Protestant Education among Indigenous Mexicans: The Social Impact of the Summer Institute of Linguistics (SIL), 1935-1970

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1. Introduction

In 1935, two U.S. Protestant missionaries took up residence in distinct indigenous Mexican towns, Tetelcingo, Morelos and San Miguel el Grande, Oaxaca, and began learning the vernacular languages, Nahuatl and Mixtec. These men were William Cameron Townsend, founder of newly-minted organisation the Summer Institute of Linguistics (SIL) and a veteran of the Guatemalan mission field, and Kenneth Pike, a recent college graduate with an unusual gift for languages. Their aim was to become sufficiently proficient in the local dialects to be able to translate into them the New Testament, for they believed that only through direct access to God's word – rather than through the customary mediation of Catholic priests, who were almost uniformly monolingual Spanish-speakers – could indigenous souls be saved. Their endeavours were unusual for three reasons. Prior to Townsend, although there had been occasional translations of scripture into indigenous languages, few if any Protestant missionaries in the Americas had combined long-term residence in the field with a commitment to rendering the gospel into a local tongue. Second, what began in Mexico in 1935 blossomed into what is today arguably the world's biggest missionary organization, Wycliffe Bible Translators (WBT).

Third, what gave SIL much of its initial impetus and logistical aid was the decidedly secular government of Mexico, headed by its socialist president, Lázaro Cárdenas (1934-40). Cárdenas viewed Townsend's work as coinciding with several key goals of the Mexican Revolution of 1910-20 and the post-revolutionary policy of *indigenismo*: the federal plan to integrate native peoples into the larger nation by (among other things) teaching them literacy, Spanish, and good citizenship and by weaning them from the 'oppressive' influence of *caciques* (authoritarian community bosses) and the Catholic church.[2] Cárdenas gave SIL a lot of material and political support. While the Mexican government was somewhat less supportive during the 1940s, Townsend retained important allies, and in 1951 state support rebounded with a formal accord between SIL and the Public Education Ministry (SEP). By its terms, SIL would spearhead educational outreach

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[2] Alan Knight, 'Racism, Revolution, and *Indigenismo*: Mexico, 1910-1940' in R. Graham, ed., *The Idea of Race in Latin America: 1870-1940* (Austin: Univ. of Texas Press, 1990), esp. 80-84.

to indigenous Mexicans and the state would distribute its translated materials. While they were producing these texts, SIL's missionary-linguists would work on their main translation task: bilingual New Testaments.

This story is well-documented, initially by SIL/WBT itself, later by anthropologists, and recently by historians. Indeed, scholars have long recognized – sometimes disapprovingly, though less so recently – the importance of SIL to Protestant evangelism, indigenous education, and rural community transformation in Mexico.[3] Yet in none of the three kinds of literature has a sustained attempt been made to *quantify* the influence of SIL upon the communities in which its missionaries lived and worked, even though by 1979, when the SIL-SEP agreement was terminated, those communities numbered more than 100.[4]

The purpose of this paper is thus to use Mexican census data to gauge as much as possible the *impact* of SIL on local-level literacy, Spanish-acquisition, and material change. This is a longitudinal quantitative study, starting with the census of 1940 and ending with that of 1970, after which factors including the burgeoning presence of Pentecostal pastors and congregations, including in places where SIL was based, complicate the statistical picture. Analysis of census figures is complemented by perusal of the existing literature (personal, anthropological, historical), linguistic materials digitized by SIL and available at its website, and assistance with documents from the SIL Mexico Archive in Arizona.

The paper's main findings are:

- Census data suggest that the continuous presence of SIL staff in indigenous communities helped literacy to grow faster between 1940 and 1970 than in indigenous communities without a permanent SIL presence; on average, the difference was modest, improving the literacy growth rate by about 30%.
- This faster literacy growth may have been achieved in coincidence or in synergy with federal and provincial school-building programs; that is, schools may have been built more frequently in those locales either by chance or (more likely, given

[3] See, e.g., Colegio de Etnólogos y Antropólogos Sociales, *Dominación ideológica y ciencia social: El I.L.V en México* (Mexico City: Nueva Lectura, 1979); Søren Hvalkof & Peter Aaby, eds., *Is God an American? An Anthropological Perspective on the Missionary Work of the Summer Institute of Linguistics* (Copenhagen: International Work Group for Indigenous Affairs, 1981); David Stoll, *Fishers of Men or Founders of Empire? The Wycliffe Bible Translators in Latin America* (London: Zed Books, 1982); Linda King, *Roots of Identity: Language and Literacy in Mexico* (Stanford, CA: Stanford Univ. Press, 1994), ch. 7; Todd Hartch, *Missionaries of the State: The Summer Institute of Linguistics, State Formation, and Indigenous Mexico, 1935-1985* (Tuscaloosa: Univ. of Alabama Press, 2006); William Svelmoe, *A New Vision for Missions: William Cameron Townsend, the Wycliffe Bible Translators, and the Culture of Early Evangelical Faith Missions, 1896-1945* (Tuscaloosa: Univ. of Alabama Press, 2008), chs. 7-8; Boone Aldridge, *For the Gospel's Sake: The Rise of the Wycliffe Bible Translators and the Summer Institute of Linguistics* (Grand Rapids, MI: Eerdmans, 2018); Kathleen McIntyre, *Protestantism and State Formation in Postrevolutionary Oaxaca* (Albuquerque: Univ. of New Mexico Press, 2019), ch. 4.

[4] What quantification exists is limited to listing the towns or languages in which SIL worked, the New Testament translations it produced, or (anecdotally) the number of converts in a given place or ethnic group.

SIL's preparation of indigenous literacy materials) by design. Further qualitative research is needed to either establish or discard a correlation.

- Census and other data suggest that, contrary to Townsend's claim to Cárdenas that indigenous-language literacy would facilitate Spanish-language acquisition, and despite its publication of many bilingual teaching materials, SIL was *not* a significant driver of bilingualism. Road-building, as indigenous villages came to be connected to market towns, was likely the biggest driver.
- Census data suggest that SIL fostered relatively rapid conversion to Protestantism, that is, at rates typically far above the average for the states in which they operated. Other sources indicate this was sometimes achieved in synergy with existing evangelists, such as Presbyterian pastors in Chiapas.
- Claims that conversion to Protestantism augmented savings and thus brought material benefits, as converts ceased to help pay for lengthy religious festivals and abstained from alcohol, while abundant in missionary accounts and affirmed by anthropologists, are hard to substantiate from census data. The problem seems to derive partly from the tabulation of most data, prior to 1970, using the unit of the *municipio* (a small version of a county), which is too large for the gauging of trends more discernible at the *pueblo* (town or village) level.
- The 1970 census, which purports to show a slowdown in the growth of Protestantism that sits at odds with local accounts, contains anomalous data that (together with those accounts) suggest the start of a deliberate mismeasurement of Mexican Protestants. Underestimation of their numbers may well have persisted in subsequent censuses, including that of 2020.
- The most-cited negative tangible consequence of SIL's presence, the expulsion of Protestant converts, is occasionally apparent in census data. The 1970 census shows a few cases of possible population loss in places with high conversion rates in Chiapas. But for Oaxaca, the state with the greatest presence of SIL staff during the period studied, limitations in the census data preclude any such deduction.

The paper proceeds as follows. Section 2 summarizes the origins, purpose, and practice of the SIL. It briefly reviews its pre-history in Guatemala and early development, including cultivation of official support, in Mexico; it then outlines how it operated on the ground in Mexican pueblos. Section 3 reviews the literature on SIL, which generally falls into one of three categories: in-house publications such as biographies of Townsend and other SIL staff, along with missionary memoirs; anthropological studies, which from the 1970s until the 1990s tended to be hostile to SIL; and academic histories. Section 4 describes my methodology, which begins in qualitative fashion, consulting histories and memoirs, so to understand how SIL operated and to build a database of its targeted pueblos and municipios, and proceeds in quantitative fashion with the analysis of census data (for which I note several caveats); I also justify my periodisation. In Section 5 the relevant census data is calculated, tabulated, and analysed. A conclusion makes suggestions for further study.

2. The Purpose and Practice of the Summer Institute of Linguistics (SIL)

The Summer Institute of Linguistics was so-called because it gave preliminary linguistics training to U.S. would-be missionaries at summer camps held in the United States.[5] These recruits were mostly recent university graduates, and in the autumn they would be assigned, usually in pairs, to an indigenous-language community in Mexico. It was generally up to them to find a particular town in which they were welcome, which in a few cases took several years. Once settled, they would live there for anywhere from a few years to fifty (see Appendix 2), learning the language, producing various kinds of translations, and evangelizing one-on-one. However, they did not found churches or hold services, preferring to work alongside other proselytizers, usually Mexicans, sometimes of their own training. In Chiapas, Oaxaca, and the Yucatán, for example, the churches whose faithful they helped to cultivate were mostly led by Mexican Presbyterians.[6]

Townsend chose Mexico as the first – and for ten years the only – destination for SIL for three reasons. Towards the end of his fifteen years in Guatemala, where he pioneered the translation of the New Testament into a local language (Cakchiquel) as a means to evangelizing the community in which a missionary lived, the entrepreneurial Townsend was anxious to take his approach to a grander territory. Second, shortly before leaving for the United States in 1932, he was invited to Mexico by education secretary Moises Sáenz, himself a Presbyterian, who was visiting Guatemala. Third, soon after Townsend and his wife had settled in Tetelcingo in late 1935 and begun to learn Nahuatl, President Cárdenas heard of his project and visited him. Cárdenas warmed to Townsend's work as an educator and to the American as a person. What to Townsend was a soul-saving mission, to Cárdenas was a literacy project, concordant with the goals of the Revolution: it promised to help Mexico's overwhelmingly illiterate and non-Spanish-speaking indigenous population learn to read and thereafter to acquire Spanish – crucial steps, he felt, to their becoming fully-integrated Mexican citizens. It also chimed with his government's policy of anti-fanaticism (*desfanatización*), which sought to cleave the rural poor from the weighty influence of the Catholic Church. Mexico's Catholic hierarchy opposed Cárdenas's social agenda, including secular education, and militant faithful had waged a three-year war against the government during the previous decade (the *Cristiada*). Townsend, meanwhile, considered the president to be 'Christlike', lobbied U.S. politicians in defence of the 1938 oil expropriation, and wrote Cárdenas's authorised biography, a work that Alan Knight has understatedly termed 'somewhat hagiographic'.[7] The friendship between the socialist

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[5] While the first of these camps ('Camp Wycliffe') was held in 1934, Townsend did not devise the SIL name until 1935, shortly before he settled in Mexico; Svelmoe, *A New Vision*, 251-57.

[6] Isaac Guzmán Arías, 'Misioneros al Servicio de Dios y del Estado: Presencia del ILV en Oxchuc, Chiapas', MA thesis, CIESAS-Sureste (2010), 58f, 65, 71, 85; McIntyre, *Protestantism*, 103; Ezer R. May May, 'Presbiterianos en Yucatán: Hacia un estudio microhistórico del crecimiento protestante, 1900-1940', MA thesis, CIESAS-Peninsular [Mérida] (2017), 171-79.

[7] Svelmoe, *A New Vision*, 56, 78, 210-14, 233f, 269-73; Hartch, *Missionaries*, chs. 1-3; Knight, 'Bibliographic essay', in Leslie Bethell, ed., *Mexico Since Independence* (Cambridge: Cambridge Univ. Press, 1991), 418. Note: In 1938, Townsend wrote an 80-page booklet *The Truth About Mexico's Oil* and toured the US with it for six months, defending the Mexico's expropriation of US & British oil interests.

Mexican president and the evangelical American missionary, which persisted for decades, makes a fascinating story that has still to be fully told.[8]

SIL's Mexican activities did not depend on the support of Cárdenas alone, although the former president continued to be an ally of Townsend's. Between 1951 and 1979, SIL had a contract with the SEP to offer bilingual education in indigenous pueblos, research their cultures, and promote their 'betterment,' as they put it, including by teaching citizenship, eradicating vice (alcoholism and wife-beating especially), and providing basic health services and medicines. Within a few years of their settling in a pueblo, SIL's missionary-linguists would begin to produce reading primers, bilingual (indigenous-Spanish) dictionaries, and even vernacular renditions of the national anthem and government documents.[9] As social anthropologist Linda King put it: 'Virtually complete responsibility for literacy training was given to the SIL.' She adds: 'until 1980, virtually all literacy materials for use with Mexican Indians were created under the auspices of the SIL.'[10]

The 1951 pact came about because of several factors: first, Townsend had won over much of Mexico's anthropological and *indigenista* establishment; second, in the mid-century debate between Spanish-only education for indigenous peoples and bilingual education, the latter camp – fortified by SIL's arguments – had won; third, few SEP-trained teachers spoke indigenous languages; and fourth, SIL linguists worked for free because they were financially supported by U.S. donors.[11] Furthermore, indigenous education programs hitherto had generally been unsuccessful or at best very limited. In most cases, instruction had been in Spanish, as most teachers lacked proficiency in the vernacular. In some towns, the people themselves had rejected the teachers that the federal government had sent to them; in others, state-level authorities under conservative governors, such as Puebla's, along with local elites, had undermined indigenous education efforts. In both such cases, teachers' commitment to secularizing 'socialist education' and their advocacy of the federal policy of land redistribution caused them to be dubbed 'Communists' (a small but vocal minority indeed were), which further stymied their efforts. In much if not most of rural Mexico, female school attendance remained low. In most states, especially those with highly diffuse rural populations like Oaxaca and Chiapas, there were simply not enough teachers, nor was federal expenditure adequate, so schools were often limited to a municipio's chief town (*cabecera municipal*).[12] For the latter reason, it seems, SIL staff tended to settle in outlying pueblos, where the need for education was greatest.

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[8] Svelmoe, *A New Vision*, and Aldridge, *For the Gospel's Sake*, both call Townsend 'evangelical,' whereas Hartch uses 'fundamentalist'; the latter term was accurate at the time, describing an evangelical Christian who holds the Bible to be inerrant, but it has since become a pejorative, as Svelmoe notes (*op. cit*., x).
[9] Hartch, *Missionaries*, 83f; McIntyre, *Protestantism*, 116f.
[10] King, *Roots*, 65, 115.
[11] Hartch, *Missionaries*, chs. 4 & 6. Note: When Townsend arrived in 1935, 'public education had reached only a miniscule percentage of Mexico's indigenous communities'; 54.
[12] Alan Knight, 'The rise and fall of Cardenismo, c. 1930-46', in Bethell, ed., *Mexico Since Independence*, 265-70; Mary Kay Vaughan, *Cultural Politics in Revolution: Teachers, Peasants, and Schools in Mexico, 1930-1940* (Tucson: Univ. of Arizona Press, 1997), chs. 3, 5 & 6; Stephen Lewis, *The Ambivalent Revolution: Forging State and Nation in Chiapas, 1910-1945* (Albuquerque: Univ. of New Mexico Press, 2005), chs. 7 &

What SIL missionary-linguists did in the indigenous pueblos they moved into followed a de facto blueprint established by Townsend and his wife Elvira in the Cakchiquel town of San Antonio Aguas Calientes, near Antigua, Guatemala, during the 1920s. They chose a pueblo that lacked a school (or lacked one that gave instruction in the vernacular). They lived modestly; in the Townsends' case, dwelling in a cornstalk hut of their own design. They quickly learned to converse in the local language (Cakchiquel); while Townsend worked on understanding the language well enough to write it down, Elvira worked part-time as a nurse, and her donor-funded access to quinine, which helped allay a local malaria epidemic early on in their residence, greatly helped them gain local trust. They then set up a school, initially for the children of converts, later expanded to all comers, and hired a man who could teach full-time in the vernacular; classes included not only the "three Rs" and scripture but also vocational topics like carpentry, basket-making, weaving, and sewing. Next they set up a clinic, again funded by a U.S.-based donor, both to improve community health and to facilitate proselytizing. And once a number of locals had converted to Protestantism, Townsend placed them in the care of a vernacular-speaking pastor. Altogether, Townsend conceived of his 'duty and privilege' as helping his adopted community become better Christians and 'better citizens'.[13] As anthropologist David Stoll once noted, 'Economy is a central theme in Townsend's conversion stories, whether they entail repudiating saints, liquor or folk healers'; he adds that Townsend wrote about one convert: '"All [his] savings" went for candles, fire-crackers and alcohol to keep the saints happy. He gave away all the images and turned his house into an evangelical temple'.[14]

In Mexico, while the general pattern of commitments and objectives was similar, the chief development was a more professional and lengthier approach to linguistic work.[15] SIL staff undertook it as follows: (1) they learned the vernacular language by interacting with the locals, which could take two or three years; (2) as they did so, since most of Mexico's indigenous languages were unwritten, they usually created an orthography (i.e. a way of rendering oral languages into writing, using the Roman alphabet, Spanish pronunciation, and a series of diacritics[16]); (3) they then compiled bilingual vernacular-Spanish dictionaries, followed by grammars and primers, to aid in the teaching of vernacular literacy to the broader language group; such materials were used by themselves as informal teachers and in Mexican federal schools;[17] (4) in most cases, especially in the 1940s and

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10; Ariadna Acevedo Rodrigo, 'Entre el legado municipal y el avance del gobierno federal: Las escuelas de la Sierra Norte de Puebla, 1922-1942', *Relaciones* [Colegio de Michoacán] 36:143 (2015).

