Creating 'Us and Them': Racial Propaganda and Right-Wing Voting in Interwar Sweden

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Abstract

I explore the political impact of the *State Institute for Race Biology* in interwar Sweden. Results of an anthropometric classification of the Swedish population according to pseudo-scientific notions of "Nordic purity" were disseminated in a propagandistic text. I find that, following the publication, districts deemed particularly "pure" exhibited relatively higher vote shares for right-wing parties catering to race-biological ideas. Insularity (low levels of immigration) and information (good access to libraries and newspaper media) are important moderators of this effect. Race-biological ideas appear to have been absorbed locally via direct correspondence with the *Institute*. My findings indicate that propaganda campaigns can shape political preferences, particularly when such campaigns make salient and speak directly to identity.

Keywords: propaganda, identity, right-wing voting, interwar period **JEL Codes**: D72, D83, J15, N44, Z13

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1 Introduction

Identity matters (Akerlof and Kranton, 2000; Chen and Li, 2009; Benjamin, Choi and Strickland, 2010). Political behaviour is particularly responsive to appeals to groupness (Glaeser, 2005; Esteban and Ray, 2008; Bordalo, Coffman, Gennaioli and Shleifer, 2016), with consequences for policy and – ultimately – development (Pande, 2003; Clots-Figueras, 2011; Bhalotra, Clots-Figueras, Cassan and Iyer, 2014; Burgess, Jedwab, Miguel, Morjaria and Padró i Miquel, 2015; Grossman and Helpman, 2021). Against a backdrop of recent resurgences of nationalist and anti-immigration sentiment, understanding the role of identity-based propaganda in creating support for right-wing movements is therefore of particular importance.

In this paper, I investigate the political impact of the efforts of the *State Institute for Race Biology* to popularise a racial worldview in interwar Sweden. The *Institute* carried out a comprehensive anthropometric study of the Swedish population to classify the country's regions according to notions of "Nordic purity", and disseminated its findings in a widely-circulated propagandistic text. The publication was intended for use in schools and in public libraries, with the aim of making race more socially and politically salient. Race-biological ideas were quickly assimilated even into moderate right-wing rhetoric (Lindström, 1985), and continue to inform the Swedish radical right to this day (Lööw, 2015).

I show that districts deemed particularly "pure" by the *Institute* exhibited relatively greater support for National Socialist and Conservative Right parties following the publication of the popular text. Combining a district-level panel covering the eight elections from 1917 to 1940 with a difference-in-differences empirical strategy, I present robust evidence that the publication caused districts of above-median "purity" to exhibit a relative increase in right-wing vote shares of approximately 3.4 percentage points in post-publication elections.

To explore the mechanisms underlying this rightward shift, I mobilise a range of novel data. First, I use hand-collected information from archival registries of the *Institute's* complete incoming correspondence to show that districts deemed particularly "pure" became more likely to engage directly with the *Institute*. Following the publication of the *Institute's* popular text, relatively greater volumes of letters arrived from such districts. The richness of the correspondence data allows me to classify letters according to subject matter; I find particularly strong effects for correspondence regarding the *Institute's* publications and race-biological literature more broadly. These findings provide compelling evidence that the "pure" districts addressed by the *Institute's* work became increasingly interested in absorbing these ideas locally.

As a second exercise to uncover mechanisms, I conduct a heterogeneity analysis to explore the types of districts driving the main effect on right-wing voting. I find that insular communities – districts characterised by low levels of pre-treatment immigration – responded particularly strongly to the *Institute's* propaganda campaign. This result is in line with previous work suggesting that "us and them" rhetoric may be particularly impactful in the absence of the targeted "outsider" group (Allport, 1954; Newman, 2013). Additionally, I find that districts with well-funded libraries (particularly school libraries) exhibit a stronger effect, as do districts that saw higher levels of exposure to newspaper coverage of race-biological topics. These findings both provide corroborating evidence of an information transmission channel, where the availability of and exposure to the ideas espoused by the *Institute* facilitated the transformation of racially-based conceptions of identity into realised political behaviour.

This paper speaks to a number of recent literatures in political economy and economic history. The *Institute's* propaganda campaign sought to create "us and them" by making salient its pseudo-scientific notions of racial identity. By examining the extent to which its efforts were successful, I add to a new and growing literature on the malleability of identity. Several works have explored the socio-economic incentives that shape identity choice and manipulation (Cassan, 2015; Dahis, Nix and Qian, 2019; Fouka, Mazumder and Tabellini, 2020; Jia and Persson, 2021; Atkin, Colson-Sihra and Shayo, 2021; Rademakers and van Hoorn, forthcoming). Others have turned to history to uncover important determinants of common identity (Ali, Fjeldstad, Jiang and Shifa, 2019; Dehdari and Gehring, forthcoming). But identity may also be moulded by political incentives, and my findings indicate that salient racial identities can be created and shaped by propagandistic information interventions. I therefore provide evidence complementary to the study of Blouin and Mukand (2019) on "erasing" ethnic divisions; propaganda has the potential to both create and remove identity-based societal divides.

The study of the media as a channel of politically potent information and its impact on electoral behaviour has received considerable attention in the political economy literature (Strömberg, 2004; Gentzkow, 2006; DellaVigna and Kaplan, 2007). Recent work has highlighted its potential for propagating extreme viewpoints that translate to real-world action (Yanagizawa-Drott, 2014; Petrova, Bursztyn, Egorov and Enikolopov, 2020; Müller and Schwarz, forthcoming).¹ I bring to light evidence for the potency of propaganda campaigns in shaping radical political behaviour in an understudied setting during the relative infancy of mass media. This complements existing work on similar time periods, where the focus has been on the United States (Ang, 2020; Wang, forthcoming) and Germany (Adena, Enikolopov, Petrova, Santarosa and Zhuravskaya, 2015).

