Assimilation and Delegation: A Model of Federal-Tribal Dynamics

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Abstract

In this paper, I introduce a formal model of state delegation as a function of indigenous assimilation. The standard model indicates that the state (federal government) is more likely to delegate to a tribe that is relatively closer to the state. Introducing a government assimilation campaign (which the tribe can embrace or not) as well as federal elections (which the tribe can participate in or not) to the model illuminates a strategic interaction that counterintuitively discourages assimilation and electoral participation in order to incentivize state delegation.

I.   INTRODUCTION

Instances of indigenous[1] groups securing state[2] recognition and authority over lands and resources are common today, including in highly industrialized democracies (Frye and Parker 2021; Sambanis, Germann, and Schädel 2018). For example, the United States increasingly delegates policy decisions and implementation to many of the 574 federally recognized tribes[3] that fall within the borders it claims. While delegation from the state level to the tribal level is not without controversy (Anderson and Parker 2008), this authority is granted across many policy domains, including water management, forestry, fisheries, and National Parks as well as related to the provision of education and healthcare. For example, The Tribal Forest Protection Act of 2004 and subsequent updates expands the tribal role in managing federal forest lands adjacent to reservations and beyond

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[1] Indigenous peoples, as understood by the United Nations, have a historical connection to pre-invasion and pre-colonial societies in their territories. They maintain an identity separate from the dominant societies that now exist in these regions and aim to preserve and pass on ancestral lands and identities to future generations. (Office of the High Commissioner for Human Rights 2013).

[2] For the purposes of this paper, I use the following interchangeably: state, federal, central or national government. To discuss states within the United States, I use the proper name of the state or indicate "U.S. states." This allows easier engagement with comparative literatures that address "the state" as the central government.

[3] Terminology surrounding indigeneity is sensitive and involves complicated histories. I try to first follow preferences expressed by tribes with whom I work in the field, second to reflect current guidance from intertribal entities, and third to follow contemporary conventions in social science and those provided by academic style guides. I prefer specific to general naming. For general cases, I often use "indigenous," "tribe/tribal," and "Native" interchangeably, and at times "Indian" or "Alaska Native" when talking about Lower 48 States tribes and Alaska tribes, respectively. None of these practices comes without legitimate critique. I welcome guidance in this and related areas.

(Congress 2004); through the Pacific Salmon Treaty, several Native American tribes have become central figures in managing salmon fisheries to ensure sustainable fishing practices (Pacific Salmon Commission 2024); the National Park Service is working with tribes to incorporate traditional ecological knowledge in managing park lands, with tribes taking on lead roles in decision making and implementation (Pahre 2014); tribes have embraced the option to set and enforce their own water quality standards and environmental regulations (Diver 2019); and the Indian Health Service operates under the principle of tribal self-determination, allowing tribes to administer their own health care programs and services (U.S. Government Accountability Office 1986). The U.S. has even delegated decisions over non-Native healthcare to some tribes, including in the context of COVID-19 vaccine distribution (Evans et al. 2022; Rodriguez-Lonebear, Barceló, Akee, and Russo Carroll 2021).

Also common are reports of Native nations' resistance to assimilation and growing commitment to indigenous - often anti-colonial - priorities and practices, in economic, political, and cultural terms (see e.g. Anderson and Parker ; Frye and Parker 2021).[4] State delegation of authority to tribes amid such activity generally runs counter to expectation. Prominent models of delegation tell us that states are more likely to delegate authority to groups that are more similar to the state (e.g. Bendor and Meirowitz 2004).[5] Furthermore, foundational theory on democratic state-building suggests that a key solution to the "problem" of heterogeneity is minority assimilation (Alesina and Spolaore 1997). Indeed, most (arguably all) of today's most admired democracies engaged in heavy-handed indigenous assimilation projects in the course of early state building (Dippel and Frye 2020; Feir 2016; Fouka 2022; Miller 2023; Scott, Tehranian, and Mathias 2002). As the assimilation of indigenous people(s) becomes more complete, we might simultaneously see an *increase* in delegation and a *decrease* in autonomy claims. This is because, compared with unassimilated people,

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[4] This pertains to the U.S. but also to other developed democracies with sizeable indigenous populations. For example, in Aotearoa New Zealand, Australia, Canada, Denmark (Kalaallit Nunaat/Greenland) indigenous peoples have secured authority over a variety of economic, political, and legal realms. A related project extends analysis to some of these contexts and to the circumpolar Sápmi region (homeland to the Sámi), which traverses parts of Finland, Norway, Russia, and Sweden.

[5] Taking for granted that the federal government can delegate authority to tribes is problematic and fails to recognize the legitimacy of Native nations' claims to a non-hierarchical nation-to-nation relationship with the U.S. government, and beyond that it does not acknowledge the complicated histories of the notion of sovereignty. For a nuanced discussion on the topic, see Barker 2005 (pp. 1-35). Still, as elaborated by Blackhawk (2019), it is important to acknowledge that constitutional law shifted power over Natives in the U.S. to the national government, arguably limiting avenues for recognition of Native nations' policy authority. Among others, Corntassel and Witmer also find that federal policy compels indigenous polities to participate in the federal order at a subnational level (2008).

those who are assimilated should return the benefits of their assimilation to the state (e.g. by way of paying taxes and participating in civic life) rather than directing excess resources toward autonomy. However, recent research suggests that measures of assimilation used in political economy - for example speaking the majority language, accumulating more years of education, gaining employment, and naming children "American sounding" names - might lead to increased identification with the state (Abramitzky, Boustan, & Eriksson 2014), but coercive state assimilation campaigns can also interrupt the assimilation process (Fouka 2020; Gamboa 2022). In some cases, indigenous adoption of central state characteristics (whether strategic or coerced) has also aided indigenous anti-state autonomy movements (Nagel 2020).

