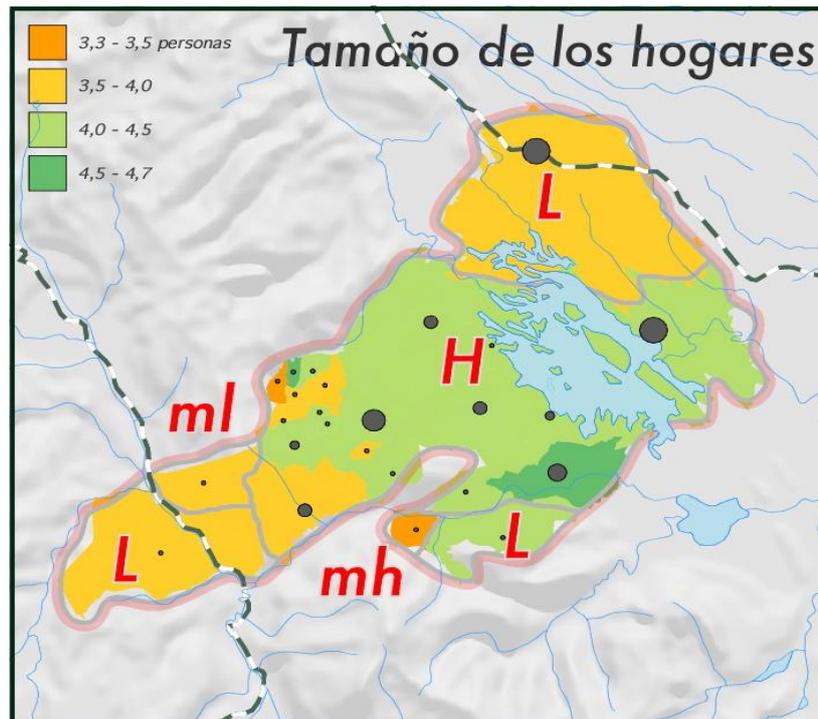


Fig. 7. Size of households in the Mazatec area (data from 1999 and 2000 Census)

Though, fig. 7 (Size of households in the Mazatec area) provides more details: Jalapa homes seem more crowded than in other urban centres, except in San Lorenzo. But this might be due to the attraction of this important town located in the Plain, not far from the big mestizo city of Tuxtepec. In both spots (San Lorenzo and Jalapa), apparent overcrowding might not be such a drastic clue about poverty: it might hint at a swift development or growth. Otherwise, areas of house crowding correlate with low standard of living, as seen before.

3. 2. Demographic patterns: generational layers in the Mazatec OSW

Fig. 8 shows the rate of young population, from 15 to 29 years. This is the most active and productive part of the population, and the most educated. These figures confirm the demographic and economic growth of Jalapa de Diaz and of the Eastern shore of the Miguel Alemán dam. It clearly points at trends towards demographic depression of the younger generation in the Northwestern Highlands (Tecoatl, Santa Ana, Huehuetlán) and, on the contrary, growth of a few central towns near Huautla, as San Lucas and Huautepéc.

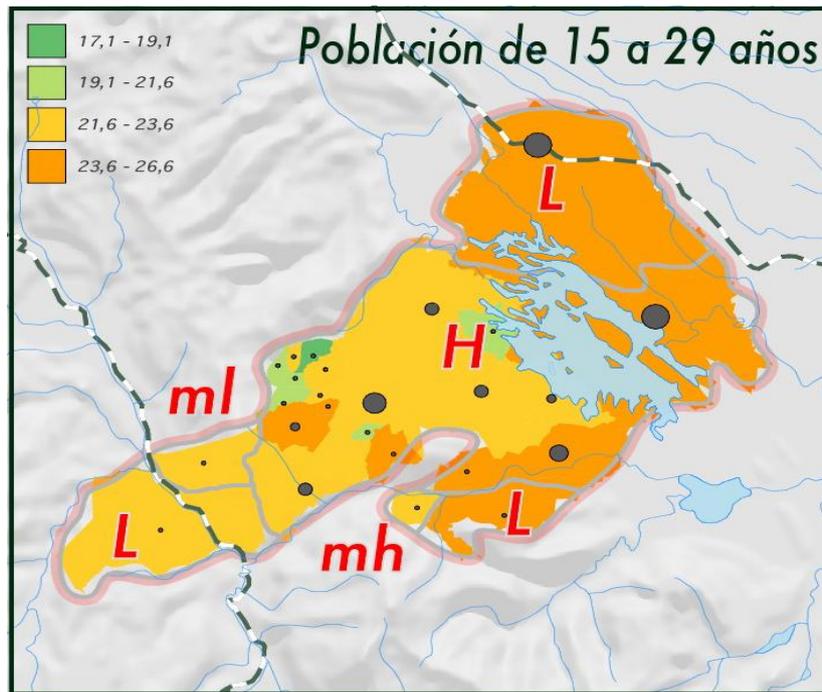


Fig. 8. Density of youngsters in the Mazatec area (data from 1999 and 2000 Census)

Fig. 9 hints at a very diverse group of population: middle age population, who may be residents who cling to their home since childhood, but who may be former youngsters who have emigrated to settle back home later in their lives, after a few years or decades of economic exile. We know that it is the case precisely in the North-western Highlands cluster we just mentioned, when having a glance to Fig. 9.

