Renewing Indigenous Cultures

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ABSTRACT

The United States government has a sad history of penalizing Native Americans who maintained traditional cultural practices, ceremonies, and languages. Whether the penalties resulted from well-meaning but misguided attempts to assimilate Indigenous people or from more blatantly corrupt objectives, they created a stark trade-off. Indigenous people historically had to choose between cultural maintenance and economic development. Today there is debate about whether current development in tribal communities is compatible with cultural revival. After assessing historical and contemporary data on factors such as income, religion, and language use, we conclude there no longer is a trade-off. Tribal Nations are renewing their economies with self-governance systems that adhere to local customs, and they are investing returns from market enterprises in cultural goods. This means that policies most likely to build wealth in Indian country—secure property rights, a reduction of federal oversight and red tape, jurisdictional clarity and authority, and clear tribal laws—are also most likely to bring about cultural renewal.

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Native Americans have faced a dilemma for over a century. Should they live and raise families on Indian reservations, or should they relocate to off-reservation communities? Reservations can provide cultural benefits including kinship, language, traditions, and connections to place. But, for many individuals, moving away provides better employment, investment, and educational opportunities. Most other Americans have not had to choose.

Recent census data on language and income highlight the difference. On one hand, the proportion of American Indians speaking an Indigenous language on reservations is 5.4 times higher than the proportion of American Indians speaking an Indigenous language off reservations.[1] On the other hand, poverty rates are 70 percent higher for Native Americans on reservations when compared to those living off reservations.[2]

Why are these differences so stark? What can be done? Can tribes grow their reservation economies while simultaneously reviving their cultural traditions? Or must cultural revival come at the expense of economic revival and vice versa?

The Renewing Indigenous Economies program, to which this essay contributes, is focused on addressing questions such as these (see Anderson and Ratté 2022). Doing so contributes to the debate about whether Indigenous culture must be sacrificed for economic gain in modern times. One view, exemplified in the book *Ethnicity, Inc.*, is that capitalism, commodification, and economic growth are threats to Indigenous cultures (Comaroff and Comaroff 2009). Gaming on reservations in particular is considered by some to be a route to cultural destruction (e.g., Mika 1995, Mezey 1996, Cattelino 2013). These views fit within broader concerns that trade and capitalism lead to cultural homogenization and assimilation that can ruin local traditions and customs (e.g., Friedman 2012). An alternative view, exemplified in the book *Creative Destruction*, argues that markets, trade, and capitalism can enhance local traditions and customs in developing countries—such as musical success in Ghana—by building Indigenous wealth and encouraging trade in cultural products (Cowen 2002).

Our findings contradict the notion that markets, trade, and capitalism—and the institutions of property rights and contract enforcement that support them—are incompatible with cultural prosperity on modern Indian reservations. On the contrary, Native American culture can support rather than suppress enterprise when adherence to local culture legitimizes business. Moreover, further economic development on reservations creates time and money surpluses that can enable valued cultural practices to thrive, rather than wither away. As Robert J. Miller (2013, 160) notes in his book *Reservation "Capitalism,"* those who argue that modern economic development will inevitably injure tribal cultures may be creating a "false conflict."

We begin by explaining how cultural practices within tribal groups evolved precisely because they promoted economic prosperity prior to extensive colonial policies. It was the federal government's devastating assimilation campaign, starting most prominently with the Indian Civilization Act of 1819 and extending through the 1950s—rather than voluntary trade and commerce—that first created a trade-off between traditional culture and economic well-being. Data from 1915–17, show that reservations with higher proportions of church-attending Christians and English speakers were rewarded with higher yet still meager per capita incomes. This kind of trade-off did not exist until tribal citizens were confined to Indian reservations and federal policies were developed to reward assimilation and penalize traditional tribal practices. Many federal agents thought assimilation was the only route to prosperity, and that imposing a high price on cultural expression would cause them to fade away.

Federal policies of the 1930s to 1980s also did little to encourage cultural revival. Through the Indian Reorganization Act of 1934, the federal government ostensibly promoted self-government, but in practice, heavy-handed federal oversight by the Bureau of Indian Affairs prevented local customs, cultures, and norms from being embedded in governance. As a result, the negative trade-off between culture and economic well-being persisted. Data from the 1990 US Census reveal a strong negative correlation between the per capita income of Native Americans on reservations and the percent who spoke an Indigenous language.

The good news is that the modern revival of tribal sovereignty, particularly from 1990 to the present, is changing the trade-off. Today, tribal nations are generating revenue from gaming industries and determining how natural resources are used. They continue to create governance rules and procedures to match local customs, and their members are investing money earned from market enterprises (e.g., gaming, business development, and natural resource management) in cultural goods and services.