Under what conditions should we expect indigenous groups in the U.S. to agree to assimilate? How do tribal decisions over assimilation affect the state's willingness to delegate policy-setting authority to tribes? And how does indigenous engagement with federal electoral institutions affect the state's willingness to delegate policy-setting authority to tribes? In this paper, I introduce a formal model that elucidates the strategic interplay between a state and a tribe in policy-making. The basic model is consistent with past findings regarding delegation: in the absence of assimilation efforts, states are inclined to delegate authority to tribes with similar policy preferences (Bendor and Meirowitz 2004). However, the introduction of an assimilation campaign, which the tribe can accept or reject, fundamentally alters this landscape.

Contrary to expectations of conventional models of delegation, which suggest states prefer delegating to entities with ideologies and preferences closer to their own, the model reveals that the presence of a state assimilation campaign can result in the state delegating to tribes that choose not to assimilate. The model demonstrates that assimilation reduces the informational advantage of the tribe and, hence, reduces the value that the state places on delegating to the tribe. To further elucidate this point, an extension to the model shows that incentives for strategic non-participation in the assimilation campaign increase as tribal capacity in the informational advantage increases (and, consequently, the value that the state places on delegation increases). To demonstrate that these dynamics extend to other state-building activities, an extension to the model that includes an electoral subgame introduces a novel insight regarding strategic voting: intergovernmental delegation dynamics can lead to strategic non-participation in state elections. Even when the tribe finds it desirable to assimilate, they may still engage in strategic non-participation to induce the state to delegate.

By exploring these nuanced relationships using a formal model, the paper sheds light on three crucial aspects of state-tribal relationships in democracies: the conditions under which indigenous

groups will choose assimilation; how these choices impact the state's propensity to delegate policy authority; and how indigenous engagement in Native nations politics can interact with federal engagement. This examination addresses gaps in existing literature, which often underestimates the complexity of tribal agency and institutional frameworks influencing these relationships. The model shows that introducing some additional complexity into the standard analysis explains some key stylized facts in a more unified way. For example, Natives in the U.S. often vote at lower rates overall than other racial or ethnic groups, however, their turnout is comparatively high in elections that have greater local impact (Huyser et al. 2017). Suppressed turnout due to strategic considerations is one potential explanation for these patterns.

The paper is organized in the following way. First, in Section II, I discuss a handful of motivating cases that serve to indicate the complexity of the relationships between Indigenous groups and the state. Section III presents a standard delegation model and the augmented version that allows for an assimilation campaign. Section IV presents and discusses extensions to the model. Section V provides limitations, and Section VI concludes.

II. MOTIVATING TYPES (preliminary identification of cases)

This section will be completed after I finish fieldwork in New Mexico and Alaska in March 2024.

The following preliminary examples could help provide insights into the diverse relationships between indigenous tribes and the U.S. government, illustrating different approaches to governance, cultural preservation, and political participation. Brief case studies will map tribal entities to equilibrium concepts associated with the model and extension that follow.

1. **Delegation without Assimilation:**
   - **Navajo Nation:** The Navajo Nation has retained a distinct cultural identity while gaining significant delegation in areas like education and law enforcement.

2. **Assimilation and Delegation Demands without Federal Participation:**
   - **The Pueblo of Zuni in New Mexico:** While being somewhat assimilated, the Zuni people have gained delegation in managing their own affairs, particularly in cultural preservation and environmental management, without significant federal participation.

3. **Delegation Demands without Assimilation or Federal Participation**
    o   **The Huna Tlingit (Alaska Native) tribe:** The Huna Tlingit have made efforts to preserve and govern their traditional lands and resources while maintaining a strong commitment to their cultural identity. Their efforts often focus on gaining more control and delegation over their ancestral lands, particularly in the context of managing natural resources and cultural heritage sites, and interaction with federal and state governments centers around delegation demands.

4. **Federal Participation After Delegation:**
    o   **The Lumbee Tribe of North Carolina:** After gaining recognition and delegation in certain areas, there has been an increase in political participation both in tribal and federal elections among the Lumbee people.

III.   THE MODEL

To model delegation-related dynamics between states and indigenous groups, I look to models of delegated discretion - hierarchical principal agent models (Bendor and Meirowitz 2004; Crawford and Sobel 1982; Holmström 1984; and Gehlbach, 2013). I consider a delegation with two players: a state (S) (in this case representing the U.S. federal government) and a "tribe" (T). Both S and T have preferences over outcomes in $\Re$, where x indicates any outcome. I assume the state's preferences are represented by $U_s(x) = -|x|$, with an implicit ideal point of 0. The tribe then has preferences represented by $U_T(x) = -|x-x_T|$, where x_T is the tribe's ideal point. Without loss of generality, we can assume $x_T > 0$.

In the standard model, the game starts when the state decides whether to delegate policy authority to the tribe. Then, there is a random shock $\omega \in \Re$, which is observed by the tribe but not the state. This indicates the tribe has a level of expertise about which policies are appropriate while the state faces uncertainty. Finally, whoever has authority - the state or the tribe, depending on whether the state delegated - chooses a policy $p \in \Re$.

The outcome, x, is determined jointly by policy, p and random shock ω such that $x = p + \omega$. This allows for "perfect shock absorption" (Bendor and Meirowitz 2004), meaning the tribe can fully absorb the shock and get its favored policy under delegation by choosing policy $p = x_T - \omega$. For simplicity, I further assume that the shock takes one of two values, $\omega \in \{-\varepsilon, \varepsilon\}$, where $\varepsilon > 0$ and the shocks are equally likely.