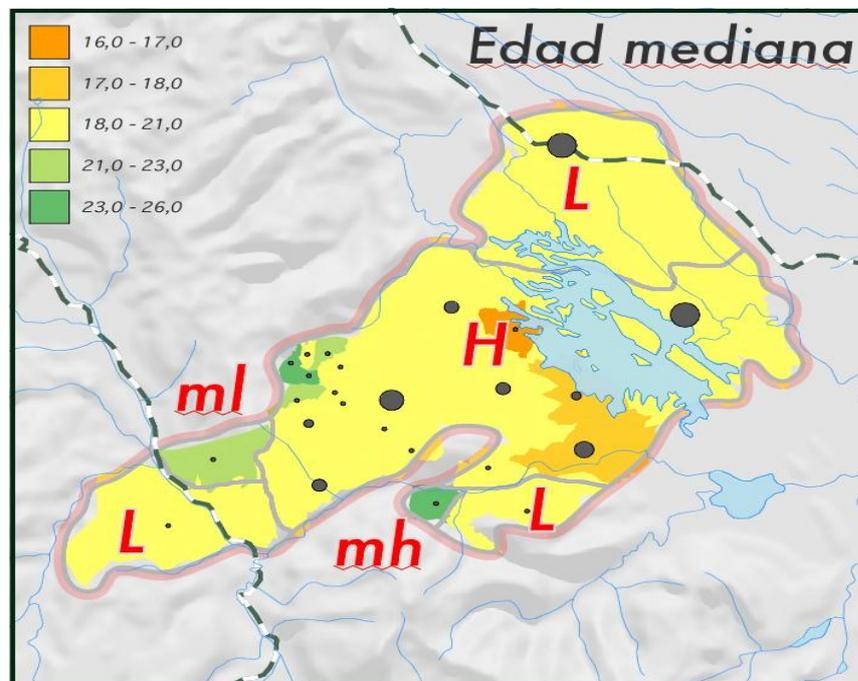


Fig. 9. Density of middle-aged people in the Mazatec area (data from 1999 and 2000 Census)

The same trend would explain density of senior workers in Chiquihuitlán, back from migration elsewhere. Fig. 10 showing the rate of retired senior residents confirms previous

patterns: on the one hand, they correlate with middle age senior density in two sub-areas (the NW Alta and Chiquihuitlán). On the other hand, the map shows that this population is far scarcer in the Lowlands than in the rest of the Mazatec world, especially in Jalapa and Soyaltepec (the South Eastern and Western Plain). Only in the Central Highlands, around Huautla, the figure gets more balanced. Of course, this does not mean that retired people tend to flee towns like Soyaltepec or Jalapa, but that they number less, comparatively, to younger generations.