As a result, the old colonial-era trade-off between economic development and traditional culture is evaporating as momentum towards self-governance builds: the reservations with the greatest growth in Native American per capita income from 1990 to 2014 experienced the largest increase in the use of Indigenous languages. This finding does not diminish thorny challenges tribal nations face in maintaining governance structures that balance economic development, inclusion, and cultural goals, but it does suggest that economic development through markets, trade, and capitalism is unlikely to be an impediment to cultural revival.

The Economic Function of Early Cultural Practices

The Europeans who made early contact with American Indian tribes duly noted their varied cultures. The tribes they encountered differed in their ways of sharing, conducting warfare, negotiating, dressing, praying, singing, dancing, and creating art. Yet the European settlers often misunderstood the function of the cultural expressions they observed. Some deemed cultural practices wasteful that, upon deeper consideration, are now better understood as rational incentive structures that tribal groups used to encourage wealth-generating behavior.

Undoubtedly, the misunderstanding of cultures between Europeans and Native Americans was mutual. Even today, modern scholars can scarcely agree on a definition for “culture,” let alone an analytical framework for understanding its dimensions, its causes, and its effects (see Acemoglu and Robinson 2021). There is, however, some common ground. Economists, like other social scientists, tend to agree that what is commonly understood to be “culture” has the following hallmarks: it is social rather than individual, local rather than universal, learned rather than instinctive, historical rather than biological, evolved rather than planned, and symbolic rather than literal. Native American cultural practices such as the Sun Dance, for example, have these features, as discussed below.

The Nobel laureate economist Douglass North (1990) argues that culture is conveyed in the informal rules and norms that reward behaviors thought to be essential to group success and sanction behaviors thought to be inimical to group success. These norms build slowly from cumulative experiences of past generations. They become embodied in language, beliefs, myths, and ways of doing things. According to this thinking, cultural norms are at first necessary for the economic success of groups and then persist beyond the life span of their utilitarian function for reasons less well understood.

Societal norms and cultural practices, therefore, provide clues for understanding how human groups adapted to their local environments in order not to just survive, but also to prosper. One example comes from tribes of the Pacific Northwest of North America. Some were so rich that they would give away wealth, such as canoes, baskets, and food, in elaborate "potlatch" ceremonies. These were winter ceremonies arranged by a tribal leader acting as a host to another tribe or tribes. The hosts and guests danced and celebrated, sometimes for weeks, while the hosting tribe prepared lavish feasts during which the leader-chief distributed gifts.

European settlers mistook this practice as wasteful and useless. Early missionaries to British Columbia, for example, thought the ceremonies promoted idleness, encouraged drunkenness, spread diseases, and impoverished participants. Modern scholars, such as D. Bruce Johnsen (2016), now understand the economic function of these ceremonies was to limit conflict and provide social insurance against unforeseen events. Potlatches limited conflict because the acceptance of gifts without objection meant that guests were accepting the hosting tribe's claims to natural resources, such as seasonal harvests at certain salmon streams. Potlatches insured against risk because alternating hosts effectively diversified portfolios across tribes in an environment where salmon productivity varied randomly across salmon streams and tribal claims. To prevent famine in years when the local harvest was low, each tribe gifted to other tribes during their years of surplus.

The Plains Indian practice of counting coup provides another nineteenth-century example. Historically, many acts of bravery in battle counted as coup, such as striking an enemy. Yet the most prestigious acts—the ones that were later recounted in a community's history—involved encountering and humiliating an enemy without killing or injuring him. As Lear (2008) describes it, counting coup won a warrior acclaim by touching an enemy with a hand, bow, or coupstick and escaping unharmed. Warriors who engaged in this act of bravery enjoyed prestige and other societal rewards.

Why was this act celebrated, and what was its economic function? Viewed in isolation, as an individual act, counting coup struck settlers from Europe as counterproductive to success in battle. If a warrior was close enough to kill an enemy, why not reward a kill rather than a touch? After all, the kill would remove the enemy as a threat to a tribe's village, children, and elders, whereas the touch leaves the embarrassed enemy alive to seek retribution. Lear (2008) offers a plausible explanation: counting coup rewarded warriors for communicating tribal boundaries to enemy tribes. Touching the enemy served to signal "this is Crow land" or "this is Sioux land" when other ways to demarcate were lacking. Keeping the enemy alive allowed the warrior to carry the message back to his people. With clarity in boundaries, particularly over bison hunting territory, some unnecessary and costly conflicts could be avoided.

Tribes in the Great Lakes area of the American Midwest harvested wild rice from wetlands in ways that also appeared wasteful to outside observers. As Monette (2021) describes it, the harvesting process involved holding two four-foot-long sticks from a canoe, one in each hand, and looping the sticks in what is a culturally important infinity sign. The first part of the loop knocks rice into the canoe, but the second part of the loop knocks it out. Why knock valuable wild rice back into the water? The answer is that, if one takes it all, there will not be enough to seed the lake bed for next year's harvest. The harvester could move on to another lake, but eventually, the wild rice resource would be depleted.

