

THE CHRONICLE OF HIGHER EDUCATION

The Oaxaca Incident

A geographer's efforts to map a Mexican village reveal the risks of military entanglement

By Paul Voosen | April 27, 2016



Google Earth

Viewed on Google Earth, Tiltepec, a village in the southern Mexican state of Oaxaca is a few patches of white rectangles drowned in forest. Yet the valley teems with ancient earthen terraces, platforms, and sacred caves.

On most maps, Tiltepec doesn't look like much.

A Zapotec village of several hundred indigenous people, Tiltepec clings to the steep slopes of the Sierra Juárez, a formidable range in the southern Mexican state of Oaxaca. Its people have lived there for generations in relative isolation under the shadow of Cerro Negro, where once their ancestors forced conquistadors off a cliff to the Rio Vera below. The valley

teems with ancient earthen terraces, platforms, and sacred caves. Yet find Tiltepec on government maps and all you'll see is bare topography and a name. Viewed on Google Earth, it's even less — a few patches of white rectangles drowned in forest. For most of the world, Tiltepec might as well not exist.

Peter H. Herlihy was going to change that. A geographer at the University of Kansas, he has been a pioneer in what he calls participatory research mapping, a method that allows indigenous communities to reflect their knowledge on official, standardized maps, empowering them when the state comes to redraw borders. Herlihy was no stranger to Latin America — he had used the method in the early 1990s, in Central America. But he was a stranger to Tiltepec.

In 2006, Herlihy and his team of American and Mexican researchers arrived in Oaxaca under the aegis of the American Geographical Society, an organization, now much reduced, that once rivaled the National Geographic Society in influence. The AGS had pinned its revival, which it saw going hand in hand with the revival of geography as an academic discipline, in large part on the success of Herlihy's expedition.

He led a series of meetings with local leaders in several gateway towns. Each meeting followed a similar script. Zapotec men crowded into hot rooms. Herlihy, a fluent if accented Spanish speaker, gave an impassioned talk through a 108-slide presentation. The first slide disclosed the researchers' financing. Then he went on to acknowledge that maps had been tools of colonialism and power, imposing new borders and names on inhabited lands. He cited, as always, a favorite quote from a mentor.



John Kelly

Peter Herlihy discusses the mapping project with members of the research team and the Tiltepec community.

"More indigenous territory has been claimed by maps than by guns," he told them, in Spanish. "This assertion has its corollary: More indigenous territory can be reclaimed and defended by maps than by guns."

His expedition was part of that defense. His team had already worked for several years with nine indigenous villages in a region north of Mexico City, Herlihy told the villagers. This project would be the same. Their research would result in each town's receiving a standardized map that reflected the people's local knowledge, including the geographic names — toponyms — that only they knew. The results would be free and publicly shared online.

Just as important, Herlihy said, the research would help the villagers understand how recent land reforms by the Mexican government had changed the region. The reforms, begun in 1993, had transfigured communities across the country by converting shared land to individual ownership. What could they do to the Sierra Juárez?

Wariness of the reforms was widespread. That summer several villages, after showing interest, chose not to participate in the mapping, suspicious that the researchers would be of more help to the Mexican government than to them. Herlihy was disappointed but still had hope for a few villages, including Tiltepec.

Late that summer, the researchers piled into the bed of a small pickup truck and drove four hours on a pitted logging road to Tiltepec. Residents gathered in a worn schoolroom, where Herlihy repeated his pitch. They were committed to helping the village remember its land and history. These maps could be a catalyst for development. Like many social scientists before him, he was making promises to an indigenous community that would prove difficult to keep. Everything, he persuaded the villagers that day, would be done with *corazón*. With heart.

Speaking then, Herlihy had no notion that his maps would fissure geography, resulting in a disciplinary wound that, to this day, refuses to heal. He had no idea that his work would revive old fears of military collaboration and colonialism — fears that have shadowed well-intentioned researchers in other social sciences. After all, what problem could a bit of empowerment cause?