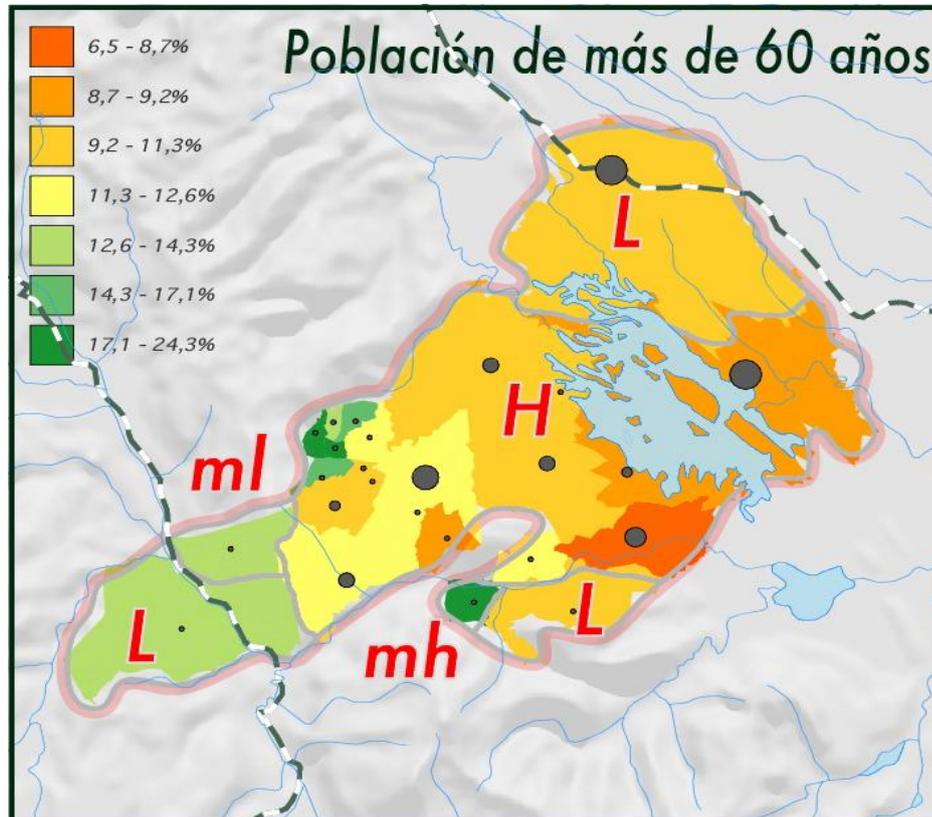


Fig. 10. Density of seniors in the Mazatec area (data from 1999 and 2000 Census)

This trend can therefore be interpreted as a confirmation of patterns already observed in previous maps: these two Lowland centres are economically and demographically more dynamic and active than anywhere else in the Mazatec world. An interesting asymmetry appears between east and west in relation to the mean value (in yellow): less elders, proportionally, in the East (San José Tenango, Santa María Chilchotla) *versus* more elders in the West (San Juan de los Cúes and Santa María Tecomavaca¹). This allows revisiting our previous statement on the patterns of these two villages at the end of the Canyon: their relative higher standard of living seems more precarious and ambiguous than the Eastern Lowlands. As a matter of facts, rural retired population in Mexico ranges among the poorest and economically most vulnerable group. They often depend on younger familiars (their children and grand children) for their living, with an unavoidable negative impact on the standard of living of these. A comparison of the demographic layers sketched in fig. 8 to 10 confirms the dynamism of Jalapa and the aging of the Western Canyon.

¹ The sociolinguistic situation of this buffer zone should be surveyed in detail, as it seems that fieldwork has never been carried out in those municipalities, except a recent ALMaz attempt, which led nowhere. Whole communities of Mazatec speakers settled over 120 years ago in the Southern part of the state of Puebla are not included in the official limits of the Mazatec speaking region, whereas San Juan de los Cúes and Santa María Tecomavaca, where very few speakers are to be seen nowadays, are included into the official map. Ethnolinguistic mapping often displays this kind of paradoxes.

3. 3. Patterns of Material Anthropology in the Mazatec OSW

Fig. 11 belongs to the “classics” of Mexican statistics on indigenous populations: the rate of homes still relying on traditional heating practices, such as fire wood and coal, instead of gas. Indeed, the fact of having *tortillas* prepared with gas or wood is by no means insignificant.

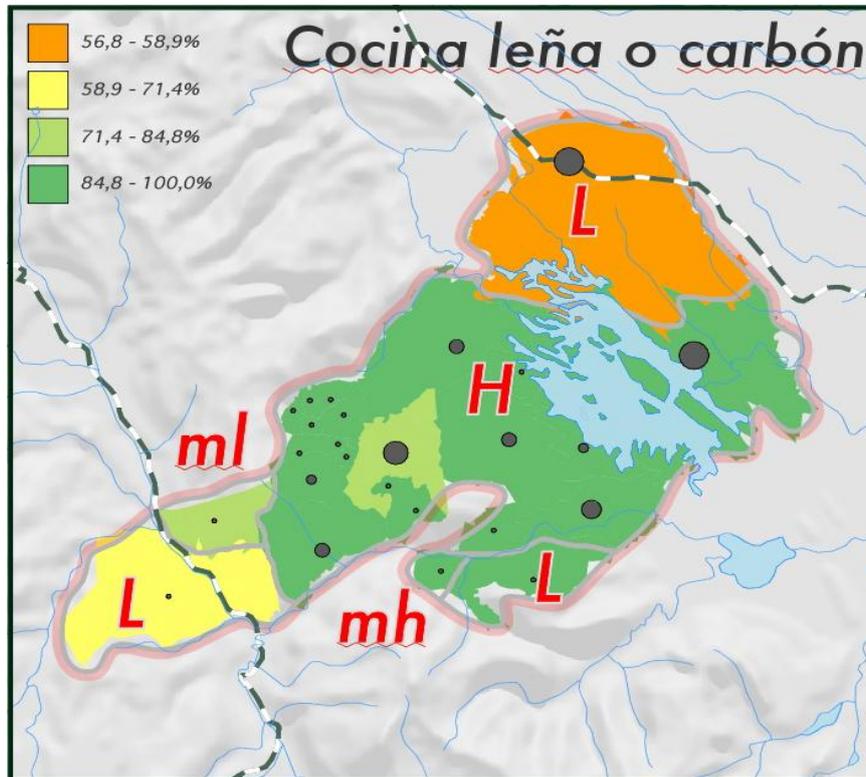


Fig. 11. Use of wood or gas for cooking (source: *idem*)