Potlatches, counting coup, and the infinity patterns are examples of how cultural norms evolved among tribes to increase the net yield, or income, of the environments in which they lived. Countless other cultural practices among Native Americans evolved to help tribes maximize the economic potential of the resources they had. These practices were deep and important, but they were misunderstood by even the most well-intentioned outsiders who sought to rid Native peoples of their ostensibly wasteful practices.

Reservations and the Assimilation Campaign

Tribes endured a period of cultural devastation at the end of the nineteenth and beginning of the twentieth centuries, following the Indian Wars. Tribes were confined to reservations. They lost access to natural resources on which they had traditionally relied, whether that was salmon, bison, beaver, or wild rice habitat. Intertribal warfare was banned. Native Americans' movement for hunting, fishing, and other purposes was constrained by federal government rules.

These changes altered the economic calculus of adhering to long-standing cultural norms. Prior to reservations, young men on the Plains were rewarded for successful hunts, counting coup, and stealing horses because these accomplishments contributed to group prosperity. The same activities caused trouble on reservations. Indeed, they were eventually sanctioned by other tribal citizens as foolish and rash. Religious ceremonies such as the Sun Dance also lost traditional meaning because they were intertwined with concepts of warfare that were no longer relevant. This left three options, according to the reasoning of Lear (2008). Tribes could 1) continue the dancing even though the point had been lost; 2) make up a new meaning for the dance (e.g., for good weather for farming); or 3) give up the dance altogether.

The economic calculus for adhering to traditional cultural norms also changed because the federal government imposed a high penalty on Native Americans who continued to express and practice cultural traditions. The assimilation campaign began with the Christian missionaries, and it accelerated into the early twentieth century. There was official federal policy to break down traditional tribal life from around 1819 to 1960. The government did so by banning certain dances and ceremonies—including the potlatch—and by sending Native American children to boarding schools, forbidding non-Western attire and hairstyles, and prohibiting Indigenous languages.

The Bureau of Indian Affairs (BIA) also attempted to convert Native Americans into yeoman farmers by allotting tribal lands. It did so under the auspices of the General Allotment Act (also known as the Dawes Act) of 1887. Through this policy, millions of acres of tribal land were allotted to Native American families, commonly as 160-acre parcels, some of which were eventually made available for sale to White farmers once the land was fully privatized (Carlson 1981).[3]

These assimilation efforts were meticulously documented by the federal bureaucracy. For example, the 1912 annual report of the Office of Indian Affairs noted that 149,721 of 193,609 Indians wore "modern attire"; that 69,529 of 177,401 Indians had professed Christianity; that 90,341 of 184,784 Indians spoke English; and that 78,543 of 186,398 Indians were citizens of the United States. The same report provides columns of data cataloging the amount of reservation land allotted, cultivated, and privatized (Office of Indian Affairs 1912).

Many policy makers argued that aggressive cultural suppression would create wealth for assimilated Indians. The philosophy was both stick and carrot. By raising the price of traditional cultural expressions—through penalties and bans—and by offering the promise of individual land ownership and wage earnings, families would naturally prefer Christianity and choose to educate and train their children in White American schools.

Economics of Early Twentieth-Century Assimilation

The assimilation campaign was effective at disrupting tribal culture and in infusing reservations with White American culture. American Indians acquired or were introduced to the English language, hunting rifles, western medicine, Bibles, pianos and guitars, rodeos, cut-rate stores, store-bought food and clothes, cars, tractors, and a system of extensive roads. However, many tribal communities also lost their original language, prayers, dances, ceremonies, herbal medicines, religious beliefs, arts and crafts, clans, traditional societies and offices, and older methods of farming and hunting. By force and allure, White American culture crowded out many forms of traditional culture.

Was assimilation effective at elevating prosperity on reservations as reformers promised? Consider data from the 1915–17 annual reports of the Office of Indian Affairs, which estimated the per capita income on reservations along with various measures of assimilation. The mean income across reservations was $137 in 1915 dollars, which is approximately $4,000 in 2022 dollars. By contrast, the per capita income for all Americans on average from 1915–17 was estimated to be $442 (Mitchell et al. 1921), which is approximately $13,000 in 2022 dollars.

Were assimilated tribes rewarded with higher incomes from 1915–17 when compared to tribes that stuck longer with traditional cultural practices? The statistical analysis in table 1 addresses this question. It shows how the BIA's measures of assimilation correlated with per capita income during the years 1915, 1916, and 1917, not adjusted to current price levels.

The results indicate that assimilation did indeed positively correlate with income across reservations. Reservations where more than half of the American Indian population attended Christian churches had higher average incomes relative to reservations where fewer than half of the population attended churches. American Indians on reservations that were allotted by 1915 also had higher incomes compared to those that were not. And reservations where more than half of the American Indian population spoke English had higher reported average incomes relative to reservations where fewer than half of the population spoke English.

