

Pre-Colonial and Colonial Origins of Inclusive Peace^{*}

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Abstract

In a recent contribution to this journal, McAlexander (2020, hereafter McAlexander) seeks to re-analyze Wucherpfennig, Hunziker and Cederman (2016, hereafter WHC) who instrument the effect of ethnic group inclusion on civil conflict by exploiting differences in colonial governance between the French and the British empire. McAlexander proposes a research design that replaces the between-colony dimension of WHC's comparison with a continuous measure of indirect rule that varies between British colonies. We show that McAlexander's study hardly poses a viable reanalysis because his approach is compromised by problems of ecological inference and post-treatment confounding, leading to biased inference by design. We propose a more informative reanalysis, indicating that British colonialism built on suitable customary institutions, unlike the French empire. Although tentative, our analytical extension lends support to WHC's original findings, most importantly that inclusion reduces the risk of post-colonial civil conflict.

Keywords: Ethnic inclusion, civil conflict, colonialism, customary institutions, endogeneity

^{*}Replication files are available in the JOP Data Archive on Dataverse (<http://thedata.harvard.edu/dvn/dv/jop>). The empirical analysis has been successfully replicated by the JOP replication analyst.

A longstanding line of research claims that ethno-political inequalities breed civil conflict (e.g. Gurr, 1993; Cederman, Gleditsch and Buhaug, 2013). However, it has been disputed whether this influential and highly policy-relevant finding deserves causal interpretation, since groups may be politically excluded depending on their propensity to fight. To address this problem of endogeneity, Wucherpfennig, Hunziker and Cederman (2016, hereafter WHC) propose an identification strategy that exploits systematic differences in the manner in which the French and British empires governed their overseas colonies, especially with regard to customary institutions. Under British rule “traditionally legitimized ethnic leaders were able to consolidate their power” whereas French rule “marginalized traditional governance structures and concentrated decision-making powers in the colonial center” (WHC, 883). Therefore, in British colonies—unlike in French colonies—“even peripheral ethnic groups had good chances of gaining access to the central government” during decolonization (WHC, 883). Using this differential in geographic gradients between the British and French colonial realms as an instrument for *group-level* inclusion, WHC then find that inclusion has a larger pacifying impact than naive, uncorrected estimation would indicate.¹

In a recent contribution to this journal, McAlexander (2020, hereafter McAlexander) questions the validity of the first-stage of WHC’s approach by offering an analysis that focuses on variation in indirect rule at the level of British colonies. McAlexander claims to contradict WHC because his study yields “the exact opposite first stage finding of WHC” (p. 1612), which he attributes to policies during the process of decolonization, rather than to a difference in colonial strategies *per se* (p. 1614). We welcome McAlexander’s efforts at replicating WHC’s study, not just because the conclusion that previous work may have underestimated the effect of grievances on conflict remains controversial, but also because there is still a lack of ingrained culture of replication and reproducibility in political science. However, as we show in this short article, McAlexander fails to provide a viable alternative test of WHC because his approach suffers from problems of ecological inference and post-treatment confounding, resulting in a biased research design. Returning to WHC’s original idea that British colonialism tended to build on (and reinforce) preexisting customary institutions much more than the French empire did, we propose an actual reanalysis of WHC’s central argument. Our tentative results indicate that WHC’s key findings hold up for both the first and second stage of their analysis: British and French colonial rule differed profoundly in terms of their respective

¹Specifically, their instrument is operationalized as an interaction term between groups’ distance to the coast and British rule.

approaches towards precolonial customary institutions, and ethno-political inequalities cause civil conflict.

McAlexander's Research Design is Biased

According to McAlexander's rendering, WHC "argue that when there is more indirect rule (as measured by the colonizer being British) and the ethnic group is farther from the coast, then those ethnic groups will be more likely to experience later inclusion than ethnic groups that are a similar distance from the coast in states colonized by the French"² (p. 1612). This interpretation motivates his derivation of observable implications: "If the argument of WHC is correct, then we would expect that higher levels of indirect rule within an imperial power will produce more ethnic inclusion" (p. 1612). Thus, whereas WHC's identification strategy rests upon a differential effect of groups' location depending on the colonizer, McAlexander focuses on differential gradients between British colonies. Specifically, McAlexander uses an indicator for indirect rule capturing the average level of *entire colonies* that moderates the effect of *group-level* distance from the coast. The goal is to replace WHC's structural, empire-level proxy of governance style with one that is more nuanced, using Lange's (2009) measure on the 'share of customary court cases'.³