Gas is used in towns and in middle class homes, whereas cooking with wood or coal is typical of poor, rural homes. *Comedores* and restaurants use gas, but regular homes, especially in the peasant world, use fire wood, in a kitchen without chimney, standing as a separate room in the dwelling complex. This map highly correlates with previous statements and our typology of sub-regions: a vast central or core area, with the highest density of linguistic vitality, uses the traditional heating method, whereas the Eastern and Western peripheries use gas devices, as in towns – and Huautla, as a conspicuous town, does show a lower figure for wood fuelling than the rest of the core area. But these figures hint at an interesting nuance: as SM Soyaltepec, on the Eastern bank of the dam, and Jalapa de Diaz, on the Southern Plain, cluster with smaller towns of the core area, we can guess that their growth and development do not entail getting rid of the former way of life – neither of any true emancipation from general conditions of poverty. They are more active and full of young population than actually well off. Once more, vitality of the indigenous language correlates with poverty.

Fig. 12 allows making even finer-grained statements about relative standard of living: what proportion of the population can actually afford electricity? The low figures may seem odd to Europeans. Though, it does not mean that the rest of the population lives without – they may find a way to channel it home without paying the bill, by wiring energy home from the street, but most people work hard to pay their bill, and can afford only low voltage.

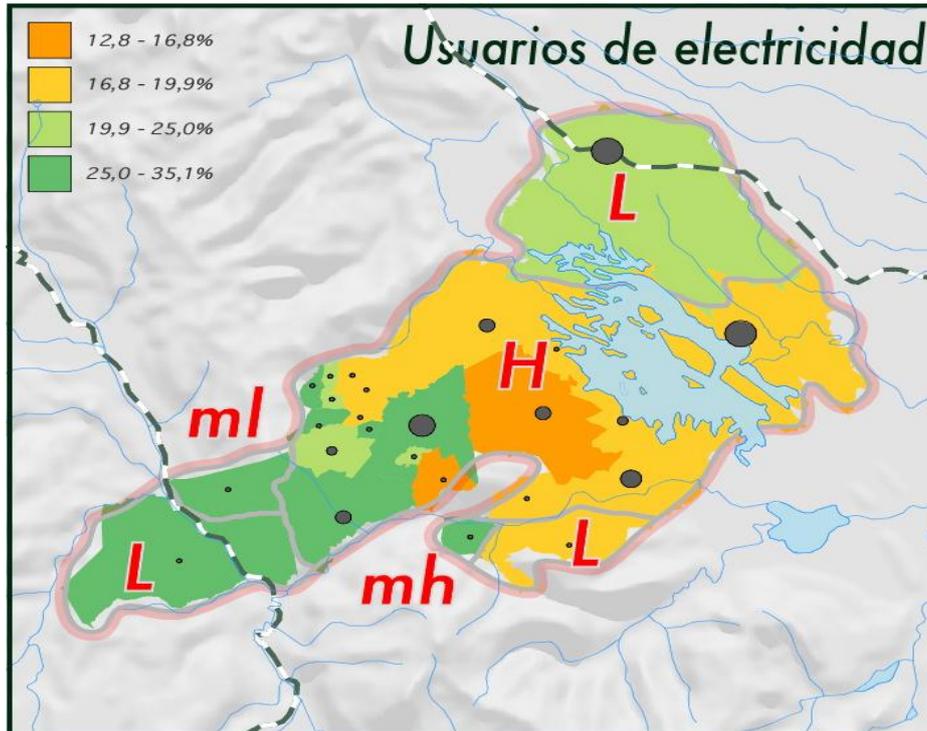


Fig. 12. Households using electricity (source: *idem*)

Nevertheless, map in fig. 12 points at two extreme situations: Huautepec and San José Tenango, which could be called the dependencies or economic subordinates of the Highland city of Huautla. Moreover, the low figures for Jalapa and Soyaltepec confirm our previous assertion: these centres may be demographically dynamic and economically rather attractive, nevertheless, they are not well off.

3. 4. The plight of literacy in the Mazatec OSW

These trends are confirmed by the data on figure 13, showing literacy rates in the Mazatec world. Santa Maria la Asunción, near Huautla, has the lowest figure (41,5-49,2 %). Coming next, with low rates of literacy are three sub-areas we already noticed: the Huautla neighbourhood and the North-western Highlands cluster.