The relationships between assimilation and average incomes are positive in table 1 because federal policy, and other circumstances of the time, created a trade-off between earning income and practicing traditional Native culture. Traditional Native cultural practices were discouraged whereas assimilation was rewarded with higher incomes.

For clarity, we emphasize three qualifications to this conclusion. First, the incomes from 1915–17 were recorded at the height of land allotment. Hence the incomes may have reflected transitory changes in earnings from land leasing rather than more permanent differences in earnings. Indeed, the "Meriam Report," completed in 1928, suggests that income gains from allotment were short lived.[4] It concluded that allotment had failed to promote Indian farming on reservations, it had not alleviated poverty, and it had not prevented Indian land from being transferred to non-Indians.

Table 1. Assimilation and Per Capita Income for American Indians on Reservations, 1915–17

	Average Per Capita Income	*Number of Reservations in Sample*
Christian Church Attenders		
More than 50% of population	$176.4	138
Less than 50% of population	$111.7	179
Allotment Status		
Reservation allotted	$164.5	228
Reservation not yet allotted	$76.9	89
English Language Speakers		
More than 50% of population	$151.5	225
Less than 50% of population	$107.7	82

Notes: The sample includes 317 reservations from 1915–17 for which data are reported. The data come from the Office of Indian Affairs (1915–17).

Second, the table 1 comparisons do not imply that full assimilation would have caused American Indian incomes to become equivalent to non-Indian incomes during this time period. Non-Indian per capita incomes were 3.2 times higher than Indian per capita incomes on reservations, and there is no evidence that attending church, privatizing land, and learning English would have eliminated this entire gap.

Third, the table 1 comparisons do not imply that full assimilation in the early twentieth century could have restored Indian wealth or income to levels enjoyed prior to Native Americans being forced on to reservations. We do not have wealth or income estimates for tribal populations before the Indian Wars, so we cannot make before and after comparisons. However, we do know that Native Americans were among the tallest in the world in the late 1800s, with the height of Plains Indians men at an average 172.6 centimeters (about 5 feet, 8 inches) tall (Steckel and Prince 2001) but also that this height advantage fell sharply after the bison were depleted (Feir et al. 2019).[5] Assuming height was a measure of wealth and prosperity, the height comparisons suggest that, at least for some tribes, even full assimilation during the early twentieth century would not have restored tribal conditions to that of pre-reservation wealth.

To summarize, assimilation was a favorable economic adaptation to the devasting circumstances tribes found themselves in during the late 1800s and early 1900s. Assimilation led to higher but still meager incomes, and this adaptation came at the expense of cultural traditions by federal policy design.[6] Tribal members essentially had to choose between being impoverished or abandoning cultural traditions by educating, working, and speaking in the White American culture.

Federal Obstacles to Cultural Revival during the Era of Reorganization

Though the official policy of assimilation ended with the Indian Reorganization Act (IRA) of 1934, federal policies of the 1930s to the 1970s did not reverse the trade-off it had created with assimilation era policies. The IRA was ostensibly meant to empower tribal institutions in two ways. First, it initiated modern tribal governments by providing a blueprint for constitutions and charters to formalize tribal governments within the US federalist system. Second, the IRA ended allotment and declared that lands not yet privatized would remain in trusteeship. The end to allotment halted the transfer of land to non-Natives, but it did not give land that was already allotted back to tribes.

The IRA blueprint did not empower tribal institutions as much as promised, and it therefore fell short of helping tribes embed customs and culture into governance. The majority of tribes were organized under constitutions and charters created from a BIA model based on principles often bearing little resemblance to traditional tribal governance systems (Mekeel 1944, Rusco 2006, Akee et al. 2015). Whereas the Dawes Act pushed cultural assimilation through Christianity and land allotment, the IRA pushed cultural assimilation by delineating governance structures and adding layers of federal bureaucratic oversight.

Federal IRA oversight ultimately suppressed the extent to which traditional tribal ways of doing things could be reflected in tribal governance. Most business transactions were ultimately deemed to require federal approval, as were all transactions involving land or natural resources (Clow 1987). Accounts from tribal government meetings highlight extensive BIA oversight. According to one, the "Indian service personnel consider the new tribal governments . . . mere advisory bodies to the Office of Indian Affairs" (Clow 1987, 132). Our statistical comparisons, based on annual BIA press releases between 1953 and 2000, suggest that BIA involvement in tribal projects was extensive until around 1980, when self-determination policies were put in place to truly allow tribes to self-govern (Frye and Parker 2021).