For much of its existence, the profession of geography has lain in contested, shadowed terrain. Maps have been its constant. By the 18th century, as Europeans spread their colonial power, geography had begun to evolve as a discrete means of knowledge. Not only would maps provide the way to exotic flora, fauna, and people, but they would also provide a way of understanding them.

It was also a rich man's hobby, part of the exploration fads of the age. In 1851 a group of New York magnates created the American Geographical Society. The National Geographic Society, based in Washington, followed in 1888. Soon after, geography appeared in academe, springing out of geology: Harvard appointed its first professor of physical geography in 1890.

Geography's physical branches evolved into the geosciences: biogeography, geomorphology, landscape ecology. The technical execution of maps remained a vital skill. Maps were crucial to winning the world wars. The AGS, led by Isaiah Bowman, its influential president, spent a quarter-century, until 1945, producing a map of Latin America unprecedented in detail. But a problem remained for professors who positioned themselves as "geographers": Their field was nebulous. If they defined it broadly — say, as covering the relationship between humans and their environment — it was practically all-inclusive. If they defined it narrowly, it sounded like mere cartography, with little reason to exist independently at all.

This intellectual weakness doomed the profession among the East Coast elite, including at Harvard, where the university killed its geography department in 1948. Elite private colleges followed Harvard's lead. It's a wrong that geographers mutter about to this day.

The purge didn't kill the discipline, which has since gone through several evolutions, housed especially at public universities, which are more receptive to the idea of training technically savvy graduates for mapping-based careers in government and industry. In its modern form, geography often blends anthropology, economics, sociology, and history, which are then overlaid on the physical landscape. It remains interdisciplinary to the core, and its wide array of practitioners makes it prone to reproducing, writ small, controversies between the sciences and humanities. An interested academic can choose from an array of paradigms, from critical geography, heavily influenced by Marxist and literary theory, to military geography, whose work is tied to classical geopolitics — avoid land wars in Asia.

While maps are an increasing part of everyday life, jammed into a universe of pockets, academic geographers have barely dented the public mind. Few disciplines are less known in the United States. (Abroad, geography is held in higher esteem.)

Jerome E. Dobson took over the American Geographical Society in 2002, soon after he joined the University of Kansas, where he's been a close collaborator with Herlihy. For decades the society had clung to life. National Geographic had seized its popular mission, and the Association of American Geographers had become the home for professionals.

Dobson set about restoring the society's sheen — and his discipline's. Geography is best defined by analogy, he's said time and again: "Geography is to space what history is to time." He hoped that the expeditions led by Herlihy,

named "the Bowman expeditions" in honor of Dobson's predecessor, would lead American geographers back to prominence. Grant financing proved difficult to track down. But he eventually found a sponsor, in part because he had a slam-dunk first grantee, a geographer down the hall with impeccable credentials in the Hispanic world.



Paul Voosen

A group of American and Mexican researchers sought to create a map of Tiltepec, Oaxaca, that reflected people's local knowledge of the area, including the geographic names that only they knew.

And so Peter Herlihy set out to put Tiltepec — and geography — back on the map.

Their work in Tiltepec began in the evening, immediately after the villagers had approved the project. Beneath the light of a single bulb and flashlights, several residents faced a broad stretch of blank white paper laid out before them.

Herlihy and his team, which included graduate students from Mexico as well

as from the United States, described the common elements of maps and then asked the residents to sketch, from memory, features and names from their 23,000 acres of territory. The blank page is a hallmark of Herlihy's work: Using their mental maps, free from colonial cartography, the people of Tiltepec would decide what mattered.

The researchers then began hiking the village's territory with Tiltepec residents. "Process any gathered data within a few days, make maps with it, and show the community what we're doing," Herlihy told his graduate students, according to research notes, when he left to oversee another part of the project. "Conform exactly to what the *comissários* [sic] say you can and cannot do."