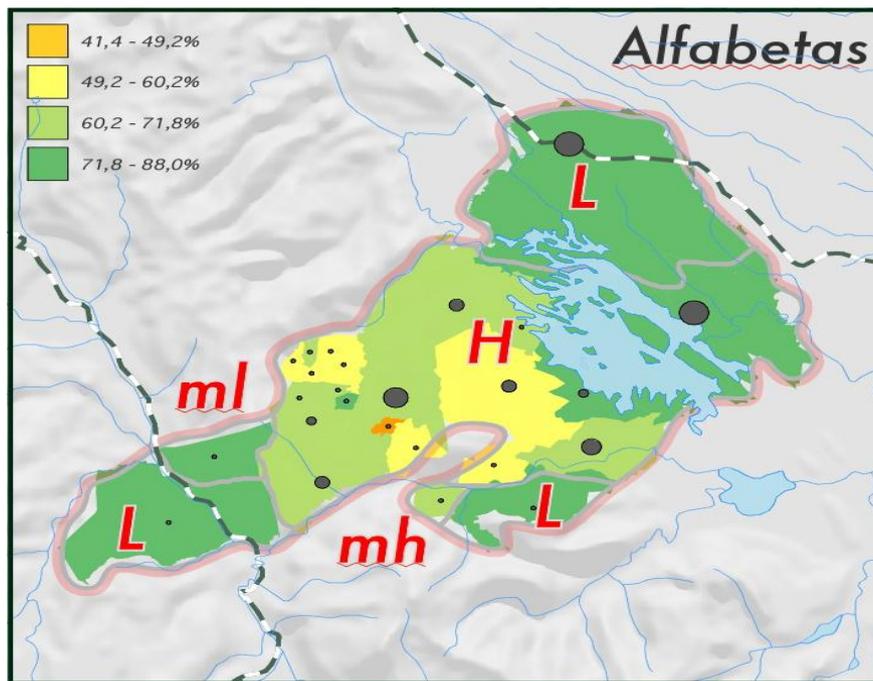


Fig. 13. Literacy in the Mazatec area (source: *idem*)

The core area as a whole displays low or relatively low figures, whereas the Eastern Lowland complex (Acatlán & Soyaltepec) and the Western Canyon do not. The Western Plain appears as the most contrasted sub-region, and Jalapa does not answer to previous expectations: its rate is lower than its southern, rural neighbour San Pedro Teotila, and matches Chiquihuitlán or the core area, around Huautla – but does not confirm any spectacular improvement in Jalapa economy. Indeed, a higher literacy rate correlates with lower vitality of Mazatec – another negative factor liable to strengthen assimilation in the future. But as the situation is worse in clusters of small towns at the periphery of big centres, where Mazatec is more and more integrated in the curriculum at school, one can hope some percolation of new forms of bilingual literacy (Mazatec & Spanish) will take place in more depressed areas in the future. The problem is, however, that bilingual education hardly takes a strong hold in schools, unable to overcome hindrances such as lack of human and didactic resources, and a total lack of effective training in formal use of Mazatec among the so called “bilingual teachers”. We experienced this situation from inside, as the ALMaz project aims not only at making a linguistic atlas of Mazatec, but also at developing tools and methods for bilingual education in the Mazatec world. Though bilingual school masters may be efficient as Spanish teachers, teaching in Spanish, their formal knowledge of Mazatec as their mother tongue, though, is extremely low. Unable to give any explanation to their pupils about how to spell words and articulate formal discourse on geography, history or natural sciences, they overwhelmingly chose to teach in Spanish. We can therefore read map in fig 13 from a very different point of view, suggesting that the yellow (and red) zones on the map should be interpreted as nuclei of both relative illiteracy and greater vitality of Mazatec. This strongly holds, when one take into account for instance of the fact that in the urban centres of Huautla and San Jerónimo Tecoaatl nowadays, Mazatec is losing ground, especially in younger generations, whereas it is still intensively spoken in the yellow and red zones on the map. Figures 8 and 13 make possible a comparison between literacy and demographic dynamism. Both maps correlate sufficiently to suggest that bilingual education would be a good solution, as depressed areas for literacy have a dense population of youngsters. This is especially true for Huautepéc, for instance. The bilingual education model might be a solution indeed. The Eastern Lowland zone, though, suggests another model: a high rate of literacy in an area of

low vitality of the native tongue, resulting in monolingualism and language shift at the expense of Mazatec. Experience shows us, though, that this model gives poorer results in terms of potential for individual development and the strengthening of a society able to evaluate alternative scenarios for local development and wider integration. Mazatec has been an asset ever since the years 1950 for civil society to enhance socioeconomic and political criticism, to restrain government abuse and to strengthen local democracy and decision making.