[13] Svelmoe, *A New Vision*, 76-86, 114f; Calvin Hibbard, "Significant Events in the Life of William Cameron Townsend and the organizations he founded'. Unpublished typescript (2004), Townsend Archives, Summer Institute of Linguistics, Waxhaw, NC.

[14] Stoll, *Fishers of Men*, 33.

[15] Svelmoe, *A New Vision*, 278-80.

[16] Diacritics were essential, first because indigenous languages often have a dozen or more vowel sounds and second because some of the languages are tonal, whereby meaning varies according to spoken pitch.

[17] These materials (which included instructions in Spanish, for use by SEP and other teachers) also aided in the academic study of indigenous languages, which some SIL linguists pursued further by submitting articles to academic journals and even gaining doctorates; Hartch, *Missionaries*, 73f, 84.

50s, they submitted articles to academic journals, thereby sharing their work and also building SIL's reputation as a scientific institution; a few even went on to gain doctorates; (5) as of 1951, they also translated at the SEP's request such documents as the national anthem, the Constitution, certain laws, booklets about hygiene, and training manuals (e.g. about tanning leather);[18] (6) over the course of anywhere from 15 to 35 years they worked on translations of the New Testament, usually starting with standalone versions of the Gospel of Mark; as Townsend had done in Guatemala, these included the text in Spanish (thus conforming to Townsend's belief that 'vernacular literacy was the key to teaching and learning Spanish' but also to his knowledge that including Spanish made the publications more acceptable to Latin American governments).[19] SIL published 15 New Testaments in Mexico by 1970 and another 40 by 1980.[20] Since a completed New Testament was each missionary's ostensible goal, they typically departed once the published book had been presented to the community, but some stayed on afterwards as consultants to other projects or preparing versions of the gospel in distinct dialects of the language they had mastered.[21]

Altogether, SIL missionary-linguists were somewhat like the SEP teachers sent from Mexico City to remote regions under Cárdenas, in that in addition to translating and teaching literacy they infused their primers with messages about good citizenship, taught health care, introduced new farming techniques, and sometimes acted as interlocutors with federal and state agencies.[22] They brought medicines, including the wonder of antibiotics; some male linguists were married to registered nurses and where single women were assigned in pairs, one of them often had medical training.[23] It is therefore valid to measure SIL's impact in terms not only of conversion and literacy.

3. The Literature on SIL in Mexico

The literature on the SIL in Mexico mostly divides along the lines of apologists and detractors. Only since 2000 has the work of social scientists more or less consistently adopted a neutral tone.

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[18] Hartch, *Missionaries*, 84f.
[19] Svelmore, *A New Vision*, 94, 101; Hartch, *Missionaries*, 56. Note: 'Because Mark is the shortest gospel and has less theological terminology, it is usually the book the SIL members choose to translate first'; Eunice Pike, 'Historical Sketch', in R. Brend & K. Pike, eds., *The Summer Institute of Linguistics: Its Works and Contributions* (The Hague: Mouton, 1977), 11.
[20] 'First 100 New Testaments in Mexico' (2002), SIL Mexico Archive.
[21] For example, (i) Anne Dyk, who contributed to the NT in the San Miguel el Grande dialect of Mixtec, finished in 1951, continued to publish reference works and stories in that language until 1975; *Bibliografía*, 93f; (ii) Herman Aschmann completed his Sierra Totonac NT in 1959, but stayed on for another four decades or so, to produce two further NTs in other Totonac dialects and to mentor Totonac pastors, as noted below.
[22] Hartch, *Missionaries*, 122f. Notes: (i) On SEP teachers under Cárdenas, see: Knight, 'Rise and fall', 269-70; Vaughan, *Cultural Politics*; (ii) Townsend's first Nahuatl primer (1935 or 1936) included such phrases as 'learn to speak Spanish well' and 'learn the laws of the nation,' while warning against 'drunkenness and fanaticism'; Hartch, 14.
[23] Emily Wallis & Mary Bennett, *Two Thousand Tongues to Go: The Story of the Wycliffe Bible Translators* (New York: Harper & Bros., 1959), 94, 116f, 136, 138, 142, 144f, 151, 158, 160.

Authorized biographies of Townsend, lives of other SIL pioneers, and memoirs by SIL veterans, of which there are altogether dozens, are understandably celebratory. The tenor of these was set in 1959 by SIL linguistics expert-turned-official historian Ethel Wallis, who with Mary Bennett published *Two Thousand Tongues to Go*; this work chiefly covers Guatemala, Mexico, and the country to which Townsend turned his attention in 1945: Peru.[24] The more specifically biographical *Uncle Cam* (after Townsend's nickname) appeared in 1974, eight years before his death.[25] By then the mantle of in-house historian had passed to SIL Mexico veteran Hugh Steven, who between 1970 and 2012 published more than two dozen inspirational books, including the edited memoirs of Townsend in four staggered volumes, lives of other SIL missionaries, and profiles of converts who became community leaders.[26] Missionary testimonies were very popular between the 1950s and 70s – major trade publisher Harper & Row even had a series called 'Harper Jungle Missionary Classics' – and SIL autobiographies began to appear in 1956 with *Not Alone* by Eunice Pike (Kenneth's sister and, like him, a prodigious linguistics scholar).[27] Memoirs have continued to appear in recent years, edited by small Christian presses or self-published. Collectively, these books are of use to the historian as they attest to the SIL modus operandi and offer glimpses of community transformation in material terms. For example, Marianna Slocum's memoir of working among the Tzeltal of Chiapas, *The Good Seed*, has been cited by a range of scholars.[28]

From the 1930 until the 1960s, Townsend enjoyed the backing of Mexican anthropologists, including the eminences Alfonso Caso and Manuel Gamio, and early anthropological accounts of SIL were quite laudatory.[29] The tide began in turn in 1963, when senior sociologist Pablo González Casanova and junior anthropologist Rodolfo Stavenhagen begin a sustained critique of *indigenismo* as 'internal colonialism'. Over the following decade, Mexico's anthropologists (indeed the world's) largely adopted the view that indigenous communities should be valued in their own right, rather than being subject to federal attempts to 'Mexicanize' them. In parallel, missionary endeavours, especially U.S.

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[24] Wallis & Bennett, *Two Thousand Tongues*. Note: In this paper, pages references are to the UK edition, published a year later (London: Hodder & Stoughton, 1960).
[25] James & Marti Hefley, *Uncle Cam: The Story of William Cameron Townsend, Founder of the Wycliffe Bible Translators and the Summer Institute of Linguistics* (Waco, TX: Word Books, 1974).
[26] Steven's best-known works include *Manuel: The Man Who Came Back* (Old Tappan, NJ: Fleming H. Revell, 1970); *They Dared to be Different* (Huntington Beach, CA: WBT, 1976); and *Doorway to the World: The Memoirs of W. Cameron Townsend, 1934-1947* (Wheaton, IL: Harold Shaw, 2000).
[27] Eunice Pike, *Not Alone* (Chicago: Moody Bible Inst., 1956).
[28] Slocum, with Grace Watkins, *The Good Seed* (Orange, CA: Promise, 1988). Scholarship citing Slocum includes Stoll, *Fishers of Men*; Margaret Ann Ryan, 'Chiapas observed: The ethics of intervention in rural Mexico', Doctoral thesis, Univ. of California, Berkeley (1999); Hartch, *Missionaries*; Margaret Thomas, "Gender and the language scholarship of the Summer Institute of Linguistics in the context of mid twentieth-century American linguistics," in G. Hassler, ed., *History of Linguistics 2008* (Amsterdam: John Benjamins, 2011).
[29] Hartch, *Missionaries*, 80-88. See, e.g,. the prologue and many of the Spanish-language chapters (including Gamio's) in Manuel Gamio & Raúl Noriega, eds., *A William Cameron Townsend, en el vigésimoquinto aniversario del Instituto Lingüístico de Verano* (Cuernavaca: Summer Institute of Linguistics, 1961).

activities, came to be seen as culturally imperialistic at best and at worst a front for Cold War propagandizing and natural resource domination.[30] Inspired by the 1971 'Barbados Declaration', a statement issued on the heels of an anthropology conference, which called for missionaries' expulsion from indigenous communities, Mexico's new anthropological establishment began to critique SIL and lobby the state for an end to the 1951 SEP accord. Scholarly work began to reflect this concern.[31] This goal was achieved in September 1979 (an episode erroneously labelled by some as SIL's 'expulsion' from Mexico; a few SIL staff did leave, as it became harder for missionaries to renew their visas, but most stayed on and SIL's main offices continued to function).[32]

An early example of collected criticism of SIL appeared just after the SEP contract cancellation: *Ideological domination and social science*, published by a Mexican association of anthropologists that, in a prefatory note, implicitly took credit for the SEP's decision.[33] This was soon followed by *Is God an American?*, in which two Danish scholars collated work by European and U.S. anthropologists on SIL's activities throughout Latin America, which generally assailed SIL as an agent of U.S. imperialism. Contributors offered judgements on missionary evangelism such as 'not only ludicrous but criminal' or 'quackery' and assertions like 'It is not known how many of these missionaries are considered backward, ugly farmers by other Americans' or '[I] call a liar any SIL missionary claiming to respect indigenous cultures'. Another chapter is subtitled 'Ethnocide Disguised as a Blessing'.[34] One contributor, David Stoll, followed up with an influential monograph on SIL/WBT, *Fishers of Men or Founders of Empire?* Though well-researched, it is likewise cynical in tone, at one point describing Townsend and his colleagues as 'the very picture of the cultural penetration team, splitting apart harmonious Indian communities for the world market'.[35] (Such accounts are hard to square, for example, with the fact that Townsend and his wife spent six months in 1938 separately travelling around the United States giving a total of 90 lectures that defended the socialist president Cárdenas and his expropriation that year of U.S. and British oil assets.[36])

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[30] Hartch, *Missionaries*, ch. 9. Note: Compare the journalistic history by Gerard Colby and Charlotte Dennett, *Thy Will Be Done: The Conquest of the Amazon: Nelson Rockefeller and Evangelism in the Age of Oil* (New York: HarperCollins, 1995), which accuses Townsend of destroying South American indigenous cultures to facilitate the entry of Big Oil. Although a bestseller, its reception among academics was mixed, especially regarding its critique of Townsend and SIL/WBT, which knowledgeable reviewers found exaggerated; cf. David Stoll, 'Missionaries and Foreign Agents', *American Anthropology* 98:3 (1996); Hartch, *Missionaries*, 90f; Svelmoe, *A New Vision*, 345-47.

[31] See, e.g., Jesús Ángel Ochoa Zazueta, 'El Instituto Lingüístico de Verano, A.C.' Cuadernos de Trabajo 11, Depto. de Etnología y Antropología Social, INAH, 1975.

[32] Hartch, *Missionaries*, ch. 10 & Conclusion. Notes: (i) On the broader theoretical and panregional context for criticism of SIL, see Aldridge, *For the Gospel's Sake*, ch. 6; (ii) On the 'expulsion' misnomer, e.g. Ryan, 'Chiapas observed', 136.

[33] Colegio de Etnólogos y Antropólogos Sociales, *Dominación ideológica*.

[34] Hvalkof & Aaby, eds., *Is God an American?*, 77, 79, 145.

[35] Stoll, *Fishers of Men*, 34. For a discussion of the heated rhetoric in the cited works by Hvalkof & Aaby, Stoll, and others, see Aldridge, *For the Gospel's Sake*, ch. 6.

[36] Hartch, *Missionaries*, 36-9. Note: On Townsend's often-ignored progressive side, see Aldridge, *For the Gospel's Sake*, esp. ch. 2.

While the Marxist certainties that undergirded the anti-Americanism and anti-Protestantism of such works began to subside in academia later in the 1980s, a sceptical tone continued to pervade much of the literature, both in English and in Spanish.[37] A chapter on SIL's linguistic work in Linda King's study of indigenous Mexican literacy, *Roots of Identity*, claims that ideologically foreign values, such as the supposed superiority of Western culture, suffused SIL's literacy materials, but the evidence she gives consists of a cherry-picking of examples from the early 1950s that in the broader context of the organization's hundreds of publications are unusual. (Educational psychologist Diana Mack Drake found SIL's materials to be culturally sensitive, at least by the early 1970s. Comparing two primers she writes: 'the clothing worn by human figures in the *Cartilla Tarahumara* (1972) is clearly distinct from that in the *Cartilla Totonaca* (1972)').[38] Since 2000, anthropological studies of Protestantism in Mexico have been more balanced in tone and nuanced in analysis, viewing indigenous people not as the victims of missionary manipulation but as willing and active participants in their own conversion, while aware of the costs, and as shapers of local Protestant practice afterwards. This is seen, for example, in studies of Oaxaca's Zapotecs by Toomas Gross and in work more directly on SIL by other scholars.[39]

Academic histories of SIL are a recent addition to the literature. They tend to be relatively neutral, or at least sympathetic but holistic and willing to engage with criticisms of SIL/WBT and its founder. The most comprehensive and analytical are Todd Hartch's *Missionaries of the State* and Boone Aldridge's *For the Gospel's Sake*. William Svelmoe's biography of Townsend during the first half of his ministry, *A New Vision for Missions*, includes the most fully rounded portrait that we have of Townsend the man, including his difficult and distressing first marriage, but it focuses on his years in the United States and Guatemala, giving short shrift (one chapter in eight) to Mexico. There is also a nuanced chapter on SIL in Kathleen McIntyre's *Protestantism and State Formation in Postrevolutionary Oaxaca*.[40]

What all these kinds of study have in common is a qualitative approach; some are anecdotal, others involve case studies of regions, towns, or villages. To my knowledge,

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[37] See, e.g., Cuauhtémoc Cardiel Coronel, Villalobos González & Martha Herminiacoaut, *Religión y sociedad en el sureste de México* (Mexico City: CIESAS, 1989).

[38] King, *Roots*, 118-21; Drake, 'Bilingual education programs for Indian children in Mexico', *Modern Language Journal* 62:5/6 (1978). Notes: (i) Many if not most of SIL's literacy materials are available as downloadable PDFs at www.sil.org; (ii) Another example from the 1990s, the doctoral thesis by Ryan, 'Chiapas observed', which is riddled with loaded language, such as references to SIL's '"linguistic" studies' [inverted commas, *sic*] and 'propaganda', a claim that 'medical assistance was used to bribe the Indians', the labelling of all SIL members as 'imperialist neo-colonialists', etc.; 107, 113, 139.