Since the shock is symmetric and positive/negative realizations are equally likely, the state cannot do better than choosing $p=0$ when it does not delegate, which results in the state's payoff being $-\varepsilon$ in either case. This is the cost of the state not knowing how the policy it chooses will map onto the outcome. When the state delegates, $p = x_T - \omega$, the tribe's decision reflects its ideal point and the shock. Then the state's expected utility from delegation is $-x_T$ in any event because whatever the shock the outcome is x_T away from the state's ideal point. Therefore, the state delegates if $\varepsilon > x_T$. On the contrary, if $\varepsilon < x_T$ then the threat of drift leads the state to not delegate. The central insight of the standard model is that, when the state is deciding to which tribe it might delegate, it is more likely to delegate to one that has similar preferences to its own.

This model could be seen as reflecting a world in which policy preferences are a manifestation of level of assimilation. In other words, more assimilated tribes would have policy preferences closer to the state. Here, assimilation is not modeled as a consideration that is separate from preferences. This is consistent with past theories of state-building that imagine indigenous people(s) adopting a particular set of identifiers and habits that are consistent with those of the majority is equivalent to adopting majority preferences as well. Newly-assimilated people would then be expected to accrue myriad benefits of conformity and should direct the excess of these benefits back to the state rather than toward activities or indigenous institutions that are costly to the state.

While many assimilation programs met preliminary goals, the past several decades have provided increasing evidence that assimilation, as commonly defined in political economy, is not necessarily associated with pro-state identification or behavior. Indeed, indigenous identity claims have been on the rise, and some research suggests that, far from states willingly delegating to like-minded groups, Indigenous group demands for – and securing of - autonomy has also risen dramatically. The standard model of delegation presented above fails to account for these empirical relationships and, I argue, misses key dynamics related to assimilation and delegation.

To illustrate the dynamics at play in this environment, I provide a variation on the basic delegation model that capitalizes on most aspects of the original model but adds a complication in that it no longer assumes assimilation and policy preferences are paired. I modify the above game by introducing a prior stage on assimilation decisions. The game now starts when the state decides whether to launch an assimilation campaign or not. If it decides not to launch a campaign, then it gets a payoff of -k and the tribe gets u, with $k > 0$, indicating there is a cost to the state when it does not endeavor to assimilate the tribe and, for the moment, u represents the tribe's unspecified payoff

under the subgame that follows no campaign. For now, I assume that k is sufficiently large, so that "No Campaign" is not part of the optimal strategy.[6] Next, assuming the state launches an assimilation campaign, the tribe decides whether to adopt the campaign. I think of assimilation here as a package, as is characteristic of assimilation projects carried out by many regimes in the process of state-building and state-consolidation. This is important in the sense that tribes may adopt certain aspects of assimilation and not others. For example, a tribe may become superficially legible or adopt a new language, and yet might still be classified as "not assimilated" if they do not cross some assimilation threshold. Regardless, in the model, for simplicity, assimilation is conceived as an all-or-nothing proposition, and the decision to assimilate or not is left to the tribe. If the tribe decides to assimilate, it faces a cost of $-c$, and $c > 0$ because assimilation is costly and difficult. After the tribe decides whether it will assimilate, the state decides whether to delegate decision-making authority to the tribe or not. If the state delegates, the tribe always accepts because it always prefers more to less autonomy.

Whether or not the state decides to delegate, Nature (N) delivers a random shock $\omega \in \mathcal{R}$, which is again observed by the tribe but not the state, indicating the tribe has a level of expertise that is unknown to the state. The shock takes one of two intensities if the tribe assimilates, $-\varepsilon_A, {}^+\varepsilon_A$ and one of two intensities if the tribe does not assimilate, $-\varepsilon_{NA}, or {}^+\varepsilon_{NA}$. I assume that $\varepsilon_A < \varepsilon_{NA}$, meaning that the state faces the prospect of greater uncertainty when the tribe does not assimilate. I continue to assume that each set of shocks takes only two values and the shocks are equally likely. Finally, whoever has authority (the state or the tribe, depending on whether the state delegated) chooses a policy $p \in \mathcal{R}$ and the tribe can still absorb the shock and get its ideal point by choosing policy $p = x_T - \omega$.

I will examine subgame perfect Nash equilibria. Working backward through the model, if the state does not delegate, the policy is chosen to maximize the expected utility of the state. If the state does delegate, the tribe chooses the policy that maximizes their utility and, in this case, is the one that perfectly absorbs the shock so that the outcome is their ideal point. Since the next move up is executed by Nature, I skip this and move to the next. At this point in the game (Nodes S2 and S3; see Figure 1 on page 21 *(to be updated as Appendix)*), the state decides to delegate or not. The state gets the same payoff either way after Nature moves, but for very different reasons. Under delegation, this is due to perfect shock absorption. Under non-delegation, this is due to imperfect information.

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[6] This assumption reflects historical reality in the United States as well as in all of the 'highly industrialized democracies' considered by this model.

Given that the tribe participates in the assimilation campaign (Node S2), the best response is to delegate if $\varepsilon_A > x_T$ and not delegate if $\varepsilon_A < x_T$. Given that the tribe does not participate in the assimilation campaign (Node S3), the similar logic applies, delegate if $\varepsilon_{NA} < x_T$ and do not delegate if $\varepsilon_{NA} > x_T$.

Moving one more step up (Node T1), the tribe constructs its best response given the state's delegation decision. For ease of analysis, I discuss three cases.

1) Case 1 is when $x_T < \varepsilon_A < \varepsilon_{NA}$.

   In this case, the state will always delegate and the tribe will compare 0-c to 0 and will choose not to assimilate.

2) Case 2 is when $\varepsilon_A < x_T < \varepsilon_{NA}$.

   In this case, the tribe will not assimilate because if it does assimilate, the state will not delegate and the tribe will get $-x_T - c$ in expectation whereas if they choose not to assimilate, the state will delegate and they will get a payoff of 0.

3) Case 3 is when $\varepsilon_A < \varepsilon_{NA} < x_T$.

   In this case, the tribe will again choose not to assimilate. The state will always choose not to delegate. Since there is no absorption by the state and the shocks are symmetric, the shocks cancel each other out in expectation and the tribe will choose not to incur the cost of assimilation.