Finally, I contribute to a rich literature in economic and political history on the rise of extreme politics during the interwar period. Understandably, the geographical focus of this literature has been elsewhere in Europe, with important work over the last decade seeking to explain the rise of National Socialism in Germany (Voigtländer and Voth, 2012; Satyanath, Voigtländer and Voth, 2017; Spenkuch and Tillmann, 2018; Caesmann, Caprettini, Voth and Yanagizawa-Drott, 2021; Galofré-Vilà, Meissner, McKee and Stuckler, 2021; Koenig, 2021). But understanding the extremes of interwar ideology is important even when and where it did not reach national dominance, not least because ideology can be persistent (Voigtländer and Voth, 2015; Cantoni, Hagemeister and Westcott, 2020; Ochsner and Roesel, 2020). In the case of Sweden, the post-war radical right has been greatly informed by the race biology of the interwar period (Lööw, 2000, 2015). Turning to Sweden's (insufficiently addressed) interwar history of exclusionary political theory and praxis can therefore aid in understanding the resurgence of populist nation-

¹Information "treatments" more broadly can similarly shape ideology (Cantoni, Chen, Yang, Yuchtman and Zhang, 2017).

alism and anti-immigration sentiment in the twenty-first century.²

2 Historical Background and Data

2.1 The State Institute for Race Biology

The Swedish *State Institute for Race Biology* was founded in Uppsala in January 1922 for the study and public dissemination of research in eugenics and human genetics. Its appointed head was physician Herman Lundborg, who championed the *Institute* and its race-biological publications for the majority of the interwar period. Lundborg's ideas shaped the output of the *Institute*, in particular his view of race biology as not only a science, but as a complete *Weltanschauung* (Broberg, 1995).³

The *Institute's* key work was an ambitious anthropometric survey of the Swedish population, with the aim of producing a systematic classification of the predominant racial elements in different parts of the country. In the early 1920s, the *Institute* carried out comprehensive physical measurements of the universe of over 100,000 Swedish conscripts. Among the characteristics recorded were conscripts' stature, hair and eye colour, and various measurements of their skull and face. The proportions of the skull were of particular interest for the race biologists; the cephalic index (the ratio of the skull's width to its length) was used to classify individuals as *dolichocephalic* (low values of the index; long-headed) or *brachiocephalic* (high values of the index; wide-headed). *Dolichocephalic* individuals were claimed to be of particularly "pure" Nordic stock.⁴ The results of the study were published in the 1926 volume *The Racial Characters of the Swedish Nation* (Linders and Lundborg, 1926), a work in English whose intended audience was the international scientific community. The work was met with universal acclaim for its supposed

²For a selection of recent work on more proximate socio-economic determinants of support for the national-conservative and anti-immigrant Sweden Democrats, see Valdez (2014); Strömblad and Malmberg (2016); Dehdari (forthcoming); Andersson and Dehdari (forthcoming).

³Lundborg was replaced by the more moderate Gunnar Dahlberg in 1936, after which the *Institute* abandoned much of its emphasis on racial hygiene for more neutral research in hereditary genetics. Recent work suggests, however, that undercurrents of racial science remained in the *Institute's* work (Ericsson, 2021).

⁴The morphological index concerned proportions of the face (rather than the skull) and was additionally, though less prominently, used.

rigour, and copies were distributed globally.

On Lundborg's initiative, a popular, condensed version of the work was prepared for the purpose of educating the Swedish population. The result was the Swedish-language *Svensk raskunskap* ("Swedish Racial Studies" (Lundborg, 1927)), which appeared in late-1927 and was intended for secondary school students and the general public. The study reproduced the key results of the scientific text, including maps of the spread of the "Nordic archetype" and a rich collection of photographs of racial archetypes (see Figure 1). Kjellman (2013) documents the intensely visual aspect of Swedish race biology, including the manipulative use of younger individuals to represent the Nordic archetype and older individuals for other archetypes.

In contrast to the relatively reserved vocabulary of the scientific work, Lundborg (1927) took the liberty to engage in moralistic racial rhetoric in the popular version:

"Archaeological research, race biology, and history have shown evidence of the strength, entrepreneurship, organizational skill, ability, and talent of the Nordic race. All this obligates us. May we, who now live in this primeval abode of the Nordic race, do everything to keep this race in good health and save it from degeneration and extinction."⁵

The book proved very popular. Its two editions, with a combined run of 10,000 copies, soon sold out, and its readership was likely much larger due to its use in schools and libraries. It received widespread media attention in national as well as local newspapers, and sparked a national debate about questions of race and fertility. The excerpts in Figure A1 in the Appendix provide examples of this type of media attention. Lundborg, the head of the *Institute*, was briefly launched into stardom, and was featured in various newspapers and journals.

The work of the *Institute* played no small part in shaping Swedish social thought. Its racial ideas influenced right-wing parties of the period (Lööw, 2004), and continues

⁵Quotation from Lundborg (1927). Translation as in Kjellman (2013). The original text reads: "Fornforskning, rasbiologi och historia bära samfällt vittnesbörd om den nordiska rasens sega kraft, företagsamhet, begåvning och organisationsförmåga. Allt detta förpliktigar. Må vi, som nu leva i den nordiska rasens urhem, göra allt vad på oss ankommer för att hålla rasen uppe, så att den ej urartar eller dör ut."

to inform white power organisations to the present day (Lööw, 2000, 2015). Its more moderate contributions to hereditary genetics influenced social-democratic governments well into the post-war era (Broberg and Tydén, 2005). In this paper, I document the immediate political implications of the *Institute's* work. Following the publication of its propagandistic text, the parts of the country that the *Institute* defined as particularly "pure" were precisely those that saw a relative flourishing of the right-wing parties catering to race-biological ideas.