[39] See, e.g., Toomas Gross, 'Incompatible Worlds? Protestantism and *Costumbre* in the Zapotec Villages of Northern Oaxaca', *Folklore: Electronic Journal of Folklore* 51 (2012); Gabriela Garrett Ríos, 'Comunidad étnica y comunidad religiosa: Apuntes para comprender la conversión religiosa entre los hñähñu de Ixmiquilpan, Hidalgo', *Estudios de Cultura Otopame* [UNAM] 4 (2004); Guzmán Arías, 'Misioneros'. Note: On active participants, see also Hartch, *Missionaries*, 121.

[40] All *op. cit.*

there is no quantitative analysis of SIL's activities in Mexico. Indeed, quantitative analysis on the long-term impact of Protestantism in general is scarce, beyond the work of Robert Woodberry and associated academics.[41] My study proposes to combine longitudinal quantitative with qualitative analysis and to offer a more systematic and comparative form of the latter than is found in case-study approaches. I hope therefore to contribute to the literature not only on Mexican religious history and educational history but also on religion and development economics in Latin America.[42]

4a. Method: Qualitative Issues

(i) Research questions

My main concern is to test the hypothesis, advocated by SIL and other Protestant missionaries and, until the 1960s, by Mexico's educational authorities and anthropological establishment, that conversion from the syncretic form of Catholicism typically practiced in indigenous communities to Protestantism, along with adherence to SIL's educational programme, brought measurable benefits. The chief benefits have been described as (1) higher rates of literacy; (2) higher rates of Spanish-language acquisition; (3) improved savings as a result of (a) ceasing participation in the local '*cargo* system', whereby nominated men known as *mayordomos* were responsible for the financing of often weeks-long religious festivals, (b) ceasing to spend on candles, fireworks, and other consumer items commonly used in Catholic devotion and celebrations, and (c) abstention from alcohol, which in some cases included ritual drunkenness;[43] (4) improved health, in part due to abstention but more generally due to access to the medicines and medical training brought by SIL couples; (5) enhanced economic mobility, as a result of improved savings, greater access to state information campaigns (a function of literacy), and perhaps also the cultural influence of Americans and Mexican pastors (many of the latter having lived in the United States), who encouraged converts to set up or improve small businesses; and (6) fewer incidences of domestic violence, again due in part to abstention from alcohol.[44] (These last three reported benefits are not probed here, due to the complexity of measuring

[41] See, e.g., Robert Woodberry, 'The Shadow of Empire: Christian Missions, Colonial Policy, and Democracy in Postcolonial Societies', Doctoral thesis, Univ. of North Carolina, Chapel Hill (2004), esp. ch. 5, and Joseph Potter, Ernesto Amaral & Robert Woodberry, 'The growth of Protestantism in Brazil and its impact on male earnings, 1970-2000', *Social Forces* 93:1 (2014).

[42] See, e.g., Sheldon Annis, *God and Production in a Guatemalan Town* (Austin: Univ. of Texas Press, 1987); David Martin, *Tongues of Fire: The Explosion of Protestantism in Latin America* (Oxford: Blackwell, 1990), ch. 11; Potter, Amaral & Woodberry, 'The growth of Protestantism'; María Waldinger, 'The Long-Run Effects of Missionary Orders in Mexico', *Journal of Development Economics* 127:1 (2017).

[43] SIL linguists practiced and encouraged abstinence; the pastors whom they worked alongside often insisted on it, and Pentecostals were strict about abstinence; Carlos Garma Navarro & Miguel Leatham, 'Pentecostal Adaptations in Rural and Urban Mexico', *Mexican Studies* 20:1 (Winter 2004): 148f, 154; Guzmán Arías, 'Misioneros', 71, 73, 94, 101.

[44] Wallis & Bennett, *Two Thousand Tongues*, 147f, 158; Stoll, *Fishers of Men*, 32-35, 52; Martin, *Tongues of Fire*, ch. 11; Hartch, *Missionaries*, 97-100, 118-21.

historical health and economic mobility trends and the lack of statistics on domestic violence until the 1980s.)

Measurable costs, on the other hand, may include (1) population loss due to expulsion or migration of converts; and (2) incidents of violence between converts and Catholics (not registered in censuses but reported in the press and in communications with federal authorities).[45] Some anthropologists have argued for further costs, such as the decline of religious festivals, the embrace of capitalism, the influence of U.S.-style consumerism, and the loss of ethnic identity.[46] However, since the categorization of such phenomena as either a cost or a benefit is subjective (as is the very definition of ethnic identity), they are omitted from this study.[47] Similarly omitted is the social cost of what has been termed 'family rupture', as this too is hard to quantify.[48] A criticism made by some (Marx-influenced) linguists is that SIL exaggerated the differences between indigenous dialects, so to hinder the formation of standard languages 'necessary for the political liberation movements of ethnic minorities'. But again, this is a matter of debate; some linguists have supported the SIL's claims of high language diversity and the practical need to treat dialects distinctly.[49] Besides which, it smacks of conspiracy theory to claim that U.S. missionaries strove to repress indigenous people's revolutionary instincts, as though they were CIA assets.

(iii) Periodisation

Although SIL began to operate in two Mexican pueblos in 1935 and had 37 linguists on the ground by 1940 (see Appendix 1), it is likely that they had achieved little measurable impact in their communities by the time of the 1940 census. In the early days of SIL, some missionaries spent several years finding a place that would welcome them and most did not begin translation work until their third year, given the difficulties of learning an unwritten language from scratch.[50] The great exception was Tetelcingo, Morelos, which thanks to Townsend's direct line to Cárdenas received all kinds of political and material support: land redistribution, an irrigation project, ten thousand fruit trees, a first telephone line, and even a road and a bus service connecting it to Mexico City. It was conceived of by both men as a

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[45] Jan Rus, 'The Struggle against Indigenous Caciques in Highland Chiapas: Dissent, Religion and Exile in Chamula, 1965-1977', in Alan Knight & Wil Pansters, eds., *Caciquismo in Twentieth-Century Mexico* (London: ILAS, 2006); Hartch, *Missionaries*, 168-75; Gema Kloppe-Santamaría, *In the Vortex of Violence: Lynching, Extralegal Justice, and the State in Post-Revolutionary Mexico* (Oakland: Univ. of California Press, 2020), Ch. 2.

[46] Gilberto López y Rivas, *Antropología, minorías étnicas y cuestión nacional* (Mexico City: Aguirre y Beltrán, 1988), 180; Stoll, *Fishers of Men*, 35; King, *Roots*, 118-21.

[47] Another criticism, made by David Stoll, is that Protestant pastors became notably wealthy, but he does not describe this as a direct consequence of SIL (as opposed to Presbyterian or other) influence; *Is Latin America Turning Protestant? The Politics of Evangelical Growth* (Berkeley: Univ. of California Press, 1990). 86.

[48] Cf., e.g., Toomas Gross, 'Changing Faith: The Social Costs of Protestant Conversion in Rural Oaxaca,' *Ethnos: Journal of Anthropology* 77:3 (2012): 344-71.

[49] King, *Roots*, 90f. Note: King cites the example of non-SIL linguist Jorge A. Suárez (of the Instituto de Investigaciones Filológicas at the UNAM), who identified 38 varieties of Zapotec, 29 of Mixtec, 19 of Nahuatl, and so forth.

[50] Hartch, *Missionaries*, 95f, 100-03, 112.

model community.[51] Tetelcingo was clearly anomalous and does not enter into this study. For statistical purposes, it therefore makes sense to use the 1940 census as a starting point.

An end point of 1970 allows for the gauging of changes across four editions of the census (although in the analysis that follows I generally omit the 1950 data, for the sake of simplicity and working on the assumption that changes became more pronounced over time). I chose to limit the periodisation to 1970 for a series of reasons. Firstly, factors pertinent to the SIL: by 1970, SIL had 317 linguists and support staff working on 96 languages and dialects across Mexico, a critical mass that suggests both a wealth of accumulated evangelising, translation, and community-transformation experience and a sample of communities large enough for the drawing of comparisons. While the SIL Mexico team would grow further in the 1970s, it did not do so by much, and the SEP contract cancellation of 1979 slowed its subsequent work. It was by 1970 that the majority of SIL's translation projects were underway; as of today these have produced 140 distinct New Testaments.[52]

Second, variables affecting indigenous literacy changed. By 1970 SIL linguists had often spent anywhere from 20 to 30 years in their communities; those that had left were almost always replaced, often with an overlap (see Appendix 2).[53] They had completed the production of hundreds of vernacular literacy texts.[54] Since these circulated in other indigenous pueblos with no fixed SIL presence, the statistical difference in indigenous literacy between SIL locales and non-SIL locales may well have begun to diminish by 1970. That difference likely diminished further after 1970 due to the establishment within the SEP in 1971 of a newly concerted (and apparently well-funded) bilingual education programme for indigenous children in which all the teachers were themselves indigenous.[55] Further, after a gradual increase dating from the 1920s, the 1970s saw an acceleration in rural school construction thanks to large increases in the federal budget for primary schools. For example, veteran demographer Robert McCaa found that in Chiapas, Mexico's fourth-most indigenous state by proportion of population, 'school attendance rates soared 250% in

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[51] Wallis & Bennett, *Two Thousand Tongues*, 118; Hartch, *Missionaries*, 14f; Svelmore, *A New Vision*, 271-73. Note: For all these efforts, the social transformation project was not a success, due in part to the scope of Townsend's ambition, which split his attention between multiple projects and led him ten years later to Peru; 15-19.

[52] Susan Regnier, SIL Mexico Archive, email to author, 30 July 2021. Note: The 140 NTs include many mutually-unintelligible dialect variations of the same language, regarded by SIL as distinct languages. They may also include separate versions in partially-intelligible subdialects. Hence, some of the 96 projects registered by 1970 likely spawned more than one published NT.

[53] The practice of immediately replacing SIL workers who quit their pueblos (to marry or for health or other reasons) was noted by Susan Regnier of the SIL Mexico Archive (email to author, 25 June 2021) and is affirmed by sources including the SIL's 1985 bibliography, which shows a regularity of publications about or for most language groups over the course of several decades; *Bibliografía*, 31-173.

[54] *Bibliografía*, 31-173; www.SIL.org.

[55] Drake, 'Bilingual education'. Note: Sources differ on the programme's long-term impact; Robert McCaa & Heather Mills, 'Is education destroying indigenous languages in Chiapas?' in Y. Lastra de Suárez, ed., *Las causas sociales de la desaparición y del mantenimiento de las lenguas en las naciones de América* (Quito: Uson, 1999).

two decades for children aged 6-14 of parents who spoke a vernacular, from 24% in 1970 to 61% in 1990'.[56] In other words, the federal boost to indigenous literacy after 1970 complicates efforts to gauge SIL's impact on that variable beyond my periodisation.

Third, factors affecting language acquisition also substantially changed. The period 1950 to 1970 saw an acceleration in road building, which in connecting many pueblos with market towns and cities, fostering trade with the former and circular migration with the latter – facilitated (some say: drove more than anything) indigenous acquisition of Spanish.[57] Indigenous people also became more exposed to radio, which at the time was uniformly a Spanish-language medium. Whereas in 1960, radios were found in only 28% of the nation's homes, that proportion rose to 76% by 1970.[58] Hence one can expect statistical variations in bilingualism between SIL locales and non-SIL locales to diminish towards 1970 and more so afterwards.

Finally, the 1970s merit separate quantitative consideration of religious practice because the decade witnessed a sea change in Mexican Protestantism, including in many of the pueblos where SIL had helped found the first churches, that would have a much greater impact on the census data. This was the expansion of Pentecostalism. The acceleration of conversions in Mexico during the 1970s has mostly been attributed to this overtly emotive form of Protestantism, chiefly introduced by former *braceros* and other Mexicans returning from living in the United States, where the phenomenon first arose. Their activities, often as itinerant preachers, became an important factor in Mexican Protestantism as of the 1940s, but it was in the 1970s that Pentecostal congregations – often building on the community groundwork laid by SIL, Presbyterians, and other 'mainline' denominations and mission groups – apparently surged into the majority within the total number of Mexican Protestants.[59]

(iii) Sample selection: 'SIL municipios'
Longevity and continuity of missionary presence was deemed by SIL itself, like many missionary organizations, as key to both conversions in numbers and the fomenting of

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[56] Stefano Varese, *Indígenas y educación en México* (Mexico City: Centro de Estudios Educativos, 1983); McCaa & Mills, 'Is education…?'
[57] For a visualization of the acceleration of Mexican highway construction from 1930 to 1990, see: 'México visualizado por datos históricos: Carreteras en México', CIDE-UC Riverside, https://mx.digital/proyectos/.
[58] *VIII Censo general de población. 1960: Resumen general*, 601f (total homes), 631 (homes with radios); *IX Censo general de población. 1970: Resumen general* (Mexico City: Secretaría de Industria y Comercio, 1972), 320.
[59] Wilbur Aulie, 'The Christian Movement among the Chols of Mexico with Special Reference to the Problems of Second-generation Christianity', Doctoral thesis, Fuller Theological Seminary (1979); Christine Anne Kray, 'Worship in body and spirit: Practice, self, and religious sensibility in Yucatan', Doctoral thesis, Univ. of Pennsylvania (1997), ch. 8; Garma Navarro & Leatham, 'Pentecostal Adaptations',148. Notes: (i) The post-1970 acceleration of Pentecostalism appears to have been pronounced in Oaxaca (Gross, 'Incompatible Worlds?', 195 [Figure 1]), whereas in Yucatán it became the majority Protestant practice in the 1980s (Kray, 283f); (ii) A Fuller Seminary study in 1969 estimated 63% of Latin American Protestants to be Pentecostals (Stoll, *Is Latin America…?*, 118), but Mexican Protestantism apparently stayed majority-mainline for longer.

literacy – if less so to the latter stages of New Testament translation, which as of the 1960s was increasingly accomplished in one of SIL's three linguistics centres (Mexico City, Mitla, Oaxaca, and Ixmiquilpan, Hidalgo). For that reason, I limited my sample to communities in which SIL missionary-linguists were in residence by 1950 and still resident in 1970, thus producing a minimum continuity of 20 years.[60] I allowed for handovers between SIL members, who often overlapped, but excluded those communities which members merely visited, even if they did so frequently.

Identifying where SIL staff lived and for how long was one of the most time-consuming aspects of this research. The archivist of the SIL Mexico Archive in Catalina, Arizona, which is not ordinarily open to outside researchers, was very helpful in providing information on request, but its records are organised by indigenous language, not by missionary or exact location. Much information was gleaned from the scholarly literature summarized above and in some cases from SIL histories and memoirs, although the former sometimes omit key dates and the latter proved hard to find – during a season in which interlibrary loan services were hampered by Covid-19 – without a large expenditure on second-hand copies. Fortunately, in the 1940s and 50, many SIL members published scholarly articles in linguistics and anthropology journals, notably the *International Journal of American Linguistics*, that almost always include footnotes signalling when and where the research was carried out. Further information was gleaned from the SIL website (www.SIL.org), which hosts thousands of members' literacy publications dating from the organization's earliest years and a limited number of biographical sketches; from SIL Mexico's 1985 bibliography (although some members continued publishing about the languages they had studied after leaving the area); from online obituaries; and in several cases from correspondence between the SIL archivist, kindly relaying questions on my behalf, and retired or veteran missionaries. My location- and missionary-specific findings are tabulated in the spreadsheet Appendix 2: 'SIL Mexico locations & members'.

(Initially, I intended to complement the research by using Mexico's National Archive, the AGN, which has a presidential collection that for the decades through to the 1960s is indexed by subject matter. One category is 'Religion', with cases identified by state and pueblo. According to the card catalogues, as of 1940 many of the corresponding files concern Protestant-Catholic conflicts and clashes. There are some 25 such case files for the presidency of Manuel Ávila Camacho [1940-46]; 40 for that of Miguel Alemán [1946-52]; and another 40 for that of Adolfo Ruiz Cortines [1952-58]; the category oddly disappears thereafter, nor could a synonymous category be found. Among these 105 cases, at least four pertained to minicipios in which SIL was based at some point between 1935 and 1970.[61] But in three of those four cases, the clashes took place before SIL members settled there.