There are several important insights from this highly stylized model. First, the model shows that assimilation is not associated with delegation in the expected direction. In the standard model, and assuming a pairing of preferences and assimilation, one would expect more assimilated tribes to be more likely to have delegation. However, in this case, there is no relationship between assimilation and delegation. Second, introducing tribal agency in the assimilation process leads to a strategic interaction that is counterintuitive. The state seemingly expands the set of tribes it is willing to delegate to even as tribes do not assimilate.[7] Here, from the perspective of the tribe, assimilation, besides being costly, has the perverse effect of reducing the threshold for x_T that it is willing to delegate. Even when assimilation could increase social welfare, for example when $\varepsilon_{NA} - \varepsilon_A > c$, delegation game dynamics do not properly align incentives.

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[7] Counterintuitive findings have been demonstrated in other contexts involving delegation (see e.g. Gailmard and Patty 2019).

It is important to mention that the lack of assimilation is not built into the model. First, there is a Nash equilibrium that involves the state threatening to not delegate in case the tribe does not assimilate and delegate in case it does. The tribe's best response to this strategy is to assimilate if $c <$ x_T. Given that the state will follow this strategy, provided that $x_T < \varepsilon_A$. Of course, these strategies are not subgame perfect because if the state ever found itself at Node 4, it would choose to delegate. Second, the tribe does have an incentive to assimilate even when the state does not delegate. This is due to the reduction in the cost of uncertainty. However, these costs never affect strategy in the above setup because the state cannot absorb the shock at all, whereas the tribe can perfectly absorb the shock. Once this assumption is relaxed, assimilation may occur when the incentives are aligned to do so.

IV.   EXTENSIONS

i.   *Tribal Capacity*

This extension considers when tribes may not be able to perfectly absorb the shock. This could happen for a variety of reasons including but not limited to bureaucratic capacity, civic engagement at the tribal level, and/or lack of resources to respond to shocks. For simplicity, I assume that this capacity is exogenously determined and represented by λ_T, which takes values between 0 and 1. In the model, the capacity of the tribe to observe the shock and then act upon this information to construct a better policy is key nonstrategic means of improving their welfare. Therefore, a straightforward way of varying this capacity is to model λ_T as the probability that the tribe observes the realization of the shock. The tribe has no informational advantage when it takes a value of zero and the game presented above is the special case when it takes a value of one.

Again, I will examine subgame perfect Nash equilibria. Working backward through the model, if the state does not delegate, the policy is chosen to maximize the expected utility of the state. In this scenario, the payoffs are the same as in the model above. If the state does delegate, the tribe chooses the policy that maximizes their utility when they observe the shock and their expected utility when they do not. The policy that maximizes the tribe's expected utility is x_T. Given that the tribe participates in the assimilation campaign, the best response is to delegate if $\varepsilon_A > \lambda_T\, x_T + (1-\lambda_T)(0.5\,*|x_T - \varepsilon_A| + 0.5\,*|x_T + \varepsilon_A|)$ and not delegate otherwise. Given that the tribe does not participate

in the assimilation campaign, the similar logic applies, delegate if $\varepsilon_{NA} > \lambda_T \, x_T + (1 - \lambda_T)(0.5 * |x_T - \varepsilon_{NA}| + 0.5 * |x_T + \varepsilon_{NA}|)$ and do not delegate otherwise.

Moving one more step back, the tribe constructs its best response given the state's delegation decision.

For ease of analysis, I again discuss three cases.

1) Case 1: $x_T < \varepsilon_A < \varepsilon_{NA}$. In this case, the state will always delegate and the tribe will compare $(1-\lambda_T) \, \varepsilon_A - c$ to $(1-\lambda_T) \, \varepsilon_{NA}$ and will choose to assimilate when $c < (\varepsilon_{NA} - \varepsilon_A)(1-\lambda_T)$ and not assimilate otherwise. Intuitively, the tribe is more likely to assimilate when it loses its informational advantage. State-tribal dynamics in a delegation game have the potential to misalign incentives relative to social welfare maximization.

2) Case 2: $\varepsilon_A < x_T < \varepsilon_{NA}$. In this case, the tribe assimilates when $x_T < \varepsilon_{NA} - (c + \lambda_T \varepsilon_{NA})$ or $c < (\varepsilon_{NA} - x_T) - \lambda_T \varepsilon_{NA}$. The first term is smaller than $(\varepsilon_{NA} - \varepsilon_A)$ and the second term is larger than $(\varepsilon_{NA} - \varepsilon_A)\lambda_T$, meaning assimilation is even less likely to occur than in Case 1, but we still observe the misalignment due to delegation dynamics. Recall that when the tribe does not assimilate, the state delegates. And higher capacity tribes are less likely to choose to assimilate. Thus, the state is more likely to delegate to tribes with a higher capacity.

3) Case 3: $\varepsilon_A < \varepsilon_{NA} < x_T$. In this case, the state will always choose not to delegate. For this reason, tribal capacity does not matter and there is no way for tribal capacity to influence the incentive to assimilate. Thus, for tribes with preferences far enough from the state, tribal capacity has no relationship with state delegation.

Discussion

This extension shows that tribal capacity is an important dimension to consider when examining the relationship between delegation and assimilation. The first remark is that higher tribal capacity tribes are more likely to obtain delegation, precisely because they are able to engage in strategic assimilation. This brings us to the second remark on the misalignment of incentives due to the delegation game. Tribal capacity increases their informational advantage. When the tribe has no tribal capacity, the assimilation decision is aligned with maximizing social welfare (in a world with

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zero tribal capacity). As tribal capacity increases, their incentive to assimilate decreases because of the boost in payoffs that they receive when the state delegates and they can force the state's hand by not assimilating.

ii.   *Electoral participation in state elections*

This extension considers how the state-tribal delegation dynamics could affect the way that Indigenous people make decisions regarding electoral participation or other means of civic engagement at the federal level. Recent research provides myriad evidence of state suppression of turnout among tribal members through policies and practices such as the closure of polling places, felony disenfranchisement laws, the purging of voter rolls, strict voter ID laws, non-standard addressing, travel distance to the polls, and effects of reduced trust among Natives due to past interactions with the state (Schroedel 2020; Schroedel, Rogers, Dietrich, Johnston, and Berg 2022). I propose strategic considerations for participation as a supplement to these.