The end of allotment through the IRA halted the transfer of land to non-Natives, which helped prevent further tribal land loss, but also empowered the BIA with trusteeship that has suppressed tribal ways of managing land and natural resources. From 1887 to 1933, trusteeship was granted over millions of acres that were allotted to Native Americans who had not been declared "competent and capable" (by the Indian agent) to hold fee-simple title. Fee-simple land can be alienated, used as collateral for loans, and sold on open markets to Indians and non-Indians. Allotted trust land is owned by the federal government on behalf of Indians, and, in most cases, it cannot be sold to non-Indians or used as collateral for loans.

Trusteeship has led to ownership fractionation, and this has stifled land from being used as Native owners might prefer. Because the original allottee typically left no will, most allotted trust lands passed to several heirs as undivided interests. This heirship practice continued over time, so that allotted trust parcels sometimes now entail undivided interests from over one hundred owners (US Dept. of the Interior 2013). The upshot is that land fractionation created sustained demand for a bureaucratic middleman—the BIA—which has been tasked with keeping track of fractionated interest owners, leasing land and natural resources on their behalf, and distributing royalty and lease payments.[7] Few would argue that the BIA has been an astute fiduciary agent. In fact, BIA mismanagement of fractionation records was so severe that allotted trust owners collectively sued the agency, culminating in a major legal settlement in 2009 known as the Cobell Settlement. Moreover, few would argue that land use decisions—whether keeping land idle or aggressively extracting natural resources—have reflected the interests and preferences of Native Americans.[8]

Did the top-down policies of the IRA reverse the negative trade-off between traditional cultural expression and economic well-being that was so sharp during the early twentieth century? Theoretical intuition suggests this was unlikely. True self-government enables citizens to create rules, laws, and procedures that match local customs, cultures, and norms (North 1990), but the IRA suppressed self-governance and replaced it with BIA governance less knowledgeable of, and less responsive to, local preferences.

To shed empirical light on this issue we focus on a particular culture expression: the use of Native American languages across Indian reservations. Here we employ US Census data reporting the number of American Indians age five and older who identified themselves (and their family members) as speaking a Native American language at home in 1990.[9] This year represents the end of the IRA era and the eve of a new era of self-determination and tribal gaming as described below. Based on the largest seventy-seven reservations with Native American populations exceeding one thousand, the data indicate that tribal language speakers averaged about 24 percent, ranging from approximately 0 percent to 91 percent in year 1990 (see table 2).[10] Correlations show that the reservations with the highest per capita incomes tended to have the fewest native language speakers as a percentage of Native American populations, as discussed below.

To summarize, the IRA era did little to inspire cultural revival or to change the negative trade-off between economic and cultural development on reservations. Cultural assimilation continued to be encouraged through economic penalties and rewards, albeit less forcefully than during the height of allotment, boarding schools, and reservation creation.

Self-Determination and Cultural Investments

A series of self-determination policies, beginning in the late 1970s, progressively gave tribes more control over reservation affairs. From about this time to the present, tribal nations have begun to transition from being viewed as merely “administered communities” to more autonomous governments that can, among other things, operate casinos, generate revenue, determine how natural resources are used, and distribute earnings and jobs to tribal members (Stull 1990, Kalt et al. 2008).

Self-determination is noteworthy for cultural investment because, as Kalt et al. (2008) note, “Sovereignty and self-determination allow local desires, preferences, needs, and ways of doing things to be more accurately perceived and acted upon.” That is, self-determination allows tribes and their members to determine how to spend revenue from business ventures, including those focused on cultural goods and services. Moreover, the Indian Gaming Regulatory Act (IGRA) of 1988 ushered in casino gaming on some reservations, thereby creating a new source of income that could be directed towards cultural investments. Tribal gaming revenues grew rapidly following IGRA, with estimates indicating that revenues in 2021 exceeded $39 billion (National Indian Gaming Commission 2022).[11]

The decision to embrace the gaming industry was controversial within many tribes that expressed concern that gaming might impair tribal culture and introduce negative outside forces. Yet many tribes set up ways for gaming revenues to fund cultural programs and services. For example, the Mille Lacs tribe's casino funded a museum with a craft room featuring demonstrations of traditional cooking, birch-bark basketry, and beadwork. Beyond the museum, the Mille Lacs' Nay Ah Shing Schools offer Ojibwe language and culture programs that bring elders into classrooms. At a cultural center, tribal members can practice language, music, dance, wigwam construction, and other traditional activities.[12]

Is the effect of gaming on cultural investments at Mille Lacs an anomaly? Or does it reflect a more general relationship in which recent income gains on reservations are an impetus for cultural revival? To shed empirical light on this issue we return to data on the use of Native American languages at home. We focus on the period 1990 to 2014 to study how recent income growth—some which has been driven by tribal gaming—correlates with changes in language use. We conclude the analysis in 2014 because the Census stopped reporting Native American language use at the reservation level during that year.