2.2 Swedish Politics in the Interwar Period

The interwar period in Sweden was politically formative for two reasons (Möller, 2015). First, it saw the beginning of social-democratic hegemony in Swedish politics: from the 1932 election until the end of the century, the Social Democrats were only in opposition for a total of nine years. Second, it marked the beginning of consensus politics (*samförståndspolitik*), in which broad coalitions and agreements were the norm, and sharp political confrontation avoided. The political trends are evident in Figure 2. The Social Democrats' rise is particularly striking, as is the slow decline of the traditional bourgeois parties (the Conservative Right and the Liberals). Of further note is the relatively modest development of parliamentary National Socialism.⁶

Given that Swedish National Socialist groups never developed into a serious political force, Berggren (2002) asks: "why bother?". The answer she provides to this (rhetorical) question is that it is important to explain why Fascism and Nazism could develop *at all* in Sweden, given a political climate which was *prima facie* infertile to such ideas. Two further, in my view more salient, reasons can be given. First, the pioneering National Socialists inspired and informed generations of Nazi sympathisers and white supremacists throughout the remainder of the twentieth century. Understanding these roots therefore aids in understanding current right-wing extremism. Second, the threat of National Socialism provoked responses in other political parties. Lindström (1985) studies this

⁶In Figure 2, the catchall label "Nationalists" is used for all the various parties with National Socialist or Fascist streaks which broke out of local radical spheres to take part in national elections. The various groups are documented in detail in Lööw's landmark study of early Swedish Nazism (Lööw, 2004).

phenomenon, and notes in particular the readiness of the Conservative Right to accommodate the nationalists, not least in response to the defection of some delegates and much of its youth wing to various nationalist groups.

The racial worldview of the *Institute* was partly mirrored in right-wing political rhetoric. The National Socialists openly espoused such ideas, often with more than a hint of anti-Semitism (Lööw, 2004). The archetypal Swede even featured in its campaign posters as a champion of anti-capitalism and anti-communism (see Figure A2a in the Appendix). Similar sentiments were evident even in established mainstream parties. The Conservative Right had always adopted a patriotic nationalism (Figure A2b), but in the 1930s more radical population politics entered its election manifestos:

"Encouragement of the forming of families. Fast and powerful measures to the protection of the Swedish population material's persistence."⁷

In this paper, I explore whether the *Institute's* popularisation of race biology, through its propagandistic text published in 1927, influenced the development of racial sentiment in interwar Sweden and resulted in larger support for the right-wing parties giving voice to such concerns. In particular, since the *Institute* sought to popularise a notion of racial purity based on anthropometric characteristics, and distributed information which individuals could use to identify Nordic "archetypes", did it engender especial support for racial rhetoric in areas where those archetypes were supposedly particularly prevalent?

2.3 Data

2.3.1 Historical Elections

I construct a panel of electoral outcomes for all Swedish districts (*härader*, lit. hundreds, an intermediate administrative unit) over the eight elections between 1917 and 1940. All data on voting and supporting information are taken from various series of *Sveriges Officiella Statistik* (Official Statistics of Sweden), published on a yearly basis by *Statistiska*

⁷Translation as in (Lindström, 1985). Original text reads: "Stöd åt familjebildningen. Snabba och verksamma åtgärder tillskydd för det svenska folkmaterialets bestånd."

Centralbyrån (Statistics Sweden). The resulting panel consists of 383 districts and eight elections, for a total of 3,064 district-election observations. Descriptive statistics are presented in Panel A of Table 1.

2.3.2 The Institute's Race-Biological Data

To reconstruct the supposed Nordic "purity" of each election district according to the *Institute's* criteria, I use the anthropometric data presented in Linders and Lundborg (1926). These data are based on measurements of the universe of Swedish conscripts in the years 1922 and 1923 (around 100,000 individuals in all), and therefore provide ample coverage of all parts of the country.⁸ The source provides me with the distribution of key anthropometric variables associated with around 2,500 settlements, which I match with districts to create measures of "purity" on the district level. Descriptive statistics of the two key measures – the cephalic index and the morphological index – are presented in the upper part of Panel B of Table 1. Here, I present the indexes as continuous measures. Note, however, that – for ease of interpretation – for the majority of the analysis I will use a treatment indicator based on a median split on the cephalic index variable. A district with a below-median average cephalic index is one characterised relatively predominantly by the *Institute's* so-called "Nordic archetypes". Such districts will form the "treatment" group.

2.3.3 The Institute's Correspondence

I additionally draw on material hand-digitised from the *Institute's* archives. In particular, using registries of the *Institute's* incoming correspondence, which include details of senders' addresses, I construct a district-level yearly panel of letters sent to the *Institute*. These registries are available for the period 1925 to 1934, for a total of 10 years and 3,830 district-year observations. The correspondence registries provide brief summaries

⁸Conscripts are, of course, a selected sample with respect to the larger population. This is not problematic for my purposes for two reasons. First, conscripts are likely to differ systematically from the overall population only on height measurements, not on the key cephalic index variable (Linders and Lundborg, 1926). Second, since I am interested on the *relative* "purity" of different districts, selection into conscription is not an issue so long as this does not differ systematically between districts. This is unlikely due to the universality of conscription in this period.

of each letter, which allows me to identify letters dealing with certain topics. Of particular interest are individuals writing to purchase the *Institute's* publications and to enquire about recommendations for further race-biological literature, as such correspondence is indicative of an information transmission channel where the *Institute's* ideas were absorbed locally. The correspondence measure therefore serves as a proxy for districts' willingness and interest in engaging directly with the race-biological ideas of the *Institute*. Summary statistics from the district-year panel of the absolute number of letters sent, as well as measures of letters per capita, are reported in the lower part of Panel B of Table 1.

2.3.4 Library Funding

In exploring the mechanisms of my main effect, I make use of data on the funding of public libraries in the last pre-treatment year (1926), which I hand-collected from the archives of *Skolöverstyrelsen* (The Swedish Board of Education). These data provide both a comprehensive list of the libraries throughout Sweden (each entry states the municipality in which the library is located) and an indication of their relative sizes (libraries received different levels of state funding). I aggregate the library funding data on the level of the district, and classify districts as having high or low library funding by way of a median split. The nature of the data allows me to perform this split for total library funding and separately for school libraries. I interpret high library funding as indicative of the accessibility of the race-biological book. Libraries with higher funding were *ceteris paribus* more well-stocked, and therefore more likely to stock the text.