In the valley, they found sites of historical or mythical importance to Tiltepec: the dwelling of the community's founding couple; the rock where witches become animals. They discovered the many names residents gave to what Americans might consider one river, depending on its location. Archaeological remains were abundant. It was a rich, undocumented heritage, and Tiltepec's residents hoped to get a book and museum out of it all. They already had a small building in mind. Perhaps they could attract tourists. Anything to improve their lot in Mexico, where they had been so long mistreated.

This wasn't easy work, and it became more difficult as political protests and violence began to roil Oaxaca's capital city. Herlihy cut his ties with two local operators who had helped persuade the residents to participate, including Aldo González Rojas, leader of a Zapotec group that had provided a political voice for Tiltepec, among other villages. Herlihy suspected that the two had ties to the protests and, above all else, wanted his work to appear apolitical and free of associations to violence.

Given the steep topography, and delays caused by the protests, the Bowman team couldn't finish in 2007. They returned the next summer, even though their primary grant had expired, relying on sabbatical funds and small grants from AGS and Mexican collaborators. During the fall, back in Kansas, they stitched together the final maps that they'd take to Tiltepec; by one estimate, 100 days of work went into the maps.

In December 2008, Herlihy returned once more to Tiltepec to hand over the finished maps. They learned that González, their early collaborator, would also be talking at the meeting, though they weren't sure about what. Residents assembled in the inky evening. A portable generator sputtered outside the building, powering the presentation Herlihy gave on the maps. Then it was González's turn. He had difficult news about the maps, he said.



Aida Ramos Viera

Aldo González Rojas, right, initially cooperated with the geographers but later accused them of "geopiracy" — stealing local knowledge with a goal of exploiting community resources.

"You have not been told about the real goals of this research," he told the crowd, as he later recollected. González spoke of the crimes the United States had committed in Latin America. Herlihy was not simply an academic hoping, in some small way, to redeem those sins. No. He was engaged in stealing the private geographical knowledge of the community — "geopiracy," as González called it. The world now had a way to find their valuable natural resources, one of the few sources of wealth they had. And Herlihy was doing all this, González said, in the service of the U.S. Defense Department.

The Bowman expeditions had begun during a dark time in American foreign policy. Dobson's son was serving as a doctor near Fallujah, and Dobson had watched aghast as the casualties mounted during the American occupation of Iraq. As he awaited dispatches from the front, Dobson says he began asking himself, "How the hell did we get into this mess?"

"I concluded it was mostly geographical ignorance," he says. "Politicians not knowing Sunni and Shia didn't get along, for example." He did a back-of-the-envelope calculation: For \$125 million, the United States could send a geography professor and several graduate students to every country in the world. "Our goal was always — and maybe this sounds too grandiose — to prevent wars," he says. "We've never been in the business of telling people how to fight wars." He had a mission. Now he needed a sponsor.

Geographers, and the maps they use, have always been instruments of power. It's whispered that the CIA heavily recruits geography graduates; the National Geospatial-Intelligence Agency is a bulwark of American power abroad. Academic geographers, like many social scientists, gladly supported the U.S. government into the early Cold War; the military, in turn, helped finance the field. The Office of Naval Research supported Carl O. Sauer, a geographer at the University of California at Berkeley, and his many students, who fanned out across the Caribbean and pioneered the "Berkeley School" of cultural historical geography. But Sauer and his students were some of the last prominent geographers to take military money: The 1960s' protests and a quantitative turn in geography pushed the government to secure knowledge from its own research centers, severing its relationship with academic social scientists.

Dobson had that Sauerian tradition in mind as he pitched his idea. He knew that Herlihy already had plans to do some mapping in Mexico, although the usual suspects, like the National Science Foundation, hadn't financed him. Dobson had despised the Vietnam War, but early in his career he had adopted a principle: "Don't fight the establishment. Infiltrate it." That's why, before arriving at Kansas, he had gone to work at Oak Ridge National Laboratory. And when the only place that bit on his proposal was the Foreign Military Studies Office at nearby Fort Leavenworth, Dobson did not shy away.

Created in 1986 to produce unclassified studies of the Soviet Union, the office had since expanded its remit to fields like mapping, property law, and internal rebellions. Herlihy laughed at the idea that the military would support his work.