Table 2 summarizes the data, focusing on the subset of large reservations with American Indian populations exceeding one thousand in 2014. It shows that, on average, tribal language use declined from 1990 to 2014, falling from 23.9 percent of the Native American population in 1990 to 17.4 percent in 2014. Since 1990, the percentage of individuals speaking tribal languages increased on thirty-four of the seventy-seven reservations in the sample. For illustrative purposes, we note the percentage of people speaking a tribal language in 2014 on some of the largest reservations including the Navajo (82 percent), Pine Ridge (23 percent), Fort Apache (54 percent), Blackfeet (8 percent), and Hopi (58 percent).

Table 2 also shows summary statistics for American Indian per capita income across the reservations in 1990 and 2014. The mean income grew from $8,393 to $14,357, expressed in 2016 dollars. Because income grew on average while Indigenous language use declined on

Table 2. Population on Reservations Speaking Indigenous Languages (Reservations with American Indian Population > 1,000 in 2014)

	Min.	*Mean*	*Max.*	*N*
% speaking Indigenous language at home				
In 1990	0.12	23.9	91.1	77
In 2014	0.05	17.4	86.6	77
American Indian per capita income				
In 1990	$4,267	$9,863	$21,251	77
In 2014	$8,393	$14,357	$38,839	77

Source: Authors' compilations from US Census and American Community Survey (ACS) reports. The year 2014 refers to the ACS average over 2010–14. Per capita income is reported in 2014 dollars.

average, it may appear that income growth relates negatively with language retention. These general trends, however, mask the fact that Native American language use declined most slowly—and even increased—on reservations that experienced the strongest income growth.

We conducted statistical analysis to calculate the correlation between per capita income in 1990 and Indigenous language use in 1990. We also calculated the correlation between the change in language use over 1990–2014 and the rate of growth in per capita income over the same period. The details of the analysis are explained in the Appendix.

Here we summarize the two main findings. First, 1990 incomes on reservations were negatively correlated with language use. Statistically, a 10 percent increase in per capita incomes across reservations was associated with a 9 percent decrease in the American Indian population speaking an Indigenous language. This suggests there was a negative trade-off between Indigenous culture, as measured by language use, and economic prosperity through 1990.

The second empirical finding is better news for tribal leaders wanting to promote both economic and Indigenous language development. There was a positive relationship between income growth from 1990 to 2014 and Indigenous language use during the same time period. Statistically, a 10 percent increase in per capita income within reservations was associated with a 5.1 percent increase in the number of Native American language speakers.

Overall, these findings suggest that economic development eroded tribal culture, or that culture eroded development, up until 1990. Since 1990, economic development appears to have been an impetus for tribal language recovery. Other analysis, not shown in the Appendix, considers how the source of income affected the relationship between income growth and language revival from 1990 to 2014. Here we find that tribes with more tribal gaming experienced more language revival than tribes with less tribal gaming.

To understand why recent economic development positively relates to language recovery, consider the potential costs and benefits of an Indigenous language to individuals who speak it. Language is a means of expression and an instrument of communication. Expression is intrinsically valuable and enjoyable. People will invest money, time, and effort to express themselves in ways that they enjoy. Consequently, as Native American communities gain income, we expect some to prefer investing more money, time, and effort in cultivating traditional languages. One way to cultivate Indigenous languages is to invest in traditional ceremonies, prayers, storytelling, classes, and media. In economic terminology, we think of Indigenous languages as "normal goods," meaning demand increases with income. That is, Native Americans will want their families and governments to spend more on language programs as their reservations' wealth increases.

Besides expression, language is also an instrument for doing business.[13] For most Native Americans, work occurs in English by necessity and mastery of English is important to business success. However, with gains in self-determination, some work activities are taking place in Indigenous languages. Some tribes ensure this by holding debates in the tribal council in a Native American language, or by rewarding tribal officials for conducting business in a Native language. Economic development can also lower the instrumental value of native languages, however, by drawing Native Americans into more business activities that require the use of English. Insofar as economic development embeds Native American business activity more deeply in the larger society, it lowers the instrumental value of speaking a Native language relative to a native language.

The empirical correlations suggest that recent increases in income have resulted in more speaking of Native languages for expressive reasons, and in the instrumental speaking of Native languages due to preferences for using them when conducting business with the tribal government. Whereas in the past—apparently up until 1990 on average—the pressure or desire to earn income by more deeply embedding business activities of the larger society has resulted in less instrumental speaking of Native languages. Self-determination and tribal gaming revenues have eroded this trade-off for many Native American households over the past decades.

Conclusions and Policy Implications

The American government has a sad history of levying harsh penalties on Native Americans who tried to maintain traditional religions, cultural practices, ceremonies, and languages. The penalties created a stark trade-off. Cultural assimilation was effectively required of tribal members who sought more than a bare minimum of economic sustenance for themselves and their families during the late nineteenth and early twentieth centuries. The assimilation campaign continued in a more disguised fashion from the 1930s through around 1980, when assimilation was pushed through heavy-handed federal oversight over tribal governments, business choices, the Indian boarding school system, and Native American property rights to land and natural resources. This oversight not only suppressed economic well-being, but it also rewarded tribal leaders who learned to assimilate governance institutions to successfully navigate federal bureaucratic red tape.