2.3.5 Newspaper Coverage of Race Biology

Finally, I explore the role of local newspapers in moderating the effect of the *Institute's* propaganda. To this end, I hand-collected data on the coverage of the *Institute's* activities in local newspapers using materials from the *Institute's* archive. The *Institute* kept a rich collection of clippings from newspapers covering its work as well as race biology more broadly: the collection spans the years 1907-1935 and contains 1,762 articles from 301

different newspapers. I use this collection to construct a district-level measure of exposure to race-biological media. For each of the 301 newspapers, I identify the location of its headquarters and assign each of the newspaper's articles to the corresponding district. Since newspapers have a readership extending beyond its immediate district, I construct a distance-weighted index of exposure which takes on large values for election districts that are near election districts producing many race-biological newspaper articles.⁹

2.3.6 Other Data

I make use of a range of additional data sources. Using various series of *Sveriges Officiella Statistik* (Official Statistics of Sweden), I compile a number of control variables, such indicators for urban and industrial districts, population, employment shares and immigration. I present descriptive statistics in Panel C of Table 1.

3 Empirical Strategy and Main Results

To investigate the effect of the *Institute's* propaganda campaign on support for the rightwing parties that catered to race-biological ideas, I employ a differences-in-differences empirical strategy. In particular, I estimate the following regression equation:

Right-wing share_{*it*} =
$$\gamma_i + \eta_t + \delta \operatorname{Post-1927}_t \times \operatorname{Low ceph. index}_i + X'_{it}\beta + \epsilon_{it}$$
 (1)

Here, Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t*. In light of the discussion of interwar politics in Section 2 above, I consider the combined votes for the Conservative Right and Nationalist parties as constituting the "right-wing" vote in this particular setting. I include district fixed effects γ_i to account for time-invariant district-specific voting behaviour and time fixed effects η_t to account for changes in political sentiment over time affecting all districts equally. Finally, I include

⁹In particular, I define an exposure measure as follows: Exposure_i = $\sum_{j} \frac{n_j}{ln(e+D_{ij})}$. Here, n_j is the number of race-biological newspaper articles published in district j in the period 1907-1935, D_{ij} is the distance in kilometres between the centroids of districts i and j. D_{ii} is normalised to zero, which yields the property that an election district's own articles are unweighted, and articles from other districts are distance-weighted.

district-level controls X_{it} . In the first instance, such controls include electorate size and turnout. In some specifications, I additionally include pre-treatment district characteristics (such as per capita income or wealth) interacted with election fixed effects to allow these characteristics to flexibly predict voting behaviour over time.

The key variable in equation (1) is the interaction $\text{Post-1927}_t \times \text{Low ceph. index}_i$. Post-1927_t is an indicator equal to 1 if an election took place after 1927 (that is, after the publication of the popular text, *Svensk Raskunskap*). Low ceph. index_i, in turn, is an indicator equal to 1 if a district is of below-median cephalic index, and therefore characterised by a relative prevalence of the *Institute's* "Nordic archetype". The coefficient δ captures the differential change in the vote share of right-wing parties following the *Institute's* campaign in places that the campaign deemed particularly "pure". Finding $\delta > 0$ would suggest that the "Nordic purity" trait became politically salient as a result of the *Institute's* propaganda efforts. If the key parallel trends assumption holds, and there are no confounding changes at the same time as the propaganda treatment, this effect can be said to be causal.

3.1 Descriptive Evidence

For a first impression of the relationship in question, I plot the spatial distributions of two key variables in Figure 3. In Panel (a), I show the distribution of the mean cephalic index from the anthropometric study of Linders and Lundborg (1926), across all 383 districts. In Panel (b), I plot deciles of the change in right-wing vote shares over the entire period 1917 to 1940. Broadly, it can be seen that districts with a higher level of "Nordic purity" (lower cephalic index) saw larger increases (or smaller decreases) in right-wing voting.

To visualise the same pattern more explicitly, in Figure 4a, I report a binned scatterplot where I correlate districts' cephalic index against their change in right-wing vote shares between 1917 and 1940. The same positive relationship emerges: districts that were deemed more "purely Nordic" by the *Institute* exhibited relative increases in the vote share of the right-wing parties catering to these ideas. Performing a similar exercise for the period 1917 to 1924, using the pre-"treatment" elections, yields a non-relationship (Figure 4b). Districts with different cephalic indexes were not evolving differentially in terms of voting behaviour prior to the publication of the popular text in 1927. This finding provides reassuring support for the validity of my empirical strategy, which relies on the assumption that trends between treatment and controls groups would have remained parallel in the absence of treatment.

3.2 Regression Evidence

To more rigorously quantify the impact of the publication on right-wing voting, I report in Table 2 the coefficients from various estimations of regression equation (1).¹⁰ Column 1 reports the coefficient δ from a parsimonious specification with district and time fixed effects only. The coefficient is positive and significant at the 1 percent level, and should be interpreted as follows: on average, right-wing parties receive 3.7 percentage points greater vote shares in districts of below-median cephalic index (and therefore more "purely Nordic") than in above-median districts following the *Institute's* propaganda campaign and the publication of its popular text.

In column 2, I introduce some simple controls to account for the effect of electorate size and turnout on right-wing voting. I additionally include a range of cross-sectional district-level characteristics interacted with election fixed effects in column 3, including indicators for urban and industrial districts and measures of districts' pre-treatment income and wealth per capita. These interactions control for the fact that vote shares of different types of districts may evolve flexibly over time. Both exercises leave the main coefficient of interest practically unaltered. Finally, in columns 4 and 5, I introduce county-by-election fixed effects. Counties are the largest administrative unit in Sweden (twenty-four in total). Accounting flexibly for counties' political evolution over time is a demanding exercise. While coefficients are attenuated somewhat relative to the more parsimonious specification in column 1, effects remain economically meaningful and statistically significant.

 $^{^{10}}$ Robust standard errors clustered by district are reported in parentheses below each coefficient. In a discussion of robustness checks below, I show that other candidate standard error structures – such at clustering at higher units aggregation or allowing for spatially autocorrelated errors – leads to very similar conclusions.