I interpret civic engagement with the state as electoral participation, $\tau^T{}_s$. Unlike tribal capacity, in this extension, I endogenize $\tau^T{}_s$ to highlight a key tradeoff in strategic state-tribal relations: relatively greater engagement with the state may reduce the tribe's informational advantage. I assume that the tribe makes the participation decision in the assimilation campaign first followed by the electoral participation decision. From the perspective of the state, however, the tribal decisions are before the delegation decision. The electoral participation decision is simply modeled as the tribe choosing the desired level of turnout and the benefits of participation are increasing in voter turnout, governed by $\mu_s \tau^T{}_s$ where $\mu_s \geq 0$.

First, and keeping with the terminology in the extension above, participation affects the probability that the state can directly observe the shock, λ_s. I assume that more participation in state elections increases λ_s and $\lambda_s(\tau^T{}_s) < \lambda_T$. For simplicity, I assume that this relationship takes the following form, $\lambda_s \tau^T{}_s$, where $\lambda_s < \lambda_T$. The previous extension on tribal capacity is the special case when $\lambda_s = \mu_s = 0$.

Again, I will examine subgame perfect Nash equilibria. Working backward through the model, if the state does not delegate, the policy is chosen to maximize either the state's utility when they observe the shock or expected utility when they do not observe the shock. The policy that maximizes the state's utility in case they observe the shock is either $x_s - \varepsilon_j$ or $x_s + \varepsilon_j$ depending on whether the shock is positive or negative for $j = A, NA$. The policy that maximizes the state's expected utility is 0

. If the state does delegate, the tribe chooses the policy that maximizes their utility when they observe the shock and their expected utility when they do not. The policy that maximizes the tribe's expected utility is x_T.

Given that the tribe participates in the assimilation campaign and participates in elections at level, $\tau^T_s(A)$, the best response is to delegate if $-\lambda_T(x_T) - (1-\lambda_T)(0.5*|x_T - \varepsilon_A| + 0.5*|x_T + \varepsilon_A|) > -(1-\lambda_s\tau^T_s(A))\varepsilon_A$ and not delegate otherwise.

Given that the tribe does not participate in the assimilation campaign, but participates in electoral participation at level, $\tau^T_s(NA)$, a similar logic applies, delegate if $-\lambda_T(x_T) - (1-\lambda_T)(0.5*|x_T - \varepsilon_{NA}| + 0.5*|x_T + \varepsilon_{NA}|) > -(1-\lambda_s\tau^T_s(NA))\varepsilon_{NA}$ and do not delegate otherwise.

Moving one more step back, the tribe constructs its best response given the state's delegation decision.

For ease of analysis, we again discuss three cases. Let $\rho \equiv \lambda_s/\lambda_T$. And $x'_T \equiv x_T/(1-\rho)$.

1) Case 1: $x'_T < \varepsilon_A < \varepsilon_{NA}$. In this case, the state will always delegate. In particular, if the tribe assimilates, the state will delegate when $x_T < (1 - \tau^T_s(A)\lambda_s/\lambda_T)\varepsilon_A$ and not do so otherwise. Since $(1-\rho) < (1 - (\tau^T_s(A)\lambda_s)/\lambda_T)$ for any possible $\tau^T_s(A)$. A similar logic applies for the case when the tribe does not assimilate. Recall that, previously, if the state were to always delegate, then the tribe will compare $(1-\lambda_T)\varepsilon_A - c$ to $(1-\lambda_T)\varepsilon_{NA}$ and will choose to assimilate when $c < (\varepsilon_{NA} - \varepsilon_A)(1-\lambda_T)$ and not assimilate otherwise. This inequality could also be affected by the benefit of electoral participation, $\mu_s(\tau^T_s(A) - \tau^T_s(NA))$, to the extent that there is a difference in turnout for the two types of tribes due to differences in the cost of voting, for example. Then, the assimilation decision becomes assimilate if $c < (\varepsilon_{NA} - \varepsilon_A)(1-\lambda_T) + \mu_s(\tau^T_s(A) - \tau^T_s(NA))$. However, turnout does not strategically affect the delegation decision.

Note that as ρ increases the tribes that the state is willing to delegate to must have more similar policy preferences.

2) Case 2: $\varepsilon_A < x'_T < \varepsilon_{NA}$. I split the analysis of this case into two subcases.

Case 2a: $\varepsilon_A < x_T < x'_T < \varepsilon_{NA}$. This case is similar to Case 2 in the previous extension. The state will prefer to delegate when the tribe does not assimilate and prefer not to delegate when the tribe does assimilate. Given this, the tribe will not assimilate and also not engage in electoral participation in a strategic manner. Nevertheless, just as in Case 1, electoral benefits can influence the level of participation and the assimilation decision.

Case 2b: $x_T < \varepsilon_A < x'_T < \varepsilon_{NA}$. In this case, a new dynamic emerges. A tribe that finds it otherwise worth assimilating may strategically choose to not participate in state elections in order to avoid "appearing farther" from the state. In other words, because greater electoral participation reduces the state's benefits of delegation, the threshold that marks the distance between the tribe's and state's ideal point that is acceptable for delegation shifts to the left. Here, there is strategic turnout: the tribe reduces electoral participation in order to avoid being in the assimilate-not delegate equilibrium path and forgoes electoral benefits from greater participation.

3) Case 3: $\varepsilon_A < \varepsilon_{NA} < x'_T$. I split the analysis of this case into three subcases.