[60] In a few cases, the residency started and ended somewhat earlier. For example, with one partner or other, Viola Waterhouse regularly visited the lowland Chontal municipio of San Pedro Huamelula, Oaxaca during 1942-48 (while living in a nearby Chontal municipio) and lived there from 1949 to 1966; see Appendix 2.
[61] AGN, Manual Ávila Camacho, Exp. 547.1/12 (Jalapa de Díaz, Oax.) & 547.1/8 (Ojitlán, Oax.); Alfredo Ruiz Cortines, Exp. 547.1/5 (Yajalón, Chis.) & 542.1/1643 (Cuicatlán, Oax.).

This sampling alone suggests that – contrary to what some anthropologists have alleged or implied – an SIL presence was not necessarily a factor of Catholic vs. Protestant violence. However, Covid-related restrictions obstructed access to these documents and also to the archive of the SEP, which as of several years ago has been housed at the AGN.)

To allow for at least a minimal degree of local comparison, I limited the analysis to states in which SIL had at least two resident bases by 1950. These proved to be Chiapas, Hidalgo, México, Oaxaca, and Puebla. Between these five states, by 1950, SIL had missionary linguists living in a total of 26 indigenous pueblos, divided as follows: 13 in Oaxaca, 6 in Chiapas, 3 in Puebla, 2 in Hidalgo, and 2 in México.[62] (Yucatán, the most heavily indigenous state, falls outside this paper's purview because, while SIL entered the Maya-speaking pueblo of Xocempich, Dzitás in 1936, the missionary couple involved re-affiliated with a separate organization in 1942, and SIL settled no other Yucatecan pueblos.[63]) As far as I have been able to trace them, by the same year of 1950 there were SIL staff based in another 18-to-20 indigenous pueblos across Mexico, so my sample of 26 represents close to 60% of permanently-staffed SIL locales in 1950. As Appendix 2 shows, in some cases it is the pueblo that appears in the sources, in other cases just the municipio, but as most census data for 1940-70 is tabulated by municipio, this is the primary unit of analysis. Hereafter, municipios settled by SIL members are termed 'SIL municipios'.

4b. Method: Quantitative Issues

(i) Using the Census Data

Mexican censuses have been conducted (more or less) every 10 years since the turn of the 20th century, the results now archived and digitized by the national statistical institute, INEGI. As noted, the main unit of census data is the municipio, which is sometimes translated as 'county' but on average is equivalent in size to an English county local district (such as West Oxfordshire).[64] It typically involves a main town (cabecera municipal) with outlying pueblos and villages; along with cities, these population centres are collectively referred to as *localidades*. Census data include not only the population size of each municipio, but also literacy, language, creed, and, as of 1950, an increasing amount of material detail.

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[62] Notes: (i) To be precise, SIL staff resided in seven Chiapas municipios in 1950, but one was abandoned that year; (ii) In México, SIL did not have two permanent residents in Jiquipilco until 1953, but I have included it because one of them jump-started the relevant linguistic work in the late 1940s.

[63] Hartch *Missionaries*, 73. Note: Brainerd and Elva Legters stayed on in Yucatán for decades and helped complete a New Testament translation into Yucatecan Maya by 1960 (which presumably served most of the peninsular due to the homogeneity of that language); Christine Anne Kray, 'Worship in body and spirit: Practice, self, and religious sensibility in Yucatan', Doctoral thesis, Univ. of Pennsylvania (1997): 270-74; May May, 'Presbiterianos en Yucatán', 173-78.

[64] Of the states examined in this paper: Chiapas in 1940 had 109 municipios, with an average area of 674 sq. km; Hidalgo had 80 municipios, averaging 100 sq. km.; Estado de México had 119 municipios, averaging 188 sq. km.; Puebla had 217 municipios, averaging 159 sq. km.; Oaxaca had a uniquely high 572 municipios, averaging just 64 sq. km (barely larger than the City of Oxford).

For each *localidad*, all censuses include population figures but (until 1970) no other data, which obliges researchers of mid-century Mexico to do most analysis at the municipio level. This is a bit of a limitation because, despite the average size of municipios just mentioned, a few of those in which SIL operated were vast; Ocosingo, which encompasses much of the Chiapas rainforest, is half the size of Wales (or close to the size of Connecticut) and includes more than 1,000 localidades.[65] Moreover, SIL usually chose a single base per municipio and often not the main town.

However, SIL case studies and memoirs suggest that over time, their translation work, social work, and religious influence pervaded much if not most of the municipio, due to trading networks (the cabecera municipal was the market town), the building of schools that used SIL materials, the setting up of SIL-staffed health clinics that drew people from other villages, and proselytizing by new converts.[66] Pan-municipio influence was quite feasible in Hidalgo, México, Puebla, Oaxaca, and the highland areas of Chiapas, where municipios are relatively small.

As of 1950, census data include such economic indicators as home ownership, home construction type, access to running water, and categories of employment status (worker, employee, boss, self-employed; relative gains in the boss and self-employed categories would suggest enhanced economic mobility). As of 1960, census data further include home size per number of rooms, indoor toilets, and radio and television ownership.

But how reliable is the census data? Linda King found that in measures of rural Mexicans in general, several problems were evident. Indigenous people would often 'profess not to speak an indigenous language because they believe speaking Spanish confers more status'. Next, indigenous regions were 'the most remote and therefore the most difficult to cover' by census takers. Moreover, in indigenous pueblos, the census takers themselves were often primary-school children (and high-school or university students in urban areas). Such limitations led, for example, to high numbers of 'Not specified' subjects in attempts to gauge bilingual vs. monolingual indigenous people as recently as in the census of 1990.[67]

A further concern for our purposes is that the number of Mexican Protestants has probably been slightly underestimated in each census. First, respondents answering neither *protestante* nor *católico* but *cristiano*, as many Mexican Protestants describe themselves,

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[65] 'Ocosingo', Enciclopedia de los Municipios y Delegaciones de México, www.inafed.gob.mx/work/enciclopedia/EMM07chiapas/municipios/07059a.html.
[66] Wallis & Bennett, *Two Thousand Tongues*, 109f, 138-48, 161; Hartch, *Missionaries*, 99, 108; Guzman Arias, 'Misioneros', 58-70.
[67] King, *Roots*, 85f, 96. Note: (i) By contrast, McCaa and Mills found data on indigenous people in Chiapas, as of the 1970 census, to be 'remarkably coherent and consistent´; McCaa & Mills, 'Is education…?'; (ii) In this author's experience (the 2020 census in Aguascalientes), census takers today are professionally trained adults.

may sometimes have been innocently been marked by census takers as Catholic.[68] Second, in zones of Protestant-Catholic conflict, some Protestants, as part of a minority group, may have felt uncomfortable declaring their affiliation and not answered, whereupon they would have been recorded in the census as 'None' (*ninguno*) or 'No reply' (*no indicado*).[69]

The 1970 census seems to have undercounted Protestants more substantially and perhaps deliberately. As I elaborate below (in Section 5(a)), there is circumstantial evidence of officials and agents shifting many converts into the 'None' category; the recording of *cristianos* as Catholics may also have become more pronounced. My hypothesis here is that, alarmed by the rapid rise of Protestantism in many indigenous municipios hitherto, and perhaps more so by the newer and more seductive/threatening phenomenon of Pentecostalism, census personnel actively suppressed the numbers. The well-documented tendency by the Catholic hierarchy of regarding Pentecostal churches as 'sects', unworthy of the same recognition as 'historical' denominations such as Presbyterians and Methodists, may well have influenced the 1970 census and others since.[70]

(ii) Comparing SIL municipios with other rural municipios

For states with large indigenous populations, by removing from census totals the municipios that had urban centers of more than 5,000 inhabitants, where white and mestizo Mexicans tended to be concentrated, one can establish an aggregate of municipios with a pronounced if not majority indigenous culture. In other words, predominantly rural municipios can function as a proxy for indigenous communities in such states.[71] Censuses of the era did not record ethnicity or ethnic self-identification, but according to the 1940 census, those states with the highest proportions of indigenous-language (including bilingual) speakers were Yucatán (75% of the population; roughly 310,000 people), Oaxaca (55%; 656,000), Hidalgo (34%; 260,000), Chiapas (33%; 225,000), and Puebla (31%; 380,000). In the sixth-ranked state of México, where indigenous-language speakers were many in number (240,000) but smaller as a proportion (21%), a separate kind of calculation must be made.[72]

In removing 'urbanized' municipios from the total, one can gauge how municipios with SIL linguists fared over time in comparison with the average 'rural' municipio. Any statistical

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[68] I owe the latter insight to Lis Isáis, former director of the Protestant news service Milamex; interview with Isáis, Mexico City, April 1992.

[69] In the census of 1960, about 1.2% of respondents fell into these categories; *VIII Censo general de población. 1960: Resumen general* (Mexico City: Secretaría de Industria y Comercio, 1962), 282.

[70] On the stigmatizing of 'sects', see: Stoll, *Is Latin America…?*, 5f, 40.

[71] Per the 1940 census, municipios with towns of at least 5,000 generally had a monolingual Spanish-speaking majority (exceptions were found in the State of México). The proposed method of calculation is more practical than more accurate but arduous method of adding up the indigenous language-only and bilingual speakers of a municipio, dividing it by the total population to deduce whether the municipio is majority-indigenous, and repeating the process for each of the 80 municipios of Hidalgo, 572 (*sic*) of Oaxaca, etc.

[72] Author's calculations, from *6º Censo de población. 1940: Resumen general* (Mexico City: Secretaría de la Economía Nacional, 1943), 1, 35, 39, 71f. Note: All other states had indigenous-speaking populations of 20% or less.

differences would not confirm SIL's educational impact, but they would *suggest* such an impact, pending evaluation of other potential factors. The latter might include (i) unusual demographic changes (faster- or slower-than average growth rates) and (ii) the opening of a municipal school, although here it might be the case that an SIL presence incentivized the SEP to move into the area, given the close cooperation between the two, especially as of its formal collaboration agreement of 1951.[73]

5. Quantitative Findings

(a) Religious conversion (and its underreporting)

While the purpose of this paper is to gauge the material impact of SIL missionary-linguists on the communities in which they lived ('SIL municipios') it may well be useful to note their spiritual impact also. Conversion rates can offer an important clue as to how well SIL workers were accepted by their communities and help explain various kinds of social transformation. In other words, conversion rates are something of an indicator of overall SIL influence. It is an imperfect indicator, given that other Protestant missionaries and pastors were sometimes already active in the area. However, the statistical evidence shows that SIL tended to choose municipios with a very minor Protestant presence (30 people or fewer in 20 of the 27 surveyed here) and in 10 cases – according to the 1940 census – none at all.

To illustrate the importance of conversion, Protestantism tends to encourage greater engagement than Catholicism with the written word – a trend seen globally since the 16th-century Reformation – and hence an increase in literacy levels. (That said, SIL members' first converts were often the locals they recruited as informants in their linguistic work, so in these cases, at least, literacy preceded or went hand-in-hand with conversion.[74]) As a second example, and as already noted, conversion may encourage greater savings, which in turn facilitate material improvements to converts' homes and employment categories.

As with subsequent variables, I look first at the central states of Hidalgo, Puebla, and México and then at the southern and poorer states of Oaxaca and Chiapas.

(i) Hidalgo: Proportion of Protestants (%)[75]

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[73] Hartch, *Missionaries*, 52-55, 83-85.
[74] Frederick Aldridge, 'William Cameron Townsend and his philosophy of national involvement in the Summer Institute of Linguistics', MA thesis, Excelsior College (2007): ch. 3; Svelmoe, *A New Vision*, 280.
[75] *6º Censo de población. 1940: Hidalgo* (Mexico City: Secretaría de la Economía Nacional, 1943); *VIII Censo general de población. 1960: Estado de Hidalgo* (Mexico City: Secretaría de Industria y Comercio, 1964); *IX Censo general de población. 19: Estado de Hidalgo* (Mexico City: Secretaría de Industria y Comercio, 1971).

Municipio	SIL entry	1940	1960	Change	1970	1940-70 change
Huehuetla[76]	1942/43	2.11	2.78		2.88	
Ixmiquilpan[77]	By 1940	0.31	4.30		3.76	
SIL average		***1.21***	***3.54***	***193%***	***3.32***	***174%***
Statewide		0.75	1.78	137%	1.55	107%

After around 30 years of activity, the average Protestant population in Hidalgo's two SIL municipios had almost tripled as a proportion of the whole, while statewide the proportion had barely doubled. Both SIL municipios on average and Hidalgo overall saw a slight relative decline in Protestantism between 1960 and 1970. The trend is especially surprising for Ixmiquilpan, which was host to many more than the usual complement of two SIL missionaries as of 1962, when SIL made the municipio's head town one of three regional headquarters for translation supervision in Mexico.[78] The ostensible relative decline in Protestantism during the 1960s may well owe to census bias, as is discussed below.

Mezquital Otomí-speaking Tasquillo is excluded, even though it was the first Hidalgo municipio in which SIL operated, as of 1936, due to the lack of a continuous SIL presence. The first missionary, Richmond McKinney, was not a good fit (he disagreed with Townsend's methods and was at one point jailed for offending local authorities); he left SIL in 1944. It seems that afterwards SIL merely visited Tasquillo, except when leading linguist Ethel Wallis lived there from 1950 to around 1953. Thereafter, SIL work on Mezquital Otomí was concentrated in Ixmiquilpan.[79]

(ii) Puebla: Proportion of Protestants (%)[80]

Municipio	SIL entry	1940	1960	Change	1970	1940-70 change
Tepexi[81]	1942	1.14	1.80		1.28	

[76] On SIL in Huehuetla: Hartch, *Missionaries*, 108-27; *Bibliografía*, 108f, 127f. Note: Work on Tepehua began in 1942 and on Otomí de la Sierra in 1943; cf. Bethel Bower, 'Notes on Shamanism among the Tepehua Indians', *American Anthropologist* 48 (1946): 683.
[77] On SIL in Ixmiquilpan: Gabriela Garrett Ríos, 'Comunidad étnica y comunidad religiosa: Apuntes para comprender la conversión religiosa entre los hñähñu de Ixmiquilpan, Hidalgo', *Estudios de Cultura Otopame* [UNAM] 4 (2004): 133, 142f; Hartch, *Missionaries*, 131.
[78] The SIL's Manuel Gamio Linguistics Center in Ixmiquilpan was inaugurated on 29 Aug. 1962; Susan Regnier, email to author, 29 July 2021.
[79] Ethel Wallis, 'Simulfixation in aspect markers of Mezquital Otomi', *Language* 32:3 (1956): 453; Wallis & Bennett, *Two Thousand Tongues*, 97; 'Home-Towners: Richmond McKinney', *The Palmer Rustler* [Palmer, TX], February 17, 1955, p. 2, https://texashistory.unt.edu/ark:/67531/metapth785784/m1/2; Hartch, *Missionaries*, 41, 48, 87f.
[80] *6º Censo de población. 1940: Puebla* (Mexico City: Secretaría de la Economía Nacional, 1947); *VIII Censo general de población. 1960: Estado de Puebla* (Mexico City: Secretaría de Industria y Comercio, 1963); *IX Censo general de población. 19: Estado de Puebla* (Mexico City: Secretaría de Industria y Comercio, 1971).
[81] On SIL in Tepexi: Ann Williams, 'Notes on the Popoloca Indians of San Felipe Otlaltepec, Puebla, Mexico', *American Anthropologist* 48 (1946); *Bibliografía*, 117f.