The parallel trends assumption is crucial to any difference-in-difference strategy. Above, I showed descriptively that districts that were to be identified as particularly "purely Nordic" did not evolve differentially over the period 1917 to 1924 in terms of voting outcomes. I now provide a more rigorous regression analogue of this check to provide additional support of the validity of the difference-in-difference approach. Specifically, I re-estimate equation (1) but with election-specific interactions with the treatment indicator rather than a simple "post-1927" interaction. Results are reported in Figure 5, both with and without controls (these are the event-study equivalents of columns 4 and 5 in Table 2). Reassuringly, effects are very small and statistically insignificant (relative to the 1924 baseline) prior to treatment. Then, in the wake of the *Institute's* publication, a positive treatment effect starts to emerge.¹¹

3.3 Robustness Checks

3.3.1 Robustness to other measures of "Nordic purity"

The division of districts into treatment and control based on a median split according to their cephalic index is desirable for two reasons. First, the cephalic index was the dimension which the *Institute* emphasised most strongly in its work, as evidenced by both the anthropometric study (Linders and Lundborg, 1926) and the popular version (Lundborg, 1927). Second, the use of an indicator variable for treatment yields more easily interpretable coefficients.

This is not to suggest that the estimated effect is unique to the chosen definition of the treatment variable. In Table A2 in the Appendix, I report additional specifications of equation (1) where the treatment variable has been replaced with alternate measures. Column 1 reproduces the coefficient from the baseline specification. In column 2, I use the standardised cephalic index of district i directly, where larger values indicate more

¹¹An effect which materialises slowly over the elections following the inception of the *Institute's* propaganda campaign is expected for three main reasons. First, a gradual incorporation of racial elements into political parties' manifestos would result in a lagged matching between racial ideas and their representation in parliamentary politics. Second, even with the development of mass media, the diffusion of new ideas could not be instantaneous. Third, given that the *Institute's* popular text was intended for use in schools, its political effect might only manifest itself in electoral outcomes when students were eligible to vote.

"purely Nordic" districts.¹² The coefficient reported in column 2 tells the same story as the baseline specification: more "pure" districts became more right-wing following the start of the propaganda campaign.

In column 3, I introduce a different measure altogether: a standardised continuous morphological index.¹³ Again, the standardisation is such that a high index is associated with a higher degree of "Nordic purity". The estimated effect is significant and in a direction consistent with the previous findings: more "pure" regions became more rightwing. Finally, I explore some of the non-linearities of the effect in column 4. Rather than a median split, I report results from a quartile split according to the cephalic index, with the bottom quartile as the reference category. The estimates show that the effect is driven entirely by the top quartile.

3.3.2 Robustness to land and employment shares

A potential concern with the specifications used so far is that political developments depend on the structure of the economy in complex ways. Hence, it may not be sufficient to control for the potentially differential trends in support for right-wing parties simply by including time interactions with indicators for whether a district is rural or nonrural, industrial or non-industrial, and so on. To capture local economic structure more granularly, I construct land and employment shares for each district using agriculture and employment censuses.¹⁴ Interacting these shares with election fixed effects will allow me to more accurately pick up the political effect of economic structure over time.

I report the result of these robustness checks in Table A3 in the Appendix. Column 1 reports the baseline result. Columns 2 and 3 include controls for the share of agriculture in the economy, measured either as the share of land used for agriculture or as the share

¹²Here, I use "standardised" to encompass both its usual meaning (mean zero and a standard deviation of one) and to indicate that larger values mean more "pure" according to the *Institute's* definition. Recall that, as constructed, smaller values of the cephalic index correspond to the *dolichocephalic* "Nordic" archetype. For the purpose of this regression I flip this to produce coefficient estimates that are directly comparable to those derived from the dichotomous treatment indicator.

¹³Similar to the cephalic index, which captures the dimensions of the skull, the morphological index captures the dimensions of the face.

¹⁴I use the censuses conducted most closely prior to the publication of the book: the agricultural census of 1927 and the employment census of 1920.

of employment in agriculture. Agricultural regions could be more socially conservative and therefore become more right-wing during the interwar period. This may confound the estimated effect if more "purely Nordic" districts are those which are predominantly agricultural. Reassuringly, the effect is stable to the inclusion of these shares-by-election interactions.

Column 4 includes similar interactions for the share of employment in industry, and the estimated effect is virtually unchanged. In column 5, I conduct the same exercise for the share of employment in trade. This is an important consideration, as districts reliant on trade may be more metropolitan and therefore respond negatively to the fundamentally exclusionary rhetoric of the *Institute*. The estimated effect, however, is robust to the inclusion of these interactions. Finally, in column 6 I include all employment share interactions simultaneously, and the coefficient estimate remains stable.

3.3.3 Robustness to alternative error structures

Throughout, I have clustered standard errors at the level of 383 districts, but other approaches are possible. I report the results from these in Table A4. First, for reference I report the baseline estimate in column 1. In column 2, I instead cluster at the level of 24 counties. This naturally inflates standard errors, but the coefficient remains strongly significant (with a wild cluster bootstrapped p-value of 0.03).¹⁵ Finally, to account for potential spatial autocorrelation of errors, I implement Conley (1999) standard errors using the acreg package of Colella, Lalive, Sakalli and Thoenig (2019). I experiment with different distance cut-offs, and results remain consistently significant even when allowing for spatial autocorrelation up to 300 kilometres.

3.3.4 Robustness to potential outliers

As a final check of the robustness of the main results, I investigate the extent to which they are sensitive to the inclusion or exclusion of individual counties and elections. To this end, I conduct two jackknife exercises. In the first, which I report in Figure A3,

¹⁵I implement the wild cluster bootstrap procedure with 1,000 repetitions to obtain valid inference even in with a small number of clusters, see Cameron, Gelbach and Miller (2008).

I exclude each of the 24 counties in turn when estimating equation (1). Reassuringly, each iteration returns a coefficient very similar to the baseline. Similarly, in the exercise reported in Figure A4, I exclude each of the eight elections in turn. Again, no single exclusion returns a result which is statistically different to the baseline.

3.4 The Effect on Other Parties

Given that more "purely Nordic" districts became more right-wing following the publication of the *Institute's* book, which parties were on the losing end? That is, which parties' vote shares did the right wing usurp in these districts? In Table A1, I report the coefficient on the Post–1927_t × Low ceph. index_i interaction with different parties' vote shares as the outcome variable. From these coefficients, it appears that the chief losers were the Farmers parties.