We agree with McAlexander that disaggregated information on the mode of governance could improve inference. However, rather than overcoming ecological assumptions, his approach exacerbates potential limitations by pairing fallacious ecological assumptions with post-treatment confounding. McAlexander's ecological fallacy arises because Lange's (2009) measure of indirect rule merely offers a *colony-level* average that cannot inform which groups were ruled indirectly.⁴ Indeed, for an analysis *at the level of groups* it is wrong to think that the share of customary court cases captures "colonial intensity" (McAlexander, SM, p. 7), since indirect rule was not applied uniformly across the board.⁵ In reality, there existed considerable subnational variation within colonies. Historical evidence strongly suggests that this variation occurred

²Below we show that this is a misrendering of WHC's argument.

³McAlexander (p. 1613) misleadingly suggests that this strategy improves upon WHC by replacing "a binary instrument binary instrument with a continuous instrument" in order to "alleviate potential bias in the IV". In reality, WHC's instrument—the product of coastal distance and colonial empire—is continuous all along.

⁴Naturally, this also extends to the alternative *country-level* measures of indirect rule McAlexander reports in his Appendix. Müller-Crepon (2020, 6) points out that "[u]nfortunately, because [Lange's] data is coded at the colony-level, it can only be used for within-empire comparisons."

⁵The exception is of course scores of 0 or 100 percent colonial court cases, but no country in the sample was ruled entirely indirectly, while only Sri Lanka scores 0.

along ethnic lines, which is unsurprising given that British indirect rule sought to build on preexisting customary institutions. Such a group-level perspective suggests that a colony’s aggregate share of customary court cases is driven not only by which groups were ruled indirectly, but also how many court cases were held for each group (group size), and how accurately the British recorded these court cases.⁶

To make things worse, McAlexander fails to appreciate the underlying logic of indirect rule as a strategy to overcome problems of governance. In this context, the literature identifies two key factors determining whether groups were ruled indirectly: (1) ethnic geography and (2) suitable pre-existing governance structures (e.g. Hechter, 2000; Herbst, 2000; Mamdani, 1996; Gerring et al., 2011; Paine, 2019; Müller-Crepon, 2020). With regard to ethnic geography, Boone (2003, 138) succinctly reminds us that “[r]ulers at the center tend to choose indirect rule for remote provinces where distance

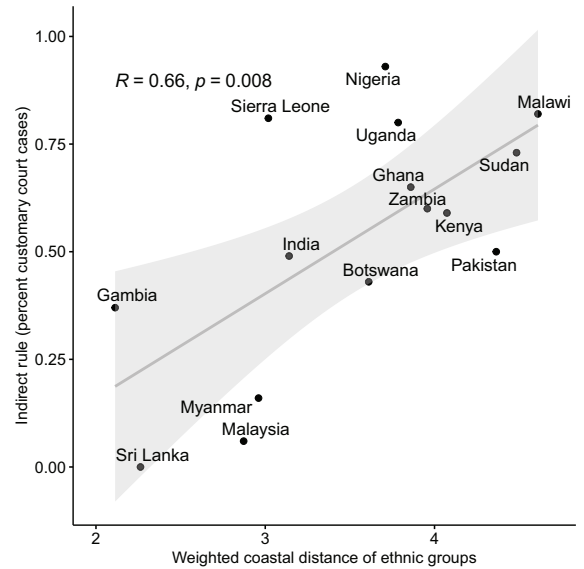


Figure 1: Peripheralness of ethnic groups and indirect rule

makes governing directly costly and inefficient, and direct rule where and when technologies of control exist to make it cost effective to do so.” Therefore, a higher share of indirect rule (here: customary court cases) can be expected within colonies whose ethnic geography is characterized by a sizeable population residing in remote areas. Following these conjectures we use WHC’s data to devise a simple colony-level measure of the population weighted by group-level distance from the coast, constructed as the logged sum of groups’ relative population share times distance from the coast (in km). As expected, this simple measure of ethnic geography correlates highly ($R = 0.66, p = 0.008$) with Lange’s (2009) measure of indirect rule, as shown in Figure 1.