"Look, we're working in indigenous areas," Herlihy said at the time. "We would have to divulge everything. We not only tell them what we're doing. They do what we're doing. And if they didn't do what they were doing we wouldn't be able to do what we did. It's that simple."

This was a heady time at Fort Leavenworth, which, thanks to its training-oriented mission, is known as the Army's intellectual center. The United States was watching its occupation of Iraq disintegrate. In 2005, David Petraeus arrived at the base to help devise a strategy to suppress uprisings. His team created a new field manual for counterinsurgency. He supported a pilot program to send anthropologists into war zones — what eventually became known as Human Terrain.

Dobson met Petraeus several times during his tenure; Herlihy joined him once. Dobson saw in Petraeus a kindred spirit — another man, a famous man, who was exploring why the United States was struggling in Iraq and Afghanistan. After one event, Dobson pulled Petraeus aside and made his case. Geography wasn't just about mountain elevations and river runs, he said. "You need to consider geography as a source of knowledge on foreign cultures and places."

The military money came through.

After González's accusations, Tliltepec's villagers debated and chose to accept the Bowman team's maps, which they also decided could remain online. Herlihy left, upset at González's attempted

intervention but hoping that this was a misunderstanding they could resolve. But González' accusations did not stay in Tiltepec.

The month after the confrontation, González released a statement claiming that Herlihy and his team had never disclosed that their work was financed by the Foreign Military Studies Office, or FMSO. That same office, he noted, was behind Human Terrain, which had now become a controversial international flash point. The United States had a database of Zapotec people from two villages, he alleged, and detailed knowledge of their land. Herlihy's team had done the work without informed consent, he added, and had provided information only in English on their website, a language most Tiltepec villagers could not understand. What did the military have in mind?

González's allegations spread to one of Mexico's largest newspapers. They circulated on American mailing lists sympathetic to the Oaxacan protests; bloggers joined in. On multiple evenings, an anonymous critic at Kansas — a "Midnight ninja," as Dobson puts it — slipped broadsides against the project under the office doors of his colleagues. People began to say offhand that the Bowman team was part of Human Terrain.



John Kelly

A local investigator on the mapping project uses a GPS unit to match local knowledge to map coordinates.

Herlihy and Dobson wrote letters in response. Yes, they had told the villagers about their financing, they wrote. They had informed consent. Kansas' institutional review board had approved the work. And what gave González, a political operator, the right to speak for those towns?

González responded in turn. He pointed out that even though Herlihy had written in critical tones about Mexico's land privatization, Geoffrey Demarest, the military researcher who had provided the grant, had praised privatization in Cuba and Colombia. González brought up how suspicious it seemed for the Bowman team to arrive just before the Oaxaca protests. The villagers had no idea, he added, that the team was sending monthly updates on the project back to the FMSO. And if the team was so transparent, why did the FMSO logo not appear on the final maps given to Tiltepec, as it had in earlier prototypes?

"Was the removal of the logo from the maps," he wrote, "perhaps a strategic decision by the Kansas geographers who feared to lose their two remaining research locations?"

A month later, two Tiltepec leaders posted a video statement online that echoed González's accusations. They were not aware that the FMSO had financed the work, they said, and they called on the Bowman researchers to destroy all the information they had collected on the community and to apologize publicly for "having violated our rights as indigenous peoples."

"Lastly," they concluded, "we issue an alert to all the indigenous communities and peoples of Mexico and the world to not be caught unawares by the investigative researchers of the Bowman Expeditions, or by any other investigators who are only pursuing their own interests or those of the groups they represent."

By this time, González's allegations had dropped in the mailboxes of two young geographers, Joe Bryan and Joel Wainwright. They are from the branch of geography that examines it as a tool of oppression.

"We read that and said, Wow," recalls Bryan, now an assistant professor at the University of Colorado at Boulder. "Here's a concrete example of the limits and problems with mapping."