The rise of the right wing at the expense of the Farmers can be rationalised with an eye on the thesis of Lindström (1985) on interwar political manoeuvrings. While the Farmers had exhibited traditional national-romanticism with a mixture of "racism, chauvinism, and xenophobia" in the early twentieth century, by the 1930s their politics had taken on a more social democratic flavour. This *rapprochement* was best demonstrated by the 1933 crisis agreement between the Farmers' League and the Social Democratic Party, which was struck primarily in response to the Great Depression, but also as a bulwark against the rise of National Socialism (notably, the agreement coincided with the Nazi seizure of power in Germany (Möller, 2015)). If the publication of the *Institute's* propagandistic text inspired concerns about racial purity, then the Farmers decreasingly represented an answer to that quandary. Rather, it was the National Socialists (explicitly) and the Conservative Right(increasingly flirtatiously) who embraced the rhetoric of race biology. Such (re-)positioning on the issue of race can go some way toward explaining why the right was able to grow at the expense of the Farmers in particularly "pure" districts.

4 Mechanisms

Districts that were particularly "pure" according to the *Institute's* criteria exhibited relative increases in support for the right-wing parties catering to race-biological ideas following the publication of the popular text, *Svensk raskunskap*. What explains this shift? I now turn to two complementary exercises to explore possible mechanisms.

4.1 Direct Correspondence with the *Institute*

First, I show that "pure" districts were more likely to engage with the *Institute* following its propaganda campaign. To this end, I make use of the district-level panel of letters sent to the *Institute*, described in Section 2.3. Direct correspondence is a less noisy measure of support for the racial paradigm than vote shares, since no political party made race biology their sole issue. Writing a letter, however, demonstrates more unambiguously a willingness to engage with the ideas of the *Institute* and is suggestive of their absorption at the local level.

I again employ a difference-in-differences specification as in equation (1), but rather than taking vote-shares as the outcome of interest, I use various measures of correspondence received by the *Institute* from each district in each year. The results are reported in Table 3. In column 1, I report the effect on the total number of letters (taking an inverse hyperbolic sine transformation to approximate a logarithmic transformation while permitting zeroes). The estimated coefficient implies that direct correspondence increased by approximately 5.4 percent in "pure" areas following the publication of the *Institute's* popular text. Using the granularity of the correspondence data, I hone in on letters pertaining to race-biological literature in general and the *Institute's* books in particular (columns 2 and 3, respectively). The large, positive effects suggest that districts addressed by the *Institute's* race-biological work became increasingly interested in absorbing these ideas locally after 1927.

In the remaining columns of Table 3, I repeat the same exercise using a per capita measure. Rather than taking the absolute number of letters as the outcome variable, I

instead use letters per 1,000 inhabitants. This is to ensure that results are not driven by populous districts that (possibly mechanically) happen to show large correspondence volumes. Reassuringly, results are corroborated using per capita measures instead. Finally, in Figure 6, I provide event-study plots to show that results are not driven by differential pre-treatment trends; these figures provide reassuring support for the parallel trends assumption also in this setting.

4.2 Insularity, Libraries and Newspapers as "Moderators"

As a second exercise to uncover possible mechanisms, I conduct a heterogeneity analysis to identify the types of districts driving the main effect on right-wing voting. Results are reported in Table 4, with column 1 restating the baseline result.

Insularity. In columns 2 and 3, I begin by splitting the sample into districts which experienced above- and below-median levels of immigration prior to treatment. The findings from this exercise are in line with work on "defended neighbourhoods" (Newman, 2013) and the "contact hypothesis" (Allport, 1954; Pettigrew and Tropp, 2006; Steinmayr, 2021), which suggest that the absence of "outsider" groups would make localities more susceptible to "us and them" rhetoric. The effect is driven entirely by districts with low levels of pre-treatment immigration, with a null effect in other districts. Insular communities appear to have been particularly affected by the *Institute's* campaign and the fundamentally exclusionary nature of race-biological thought.

Libraries. I now turn to estimations of the main regression equation which incorporate the library data described in Section 2.3. In columns 4 and 5, I split the sample into districts with high and low pre-treatment levels of overall library funding, and in columns 6 and 7, I focus specifically on funding of school libraries. While, unfortunately, no direct evidence is available on which libraries stocked which titles (and therefore which libraries stocked *Svensk raskunskap*), the logic of the exercise is that more well-funded libraries were *ceteris paribus* more likely to stock the race-biological text. Indeed, one of the stated aims of the *Institute's* campaign was to make the work available to the public through libraries and secondary schools. The findings suggest that effects are much stronger in districts with high levels of (school) library funding. These patterns provide an indirect indication of the importance of information channels for the efficacy of propaganda interventions. The school library results are paricularly interesting, and are consistent with the notion that information treatments are more effective when the recipient is at a young age. To the extent that students discuss their schooling with parents and relatives, this result is also suggestive of a transmission mechanism by which information is diffused within the household and the propaganda effect magnified.¹⁶

Newspapers. A complementary channel through which racial attitudes may have proliferated is via the exposure to media covering these topics. In order to investigate this channel, I make use of data on the coverage of race biology in national and local newspapers (see Section 2.3 for details). In particular, I divide districts into those which – over the course of the interwar period – were exposed to above- and below-median newspaper coverage of race-biological topics. I then estimate the main specification separately for these two groups, and report results in columns 8 and 9 of Table 4. Interestingly, the effect is significantly larger in high-exposure districts. Media appears to have played a central role in shaping the response to radical racial ideas by granting a prerequisite step of mainstream exposure to such ideas.

5 Concluding Remarks

In this paper, I have shown that the *State Institute for Race Biology* was instrumental in the formation and popularisation of racial paradigms in interwar Sweden. The publication of a popular race-biological propaganda piece classifying the Swedish population according to racial "purity" achieved its aim of making pseudo-scientific notions of race more politically salient. Following the publication of the propagandistic text, districts deemed particularly "pure" according to the *Institute's* measures exhibited a relative increase in the vote shares of the right-wing parties catering to these racial worldviews.

¹⁶See Becker, Nagler and Woessmann (2017) for a similar transmission mechanism in the context of education in Germany's secularisation period.