This insight has important repercussions for McAlexander’s research design, which assumes that indirect rule (measured as customary court cases) moderates the effect of groups’ peripheralness (here operationalized as distance from the coast). Yet, if groups’ peripheralness is itself a cause of indirect rule, then the

⁶We conjecture that customary court cases are systematically under-counted in peripheral areas to which the British deployed few administrators.

design suffers from post-treatment bias. Keele and Stevenson (forthcoming, 6) explain that this problem also pertains to interaction effects:

Analysts also must ensure that effect modifiers are measured at baseline and thus unaffected by the treatment. It is well understood that adjustment for post-treatment variables can be an important source of bias (Rosenbaum, 1984). This holds true in the studies of effect modification as well: if [the modifier] is post-treatment and possibly effected by [the treatment], this may result in bias. Therefore, the effect modifier should be measured temporally prior to the treatment and thus unaffected by the treatment.

The problem arises because the (moderated) effect of coastal distance operates partially through (i.e. is mediated by) indirect rule. Consequently, in McAlexander's research design the causal effect of coastal distance is not identified, resulting in biased estimates.⁷

Customary institutions, ethnic inclusion, and civil war

Beyond these technical deficiencies, McAlexander's article also misrepresents WHC's argument. More precisely, rather than postulating a simple dichotomy whereby the British employed indirect rule as opposed to the French using direct rule, WHC explicitly acknowledge that both empires relied on direct and indirect rule, arguing that the British approach differed primarily in terms of the *manner* of indirect rule, that is its use of customary institutions:

[W]hereas the British typically employed traditional authorities to reign over their own tribal communities, the French implementation of indirect rule recruited native administrators to act as representatives of the colonial empire, rather than traditionally legitimized rulers. Hence, British indirect rule meant the "incorporation of indigenous institutions – not simply individuals – into an overall structure of colonial domination" (Lange, Mahoney and vom Hau, 2006, 906). (WHC, 886)

⁷Disregarding the problem of ecological inference described above, it is possible to estimate the 'average controlled direct effect' (the causal effect of a treatment when the mediator is fixed at a particular level) while fixing (controlling) the mediator at different levels (Acharya, Blackwell and Sen, 2016). When correcting for post-treatment along these lines results, (de-mediated) indirect rule no longer discernibly moderates the effect of coastal distance.

While inconsequential for McAlexander due to his intra-empire focus, this clarification is important since a proper re-analysis should stay true to the original argument and its empirical implications.

What, then, would constitute an alternative test of WHC's main assumption? In principle, we agree with McAlexander that a reanalysis of WHC is desirable, and that more fine-grained data could help. However, to avoid the aforementioned problems of inference, such data should (1) be available at the group-level, (2) cover both the French and the British empire, and (3) capture how customary institutions were incorporated into the colonial state apparatus before decolonization. Below, we use the limited space of this *short article* to sketch a research design along these lines and to provide some preliminary results.

In a nutshell, WHC argue that the British empire pursued a colonial doctrine that aimed to co-opt customary institutions, while the French appointed intermediaries on the basis of loyalty instead of pre-colonial status. However, as briefly discussed above, whether the British were able to follow such practice depended on the availability of pre-existing hierarchies and precolonial centralization (e.g. Gerring et al., 2011). Where centralized political structures were missing, for example because traditional local governance was organized through village councils, it proved impossible or inefficient to rule through pre-existing rulers to control a large population and territory. Müller-Crepon (2020, 2) uses local administrative data to examine these conjectures directly, finding that “the British exerted less effort where they could rule through precolonially centralized institutions. [...] These patterns are absent or even reversed in comparable data from French West Africa.”⁸

Indeed, a burgeoning literature rightfully emphasizes the effect of precolonial statehood on postcolonial civil conflict (Wig, 2016; Paine, 2019). Building on these pioneering insights, we posit that the British empire systematically co-opted precolonially centralized groups during colonial rule, famously leading to ‘decentralized despotism’ (Mamdani, 1996). Consequently, traditionally legitimized local institutions were also present at the time of decolonization. Elites of such groups were then able to use their consolidated power to gain influence in the struggle for power in the central government, because they were particularly able to mobilize support through votes or otherwise. By contrast, precolonially centralized groups in French ex-colonies were less able to play a significant role in the struggle for post-colonial power, precisely because the French colonial approach had undermined such customary institutions at the local level

⁸Although systematic, Müller-Crepon's (2020) data do not provide sufficient cross-country and cross-imperial coverage for our purposes.

throughout the colonial era.