Zacapoaxtla[82]	1941	0.24	1.94		2.23	
Zapotitlán de Mendéz[83]	1936	0	2.11		1.18	
SIL average		***0.46***	***1.95***	***324%***	***1.56***	***239%***
Statewide		0.73	1.74	138%	1.71	134%

While across Puebla the proportion of Protestants more than doubled between 1940 and 1970, SIL municipios saw Protestantism more than triple in relative size. On the other hand, a similar overall shrinkage to that noted for Hidalgo occurred after 1960. (Converts in Zapotitlán de Mendéz, of whom not one could be found in 1940, declined from 63 in 1960 to 39 by 1970. Did one-third of the community migrate, or was census bias to blame?)

(iii) State of Mexico: Proportion of Protestants (%)[84]

Municipio	**SIL entry**	**1940**	**1960**	**Change**	**1970**	**1940-70 change**
Jiquipilco[85]	1953	0	5.51		5.75	
Jocotitlán[86]	1940	0.12	1.92		2.76	
SIL average		***0.06***	***3.71***	***6,083%***	***4.25***	***6,983%***
Statewide		0.65	1.26	94%	1.43	120%

Whereas the Protestant proportion of *mexiquenses*, as State of Mexico natives are known, slightly more than doubled between 1940 and 1970, the average proportion in Jiquipilco and Jocotitlán grew *71-fold*. During the 1960s, according to the 1970s census, the Protestant fraction did not shrink (unlike in Hidalgo and Puebla) but the recorded growth rate slowed drastically, so again census bias might have been involved.

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[82] On SIL in Zacapoaxtla: Arch McKinlay, *Visits with Mexico's Indians* (Glendale, CA: Wycliffe Bible Translators, 1944); Harold & Mary Key, 'The Phonemes of Sierra Nahuat', *International Journal of American Linguistics* 19:1 (1953): 53; Dow Robinson, *Wind of the Son: The Story of God's Mighty Outpouring among the Descendants* (Mobile, AL: Gazelle Press, 1999); *Bibliografía*, 104f.

[83] On SIL in Zapotitlán de Mendéz: Wallis & Bennett, *Two Thousand Tongues*, 97, 157f; Hugh Steven, *Translating Christ: The Memoirs of Herman Peter Aschmann, Wycliffe Bible Translator* (Pasadena, CA: William Carey, 2011).

[84] *6º Censo de población. 1940: Estado de México* (Mexico City: Secretaría de la Economía Nacional, 1943); *VIII Censo general de población. 1960: Estado de México* (Mexico City: Secretaría de Industria y Comercio, 1963); *IX Censo general de población. 1970: Estado de México* (Mexico City: Secretaría de Industria y Comercio, 1971).

[85] On SIL in Jiquipilco: *Bibliografía*, 107f; Doris Bartholomew email to Susan Regnier, July 2021, forwarded to author. Note: As I footnoted above, I include Jiquipilco, even though SIL residence was not established until after 1950, because one of the team jump-started the relevant linguistic work in next-door Temoaya in the late 1940s; Henrietta Andrews, 'Phonemes and morphophonemes of Temoayan Otomi', *International Journal of American Linguistics* 15:4 (1949).

[86] On SIL in Jocotitlán: Hazel Spotts, 'Vowel harmony and consonant sequences in Mazahua (Otomi)', *International Journal of American Linguistics* 19:4 (1953): 253-58; *Bibliografía*, 67f; Hartch, *Missionaries*, 71.

(iv) Chiapas: Proportion of Protestants (%)[87]

Municipio	**SIL entry**	**1940**	**1950**	**1960**	**1940-60 Δ**	**1970**	**1940-70 Δ**
Copainalá[88]	1940	1.89	12.9	11.7		11.0	
Las Margaritas[89]	1943	0.57	0.89	0.85		1.20	
Ocosingo[90]	1944	0.04	0.63	8.89		11.6	
Oxchuc[91]	1942	0	0	34.7		25.1	
Tumbalá[92]	1940	3.0	19.2	23.0		19.6	
Yajalón[93]	1947	0.27	9.58	9.58		8.38	
SIL average		***0.96***	***7.2***	***14.8***	***1,442%***	***12.8***	***1,233%***
Statewide		0.94	2.13	4.20	347%	4.80	411%

Chiapas today is the state with the highest proportion of Protestants, at 32.5% according to the 2020 census; it has held this distinction since 1990.[94] In 1940, however, the state's level of Protestantism was barely higher than the national level of 0.91%. Census data show that local growth took off between 1940 and 1960, and the average rate of conversion in SIL municipios was triple the statewide growth rate. Though SIL staff were based in just six of the state's 111 municipios by 1950, they added another five over the following decade

[87] *6º Censo de población. 1940: Chiapas* (Mexico City: Secretaría de la Economía Nacional, 1943); Séptimo *Censo general de población. 1950: Estado de Chiapas* (Mexico City: Secretaría de la Economía, 1952); *VIII Censo general de población. 1960: Estado de Chiapas* (Mexico City: Secretaría de Industria y Comercio, 1963); *IX Censo general de población. 1970: Estado de Chiapas* (Mexico City: Secretaría de Industria y Comercio, 1971). Note: Unlike with other states, I have include the figures for 1950 due to the high rate of conversion in Chiapas.

[88] On SIL in Copainalá: William Wonderly, 'Zoque Place-Names,' *International Journal of American Linguistics* 12: 4 (1946): 217; *Bibliografía*, 107f; Susan Regnier, email to author, 25 June 2021.

[89] On SIL in Las Margaritas: Julia Supple & Celia Douglass, 'Tojolabal (Mayan): phonemes and verb morphology,' *International Journal of American Linguistics* 15:3 (1949): 168; Hugh Steven, *Dear Aaron and Hur: An Intimate Portrait of the Life and Times of Julia Supple Andrus* (n.p., 2012); *Bibliografía*, 133.

[90] On SIL in Ocosingo: Wallis & Bennett, *Two Thousand Tongues*, Ch. 18; Philip Baer & William Merrifield, *Two Studies of the Lacandones of Mexico* (Norman: Summer Institute of Linguistics/Univ. of Oklahoma, 1971); Issac Guzmán Arías, 'Misioneros al Servicio de Dios y del Estado: Presencia del ILV en Oxchuc, Chiapas'. MA thesis, CIESAS-Sureste (2010), 30, 70.

[91] On SIL in Oxchuc: Marianna Slocum, *The Good Seed* (Orange, CA: Promise, 1988); Hartch, *Missionaries*, 95-97, 100; Guzmán Arías, 'Misioneros'.

[92] On SIL in Tumbalá: Viola Warkentin & Arabelle Whittaker, 'Tumbalá Chol Clause Structure,' *Linguistics* 8:60 (1970): 74; Slocum, *The Good Seed*; Stoll, *Is Latin America…?*, 85-88. Note: Tumbalá's relatively high Protestant population of 1940 owed to evangelizing by the Mexican National Presbyterian Church and the Reformed Church in America; Wallis & Bennett, *Two Thousand Tongues*, 144; 'The New Word: Chols Read Own New Testament', *Translation* [Santa Ana, CA], 1961.

[93] On SIL in Yajalón: James Hefley, *Peril by Choice: The Story of John and Elaine Beekman, Wycliffe Bible Translators in Mexico* (Grand Rapids, MI: Zondervan, 1968); Hugh Steven, *The Man with the Noisy Heart* (Chicago: Moody, 1979); Jan Rus & Robert Wasserstrom, 'Evangelization and Political Control: The SIL in Mexico', in Hvalkof & Aaby, eds., *Is God an American?*, 166-68.

[94] Alejandro Díaz Domínguez, '¿Qué nos dice el Censo 2020 sobre religión en México?', Nexos Taller de Datos, 1 February 2020, https://datos.nexos.com.mx/que-nos-dice-el-censo-2020-sobre-religion-en-mexico. Note: In 1980, Tabasco recorded a Protestant proportion of 12.2%, against 11.5% for Chiapas*; X Censo General de Población y Vivienda, 1980: Resumen general abreviado* (Mexico City: INEGI, 1984): Chart 20.

(Chilón, Huixtán, Ostuacán, Palenque, San Cristóbal de las Casas) and they were active as visitors in at least five more (Chenalhó, Larráinzar, San Juan Chamula, Tapalapa, Zinacantan[95]). So, altogether, it is reasonable to infer that SIL – both in its presence and via its published materials, which included four completed New Testaments by 1970 – was an important factor of the state's early trajectory as a modern Protestant hotbed. Again, its activities tended to take place in cooperation with the Presbyterian Church, which supplied pastors to SIL towns, built churches there, and used its translations of scripture.[96]

The other remarkable trend the data purport to show is a relative decline in Protestantism in SIL's Chiapas municipios during the 1960s. Overall, the decline is similar in scope to that seen for Hidalgo and Puebla, but in several municipios it is especially severe. In Oxchuc the registered Protestant fraction strangely fell from nearly 35% to 25% in 1970; by contrast, in 1965, a Norwegian anthropologist estimated that already *half* the population of Oxchuc was Protestant.[97] In Tumbalá, where the proportion declined by a seventh, the total number of Protestants also fell, from 3,205 to 2,759. Since these were effectively SIL's flagship municipios, with the highest conversions rates in Chiapas (and possibly in all Mexico), might Catholic census officials or census takers have actively underreported the number of converts? This hypothesis gains circumstantial evidence from the sudden popularity of the 'No religion' or 'None' category in the 1970s census. In 1960, just 194 people or 1.5% of Oxchuc residents were categorized as either 'None' or 'Not given'; in 1970, that number rose to 1,892 people, or 10.5%.[98] In Tumbalá, 'Nones' rose from 175 to 445. Another possibility is that, due to rising Catholic-Protestant tensions, some Protestants may have kept their affiliation from census takers, but this seems unlikely in municipios with such a critical mass of converts as found in Oxchuc and Tumbalá.

While here and elsewhere a bias against Protestants appears to be a general feature of the 1970 census, the phenomenon is already apparent in Chiapas in earlier censuses. In Oxchuc, the work of Marianna Slocum and her colleagues yielded *no converts at all* during their first eight years, according to the 1950 census. That datum is contradicted by various third-party accounts, as well as Slocum's own.[99] It thus suggests a kind of '*carro completo'*, the traditional term for an electoral fraud in which a whole town or district is deemed by local authorities to have voted for the ruling party. Census bias may also explain the ostensible stalling in the proportion of converts in Copainalá after 1950.

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[95] See Appendix 2.
[96] Guzmán Arías, 'Misioneros', 58f, 65, 71, 85.
[97] Henning Siverts, *Oxchuc* (Mexico City: Instituto Nacional Indigenista, 1969), 175, cited in Hartch, *Missionaries*, 100. Note: Siverts' book was first published in Norwegian in 1965.
[98] In the 1970 census, the 'Not given' category disappears, apparently subsumed into 'None'. The definition of 'None' ('Ninguna religión') is: 'Dentro de este grupo se incluye a las personas que declaran no tener religión o que aun siendo creyentes no siguen las normas o preceptos de alguna religión específica'; *Chiapas 1970*, p. LXVII.
[99] Slocum, *The Good Seed*; Stoll, *Fishers of Men*, 52; Ryan, 'Chiapas observed', 109-26; Guzmán Arías, 'Misioneros'.

(v) Oaxaca: Proportion of Protestants (%)[100]

For the fourteen SIL municipios in Oaxaca, the average proportion of Protestants in 1940 was just 0.15%, lower even than the relatively low state average of 0.40; nine of them had no converts at all.[101] By 1970, Oaxaca's Protestant population stood at 1.5% of the whole, an increase of 275%, the second-highest growth rate among the five states studied, after Chiapas. However, longitudinal analysis of SIL municipios cannot yet be attempted because in the 1960 and 1970 censuses, religious affiliation (unlike many other categories) is tabulated only by 'ex-district,' a reference to the thirty districts into which the state was divided before the 1910 Revolution. The 1980 census, by when Protestants had grown to 4.4% of Oaxaca's population, returns to a municipio-based tabulation. However, the acceleration of conversions during the 1970s has mostly been attributed to Pentecostalism, a trend that appears to have been pronounced in Oaxaca.[102]

(vi) Overall findings on religious conversion

The overall picture generated by the five states allows two significant observations. First, in each state, Protestantism grew considerably faster in the average SIL municipio than in the respective state as a whole. (Oaxaca might be an unlikely exception, but municipal data are lacking.) The difference ranged from roughly 1.6 times faster in Hidalgo to 58 times faster in the State of Mexico. It seems obvious that the difference was at least partly due to SIL's constant presence, though that often worked in combination, indeed in synergy, with the coexistence of Protestant pastors (and almost certainly more so in the two State of México municipios). This finding in turn allows us to suppose that material changes in those communities – from literacy growth to use of shoes – owed at least in part to SIL influence.

Second, most SIL municipios show a slowdown, and occasionally a reversal, in their proportions of Protestant residents, according to the 1970 census. Rural to urban migrations during the 1960s might explain some of it (if Protestants moved in greater numbers than Catholics, as well they might if they faced small-town persecution), but that option is largely ruled out by the fact that reported growth of Protestantism slowed on a nationwide basis too. A likelier explanation is that Catholic or secularist census personnel, alarmed at Protestantism's acceleration since 1940 and perhaps particularly concerned with the impact of SIL (which was starting to be associated with U.S. cultural imperialism), fiddled the numbers. Such an outcome would have been easy to achieve given that indigenous-pueblo census takers were usually children and thus an especially malleable team.

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[100] *6º Censo de población. 1940: Oaxaca* (Mexico City: Secretaría de la Economía Nacional, 1948); *VIII Censo general de población. 1960: Estado de Oaxaca* (Mexico City: Secretaría de Industria y Comercio, 1963); *IX Censo general de población. 1970: Estado de Oaxaca* (Mexico City: Secretaría de Industria y Comercio, 1971).

[101] For a list of the municipios, see under 'Literacy', below.

[102] Gross, 'Incompatible Worlds?', 195 (Figure 1).

(b) Literacy[103]

(i) Literacy in Hidalgo

In 1940, Hidalgo had an overall literacy rate of 23%, against a national average of 35%. Of the 80 Hidalgo municipios in 1940,[104] those with cities of 5,000 or more inhabitants (and an overall literacy rate of 25% or higher) were five in number: state capital Pachuca plus Mineral del Monte (a.k.a. Real del Monte), Tulancingo, Mixquiahuala, and Tepeji. Discounting these five 'urban' municipios produces the overall rural sample. Since the first wave of SIL linguists in Hidalgo arrived in the early 1940s, the 1940 census serves as the best point of departure for comparative analysis. The literacy rates in those municipios evolved as follows:

Municipio	**Language (dialect)**	**Entry**	**1940**	**1960**	**Δ**	**1970**	**1960-70 Δ**
Huehuetla	Tepehua & Otomí (Sierra)	1942/3	6.6	12.9	95.5%	20.6	59.7%
Ixmiquilpan	Otomí (Mezquital Valley)	1940	16.6	29.3	76.5%	38.1	30.0%
SIL average			***11.6***	***21.1***	***85.5%***	***29.3***	***44.8%***
Rural sample average			18.6	31.6	69.9%	38.7	22.5%

SIL's Hidalgo municipios both had a literacy rate in 1940 below the average recorded in the state's rural municipios. By 1960, they had seen literacy grow at a faster rate than for the rural Hidalgo average, if modestly so. Between 1960 and 1970, the literacy growth rate in SIL municipios was twice that of the rural average. Ixmquilpan may have seen lower literacy growth than in Huehuetla because the SIL workers based in the former were more involved in regional coordination of SIL translation activities than in local teaching.[105] (A similar base in Mitla, Oaxaca served the south of Mexico.) Tasquillo, which had SIL residents from 1936 to 1944 and 1950 to 1953, also saw impressive literacy growth between 1940 and 1960, with a 95% increase. But over the following decade growth dropped to a mere 13%, and the absence of permanent SIL staff was likely a factor of the decrease.