Yet it would be a mistake to attribute the cultural oppression to market forces and capitalism. On the contrary, the oppression was executed through a federally coordinated effort of cultural imperialism that constrained Native American liberties, property rights, and traditional ways of trading, exchanging, investing, and freely marketing their cultures for profit. Indeed, the form of oppression resembles that of Uyghur and Tibetan cultures in modern China in that both rely on governmental control (see Mascagni 2011, Crepelle et al. 2021).

The good news is that recent stronger federal commitments to tribal self-governance, combined with new economic opportunities on Indian reservations such as those created by the tribal gaming industry, mean that Native Americans no longer have to choose between traditional cultural practices and economic well-being. For example, although many observers assume the benefits of gaming have necessarily come at the expense of tribal culture, our empirical findings suggest the opposite effect: on reservations where income growth has been the strongest since 1990, tribes are slowing, and even reversing, the trend of declining Indigenous language use.

In summary, the dilemma that many Native Americans have faced for much of the century—whether to live on reservations to enjoy kin and culture or live off reservations for employment and income—is dissipating with an economic and cultural revival on many reservations. This implies that more Native Americans will migrate back to reservations, as they did during the Great Recession, which demonstrated a preference for living on reservations when the relative differences in economic opportunities shrank (Feir and Gillezeau 2018). The trend towards remote work is also changing the trade-off in that it may better enable young Native Americans to live and work from Indian country. If it does, young Native Americans can earn income from the broader capitalist economy without having to forgo local kinship, language, and cultural opportunities nearer to their homelands.

Our analysis should be good news for federal and tribal policy makers wanting to further support widespread cultural revival in Indian country. It implies they need not choose between policies supporting economic growth or policies supporting cultural revival. Quite the reverse: cultural resurgence and economic development go hand in hand. This means that policies most likely to build economic opportunities, entrepreneurship, and wealth in Indian country—such as secure property rights for tribal nations and their members, a reduction of federal oversight and red tape, jurisdictional clarity, self-governance, and clear and predictable tribal laws and rules—are most likely to aid cultural renewal. To paraphrase Bill Yellowtail (2006), a Crow tribal member, being poor is not an Indian cultural tradition, and policy makers should not assume it is.

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Appendix: Statistical Correlations between Income and Indigenous Language Use

Table A1 shows how Indigenous language use correlated with income changes across reservations from 1990 to 2014. For comparison purposes, we report the 1990 correlation in column 1. Because the data are transformed by the natural logarithm, the correlation estimate can be interpreted as what economists call *elasticities*. Here an elasticity simply indicates how percentage changes in per capita income corresponded with percentage changes in the number of reservation residents speaking a tribal language.

The column 1 estimate of –0.89 means that a one percent higher level of per capita income among American Indians in 1990 was associated with –0.89 percent lower level of the number of tribal language speakers. The estimate holds constant the size of the American Indian population and therefore indicates that higher per capita incomes were associated with lower proportions of reservation residents speaking the tribal language.

The column 1 estimate of 1.23 on the log of the American Indian population means that an increase of the American Indian population by one percent is associated with an increase in the number of Native language speakers by 1.23 percent, suggesting that encouraging tribal use may be easier on reservations with more Native Americans.

Table A1. Correlations between American Indian Per Capita Income and Indigenous Language Use on Reservations

	Dependent Variable = Log(Number speaking language), 1990	*Dependent Variable = Δ Log(Number speaking language), 1990–2014*
	(1)	*(2)*
Log Am. Indian Per Capita Income, 1990 (in 2018 $)	–0.89**	
	(0.37)	
Δ Log Am. Indian Per Capita Income, 1990–2014 (in 2018 $)		0.51**
		(0.23)
Log Am. Indian Population, 1990	1.23***	
	(0.06)	
Δ Log Am. Indian Population, 1990–2014		1.06***
		(0.22)
Intercept	4.70	–0.61***
	(3.96)	(0.13)
Reservations	77	77
Adjusted R^2	0.64	0.24

*Notes: p values in parentheses, *statistically significant at $p < 0.1$, **$p < 0.05$, ***$p < 0.01$. The standard errors are robust to heteroskedasticity. The dependent variable in columns 3 and 4 is the log(2014 Number speaking Indigenous language) - log(1990 Number speaking Indigenous language).*

Turning to column 2, there was a positive relationship between income growth from 1990 to 2014 and the number and concentration of Indigenous language speakers during the same time period. The Column 2 estimate of 0.51 means that a 10 percent increase in per capita income was associated with a 5.1 percent increase in the number of Indigenous language speakers, after controlling for growth in the Native American population on each reservation and the overall negative trend in the number of Indigenous language speakers as reflected by the negative intercept.