Fig. 14 shows that the government has understood the relevance of the former model of education, investing intensively in bilingual schooling in particular in the Western Plain, in Soyaltepec and in Huautla – three strategic areas for the development of bilingual education in the Mazatec world. It seems that, as usual, government has been betting on percolation: insert much money inside the bottleneck of big and mid-size urban centres, with the ingenuous hope that resources will eventually percolate to the rural vicinity and smaller centres.

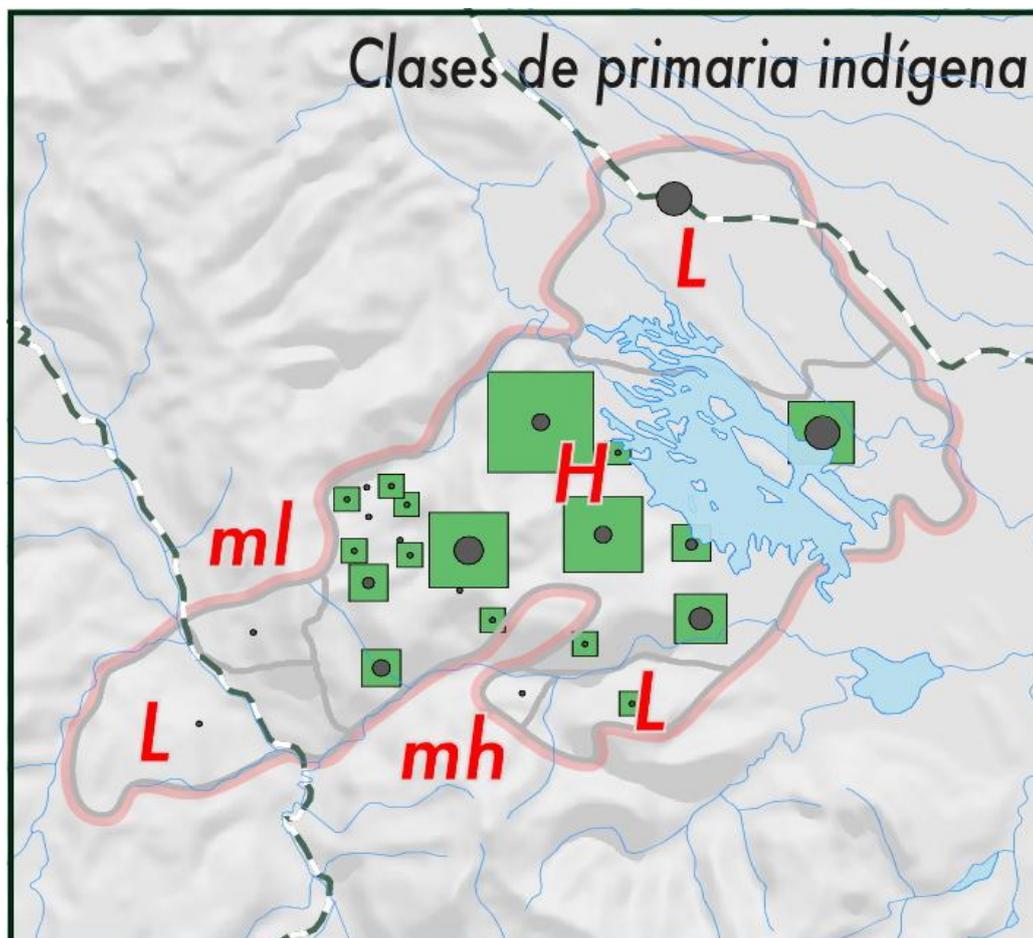


Fig. 14. “Bilingual primary schools” in the Mazatec area (source: *idem*)

Though, the underinvestment in such regions as the Canyon and the North-western Highlands, and the lack of attention for the Acatlán region, shows that resources are indeed very limited, and the general policy toes the line “save women and kids first”, while the ship is sinking. Fig. 15 confirms this policy: the density of teachers attending the local population is much higher in the core area of the Mazatec world than in the peripheries – straightforwardly tenfold, comparing San José Tenango to Acatlán. We cannot accuse the Oaxacan government not to invest in teachers and facilities in the most strategic zone, with a remarkable effort to improve the situation.