Case 3a: $\varepsilon_A < x_T < \varepsilon_{NA} < x'_T$. In this subcase, now it is a tribe that prefers not to assimilate that can strategically choose not to participate in order to prevent the state from choosing not to delegate. The unassimilated tribe chooses to strategically reduce turnout and forgo electoral benefits in order to avoid the always-do-not-delegate equilibrium path.

Case 3b: $x_T < \varepsilon_A < \varepsilon_{NA} < x'_T$. In this subcase, the tribal electoral participation can affect the delegation decision. Recall that the state will delegate when $x_T < (1 - (\tau^T_s(A) \lambda_s)/\lambda_T) \varepsilon_A$ if the tribe assimilates. Suppose that $c < (\varepsilon_{NA} - \varepsilon_A)(1-\lambda_T) + \mu_s(\tau^T_s(A) - \tau^T_s(NA))$ holds. As the tribe assimilates, the tribal payoff under delegation or no delegation is increasing in τ^T_s; for any fixed value of τ^T_s, the tribe always prefers delegation to non-delegation. While the marginal gain of delegation as turnout increases is decreasing at $-\lambda_s \varepsilon_A$, one still needs to check whether the gain in turnout would compensate for the loss of delegation. The state is indifferent between delegating and not delegating at turnout level $\tau^T_s=(\lambda_T/\lambda_s)*(1 - (\lambda_T x_T)/\varepsilon_A)$. The tribe

will then increase turnout just up to the this amount and no further provided that $(\lambda_T - \lambda_S)\varepsilon_A - \mu_S(1-(\lambda_T/\lambda_S)) * (1 - (\lambda_T x_T)/\varepsilon_A)) > 0$. Otherwise, the tribe does not prefer to engage in strategic turnout and will fully participate in state elections even though this will mean the state will choose to not delegate. For tribes that find it too costly to assimilate, the dynamics work similarly as in Case 3b. Thus, in this case, both types of tribes can participate in strategic turnout.

Case 3c: $\varepsilon_A < \varepsilon_{NA} < x_T$. In this subcase, the state will always choose not to delegate. Given this, the tribe will face a tradeoff between the benefit of higher turnout given by assimilation and the cost of assimilation. In both cases, electoral participation will not be strategic and individuals will participate if the cost of doing so is lower than the marginal policy benefit.

Discussion

Tribes have an additional strategic tool for influencing the state's delegation decision, strategic turnout. Strategic turnout could add to extant explanations (e.g. see Schroedel 2020 and Huyser, Sanchez, and Vargas 2017) for why turnout is lower for Indigenous groups relative to other minority groups, particularly for those who are seeking delegation or more state control. Interestingly, to the extent that delegation is not reversible, a tribe exercising strategic turnout may actually increase electoral participation in state elections after delegation has occurred.

A second remark concerns *(1 - ρ)*, which governs the relative technical informational advantage of the tribe. When this value is small, there is more scope for tribes to engage in strategic turnout. It is reasonable to think that this relative advantage has been decreasing over time and, consequently, the importance of strategic turnout may be increasing. Yet, as the scope for strategic interaction increases, the state also becomes less tolerant of differences in ideal points in the delegation decision, which can put more pressure on tribes to engage in strategic assimilation in order to gain more control.

While much attention has been given to strategic voting in highly industrialized democracies (e.g. see Alvarez et al., 2006; Cox, 1997; Ordeshook and Zeng, 1997) and some to strategic voting, information and ethnicity in emerging democracies (e.g. Horowitz and Long 2016), none approaches the considerations presented in the model presented here.

iii.   Other extensions

Electoral participation in both state and tribal elections

This extension considers the time and/or other constraints that impose a trade-off between civic engagement at the state and the tribal level. Here the tribe must decide on the level of turnout at both the state and tribal levels, τ^T_S and τ^T_{Tr}, with $\tau^T_S + \tau^T_{Tr} \leq 1$.

Electoral participation in state elections and endogenous ideal point of the state

This extension considers a more complicated tradeoff in strategic state-tribal relations: relatively greater engagement with the state may, in fact, improve the state's policy choices from the perspective of the tribe, even though it also reduces the tribe's informational advantage. The game builds on the previous one by allowing electoral participation to affect the ideal point of the state, $x_S(\tau^T_S) \geq 0$ with $x_S(0) = 0$.

Electoral participation in state elections and endogenous ideal point of tribe

This extension will allow assimilation to change a tribe's ideal point. One of the state's main objectives is to move the tribe's preferences closer to its own. While there is a large debate about whether this is possible, it is reasonable to explore whether the assimilation campaign could move the tribe's ideal point closer to the state's, which should affect the balance of conditions under which the state chooses to devolve power.

V.   LIMITATIONS

The model's shortcomings are readily apparent. First, in the model, there is a single state and tribal actor. In particular, the model abstracts from distinctions in national and sub-national levels of government and their respective state-tribal dynamics. In the US context, there is a large literature examining the differences between how Indigenous groups interact with federal, state and local government and this literature serves as a rich base to inform a more careful examination of how the strategic interactions that the model identifies are augmented or frustrated when these more complex institutional environments are considered (see e.g. Evans 2011 and Corntassel and Witmer 2008). The same criticism applies for the model's abstraction from intra- and inter-tribal dynamics.

Second, the model is essentially static. While it illuminates intuition concerning state-tribal dynamics, it would be preferable to make the game environment a dynamic one, allowing for a more realistic set of strategies. For example, it is often suggested that the kind of autonomy, self-

determination, or sovereignty we see being delegated to indigenous groups could be easily reversed; governments can give autonomy and they can just as easily take it away. In general, delegation is modeled as a one-way street.[8] However, some suggest that, in our current globalized '*self-determination era,*' accountability for developed democracies might stem from international institutions or media scrutiny that can tarnish a state's reputation if it reneges on delegation.[9]

A final example that is relevant for both types of limitations is the dynamic demand for delegation. Intuitively, we would expect that tribes that have preferences less like the state's would be more likely to seek greater decision-making power. A state may be able to minimize costly challenges to its authority by deflating the collective demand through delegating to closer, more assimilated tribes.