Accordingly, in line with WHC's argument about differential approaches to customary institutions, we expect that precolonially centralized groups in former British colonies were more likely to gain inclusion. We test this hypothesis using Paine's (2019) data, which provide the most comprehensive and accurate information on precolonial statehood (PCS) for most countries in Sub-Saharan Africa. These data directly map onto the Ethnic Power Relations dataset (Vogt et al., 2015) from which WHC's data were derived. Following up WHC's original analysis, we are interested in the interaction between precolonial statehood and British colonialism. In order to allow for a direct comparison, the models follow the same specification and method as in WHC and McAlexander. The data cover a total of 111 African ethnic groups in the sample (compared to 167 in WHC who also include Asian groups).

The results are given in Table 1. Models 1 and 2 show that even though PCS groups stood a good chance of being included in the first postcolonial government after independence, this effect only holds for the British Empire. Indeed, as shown in Figure 2, PCS groups were significantly more likely to be included if they were colonized by the British.⁹ By contrast, there are no discernible differences for groups in former French colonies. In short, these estimates further corroborate WHC's key assumption that French colonialism generally ignored customary institutions, whereas the British approach to customary institutions systematically fostered precolonially centralized groups in ways that played out favorably for such groups at the time of decolonization.

The next set of models addresses the second stage of WHC's analysis, focusing on the effect of ethnic inclusion on postcolonial civil conflict. Model 3 is a simple probit regression that shows that a naive model fails to find a strongly pacifying effect of inclusion on civil conflict. Accounting for endogeneity, Model 4 is a bivariate probit with two equations, using the interaction between British colony and PCS group as an instrument for ethnic inclusion in the first stage. This research design tackles possible endogeneity if groups are excluded or included depending on their propensity to fight. Figure 2 demonstrates that the difference between PCS and non-PCS groups is statistically significant in former British colonies, but not in former French colonies. Most importantly, the conflict equation shows a much stronger, negative and statistically significant effect for ethnic inclusion on conflict, as shown in Figure 3. This underscores

⁹Model 4 is the first-stage of a bivariate probit and described below. The thin lines depict 95 percent confidence intervals. The thick lines are 83 percent confidence intervals for which non-intersection implies that the estimates are statistically different at $p < .05$ (Maghsoodloo and Huang, 2010).

Table 1: (Bivariate) probit estimates

Model	(1)	(2)	(3)	(4)	
Estimator	Probit	Probit	Probit	Bivariate probit	
Dependent variable	Inclusion	Inclusion	Conflict	Inclusion	Conflict
Ethnic inclusion			-0.162 (0.332)		-1.360** (0.530)
British colony	-0.041 (0.381)	-0.251 (0.434)	-0.885** (0.371)	-0.267 (0.398)	-0.810*** (0.307)
PCS group	0.954** (0.405)	0.269 (0.563)	-0.901** (0.356)	0.235 (0.481)	-0.426 (0.376)
British × PCS		1.449** (0.655)		1.030 (0.689)	
Group size	1.993* (1.109)	2.119* (1.160)	-0.910 (1.222)	1.792 (1.115)	0.032 (1.050)
ln Group area	-0.024 (0.115)	-0.041 (0.112)	0.137 (0.105)	-0.017 (0.115)	0.111 (0.105)
ln Country area	-0.555*** (0.165)	-0.578*** (0.169)	0.262 (0.250)	-0.615*** (0.162)	0.046 (0.239)
ln Population	0.115 (0.137)	0.144 (0.146)	0.335* (0.178)	0.140 (0.157)	0.342** (0.174)
ln GDP p.c.	0.537** (0.259)	0.482* (0.262)	0.220 (0.359)	0.539** (0.255)	0.334 (0.294)
Violent independence	1.099*** (0.372)	1.134*** (0.364)	-1.094*** (0.398)	1.082*** (0.372)	-0.543 (0.439)
Constant	1.535 (2.732)	2.043 (2.860)	-11.352*** (2.927)	2.073 (2.895)	-8.730*** (3.184)
ρ				0.787 (0.258)	
Observations	111	111	111	111	

Robust standard errors clustered by country in parentheses

*** p<0.01, ** p<0.05, * p<0.1

WHC's earlier findings that naive estimation that does not address endogeneity is likely to underestimate the peace-inducing effect of ethnic inclusion.