(ii) Literacy in Puebla

In Puebla, which in 1940 had an overall literacy rate of 26%, the first three municipios with an SIL presence belonged to different linguistic communities: Popoloca-speaking Tepexi,

[103] Except for Oaxaca, I calculated 'overall literacy' by dividing literate inhabitants aged 6 and over as indicated in Chart 1 in the state volumes of the 1960 census (which tracks literacy since 1930) by a municipio's total population. While Chart 33 gives municipal literacy in percentage terms for inhabitants 6 and over (what one might call 'adult and juvenile literacy'), it lacks data for previous decades, nor does the 1940 census itself offer this measure. For Oaxaca in 1960 (where Chart 1 gives data by district only), I used the data in Chart 33. In 1970, literacy was measured (in Chart 14 in the state volumes) among inhabitants aged 10 and over, as opposed to 6 and over; this change slightly inflates the literacy rate as compared with the 'overall literacy' rate defined above.

[104] Hidalgo's number of municipios grew to 82 by 1950 and 84 by 1970, and the rural average has been calculated accordingly.

[105] Hartch, *Missionaries*, 131, 163.

Nahuatl-speaking Zacapoaxtla, and Totonac-speaking Zapotitlán de Méndez (not to be confused with the southern Puebla municipio of Zapotitlán). All are rural and mountainous, Tepexi being located in the southern area known as the Mixteca (which extends into Oaxaca), the other two in Puebla's Northern Sierra.

Of the 215 Puebla municipios in 1940, those with cities of 5,000 or more inhabitants in 1940 were thirteen in number; these are discounted to produce the overall rural sample.[106] As with Hidalgo, the first wave of SIL linguists in Puebla arrived between 1936 and 1942, so the 1940 census again serves as the point of departure for comparative analysis. The literacy rates in those municipios evolved as follows:

Municipio	**Language (dialect)**	**Entry**	**1940**	**1960**	**Δ**	**1970**	**1960-70 Δ**
Tepexi	Popoloca	1942	21.1	30.4	44%	64.0	111%
Zacapoaxtla	Náhuatl (Puebla Sierra)	1941	18.9	32.8	74%	57.7	75.9%
Zapotitlán de M.	Totonac (Sierra)	1936	26.4	39.9	40%	51.1	28.1%
SIL average			***22.1***	***34.4***	***55.7%***	***57.6***	***67.4%***
Rural sample average			20.0	33.3	66.5%	57.7	73.3%

The three SIL municipios in Puebla had a combined literacy rate a little higher than the rural average in 1940, but by 1970 there was no difference between them. In other words, at first glance SIL had no positive impact on literacy in its Puebla locales. However, Zapotitlán de Mendéz is an outlier among the three, for it it is much smaller, having a population in 1970 of just 3,297, against 12,775 for Tepexi and 26,134 for Zacapoaxtla. A weighted average (such as I have already calculated for rural Puebla overall) produces a 30-year literacy gain for the SIL municipios of 195%, which is slightly better than the 188% recorded in the average rural municipio.

Why Zapotitlán de Mendéz proved a slow learner (despite a six-point head-start over the rural average in 1940) is unclear. It may be that, due to its small size, it was one of the last municipios in the state to gain a formal school. It may also be that resident SIL missionary Hermann Aschmann expended so much energy on Bible translation and evangelism, he had little left for teaching. His Sierra Totonac New Testament was the third to be completed (in 1959), he went on two produce two further New Testaments in distinct Totonac dialects, and he was credited with the training of indigenous pastors who set up fifty Totonac churches.[107]

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[106] By 1960, Puebla had 222 municipios and by 1970 the number had been reduced to 217. The 13 'urban' municipios were Acatlán, Atlixco, Cuetzalan, Chalchicomula, Huauchinango, Huejotzingo, Izúcar de Matamoros, Puebla, San Gabriel Chilac, San Martín Texmelucan, San Pedro Cholula, Tehuacán, and Teziutlán.

[107] Steven, *Translating Christ*; Dan Wooding, 'Herman P. Aschmann, translator of three versions of the Totonac New Testament in Mexico has died at the age of 94', Identity Network, n.d. [2008], www.identitynetwork.net/apps/articles/default.asp?articleid=43780; 'First 100 New Testaments in Mexico', SIL Mexico Archive.

(iii) Literacy in the State of Mexico

For the relatively populous State of Mexico, I did not disaggregate urbanized from rural municipios, because the first ones that hosted SIL linguists already had urban populations of more than 5,000. It is worth noting that the state's 119 municipios were more densely populated than those of Hidalgo, Puebla, or Chiapas and towns of 5,000 and up were already common by 1940.[108] By 1950 or so there were just two SIL bases, both in the rural northwest of the state: Jiquipilco, where a local variant of Otomí is spoken, and Mazahua-speaking Jocotitlán.

Municipio	**Language (Dialect)**	**Entry**	**1940**	**1960**	**Δ**	**1970**	**1960-70 Δ**
Jiquipilco	Otomí (State of Mex.)	1953	13.3	30.2	127%	52.8	72.2%
Jocotitlán	Mazahua	1940	21.8	44.5	104%	69.4	56.0%
SIL average			***17.55***	***37.35***	***115%***	***61.1***	***64.1%***
State of Mexico average			25.4	45.7	80%	75.0	64.1%

Here the data suggest a trend similar to that among SIL communities in Hidalgo, with a faster than average increase in literacy, but at a more notable difference (indeed almost 50% faster than the average) until 1960. This finding is also significant given the fact that the State of México was fast urbanizing at this time, with places on the periphery of Mexico City like Naucalpan and Tlalnepantla turning from modest pueblos into large industrial nodes within twenty years.[109] Where industry multiplies so do schools. Nonetheless, in relatively slow-growing Jiquipilco and Jocotitlán (whose populations respectively grew 40% and 30% by 1960, against the state-wide growth of 70%), and which were thus less of an educational priority for state government officials than industrial towns, literacy grew unusually quickly.

During the 1960s, the rate of literacy growth in SIL municipios slowed somewhat relative to that of the state average. One possible factor behind the slowdown is a disproportionate migration of literate townspeople from these relatively remote towns to Mexico City or the State of México industrial belt.

(iv) Literacy in Chiapas

In 1940, Chiapas had an overall literacy rate of only 17%. Of the 109 Chiapan municipios, those with cities of 5,000 or more inhabitants in 1940 were seven in number: Cintalapa, Comitán, Chiapa, San Cristóbal de las Casas, Tapachula, Tonalá, and Tuxtla Gutiérrez;

[108] In 1940, México state had a population of 1.15 million, against 772,000 for Hidalgo and 680,000 for Chiapas; it had 15 towns of 5,000 or more people, against 5 in Hidalgo and 7 in Chiapas. By 1970, the number of municipios had risen to 120.

[109] The pueblos of Naucalpan and Tlalnepantla had populations of fewer than 5,000 in 1940, but by 1960 they tallied 86,000 and 105,000 respectively.

each had at least 25% literacy.[110] In the earliest SIL municipios, literacy rates grew as follows:

Municipio	**Language (dialect)**	**Entry**	**1940**	**1960**	**Δ**	**1970**	**Δ**	**Size (km²)**[111]
Copainalá	Zoque (Copainalá)	1940	15.6	39.8	155%	72.0	81%	395
Las Margaritas	Tojolabal	1943	7.8	23.5	201%	39.7	69%	4,250
Ocosingo[112]	Tzeltal + Lacandón	1944	7.1	11.0	55%	26.1	137%	12,142
Oxchuc	Tzeltal (Oxchuc)	1941	9.8	12.0	22%	46.6	288%	42
Tumbalá	Chol (Tumbalá)	1940	3.2	13.8	331%	33.3	141%	348
Yajalón	Chol (Tumbalá)	1947	13.1	19.6	50%	39.9	104%	145%
SIL average			***9.4***	***20.0***	***112%***	***42.9***	***115%***	
Rural sample average			13.4	27.5	105%	48.9	78%	

SIL municipios in Chiapas were notably more illiterate in 1940 than even the low rural average. Initially, the SIL impact on literacy seems modest, with the average increase over the first two decades only slightly higher than that in rural municipios generally. During the 1960s, however, literacy grew in SIL municipios at about one-and-a-half-times the rate of the rural average. The reasons are unclear. Perhaps SIL's Chiapas staff grew in competence; perhaps federal authorities chose to 'reward' SIL municipios in Chiapas with greater investment in rural schools; perhaps other variables such as road-building had a greater bearing.

Two external factors show that SIL municipios made greater progress than is readily apparent. First, the small literacy improvement recorded in Oxchuc by 1960 must be set against a fourfold increase in the population, an unusually high rate (more than double the average), which evidently owed to an expansion of its territory in the 1950s from 42 to 72 square kilometers, thus adding areas less reached by SIL; in numerical terms, by contrast, literate inhabitants grew over the two decades from 292 to 1,515, a *fivefold* increase. (Tumbalá doubled in size over the same period, so its unusually fast literacy gains may have been boosted by the municipio's incorporation of one or more pueblos with pre-existing schools.) Second, the modest literacy increase by 1960 in Ocosingo must be contextualized with the giant size of the municipio and its rainforest terrain, both of which surely slowed educational efforts.

[110] By 1950, the number of Chiapan municipios had risen to 111, with the same sum in 1960 and 1970.
[111] Size in 1940. Some municipios shrank over the decades as faster-growing population centers earned municipio status. Hence Ocosingo, 12,185 km² by 1930 and 12,142 km² by 1940, shrank further to 10,591 km² by 1960 and 9,520 km² today; Yajalón was 145 km² in 1940 but 109 km² by 1960 (and today it is 162 km²). In contrast, Oxchuc grew from 42 km² by 1940 to 72 km² by 1960 (the size it retains today), an expansion that explains its fourfold population increase during a 20-year period during which the population of Chiapas as a whole did not quite double; Tumbalá doubled in size from 348 km² to 705 km² by 1960.
[112] Both Tzeltal and Lacandón-language projects were begun in 1944.

I have excluded the municipio of Chilón, SIL's first Chiapan base, which a missionary first visited in 1938, because he died (while on leave) in 1941. No SIL staff actually resided in Chilón until 1957.[113] Still, the data are instructive. Between 1940 and 1960 its literacy rate actually fell, from 7.1 to 6.8%, apparently due to a population loss during the 1940s that disproportionately affected the literate. However, between 1960 and 1970, with SIL in residence, the Chilón literacy rate almost tripled to 18.7%. It is also interesting to note that by 1960, Protestant converts in Chilón, of whom there were just 17 in 1940 (0.2% of the population) and 23 in 1950, mushroomed to 1,116 by 1960 (5.5%). Ocosingo registered a similar experience: converts increased exponentially but literacy only modestly. That trend is not general, however: the reverse is true of Las Margaritas, which saw only a slight increase in converts to 1960 but a tripling in literacy, while Oxchuc saw both a high absolute increase in literacy and an explosion in Protestant conversion and Tumbalá recorded both the highest increase in literacy and the second-highest in converts. (I return to the issue of correlation at the end of this section.)

For similar reasons to those regarding Chilón, I also excluded Tzotzil-speaking Zinacantán. SIL settled here in 1939 but departed in 1950. Tzotzil communities became known among SIL and other missionaries for their hostility to outsiders and to converts (notoriously so in the case of San Juan Chamula, whose caciques expelled thousands of converts as of the 1960s; by one estimate, almost half of all Chamulans were living outside the municipio by the 1980s[114]). In most cases, SIL staff worked on Tzotzil translations and evangelised Chamulan visitors while based in the city of San Cristobal de las Casas (on the periphery of which many exiled converts, or *expulsados*, settled and built villages). SIL's physical departure likely helps explains the relatively slow literacy growth in Zinacantán, which nudged up a mere 15% between 1940 and 1960.[115]

(v) Literacy in Oaxaca

In 1940, Oaxaca had an overall literacy rate of just 17% (like that of Chiapas). Urban/rural population breakdowns per municipio in 1940 are not given for this state. Of the 572 Oaxacan municipios, those with cities of 5,000 or more inhabitants in 1950 were seventeen in number, of which four had cities of 10,000 or more.[116] For simplicity's sake I am subtracting three of the latter (state capital Oaxaca plus Ciudad Ixtepec and Tehuantepec) from the total to produce the rural sample for 1940. Each of those three municipios had at least 25% literacy by that year; the fourth, Juchitán, did not and was anyway a site of an

[113] Hartch, *Missionaries*, 95f;
[114] Harvard anthropologist Gary Gossen, cited in Ryan, 'Chiapas observed', 131.
[115] Hartch, *Missionaries*, 168; Mark Weathers email to Susan Regnier, June 2021, forwarded to author. Notes: (i) Weathers, whose parents Ken & Nadine were SIL missionaries in Zinacantán (1943-50), reports that after 1950 the only researcher resident in a Tzotzil community was Marion Cowan in Huixtán; (ii) The 113% literacy growth witnessed between 1940 and 1960 in the Tzotzil municipio of Chenhaló, where SIL staff regularly visited but never established a residence, likely owes most to non-SIL factors.
[116] Oaxaca had 572 municipios in 1940, 571 in 1950 and 1960, and 570 in 1970 (as also today).

SIL base (many of the other thirteen urban municipios similarly had rates below 25%).[117] In the earliest SIL municipios, literacy rates grew as follows:

Municipio	**Language (dialect)**	**Entry**	**1940**	**1960**[118]	**Δ**	**1970**	**1960-70 Δ**
Concepción Pápalo[119]	Cuicatec (Tepeuxila)	1940	7.1	38.0	435%	65.3	
Huautla de Jiménez[120]	Mazatec (Huautla)	1936	8.2	26.1	217%	35.4	
Juchitán[121]	Zapotec (Isthmus)	1944	19.7	49.8	153%	60.3	
Putla Villa[122]	Trique (Chicahuaxtla)	1942	17.2	48.2	180%	58.0	
San Baltasar Yatzachi[123]	Zapotec (Yatzachi)	1937	17.5	65.5	274%	61.7	
San Juan Atepec[124]	Zapotec (Sierra de Juárez)	1942	*5.9*	55.8	*846%*	80.0	
San Lucas Ojitlán[125]	Chinantec (Ojitlán)	1950	9.9	35.1	255%	51.0	
San Mateo del Mar[126]	Huave	1943	5.9	19.3	227%	31.5	
San Miguel el Grande[127]	Mixtec (SM el Grande)	1935	13.6	34.9	157%	60.3	
San Pedro Huamelula[128]	Chontal (Lowland)	1942	7.7	38.0	394%	56.3	

[117] Although Juchitán was Oaxaca's third-largest municipio in 1940, with 15,000 residents, its population 5 years old and over was 58% Zapotec-speaking, an unusual concentration of indigenous Mexicans.
[118] As noted above, the 1960 & 1970 volumes for Oaxaca give overall literacy rates by district only, so here I am using the 'adult and juvenile' rate, which discounts the under-6s from the sample, thus slightly inflating the figures relative to 1940.
[119] On SIL in Concepción Pápalo: Doris Needham & Marjorie Davis, 'Cuicateco phonology', *International Journal of American Linguistics* 12:3 (1946): 139; *Bibliografía*, 35f.
[120] On SIL in Huautla de Jiménez: Pike, *Not Alone* and *Words Wanted* (Chicago: Moody Bible Inst., 1958); Wallis & Bennett, *Two Thousand Tongues*, 94f, 104, 156f; Svelmoe, *A New Vision*, 267f, 280; Jonathan Daniel Vielma Hernández, 'Panorama de los estudios lingüísticos sobre el mazateco', *Cuadernos de Lingüística* [Colegio de México] 4:1 (2017), esp. 220-43.
[121] On SIL in Juchitán: Velma Pickett, 'Isthmus Zapotec verb analysis I', *International Journal of American Linguistics* 19:4 (1953): 292; *Bibliografía*, 157f.
[122] On SIL in Putla Villa: Robert Longacre, 'Five phonemic pitch levels in Trique', *Acta linguistica* 7:1-2 (1952): 62-82; 'Remembering Dr. Robert Longacre (1922-2014)', SIL.org, May 2014; Susan Regnier, email to author, 21 July 2021.
[123] On SIL in San Baltasar Yatzachi: Mary Leal, 'Patterns of tone substitution in Zapotec morphology', *International Journal of American Linguistics* 16:3 (1950): 132; McIntyre, *Protestantism*, 108-12.
[124] On SIL in San Juan Atepec: Wallis & Bennett, *Two Thousand Tongues*, 154; Neil Nellis & Jane Goodner de Nellis, *Diccionario zapoteco: Zapoteco de Juárez* (Mexico City: Instituto Lingüístico de Verano, 1983), ix-xii; Susan Regnier, email to author, 25 June 2021. Note: The 1940 figure may well be an undercount, for the 1930 census indicated 240 literate residents, while the 1940 census gave just 89, without sign of population loss. For this reason I have excluded both the figure and the percentage gain to 1960 (both italicized) from the SIL averages.
[125] On SIL in San Lucas Ojitlán: Paul Smith & Dorothy Smith, *One More Mountain to Climb* (Fairfax, VA: Xulon, 2002); McIntyre, *Protestantism*, 97.
[126] On SIL in San Mateo del Mar: Wallis & Bennett, *Two Thousand Tongues*, 159-61; Clara Warkentin, *Fishers of Men* (n.p., 1997); Clara Warkentin & Lois Gourley, *The Fisherman's Wife* (n.p., 2011).
[127] On SIL in San Miguel el Grande: Wallis & Bennett, *Two Thousand Tongues*, 93, 109f, 117, 156; Eunice Pike, *Ken Pike: Scholar and Christian* (Dallas: SIL, 1981); Hartch, *Missionaries*, 74f; Susan Regnier, email to author, 25 June 2021.
[128] On SIL in San Pedro Huamelula: Viola Waterhouse, 'Learning a second language first', *International Journal of American Linguistics* 15:2 (1949): 106-09; "Viola Waterhouse (1918-1997)," SIL.org, n.d.; Susan Regnier, email to author, 25 June 2021.