With these abstractions and criticisms in mind, this paper, thus, represents a small step forward in the game-theoretic analysis of state-tribal relations.

VI.   CONCLUDING REMARKS *(to be completed)*

The model highlights two tools that tribes can use to leverage their informational advantage and incentivize the state to delegate decision-making. Yet, relying on these tools can come at a cost since the strategic decisions to not assimilate or participate in elections are not always aligned with social welfare.

From an institutional design perspective, political institutions that are susceptible to strategic non-participation merit further attention, particularly those designed to be democratic. Further policy implications and lessons should emerge as I complete the case studies and extensions to the model and begin to interpret the cases through the lens of the model.

Future Research
The comparative statics in the model could be used to derive testable hypotheses. Data on delegation, policy preferences, assimilation, electoral engagement could all be compiled and analyzed to this end.

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[8] Gailmard and Patty (2019) incorporate "oversight" into a delegation model, which might be a useful direction to consider along these lines.

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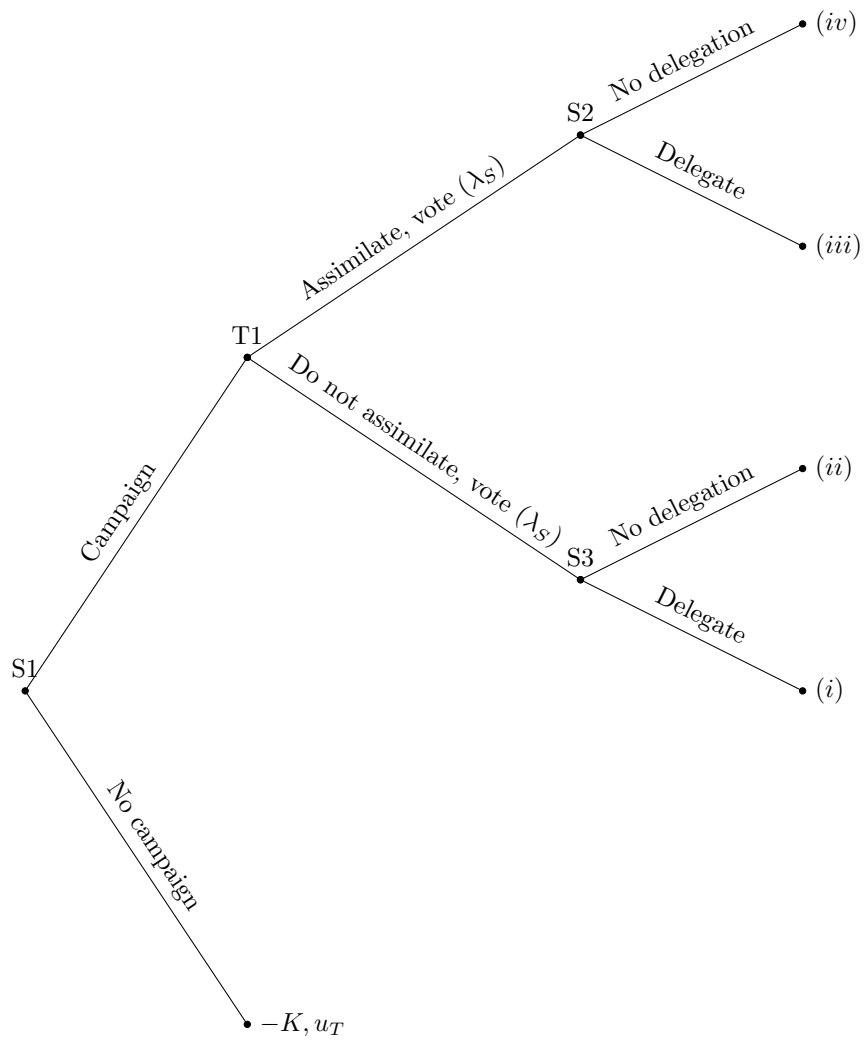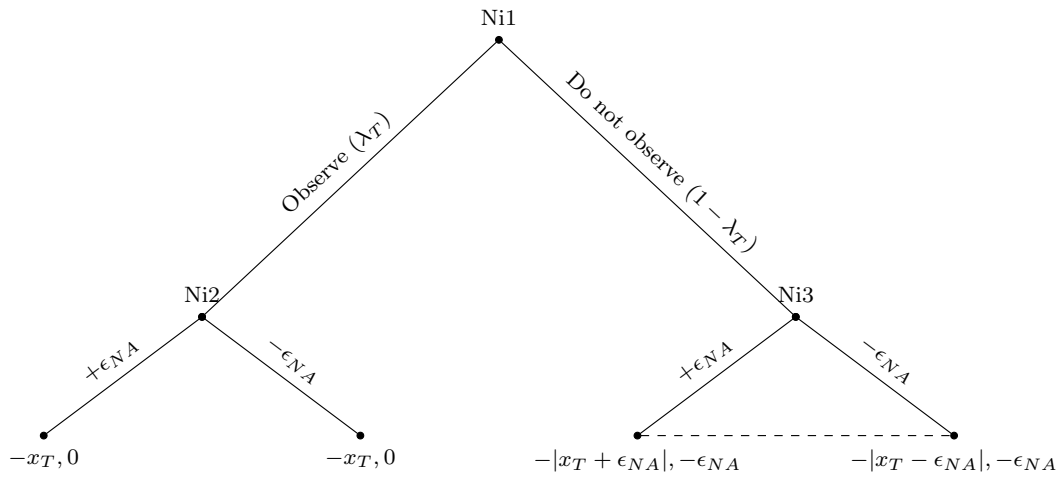
Figure 1: Delegation game