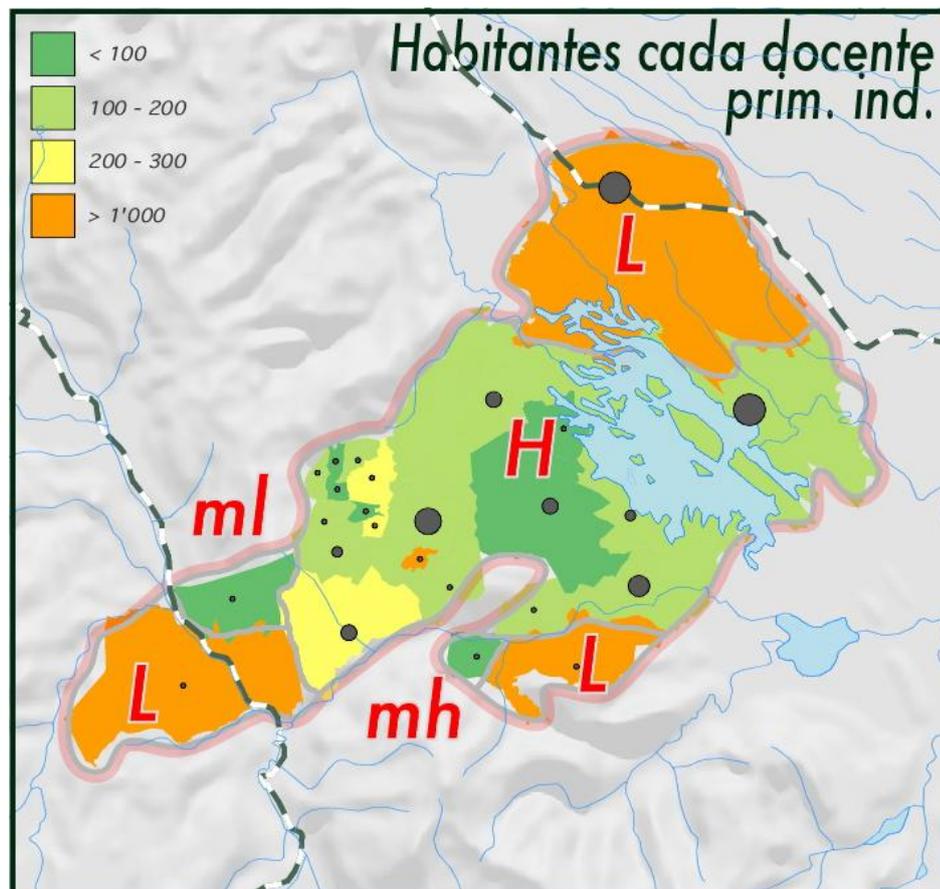


Fig. 15 Rate of bilingual school teachers per inhabitant in the Mazatec area (source: *idem*)

Even though, knowing how much wider is the range of needs and prerequisites to make this policy work, we can say that this endeavour will probably have a weak effect on the situation as a whole. As a matter of facts, a Bilingual Normal School or a pedagogical university would be needed, and the best place to locate it might be... Jalapa de Diaz, because of its accessibility and demographic dynamism. Let's remind that a previous attempt was made during the years 2000 to build a university in Huautla, but the project failed, after having invested huge amounts of money in a zone which was later on declared unfit for construction. We claim that, although one could hardly help thinking that the most adequate place for such an academic institution should be Huautla in the first place, the very heart of the Mazatec world, from an anthropological viewpoint, the same data from census we handled in this paper was already available. A sociolinguistic reading of this information should rather have led to our conclusion: the most suitable place to build up a University or a teacher training centre would rather have been Jalapa, instead of Huautla.

The lack of teachers in Mazatlán can probably be explained by political reasons, as this municipality pioneered a rebellion in the eighties, enhancing the role of autonomous education. But this can by no means be considered as a legitimate reason for government not to invest more in this very important centre of the Canyon fringe. The same kind of reason might also explain the lack of teachers in San Antonio Eloxotitlan, in the Northwestern Highland sub-region: this centre is well known for its political criticism and restlessness. Schooling facilities exist in San Antonio, as a B.I.C. (*Bachillerato Integrado Comunitario*) and a primary school for the very poor – we have been training school teachers for both institutions in 2011. We can say that this place does deserve getting more resources: the staff of the few schools available is doing their best, and some of them are extremely proficient and

hard-working teachers. But good will and skills are not enough to answer the tremendous need for better schooling opportunities. Most children and teachers speak Mazatec, but few of them, especially in the primary school; have any idea of how to use it at school, especially as a teaching language. Unfortunately, in Mexico, the so called “bilingual schools” are most often, *de facto*, monolingual schools, out of the lack of efficient practice and doctrine of what bilingual education should be and what it could do for the development of society. We should bear this statement in mind, when looking at figures 14 and 15, which confirm the same trends, comparing pupils in bilingual schools with the ratio of teachers for local population. The former figure makes even more obvious where lays the focus on basic bilingual education (*primaria indígena*), in primary school: in the Western Plain, especially in the vertical stripe that runs across the municipalities of Santa Maria Chilchotla and San José Tenango, including San José Independencia. Jalapa comes second in the race. Though, on the basis of our own practice in bilingual school teachers’ training, we cannot help being pessimistic: a one week summer school for a dozen of bilingual teachers held in Jalapa de Díaz, in august 2010, revealed that no teacher was able to analyze conjugation forms of Mazatec, all pedagogical materials which were written during the session were full of spelling mistakes. Teachers turned out to barely have any practice of how to take tone patterns into account when writing their mother tongue, and the SEP school books in Mazatec were laying on the floor, eaten by mice.