Santiago Pinotepa Nac.[129]	Mixtec (Pinotepa)	1949	14.5	46.8	223%	43.5	
Santiago Yaitepec[130]	Chatino (Western highland)	1947	8.2	*0.9*	*-89%*	*9.0*	
San Tomás Ocotepec[131]	Mixtec (Ocotepec)	1949	8.1	35.1	333%	52.4	
SIL average			***11.5***	***41.0***	***223%***	***54.6***	***33.1%***
Rural sample average (statewide in 1960 & 1970)			15.4	40.9[132]	166%	60.0	46.7%

As in Chiapas, SIL municipios in Oaxaca were notably more illiterate in 1940 than the low rural average. SIL staff rose to that challenge by helping their municipios climb to the average level of literacy for the state (and thus ahead of the rural average) by 1960. Thereafter, SIL municipios' literacy grew at a somewhat slower rate than in Oaxaca in general, although due to school-building (which likely privileged the larger towns), road-building, and other factors the difference as regards the continued educational influence of SIL may be statistically insignificant.

It is noteworthy that between 1930 and 1940 the literate population of San Miguel el Grande more than doubled from 211 to 442, an unusual advance that likely owed to the presence of Ken Pike, who would prove to be SIL's most gifted and influential Mexican linguist, from 1935.[133] It is further noteworthy that while the place had just nine literate women in 1930 (a proportion typical of the era), the number unusually grew to 71 by 1940. (Another early base, San Lucas Camotlán, settled by Walter and Vera Miller in 1936, saw the literate population more than triple from 43 to 144 during the same decade. But the fact that the Millers move to Mitla in 1938 and pursued their work through visits seems thereafter to have contributed to a slowing of proportionate literacy growth, which registered a relatively meagre 75% improvement for 1940-60.)

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[129] On SIL in Santiago Pinotepa Nacional (pueblo of Santa María Jicaltepec): Cornelia Mak & Robert Longacre, 'Proto-Mixtec Phonology', *International Journal of American Linguistics* 26:1 (1960): 23f; C. Henry Bradley, *A linguistic sketch of Jicaltepec Mixtec* (Norman, OK: Univ. of Oklahoma/SIL, 1970); *Bibliografía*, 91f.

[130] On SIL in Santiago Yaitepec: Howard McKaughan, 'Chatino Formulas and Phonemes', *International Journal of American Linguistics* 20:1 (1954): 23; *Bibliografía*, 37f; Susan Regnier, emails to author, 25 June & 21 July 2021. Note: The anomalous 1960 percentage for Yaitepec, purporting to a 90% collapse in literacy since 1940, is likely a census error. The municipio's population (1,197 in 1940; 1,414 in 1950; 1,247 in 1960) shrank a little in 1950s, but it's very unlikely that the municipio lost all but a dozen of its literate residents. The 1970 figure also looks suspiciously low. For these reasons I have excluded Yaitepec data from the 1960 and 1970 SIL averages.

[131] On SIL in San Tomás Ocotepec: Cornelia Mak, The tonal system of a third Mixtec dialect', *International Journal of American Linguistics* 24:1 (1958): 61; *Bibliografía*, 89-91; Susan Regnier, emails to author, 25 & 26 June & 7 July 2021.

[132] The 1960 Oaxaca census data do not allow for calculation of a rural average on the same terms as I have calculated for 1940, so the figure given is the statewide average; I estimate the rural average to be several percentage points lower.

[133] Pike, *Ken Pike*; Hartch, *Missionaries*, 74f, 80f; Aldridge, *For the Gospel's Sake*, ch. 3. Note: Pike appears to have departed San Miguel for good (following several academic interludes) in 1951, and the slowing of San Miguel's literacy growth for 1940-60 may reflect the lesser abilities of his replacement.

(vi) Correlating Conversion and Literacy

As suggested earlier, rates of conversion are probably the best proxy for measuring the success of SIL staff in integrating themselves into an indigenous community, even though the measure is imperfect due to the frequent coexistence of other pastors. Do the data suggest a correlation between rates of conversion and rates of literacy growth? Do they at least do so for the twenty years from 1940 to 1960, when external factors such as road-building, school-building, radio, and circular migration between pueblo and city are less likely to have impacted literacy rates than for the period 1960-70? Without attempting complex regression analysis, several tentative observations can still be made.

For the four states for which complete data are available for both variables (i.e. excluding Oaxaca), a moderate degree of correlation is evident. At the most basic level, viewing SIL municipio averages in each case, conversion to Protestantism exceeded the rate of conversion statewide and in each state except Puebla literacy growth exceeded the rural sample average. Further, Hidalgo, the state in which SIL municipios witnessed the lowest local and relative rates of growth in Protestantism, also saw relatively modest growth in literacy in those places, while in the State of México, where the average SIL municipio conversion rate was highest (both locally and relative to the state average), those counties also recorded the greatest average literacy gains of any of the four states. In Chiapas, where the correlation initially appears weak, mitigating factors regarding two of the six municipios studies allow for a stronger correlation, and the correlation looks stronger still if the analysis is extended to 1970.

(c) Spanish language acquisition

As noted above regarding the fallibility of census data, secondary sources on the subject of indigenous Mexican acquisition of Spanish suggest the census data on the subject are problematic, at least for the period under review. Research also suggests that there is little or no pedagogical or linguistic evidence to back Townsend's claims that indigenous-language literacy would facilitate Spanish-language acquisition.[134] These claims, first made in Guatemala and then in Mexico, though they may have been made in good faith, were clearly motivated in part (and by Townsend's own admission, in the first case) by a need to assure nation-building political leaders that his Bible translation initiative was not going to help perpetuate indigenous separatism.[135] For these reasons, I did not attempt a statistical analysis of Spanish acquisition in SIL municipios, considering it to have been far more likely driven by road building, radio, and federal- and state-funded school construction.

The census reading of Linda King on Spanish language acquisition between 1930 and 1990 illustrates the problem of census data:[136]

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[134] King, *Roots*, 115-18.
[135] Svelmoe, *A New Vision*, 94, 101 (in Guatemala); Hartch, *Missionaries*, 13f, 55 (in Mexico).
[136] King, *Roots*, 96 (Table 7).

Historical Trend of Bilingualism and Monolingualism in Mexico (percentage)

Year	Spanish-speaking population	Indian-language-speaking population		
		Bilingual	Monolingual	Total
1930	84.0%	7.6%	8.4%	16.0%
1940	85.2	7.5	7.3	14.8
1950	92.5	3.9	3.6	7.5
1960	91.7	5.3	3.0	8.3
1970	92.8	5.2	2.0	7.2
1980[a]	90.8	7.3	1.4	8.7
1990[b]	90.8	6.0	1.2	7.2

SOURCE: National Census, 1930–90.
[a] According to the 1980 census, 0.5% were unspecified.
[b] 2 percent of the total are unspecified, according to 1990 census.

By these figures, Spanish acquisition grew markedly between 1940 and 1950, as monolingual indigenous people decreased from 7.3% to 3.6% of the population, while subsequent censuses through to 1990 purport to show a further but gentler decline in monolingualism. The great decrease of the 1940s, involving close to a million people (out of a national population of around 20-25 million), is too great a change to be sufficiently explained by that decade's well-attested urban migration. To attribute the statistical decrease to migration alone would be to claim that fully half of all monolingual indigenous Mexicans left their cornfields for the cities in just ten years. There is nothing in the historiography to suggest such a drastic and rapid emptying out; even though the overall proportion of rural Mexicans fell by 11.6% that decade, the total number rose by 2 million.[137] There are only isolated cases of net municipal population decline in the 1950 census, although it must be supposed that some urban migration was circular and will have brought Spanish back from the cities to the pueblos. A second factor, road building, would facilitate Spanish acquisition as pueblos became more closely bound to urban markets, but the new highways of the 1940s rarely reached indigenous pueblos and paved rural roads were still few.[138] A third factor, the arrival of radio, surely encouraged Spanish adoption, especially through its popularising of Mexican musical genres; by the 1930s, several stations had nationwide coverage. However, radio ownership outside the cities remained limited for several decades; in 1960, radios were found in just 9% of homes in Oaxaca.[139]

[137] James Wilkie, *The Mexican Revolution: Federal Expenditure and Social Change since 1910* (Berkeley: Univ. of California Press, 1970), 218-22. Note: Rural Mexicans were defined as those living in communities of 2,500 or fewer.
[138] Michael K. Bess, *Routes of Compromise: Building Roads and Shaping the Nation in Mexico, 1917-1962* (Lincoln: Univ. of Nebraska Press, 2017).
[139] Joy Hayes, *Radio Nation: Communication, Popular Culture, and Nationalism in Mexico, 1920-1950* (Tucson: Univ. of Arizona Press, 2000); *VIII Censo general de población. 1960: Resumen general*, 601f (total homes), 631 (homes with radios).

Educational initiatives targeting indigenous communities surely account for some of the change. Since the SEP, state governments, and municipal authorities had insufficient teachers to send them to each indigenous pueblo, and since Mexico's postrevolutionary school-building project was still very much a work in progress SIL may have played a small role in the indigenous acquisition of Spanish that decade. By 1950, SIL had 142 linguists and support staff in Mexico working on at least 47 languages; it had completed dozens of reading primers (both for their own use and for use in formal schools), various translations of the gospels of Mark or John (in bilingual indigenous-Spanish editions), and six indigenous-Spanish dictionaries.[140] Still, in a nation of 25 million and at least 2 million indigenous people, such efforts were a drop in the bucket.

The most likely explanation – the biggest single probable factor – for the reported size of the 1940s decline in monolingual indigenous people is census bias. Under President Alemán (the 'Businessman President', the ultimate 'modernizer'), census organizers surely came under duress to show that Mexico, following three decades of an *indigenista* policy that sought actively to integrate native peoples, was finally leaving behind its 'backward' 'Aztec' past.[141]

Interestingly, the censuses of 1940 and 1950 purport to show a simultaneous decrease in *bilingual* indigenous people, from 7.5% to 3.9% of the population.[142] This finding is quite counterintuitive, given all of the factors enumerated above, which while encouraging Spanish acquisition hardly encouraged indigenous-language eradication (except in the sense of urban migration causing indigenous children to attend Spanish-only schools, but that trend would have been insufficient to explain the statistical difference). The reported decline offers another example of where census data need to be questioned. The difference might well be explained in part by rural-to-urban migrants declining to admit their knowledge of an indigenous language to census takers, as they sought to project a new, culturally mestizo, urban identity, as King has pointed out.[143] A complementary and likely greater factor is the one posited above: census coordinators felt pressured to show mass transition from vernacular to Spanish and so massaged the data.

(d) Disposable income markers

As of 1940, and more thoroughly as of 1950, Mexico's census designers began to include categories of question that allowed the state to measure the country's 'modernisation' in statistical terms. In 1940, they included footwear as a category of inquiry, deeming the

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[140] William Wonderly, 'Miscellaneous Papers Relating to Mexican Languages', *International Journal of American Linguistics* 18:4 (1952): 269; Susan Regnier, email to author, 20 May 2021.
[141] King, *Roots*, 63-65. Note: On Alemán: Enrique Krauze, *Mexico: Biography of Power* (New York: HarperCollins, 1997), 526-600.
[142] King, *Roots*, 96 (Table 7).
[143] King, *Roots*, 85.

measure to be a good indicator of standard of living (*nivel de vida*).[144] Three basic options were given in this and subsequent censuses, for all persons aged one and over: barefoot, use of sandals (*huaraches* o *sandalias*), use of shoes. (In 1940, 27% of the population walked barefoot, a proportion that fell to 8% by 1970.[145]) In 1950, measures of housing feature (*características de la vivienda*) were added, including running water availability and the construction material used for walls. Further measures, such as in-home toilets and TV ownership, were included as of 1960.

Statistical increases in the availability of running water and quality of construction material, as well as in the use of shoes, each to some extent reflect increases in disposable income. (Living standards in general improved between 1940 and 1970, but the poorest quarter of Mexicans, which included most rural folk and the entire indigenous population, saw little or no improvement.[146]) Gains in such indicators in SIL municipios that prove higher-than-average for rural municipios would therefore affirm greater-than-average gains in disposable income, of the kind that indigenous converts to Protestantism are reported to have experienced directly as they abandoned the *cargo* system and abstained from alcohol.

In fact there are several ways in which SIL's influence may have fostered greater income. Higher-than-average literacy growth, as shown above for SIL municipios, could be expected to lead to improved acquisition of skills that in turn boost family earnings. SIL's willingness to translate government documents, on such themes as agricultural methods and foot-and-mouth disease, would likely have brought tangible economic benefits. Access to SIL-administered antibiotics and other medicines would have reduced days lost to sickness.

As markers of disposable income, each of the three categories carries its own caveat. Choice of shoes over sandals or going barefoot is also a marker of social status, a reflection of consumerism driven by mass media, and driven further by the availability of shoe shops that accompanies urbanization. Access to running water may be more a function of external factors, especially local public works projects, given the state's policy of increasing the supply of potable water (along with irrigation water) as of the mid-1920s.[147] Improvements in construction material (as occupants improve existing homes or build new ones) are again a marker of status and are also influenced by access to external sources of income, chiefly housing credit or remittances from family members working in the United States.

Of the three disposable-income markers available to us by 1950, I opted to analyse footwear as the simplest and cheapest indicator of disposable income, and therefore the most feasible indicator of SIL's potential social impact. Footwear was already seen in 1940 by clear majority of Mexicans, as well as by the state, as a basic necessity.

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[144] The 1940 census also included sleeping arrangements, asking whether individuals slept on the floor, on a straw mat (*tapexco*), in a hammock, or on a cot or bed, but the question was dropped in the 1950 census.
[145] *6º Censo ... Resumen general*, 35; *IX Censo ... Resumen general*, xix, 53; *IX Censo ... Hidalgo*, 91.
[146] Roger Hansen, *The Politics of Mexican Development* (Baltimore: Johns Hopkins Univ. Press, 1974), ch. 4.
[147] Wilkie, *The Mexican Revolution*, 252-54.