Figure 2: Subgame (i): Do not assimilate, Delegation. Tribe chooses policy to maximize own (expected) payoff.
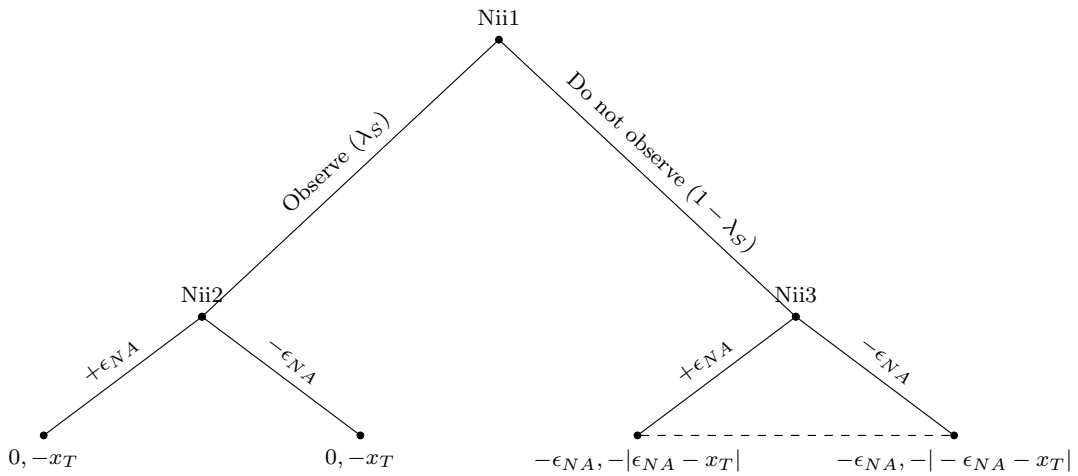

Figure 3: Subgame (ii): Do not assimilate, No delegation. State chooses policy to maximize own (expected) payoff.
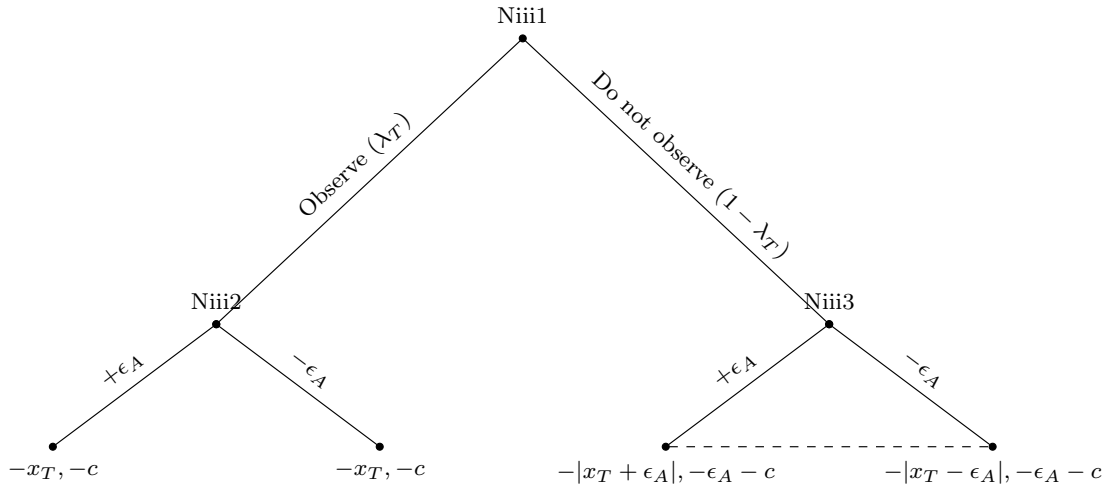
Figure 4: Subgame (iii): Assimilate, Delegation. Tribe chooses policy to maximize own (expected) payoff.
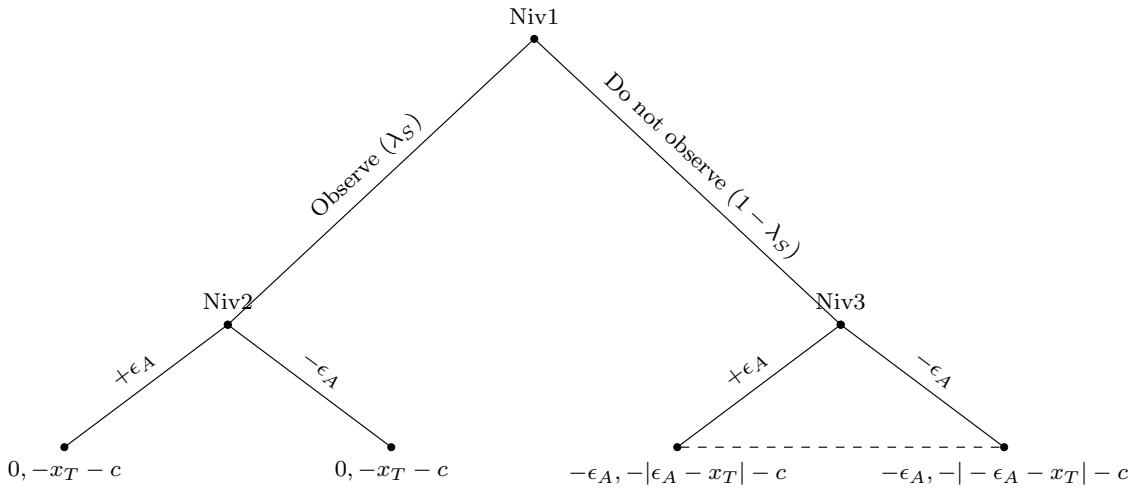

Figure 5: Subgame (iv): Assimilate, No delegation. State chooses policy to maximize own (expected) payoff.