They wrote to the president of the Association of American Geographers, requesting "an inquiry into a potential violation of the ethical norms of our profession." They repeated González's allegations, though conceding they could be false. Even if the project is "as transparent and scholarly as Herlihy claims," they wrote, "he fails to recognize that even the perception of impropriety constitutes a major setback for all who do similar kinds of research in Latin America." Their letter was soon echoed by an AAG group on indigenous peoples. "This issue is a defining moment for the AAG and for U.S. geography and geographers in general," they wrote. "Our reputation is now at stake."

Despite buzz at the association's annual meeting, it demurred from investigating the Bowman team. The association president at the time said that was a matter for the University of Kansas. But the AAG did quietly release a revision of its ethics statement, without stating at the time what had prompted it.

It was easy enough to read through the lines. Previously the statement made no reference to indigenous people. Now, it cautioned researchers to think about the "physical and social threat and danger to participants from both outside and within their groups, violation of intellectual property, and threats to the viability of a group and its territory."

For years, the facts of the Oaxaca incident have lingered in uncertainty. The critical geographers mounted a series of journal articles using González's allegations as grist. Wainwright followed with an electronic book, *Geopiracy*. Periodic attacks continued in Mexico. Last spring, Joe Bryan and Denis Wood, an independent geographer who has influenced Herlihy's own thinking, published their own book, *Weaponizing Maps*, on the Bowman affair. This past March, a leading geography journal published several essays pinned to the controversy. Herlihy's graduate students have been slow to find jobs and say they're sure that certain geography journals won't publish their work.

The scholars' criticisms had at time grown personal. In asides in his book, Wainwright, an associate professor at Ohio State University, said the breathless prose in a report by Herlihy and others about meeting Petraeus betrayed "a repressed homoeroticism"; he took a Dobson quote to infer a "desire for an enormous phallus." On the phone, Denis Wood is particularly scathing about Dobson, who has written several novels inspired by ideas of Atlantis. He's a "buffoon," Wood said in an interview, "with no knowledge of the history of the earth." "His understanding of postmodernism is nil to micro thin," he added. Bryan and Wood's book is more temperate, swinging between thoughtful analysis and caveat-powered conclusions, all of which return to one point: In spirit, if not in letter, the Bowman team misled the people of Oaxaca about the financing of their work.

Today the team has a new project, financed through the Defense Department's Minerva Research Initiative, applying the methods from Oaxaca in Central America. The only difference: written agreements with the local collaborators. That is a step Herlihy hadn't even considered in Mexico, he said. "That was just not something you did back then. Nor do you do it now," he said. "But we're doing it now."

Even with those written disclosures, Herlihy doubted that his collaborators in Honduras, where he had just been working, could say who financed the project, no matter how many times he repeated it. "No way they'll be able to tell you," he said. "No. Way."

In contrast to their students, Herlihy and Dobson seem unlikely to suffer concrete penalties from the controversy. In 2013, Kansas promoted Herlihy to full professor, though he required a flood of supportive letters. The university never found cause to investigate the duo. Dobson continues to run AGS, though he has now retired from Kansas, and this year he will retire from the society.

The Bowman controversy has not dissuaded American military and intelligence agencies from taking an interest in geography. If anything, their interest has grown. In 2011 the director of national intelligence asked the National Geospatial-Intelligence Agency to lead efforts at leveraging human geography for their work. One member of Human Terrain, reflecting back on that work in a recent book, noted how it wasn't really anthropology — it was "applied human geography." And the Defense Department's Minerva Research Initiative continues to finance not only Herlihy's work but also that of other geographers.

At one point, in 2013, it seemed that the Association of American Geographers, which does not itself accept military financing, would engage in a dialogue similar to the one that consumed anthropologists after Human Terrain or psychologists after the collaboration with the CIA on torture. Eric Sheppard, who was then the association's president, proposed to its governing council a panel that would investigate the discipline's relationship with the military from all angles, ending in a comprehensive report. But the vote to create the committee ended in deadlock, 8 to 8.

"There was some discomfort," Sheppard says, "in wanting to open up this particular can of worms."