(Construction materials seem the next-best option for analysis. Anecdotal evidence is found, for example, in San Antonio el Grande in Huehuetla, Hidalgo, where SIL staff witnessed converts using their savings to replace their huts, made of bark-tied planks, with houses built with cinder blocks.[148] As regards the influence of external factors, housing credit in small towns was rare, possibly non-existent, prior to the establishment of public mortgage lender Infonavit [el Instituto del Fondo Nacional de la Vivienda para los Trabajadores, or the Institute of the National Housing Fund for Workers] in 1972.[149] Further, remittances to indigenous pueblos were minor prior to the 1990s. The Bracero Program, established in 1942 and involving circular migration of several hundred thousand Mexican workers between 1951 and 1964, did allow many to return from the United States with savings, but the main sending states were Guanajuato, Jalisco, Michoacan, and Zacatecas and the men involved were mostly mestizo rather than indigenous.[150])

I begin the analysis of footwear types in 1950 rather than 1940. In the earlier census, calculations are made unusually arduous by the tabulation of data into fifteen categories for each municipio.[151] Further, whereas the censuses as of 1950 indicate that babies (up to one year old) are excluded from the figures, their inclusion or exclusion is unclear in the 1940 census. Finally, data for Hidalgo, the first state I considered, show only slight average growth in shoe usage during the 1940s as compared with later decades, both in SIL municipios (from 5.8% to 7.7%) and in rural municipios overall (from 17.2% to 19.7%).

(i) Use of shoes in Hidalgo

Municipio	**SIL entry**	**1950**	**1960**	**1970**	**Growth factor (1950-70)**
Huehuetla	1942/43	3.96	7.95	36.5	x 9.2
Ixmiquilpan	1940	11.5	18.9	52.5	x 4.4
SIL average		***7.73***	***13.4***	***44.5***	***x 5.8***
Rural average		17.2	19.7	29.3	x 3.1

The data, which use the same rationale for determining rural municipios as was used for conversion and literacy rates, produce three main findings. First, the averages for 1950 show that SIL opted to base itself in municipios where use of shoes was less than half as common as for the rural average. This affirms that SIL municipios were both considerably

[148] Hartch, *Missionaries*, 119.
[149] 'Historia del Infonavit' (PDF), accessed from https://portalmx.infonavit.org.mx/wps/portal/infonavit.web/el-instituto/el-infonavit/acerca-de-nosotros, 21 July 2021.
[150] Michael Snodgrass, 'The Bracero Program, 1942–1964', in M. Overmyer-Velásquez, ed., *Beyond the Border: The History of Mexican-U.S. Migration* (New York: Oxford Univ. Press, 2011).
[151] For each municipio, the 1940 census divides footwear data into three sets (indigenous language-speakers, bilinguals, and Spanish speakers), each of which are divided into five subsets (barefoot, sandals with indigenous dress, sandals with non-indigenous dress, shoes with indigenous dress, shoes with non-indigenous dress). As of 1950, tabulation is simplified with just three categories: using shoes, using sandals, barefoot.

poorer and (given the historic indigenous propensity to go barefoot or wear sandals) considerably more indigenous than the average. Second, uptake of shoe usage grew twice as fast in SIL municipios than in rural municipios as a whole. To some extent, however, this is surely a function of their having begun from a very low base.

Third, and most importantly, the average usage of shoes in SIL municipios by 1970, at 43%, is far higher than the average proportion of Protestants recorded above, of just 4.25%. Even allowing for a cultural ripple effect, whereby newly prosperous indigenous Protestants, in opting to wear shoes, might have started or contributed to a local trend, conversion can only be said to be a minimal driver of shoe usage, at least at the municipio level. A much greater driver will have been urbanization, complemented by consumerism. The town of Ixmiquilpan, to take the more obvious example, had a population when SIL moved in of around 1,500 (within a municpio of some 18,000). By 1970, the town had quadrupled in population to 6,000; here, 88% of homes had a radio and 44% had a television.[152]

Given the statistical disparity in Hidalgo between uptake of Protestantism and improvement of footwear, there seems little point in making such calculations for most other SIL municipios, where by 1970 converts to Protestantism typically ranged between two and ten percent of the population. A more useful calculation might be made regarding the specific communities in which SIL settled, which were often not a municipio's main town but a village with a more fully indigenous identity. However, as noted before, village-level data beyond basic population tallies did not appear in the census until 1970, at which point footwear was no longer a category of inquiry. Further analysis is therefore limited to the two SIL municipios where conversion was prolific, claiming at least 20% of the population during the period studied: Oxchuc and Tumbalá in Chiapas.

(ii) Use of shoes in Chiapas

Municipio	**SIL entry**	**1950**	**1960**	**1970**	**Growth factor (1950-70)**
Oxchuc	1941	4.83	1.45	22.1	x 4.6
Tumbalá	1940	2.95	3.48	34.1	x 11.6
SIL average		***3.89***	***2.46***	***28.1***	***x 7.2***
Rural average		12.9	18.7	48.9	x 3.8

The first finding here, similar to Hidalgo for 1950 but more pronounced, is that the Chiapas municipios where SIL would have most success as proselytizers evinced an initial use of shoes that was less than one-third the rate of the rural average. Again, these municipios were almost certainly much poorer than the average. Second, as mentioned earlier, the

[152] *IX Censo general de población. 19: Localidades por entidad federativa y municipio* (Mexico City: Secretaría de Industria y Comercio, 1973), II-25. Note: Municipio-wide, radio penetration was 70% and TV 15%.

municipio of Oxchuc underwent a territorial expansion at some point between 1940 and 1960 that caused its population to quadruple over the period. The data on footwear suggest that the newly-incorporated inhabitants were far poorer than the original inhabitants, which in turn further accounts for slow literacy growth by 1960 in that municipio, since poverty and lack of education are strongly correlated. Third, usage of shoes in the SIL municipios grew at almost twice the rural average rate, which may well indicate a higher-than-average growth in disposable income, although again, the (presumably uneven) spread of shoe shops from urban centres to small towns may also have been a factor; steep growth in rural shoe use overall after 1960 suggests that such stores indeed multiplied over the following decade. Qualitative research is needed to tease out the role of SIL in the high adoption of shoe use in the two municipios.

(e) Demographic change

The final data set studied here concerns demographic change. According to missionary and anthropological accounts, conversion to Protestantism – especially once it reached a critical mass of several dozen villagers – could generate conflict with Catholic or Catholic-affiliated authority figures such as *caciques*, sometimes leading to mass expulsions of converts. One may also suppose that converts no longer felt themselves bound by the Catholic injunction against contraception and so had smaller families, although the strong rural tradition whereby a farmer's sons are his future workforce may have rendered that notion moot. These variables would tend to depress population growth. [153]

To test whether a permanent SIL presence tended to slow population growth I looked at five municipios in Chiapas. Not only is Chiapas the state that witnessed the most rapid growth in Protestantism for 1940 to 1970, both in SIL municipios and (more or less tied with Tabasco) statewide, it is also the site of the best-known case of mass expulsions, which occurred as of 1966 and for several decades in Chamula municipio.[154] The five municipios are the four sites where Protestantism most quickly advanced, gaining at least 10% of the population by 1970, and Chamula itself, which SIL missionary Ken Jacobs began to evangelise from his base in San Cristóbal de las Casas in 1954, by reaching out to Chamulan visitors to his town and training converts to minister to their neighbours, with remarkable results.[155]

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[153] Some anthropologists have claimed that converts were sometimes lured by the material culture of SIL staff to emigrate to the United States, which would constitute a third factor depressing population growth.
[154] Hartch, *Missionaries*, 168.
[155] On SIL's mission to Chamula: James Hefley & Hugh Steven, *Miracles in Mexico* (Chicago: Moody Press, 1972): Ch. 5; Hugh Steven, *They Dared to be Different* (Huntington Beach, CA: WBT, 1976); Ryan, 'Chiapas observed', Ch. 4; Hartch, *Missionaries*, 168-75.

Municipal populations in Chiapas						
Municipio	**SIL entry**	**1950**	**1960**	**Δ**	**1970**	**1960-70 Δ**
Copainalá	1940	7,462	9,074	22%	10,626	17%
Ocosingo	1944	13,940	19,800	42%	34,356	74%
Oxchuc	1941	5,412	12,579	132%	17,993	43%
Tumbalá	1940	11,328	13,963	23%	14,081	0.8%
Chamula	1954 (proxies)	22,029	26,789	22%	29,357	9.5%
Rural average		6,839	8,527	25%	10,991	29%

Until 1960, SIL municipios (and Chamula) all grew at more or less the average rate for rural municipios across the state. Oxchuc grew notably faster due to the territorial expansion mentioned above. During the 1960s, however, unusual things were happening. Even as the rural average growth rate increased – a reflection of Mexico's demographic boom that decade – population growth in three of the municipios slowed. In Copainalá growth was barely more than half the rural average rate, in Chamula growth was only a third of that rate, while Tumbalá effectively failed to grow at all. None of these municipios experienced territorial loss. For Chamula, the data statistically substantiate the reports of expulsions recorded by anthropologists and others.[156]

Of the two municipios that experienced greater than average growth (in the 1950s as well as the 60s), Ocosingo is an outlier. Its vast territory, covering one-seventh of the state and incorporating much of the Lacandón rainforest, became a refuge for indigenous peoples fleeing or exiled from their communities for a variety of reasons (including, eventually, many members of the future Zapatista Army of National Liberation, or EZLN). But the experience of the small municipio of Oxchuc, with its higher-than-average population growth in the 1960s, suggests that a critical mass of converts (25%-35% by official counts, as much as 50% by other estimates) deters expulsions. Indeed, by this time the Protestant population was large enough to secure the mayorship for one of its own.[157] Oxchuc's population data may further suggest that conversion does not notably affect the births-per-mother nor does it notably encourage emigration, or at least not from Mexico's southernmost state of Chiapas.

Conclusion

This conclusion will be brief, as the main findings of this paper are summarized at the start. My purpose here is rather to suggest avenues for continued research.

[156] Rus, 'The Struggle'; Hartch, *Missionaries*, 168f.
[157] Stoll, *Fishers of Men*, 52.

Census data might be mined for further possible evidence of SIL's local impact, especially where conversion and/or literacy growth rates were pronounced. For example, the disposable income markers of household running water and home construction materials could be gauged across time in SIL municipios, since these questions are introduced in the 1950 census. Changes in such markers may of course owe to a range of factors, but a correlation could nonetheless be tested. A second example is primary school attendance levels. This variable may have been impacted by SIL both directly, as its members created vernacular texts for use by indigenous pupils, and indirectly, as they encouraged parents to keep their children in school.

Given the probability that SIL staff impacted their communities much more at the very local level than across their municipio, more detailed data on individual pueblos and villages, such as appear as of the 1970 census, could be compared – if not longitudinally, at least between communities. Such comparisons could include literacy, school attendance, home ownership, household running water and drainage, types of flooring, household electricity, and employment status.

The absence of even municipal data for Oaxaca in the published versions of the 1960 and 1970 censuses is naturally a major obstacle to the satisfactory completion of this research, given that 13 of the 26 SIL municipios under consideration are located in that state. household electricity, and employment status the original municipal-level data may be stored in the physical archives of INEGI, either in Mexico City and/or in Aguascalientes.

Regarding other sources of information, the most pressing matter is to try to establish when schools and Protestant churches were established in SIL municipios, so to gain greater insights into how SIL may have exerted an impact in tandem with other institutions or seen its efforts surpassed by them. Some information on school construction may exist in the scholarly literature, but as Ariadna Acevedo has noted, scholarship on rural education post-1940 remains meagre.[158] Mexico's SEP archive, now housed at the AGN, may have information on when schools were built in each municipio, although that might need to be complemented by research in state-level archives. The SEP collection may also reveal contact and cooperation – or non-cooperation – between teachers and SIL linguists, via teachers' field reports and correspondence.

As for Protestant churches, this is probably the hardest variable to establish, given the variety of mainline denominations operating in Mexico and the profusion of Pentecostalism (its congregations often unaffiliated to an umbrella institution). Some insights as to pre-existing congregations can be gleaned from SIL memoirs. Otherwise, local sources such as municipal archives, informal town histories (*crónicas*), and even veteran church members may need to be sought out.

[158] Acevedo Rodrigo, 'Entre el legado municipal', 79.

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Appendix 1: Timeline of Protestant and SIL activity in Mexico

1867-70 Under President Juárez, U.S. missionaries establish the first permanent Protestant presence in Mexico.
1914 The Cincinnati Plan' among Protestant denominations divides Mexico into spheres of missionary influence (Presbyterians in Chiapas & Oaxaca, etc.).
1935 William Cameron Townsend, a veteran of Protestant missions to Guatemala, enters Mexico at the invitation of former education minister Moisés Sáenz; settles in Nahuatl-speaking Tetelcingo (Cuautla, Morelos).
1936 President Cárdenas visits the Townsends in Tetelcingo; friendship quickly develops; Cárdenas sees the compatibility of Townsend's Bible translation project with his own project of *indigenismo*: bringing indigenous Mexicans into the national fold.
1938 By year's end, SIL has 26 on-site linguists working on 13 indigenous languages & dialects.[159]
1940 Census indicates that 0.91% of Mexicans are Protestant.
SIL has 37 linguists in Mexico.[160]
1942 SIL has 45 linguists working on 22 indigenous languages & dialects.
1944 Pastoral letter by Archbishop of Mexico City decrying the 'infernal serpent of Protestantism' triggers years of Catholic-on-Protestant violence.[161]

[159] Hartch, *Missionaries*, 70 (as for data on linguist numbers in 1942 and 1945).
[160] Wallis & Bennett, *Two Thousand Tongues*, 117.
[161] Kloppe-Santamaría, *In the Vortex*, 57-61; Hartch, *Missionaries*, 65-70.

1945 SIL has 91 linguists & support staff working on 39 languages & dialects.
1950 Census indicates that 1.28% of Mexicans are Protestant.
SIL has 142 linguists & support staff working on 47 languages & dialects.[162]
1951 SIL signs an accord with the Public Education Ministry (SEP) to educate indigenous peoples and promote their 'betterment'.
1960 Census indicates that 1.66% of Mexicans are Protestant.
1962 SIL has linguists working on 81 languages & dialects.[163]
1963 Sociologist Pablo González Casanova & anthropologist Rodolfo Stavenhagen begin a sustained critique of *indigenismo* as 'internal colonialism'.[164]
1970 Census indicates 1.82% of Mexicans are Protestant; community-level data and third-party accounts suggest the start of an underestimation of Protestant numbers.
SIL has 317 linguists & support staff working on 96 languages & dialects.
1971 The 'Barbados Declaration' signals a major shift in anthropologists' regard of missionaries, calling for their expulsion from indigenous communities.
1979 Under the duress of the anthropological community, the SEP terminates its agreement with SIL.
1981 SIL has 328 linguists & support staff working on 114 languages & dialects.[165]
1990 Census indicates that 3.3% of Mexicans are Protestant.
2002 SIL publishes its 100th Mexican indigenous-language New Testament.
2020 Census indicates that 11.2% of Mexicans are Protestant.

Appendix 2: SIL Mexico locations & members

Excel spreadsheet available at https://cide.academia.edu/AndrewPaxman (as PDF) or from author at andrew.paxman@cide.edu

[162] SIL Mexico Archive.
[163] Hartch, *Missionaries*, 106. Note: In 1958, SIL Mexico director Ben Elson reported there were 225 linguists working on 71 languages and dialects; Wallis & Bennett, *Two Thousand Tongues*, 151.
[164] Hartch, *Missionaries*, 132.
[165] Stoll, *Fishers of Men*, 319.