4. Conclusion

We endeavoured to approach the sociolinguistic situation of Mazatec, an Eastern Popolocan language, which stands as a multiplex sociolinguistic « Small World » or microcosm: a Leibnizian monade in itself. Though, our approach was by no means monadic, as we always took into account the outer coordinates of this world (especially the network of major urban centres for migration, in Oaxaca, Puebla, the D.F. or abroad) and we took care to suggest two types of interpretation – quantitative and qualitative. We positively argued every time we could that figures should not be taken as granted. They tell more through the network of discrepancies and contradictions they uncover than by mere statements or enumeration of variables and figures. The fact the main writer of this paper (Jean Léo Léonard, coordinator of the ALMaz project) has been involved in workshops with school masters and the elicitation of dialectological data within the framework of the ALMaz adds much to the diagnosis and prognosis. Fieldwork anchors social science in more than mere facts and figures: it provides “counterfacts” and “counterfigures”. It has the powerful causticity of criticism based on observations and the revisiting of illusions. We do not claim that the Mazatec situation is desperate, as far as the future of the language and its twelve or twenty five dialects are concerned. We do claim, though, that Mazatec is actually to a certain extend an endangered language in the long term, and that one of the efficient ways to reverse this trend might have to do with investing more on knowledge and formal practice of the language among teachers and youngsters – not only at school. A strong commitment to democracy, sociocultural and political pluralism, and a different policy for local economic development should also prevail, in a region where the system of complementarities between the Highlands and the Lowlands have been dramatically made into pieces, by the building up of the Miguel Alemán dam. The fact that two municipalities at the crossroads in this former system of agrarian complementarities – San José Tenango, and Santa Maria Chilchotla – look nowadays so depressed is by no means casual: geography still bleeds where the knife cut deep inside the thread of the Mazatec world. In other words, where the Mazatec and Chinantec civil society and the microfundio network of the Lowlands were drowned and scattered, many times in history, and more recently, as a result of the Miguel Alemán dam.

One can still try to convince himself or herself that language endangering has to do with fate, as an unavoidable consequence of “progress” and globalization. The facts will always stand here to witness, for anyone sensitive to social criticism or being aware of contradictions and discrepancies between ideology, illusions or lies, that language endangering and vulnerability are the result of conflicting socioeconomic and political interests. On the contrary, language endangerment is one of the most obvious scenery evidencing conflicting powers and power shift. In short, language shift results dramatically *from* or *into* power shift. The question is not only what linguists loose when a language disappear, but who won in the struggle, what did he/she won and with what consequences for the future of mankind? Languages are not living beings, nor are they only highly and unique elaborate semiotic systems: they are tools for handling material and symbolic power. Shall we wait for most languages to disappear to finally realize that the king is naked, and that instead of a plurality of alternative worlds and individual and collective options, we are reduced to herds of globalized and submissive citizens?

Moreover, we want to point out that linguists have a responsibility in the situation of most endangered languages: for over five decades they have shown very small concern for languages that are now considered as endangered or vulnerable, according to the Unesco criteria. The focus was either on the engineering and promotion of a set of international languages, such as English, Spanish, French, Russian, etc., while most of the descriptive work was handed to a proselyte organisation, the Summer Institute of Linguistics, whose overt goal was not to foster language planning or management on behalf of indigenous communities, but rather to translate religious corpora, to strengthen acculturation, according to the integrationist doctrine. How could linguists not realize that they were creating a void of power, when mankind and linguistic communities such as Popolcan speakers, or others, were facing a power shift? As far as Mazatec or Popoloca are concerned, the S.I.L. has done outstanding descriptive work. We owe most of what we know about these languages to linguists from the S.I.L., who were missionaries, though, and who took part in the positivist plans of the INI and Mexican government (McMahon, 1971). It should be time for non proselyte linguists to at last take over the task, not only for the sake of the future of linguistics. It's time to do our job, and the speakers badly need us. Not only should our work be as good as the S.I.L.'s, but it should also be critical, cooperative, efficient and accurate. Facing the immense gap between former proselyte descriptive linguistics and what non proselyte, regular scholars, have been doing on the field, one can only remind Ivan Illitch's lessons on counter-productivity: while we were so keen on commenting cleft constructions or binding in English or Spanish as though the fate of linguistics should depend the advancement of formal grammar, how aware have we been of our role not only as scholars, but also as critical citizens in a global world, where power shifts dispossess widely mankind of its resources, free will and good will?

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