Some caveats remain. First, the small sample (based on African groups alone) likely affects statistical power and instrument strength, and so we caution that these second stage results should be seen as preliminary to—but consistent with—those presented in WHC (who also include Asian cases).¹⁰ Second, Paine (2019) shows that the dynamics may differ in countries without any PCS group. Accordingly, we split the baseline category of non-PCS groups depending on the presence of a PCS group in the country. How-

¹⁰In principle, it would be possible to extend the coverage to Asian colonies, for example on the basis of the information contained in Müller et al. (1999). These data also provide information on the degree of centralization, which could further increase instrument strength.

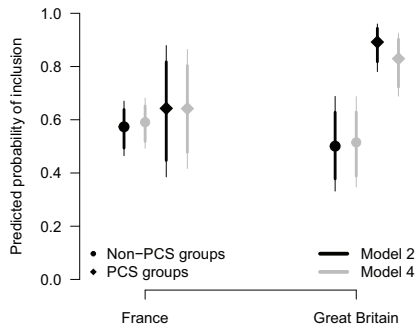


Figure 2: Effect of precolonial statehood on inclusion by colonizer

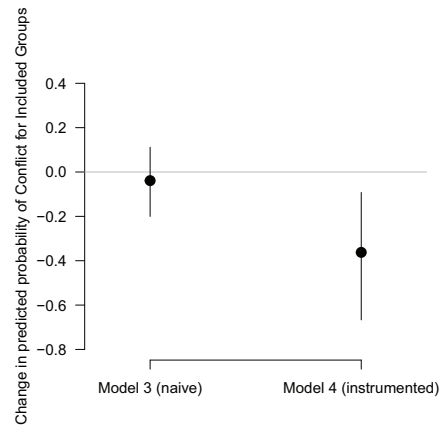


Figure 3: Effect of inclusion on conflict

ever, the results suggests that such groups were not treated differently by the British as compared to the French.¹¹

Third, recent studies have shown that precolonial statehood determines local economic development (e.g. Michalopoulos and Papaioannou, 2013). Thus, the exclusion restriction may be violated if precolonial centralized groups are wealthier (or if development determines precolonial centralization) and thereby more peaceful regardless of political status. Given that local development in Africa is heavily agriculture-based, we can block this channel by including a group-level measure of soil quality, capturing the fraction of group settlement-area classified as suitable for agriculture given climatic, soil, and terrain constraints (Fischer et al., 2001).¹² However, accounting for economic development (and in a way that avoids post-treatment bias) does not impair the results. Fourth, it is possible that the British approach of preserving precolonial statehood affects postcolonial conflict not only through inclusion, but also directly via increased mobilization capacity. However, in this case we would expect the respective groups to be *more* conflict-prone (c.f. Paine, 2019), implying a downward bias (underestimation) of the pacifying effect of inclusion.¹³

Finally, the process of decolonization calls for future research. McAlexander posits that “the differences in ethnic inclusion between the British and the French empires can be attributed to policies during the

¹¹All additional results not shown, but available upon request.

¹²Additionally, interacted with PCS status, this measure should yield a reduced form proxy for differential economic trajectories by PCS groups.

¹³WHC discuss that it is unlikely that the colonizers chose their colonies based on ethnic characteristics, since demarcations were generally arbitrary and often took place prior to explorations on the ground (p. 894).

process of decolonization” (p. 1612), but fails to provide any systematic evidence for this claim. By contrast, Müller-Crepon (2020) traces the lines of succession of 124 West African polities over the course of the colonial period. He shows that precolonial polities’ lines of succession were only half as likely to remain intact after just 30 years *since the start of colonization* in French colonies, as compared to centralized groups in British colonies. In short, we have reason to believe that the French and the British empires pursued fundamentally different approaches toward customary institutions early on during the colonial period, not just during the process of decolonization (as claimed by McAlexander). One long-lasting consequence of these colonial blueprints has marked differences determining which groups became politically included or excluded in the postcolonial era. For excluded groups, this fate increased the risk of civil conflict.

Clearly, our reanalysis leaves plenty of room for future research. In this brief response, we have not been able to engage in extensive validation of our new instrument, including qualitative tracing of the postulated channels. Moreover, further data collection would be needed to extend the analysis beyond Africa so as to strengthen the instrument. More fundamentally, it would also be desirable to construct new direct measures of colonial empires’ style of governance at the level of groups. For now, however, we see no reason to question the finding that, even when endogeneity is accounted for, exclusion remains a robust and important driver of civil war.

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