Bryan and Wainwright, the two academics most critical of the Bowman team, have migrated into this broader discussion of the military's role in geography. Herlihy and Dobson think that's because their critiques of the Bowman project faltered beyond their community of fellow thinkers. But for the critical geographers, it's a natural evolution, especially given how the military-intelligence world has been abjured, to an extent, from anthropology and psychology.

Scholars and the Military

Recent *Chronicle* stories examine rising tensions between two disparate groups.

- Program to Embed Anthropologists With Military Lacks Ethical Standards, Report Says
- Damning Revelations Prompt Social Science to Rethink Its Ties to the Military
- What a Bombshell Report Tells Us About the APA's Abetting of Torture
- Former Human Terrain System Participant Describes Program in Disarray

Certainly, as both critics concede, they never sought to conduct a full investigation of the Bowman project on their own. "Our job," as Bryan described it, "was not to extract the whole story of what had happened in Sierra Juárez."

This is about more than informed consent in two Mexican villages, Wainwright says. Search online and you'll see that every military branch has a human-geography program now. He sees his discipline at risk of becoming a Trojan horse for American military power.

The relationship between academic geographers and the military is a border region that, despite repeated attempts, never feels charted. The GPS signals that power the geospatial revolution come from military satellites. The Defense Department is the third-largest financier of academic research in the United States; in the sciences it is common and much less controversial to take military money. Military money gave us the Internet. Is this work implicated in the lives it has wrecked — guilt by association — or do the details matter? If it's the former, I'm implicated: My wife works for the Defense Department. For some, whatever I write, this will render my story suspect.

Reading through evidence of the military's revived interest in human geography — a real trend — I couldn't help thinking back to Harvard's decision to kill its geography program decades ago. The field, especially human geography, has never found an overarching theory. It can be made to say many things. It's flexible. The units of its research are among the most concrete of materials: mountains, rivers, fields, and the people who name them. But how these dots connect? In geography, that's entirely up to you.

Even Dobson, as willing as he's been to take money from the military for research, wishes he could have turned to a different financier. The United States should pay for geography that supports its broad foreign policies through the State Department, he said. But until then, he'll keep taking money from the Defense Department.

The ultimate damage of these allegations, Herlihy added, is how they will make future research among the Zapotec more difficult and cut short any benefits to the Oaxacan communities his team worked in.

"I'm sure the community, unfortunately, has not seen any of the benefits of the maps," he said. "They would have been huge."

Herlihy did provide me with evidence of slides they had presented with the FMSO logo. His explanation for why the logo was missing from the final Tiltepec maps: The FMSO money had run out a year earlier, and so that money did not support the technical work of executing the maps. Had the villagers in Tiltepec understood the source of their financing? There were no recordings of those meetings. The only people who could speak without bias about those events lived in a town more than 2,500 miles away.

On the dirt road to Tiltepec, lumber trucks share the single lane with reluctance. Turn left at the crossroads with the shrine and plow cautiously through felt-thick fog, sliding down switchbacks at a creep. Another hairpin, and the metal roofs of Tiltepec flash in revealed sun. Women carry bundles of wood on their heads back to town, accompanied by a lone donkey. The village sits high on the hill; its people have survived here for generations, yet the buildings, all concrete, adobe, and corrugated steel, seem a mudslide away from devastation.

I had come to Tiltepec with Marco Antonio Martínez Costilla, a Mexican graduate student who had worked on the Bowman expedition and could translate my questions about the villagers' encounter with Peter Herlihy. We pulled up to the town's government building. Residents eyed us warily.

You could see how a savvy political operator like Aldo González could influence the town, which has not been well-served by its government. Ironically, González was now part of that state government, serving as director of enforcing indigenous rights. A few days later, at a cafe in Oaxaca's capital, he would reiterate his past critiques, and lament having missed warning signs, like when Herlihy mentioned that the maps would be published online and be available, for example, if someone wanted to invest in the region.