With novel data on the correspondence of the *Institute*, I provide evidence of a transmission channel where – through increased direct interaction between districts and the *Institute* – race-biological ideas were absorbed locally. Heterogeneity analyses additionally reveal that insularity (low levels of immigration) and information (good access to libraries and newspaper media) were important moderators of the main effect on rightwing voting. Together, these results indicate that the *Institute's* campaign appears to have successfully activated its intended audience.

My work sheds light on the potency of propaganda campaigns in shaping political preferences, particularly when such campaigns make salient and speak directly to identity. Racially-based propaganda resonates with concepts of "us and them", particularly in places where mutual inter-group exposure is low. The resulting entrenchment of racial worldviews has the potential to be highly persistent. If we seek to understand the current resurfacing of radical racial rhetoric as well as its milder expressions in political discourse, it is crucial to appreciate the historical deep-rootedness of such worldviews.

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Figures





(a) Map of geographical distribution of 'Nordic archetype'



(b) Examples of 'Nordic archetypes'



(c) Examples of 'Baltic archetypes'

Note: Excerpts from the popular text *Svensk raskunskap* (Lundborg, 1927), which summarised – in an accessible and propagandistic way – the results of the anthropometric study of Linders and Lundborg (1926) (see Section 2 for details).



Figure 2: Aggregate election outcomes, 1917–1940

Note: Aggregate election outcomes for the eight elections over the period 1917-1940. The Liberals, Left, Farmers and Nationalist groups consisted of multiple, separate parties at various points over this period. For the purposes of this paper, I combine the vote shares of such parties under unified headings where applicable.



Figure 3: Spatial distributions of cephalic index and right-wing vote share changes

(a) Mean cephalic index

(b) Change in right-wing vote shares

Note: Spatial distributions of two key variables across all 383 districts in my sample. Panel (a) shows the distribution (in deciles) of districts' mean cephalic index. This measure was the key indicator of "Nordic purity" in the work of the *Institute*, and constitutes the basis on which I define "treatment" in my empirical strategy. See Section 2 for historical details, and Section 3 for details on my empirical strategy. Panel (b) shows the change in right-wing vote shares between the first (1917) and last (1940) elections in my sample (in deciles).

Figure 4: Correlation between districts' cephalic index and changes in right-wing vote share



(a) 1917–1940 (comparing before and after publication of *Svensk raskunskap*)



(b) 1917–1924 (before publication of Svensk raskunskap)

Note: Binned scatterplots (10 districts per bin) showing the correlation between districts' mean cephalic index (see Section 2 for historical details) and the change in right-wing vote shares. Panel (a) computes the change between 1917 and 1940 (that is, computing the difference between before and after the publication of *Svensk raskunskap* in 1927). Panel (b) computes the change between 1917 and 1924 (both pre-treatment).





(b) With controls

Note: Event-study regressions of the form: Right-wing share $_{it} = \gamma_i + \eta_t + \delta_t \operatorname{Election}_t \times \operatorname{Low}$ ceph. index $_i + X'_{it}\beta + \epsilon_{it}$. The omitted election is 1924. The dashed red line indicates the year of the publication of *Svensk raskunskap*. Right-wing share $_{it}$ is the vote share of right-wing parties in district i in election t and Low ceph. index $_i$ is an indicator equal to 1 if district i is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. In both panels, regressions include district and county-by-election fixed effects (corresponding to columns 4 and 5 in Table 2. In panel (b), I additionally include a full vector of controls (see text for details). Error bars indicate 90 percent confidence intervals, with standard errors clustered at the level of the district.

Figure 6: Event study: the effect of Svensk raskunskap on direct correspondence



(b) Letters per 1,000 inhabitants

Note: Event-study regressions of the form: Letters_{it} = $\gamma_i + \eta_t + \delta_t \operatorname{Year}_t \times \operatorname{Low}$ ceph. $\operatorname{index}_i + X'_{it}\beta + \epsilon_{it}$. The omitted year is 1927. The dashed red line indicates the year of the publication of *Svensk raskunskap*. Letters_{it} is either the inverse hyperbolic sine of the number of letters sent by district *i* in year *t* (panel (a)), or the number of letters sent per 1,000 inhabitants (panel (b)). Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. In both panels, regressions include district and year fixed effects (corresponding to columns 1 and 4 in Table 3. Both regressions include the full vector of controls (see text for details). Error bars indicate 90 percent confidence intervals, with standard errors clustered at the level of the district.

Tables

Table 1: Summary statistics

	Obs.	Mean	St. Dev.	Min.	Max.
Panel A. Elections					
Vote share of right-wing parties	3064	25.49	14.56	0.00	100.00
Vote share of farmers parties	3064	14.20	13.85	0.00	87.07
Vote share of liberal parties	3064	18.18	11.84	0.00	76.84
Vote share of social democrat party	3064	35.73	16.65	0.00	78.66
Vote share of far left parties	3064	5.93	8.65	0.00	64.98
Electorate size (thousands)	3064	7.89	17.78	0.12	426.19
Turnout	3064	66.41	11.29	5.17	99.94
Panel B. Institute for Race Biology					
Mean cephalic index	383	77.15	0.63	75.40	79.24
Mean morphological index	383	92.65	1.13	90.01	95.45
Letters sent (all)	3830	0.56	4.34	0	136
Letters sent (race-biological literature)	3830	0.12	1.75	0	90
Letters sent (Institute's books)	3830	0.07	1.50	0	83
Letters sent, per thousand inhab. (all)	3830	0.05	0.25	0.00	7.50
Letters sent, per thousand inhab. (race-biological literature)	3830	0.01	0.07	0.00	2.14
Letters sent, per thousand inhab. (Institute's books)	3830	0.00	0.06	0.00	2.14
Panel C. Other variables					
Urban district	383	0.33	0.47	0	1
Industrial district	383	0.19	0.40	0	1
Income p.c. (1930, Swedish kronor)	383	631.95	304.54	177	2263
Wealth p.c. (1930, Swedish kronor)	383	2209.53	1038.53	407	11236
Agricultural land share (1927)	383	31.08	20.86	0.23	93.02
Agricultural employment share (1920)	383	43.41	25.63	0.50	84.70
Industrial employment share (1920)	383	28.07	14.77	2.30	83.40
Trade employment share (1920)	383	11.05	9.15	1.30	40.50
Immigrants per thousand inhabitants, 1924	383	0.77	0.48	0.24	2.54
Exposure to newspaper coverage of race biology, total	383	2.85	0.64	2.16	11.84
Total library state funding (1926, Swedish kronor)	383	818.37	751.22	0	4766
School library state funding (1926, Swedish $kronor$)	383	497.57	526.66	0	3122