Overall, the results in table A1 leave the impression that economic development eroded tribal culture, or vice versa, up until 1990. Since 1990, economic development appears to have been an impetus for tribal language recovery. Other analysis, not shown here, considers how the source of income affected the relationship between income growth and language revival from 1990 to 2014. Here we find that tribes with more casino gaming experienced more language revival than tribes with less casino gaming.

NOTES

1 Data from the American Community Survey (ACS) from 2014 suggest that 38 percent of Native Americans living on reservations spoke a Native language compared to 7 percent of Native Americans living off reservations.

2 Poverty rates were 37 percent on reservations compared to 22 percent off reservations from 2014 to 2018.

3 Senator Dawes argued that, under communal ownership, Indians had not “got as far as they can go because they own their land in common, and under that [system] there is no enterprise to make your [land] any better than that of your neighbors.” Cited in Ambler 1990, 10.

4 Institute for Government Research, *The Problem of Indian Administration: Report of a Survey Made at the Request of Honorable Hubert Work, Secretary of the Interior, and Submitted to Him, February 21, 1928* (Baltimore: Johns Hopkins Press, 1928). Lewis Meriam was technical director for the survey staff who prepared the report.

5 This height exceeded the height of Australian men (averaging 172 cm), American men of European descent (171 cm), and European men (170 cm or less).

6 Recent empirical research suggests that boarding schools created a similarly devastating dilemma. Reservations that had more children forced into boarding schools during the early twentieth century did come to realize higher per capita incomes in later time periods. But the boarding schools imposed economic assimilation at a high cost, and the schools frustrated traditional cultural connections on reservations long after they closed (Feir 2016, Gregg 2018).

7 Shoemaker (2003, 761) notes that any informed transaction on fractionated Indian reservation land “can be accomplished only if accurate records can be acquired and understood. . . .” She cites an example (p. 760) in which an oil company did not complete a lease “after realizing how much work was involved in obtaining the necessary signatures from 101 heirs, of whom the BIA had no address for twenty-one and six were deceased with estates still pending agency probate.”

8 There is of course variation within and across tribes in preferences towards aggressive natural resource extraction or conservation. For example, neighboring tribes in Montana—the Northern Cheyenne and the Crow—have different views towards coal mining with the Crow favoring it and the Northern Cheyenne being opposed. Valerie Volcovici, “In Montana’s Indian Country, Tribes Take Opposite Sides on Coal,” Reuters, August 21, 2017, https://www.reuters.com/article/us-usa-trump-energy-tribes-insight-idUSKCN1B10D3.

9 Some potential shortcomings of the language data are worth noting. As Crawford (1995) points out, self-reports of language use can be less reliable than objective measures. Self-reported measures may be biased by feelings of ethnic pride, obligation to one's tribe, or even embarrassment about the true use of language.

10 We follow precedent from other empirical studies of reservation outcomes by focusing on reservations having American Indian populations exceeding one thousand (Cornell and Kalt 2000, Anderson and Parker 2008, Akee et al. 2015).

11 In the American Gaming Association's (AGA) annual survey report (2019), total commercial gaming revenues in the United States was $41.7 billion. The AGA estimates tribal gaming revenues will exceed total commercial gaming revenues by 2030.

12 Steve Date, "Casinos Influencing Indian Culture—In a Good Way," *MinnPost*, December 14, 2012, https://www.minnpost.com/politics-policy/2012/12/casinos-influencing-indian-culture-good-way.

13 Stewart et al. (2017) provide an analysis of the important role of culture and identity in the leadership of American Indian–owned businesses.

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The Hoover Project on Renewing Indigenous Economies

The Renewing Indigenous Economies Project is rooted in the Hoover Institution's purpose to advance ideas defining a free society and focused on securing land title, clear legal jurisdiction, self-governance, and financial independence for Native American people and tribes. The project launched in 2017 with a mission to foster research and outreach designed to: (1) support scholarship documenting the institutions through which tribes thrived before European contact, the colonial institutions that have stifled Indigenous economies, and the lessons to be learned from tribes that have freed themselves from colonial control; (2) educate Indigenous university students about the ways tribal economies can be rebuilt; (3) educate policy makers on the steps necessary to unwrap tribes from the bureaucratic "white tape" that stifles entrepreneurship and prosperity; and (4) help tribal leaders establish stronger governance structures and build their economies from the ground up based on revenue rather than federal grants.

Since the project's launch, it has built a strong research foundation for helping tribal leaders, policy makers, and scholars explore ideas that can renew Indigenous economies. These data and analyses offer empirical evidence that enables proposals for reform to be implemented and improve the lives of Native Americans.