"He was making information that is very specific to the indigenous communities available to the general public, and they weren't respecting the rights of the indigenous communities," he said. It's perverse, he later continued, "what Mr. Peter Herlihy is doing, recruiting or trying to recruit young students, to get information from communities in their own countries." Indigenous people should be wary of all social scientists with promises, he said. They promise to empower the people, but instead their work can be used to create policies that encourage assimilation into Western society. "From the perspective of indigenous people, we don't see it as a good thing."

In Tiltepec, inside the office of the town leader, papers sat on dusty computers. A bare bulb hung from the ceiling. Moths fluttered. On a bulletin board, its credits section covered by a calendar, hung the Bowman team's map of Tiltepec.

As night fell, a dozen or so men, including two who had done the mapping with Herlihy, gathered to answer questions.

When the project started, was it clear to you who was paying?

"Yes," several men replied.

This was surprising. The translator pressed them again. Was it clear at the start? "Yes," one man said. Really? "Well, a little later." Another man: "It wasn't until much later we found out that it was coming from there."

The town's leader, José Hernández Flores, was concerned. "What happens if now we say we didn't like anything and we don't want anything to do with the map?" he asked. "Or what if we say we really liked it and we want to work with them more, what happens?"

They frequently returned to what Aldo González had told them. What was true? What was really being done? Herlihy had never harmed them, but he also didn't listen well. It was frustrating that the villagers couldn't understand the English the researchers used to talk with one another.

Was anything stolen from you?

"No. I'd say no, but I don't know," Hernández said. "Some people say they are smarter than us in Mexico, that they want to take, they want to steal resources."

"I don't know if that was true or not. I know that they wanted the names of places."

The villagers did use the maps, sometimes, to point out their names for the valley's features to their children and the government. They used them in their border dispute with a neighboring village, but in the end that didn't help resolve the conflict. They were disappointed. Some felt deceived. The project was left half-done. They had thought Herlihy had agreed to make a book about Tiltepec. That the work would bring in tourism. That hadn't happened.

Even had the project been finished, it would have been unlikely to fulfill the hopes the town had put on it. At other villages in Mexico where Herlihy's team has worked, their finished maps, clearly marked with the FMSO logo, had been used in efforts to clarify land rights. But their effectiveness was limited; maps can change only so much without a lawyer.

After an hour of animated, overlapping conversation, the Tiltepec residents lost steam. They were ready for us to stop. At the end, Martínez, the graduate-student translator, asked to share his opinion with the villagers.

"This project wasn't finished. It wasn't completed." he said. But, he pleaded, hold on to those maps. "You could go 30 years and probably never use it. But most likely one day will come, and they'll say, 'Hey, what was this place called?' " He pointed to the map on the wall. "There it is. There is the name, right? It's a minimum benefit. But at the very least we'll be able to save it before it disappears, so we remember. Because whatever you put on a map never dies. But what you forget, that doesn't come back. It doesn't come back."

We left Tiltepec the next morning. It seemed unlikely we'd ever resolve how often Herlihy had disclosed his financing, and what the people of Tiltepec might have understood of it. Even former collaborators friendly to Herlihy told me that, from the beginning of his work with them, it hadn't been clear that the Defense Department supported the mapping. At presentations, the FMSO logo certainly appeared at the start, along with the names of participating universities. But Herlihy was so excited to get to his message, on using maps to fight power, that he could gloss over it. The message got lost in translation.

Driving away that morning, I thought back to another map I had recently seen: the Oztoticpac Lands Map, stored underground in a vault at the Library of Congress. Dating from 1540, the map, adorned with glyphs and drawn on

amatl paper, stems from an indigenous lawsuit that sought to restore fruit orchards to common ownership. It's a gorgeous artifact, fragile, depicting a devastated people in transition. These were the ancestors of Herlihy's past collaborators, melding their local traditions into a geography employed by the Spanish legal system. Today the map is a fine example of Classical Nahuatl, their language. It's a necessary example, too: Classical Nahuatl is a dead language.

As for the results of the lawsuit? They're unknown.

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