Note: Summary statistics for key variables. See Section 2.3 for a detailed discussion of data sources. Panel A summarises election variables. The unit of observation is the district-election; 383 districts over 8 elections for a total of 3,064 observations. Panel B summarises variables relating to the Institute for Race Biology. Mean cephalic index and mean morphological index are time-invariant, and reported for the 383 districts in the cross-section. Information on correspondence has a panel structure. The unit of observation is the district-year; 383 districts over 10 years (1925-1936) for a total of 3,830 observations. **Panel C** summarises other variables. These are all time-invariant, and reported for the 383 districts in the cross-section.

	Deper	ndent variable	: Vote share of	f right-wing p	oarties
	(1)	(2)	(3)	(4)	(5)
Low ceph. index \times post-1927	3.74^{***}	3.71^{***}	3.41^{***}	2.27**	1.83^{*}
r in r	(0.70)	(0.70)	(0.69)	(0.99)	(0.98)
ln(Electorate)	~ /	0.62	-5.22***	~ /	-3.12*
· · · · ·		(1.24)	(1.54)		(1.73)
Turnout		-0.13***	-0.13***		-0.07**
		(0.03)	(0.03)		(0.03)
District FE	Y	Y	Y	Y	Y
Election FE	Υ	Υ	Υ		
County \times election FE				Υ	Υ
Controls		Υ	Υ		Υ
District chars. \times election FE			Υ		Υ
Observations	3,064	3,064	3,064	3,064	3,064
Districts	383	383	383	383	383
Outcome mean	25.49	25.49	25.49	25.49	25.49

Table 2:	Main	results:	the	effect	of	Svensk	raskunskap	on	right-	wing	voting
									()		

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t \operatorname{Post-1927}_t \times \operatorname{Low} \operatorname{ceph}$. index_i + $X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. Regressions include district, election and county-by-election fixed effects as indicated. Time-varying district-election controls and time-invariant characteristics interacted with election fixed effects are included where indicated (see text for details). Standard errors clustered at the level of the district reported in parentheses; *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.

	Dependent variable:										
		IHS(letters) Letters p									
	All	Topic: Race-biol.	Topic: Books	All	Topic: Race-biol.	Topic: Books					
	(1)	(2)	(3)	(4)	(5)	(6)					
Low ceph. index \times post-1927	0.054^{*} (0.030)	0.037^{**} (0.018)	0.031 (0.020)	0.041^{**} (0.020)	0.015^{*} (0.008)	0.014^{*} (0.007)					
District FE	Y	Y	Y	Y	Y	Y					
Election FE	Υ	Υ	Υ	Y	Υ	Υ					
Controls	Υ	Υ	Υ	Υ	Υ	Υ					
District chars. \times election FE	Υ	Υ	Υ	Υ	Υ	Υ					
Observations	3,830	3,830	3,830	3,830	3,830	3,830					
Districts	383	383	383	383	383	383					
Outcome mean	0.197	0.049	0.025	0.050	0.008	0.005					

Table 3: Mechanisms: the effect of *Svensk raskunskap* on direct correspondence

Note: Regressions of the form: Letters_{*it*} = $\gamma_i + \eta_t + \delta_t$ Post-1927_{*t*} × Low ceph. index_{*i*} + $X'_{it}\beta + \epsilon_{it}$. Letters_{*it*} is either the inverse hyperbolic sine of the number of letters sent by district *i* in year *t* (columns 1–3), or the number of letters sent per 1,000 inhabitants (columns 4–6). Low ceph. index_{*i*} is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. Regressions include district and election fixed effects, time-varying district-year controls and time-invariant characteristics interacted with year fixed effects (see text for details). Standard errors clustered at the level of the district reported in parentheses; *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.

		Dependent variable: Vote share of right-wing parties									
	Baseline	Baseline Immigration			library	Funding		Newspaper cov.			
				Ove	rall	Scho	ools				
	(1)	$ \begin{array}{c} \text{High} \\ (2) \end{array} $	$\begin{array}{c} \text{Low} \\ (3) \end{array}$	High (4)	Low (5)	High (6)	$ \begin{array}{c} \text{Low} \\ (7) \end{array} $	$ \begin{array}{c} \text{High} \\ (8) \end{array} $	$\begin{array}{c} \text{Low} \\ (9) \end{array}$		
Low ceph. index \times post-1927	3.41^{***} (0.69)	-0.72 (1.00)	6.45^{***} (1.05)	5.47^{***} (0.79)	1.61 (1.12)	6.63^{***} (0.98)	1.61^{*} (0.92)	5.04^{***} (1.02)	1.99^{*} (1.13)		
District FE	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Election FE	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
Controls	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
District chars. \times election FE	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
Observations	3,064	1,536	1,528	1,512	1,552	1,184	1,880	1,528	1,536		
Districts	383	192	191	189	194	148	235	191	192		
Outcome mean	25.49	29.32	21.64	21.78	29.10	19.90	29.01	23.99	26.99		

Table 4: Mechanisms: insularity, libraries and newspaper media

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t$ Post-1927_t × Low ceph. index_i + $X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. Column 1 reports the baseline result, and remaining column pairs reestimate the same regression using different splits of the full sample (see discussion in Section 4 for details). Regressions include district and election fixed effects, time-varying district-year controls and time-invariant characteristics interacted with year fixed effects (see text for details). Standard errors clustered at the level of the district reported in parentheses; *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.

Appendix A: Additional Figures and Tables



(a) Göteborgs Morgonpost, 26 November 1927



(b) Östersunds-Posten, 29 November 1930

Note: Excerpts of newspaper coverage of race-biological topics, published as indicated. Author's translations of the headlines follow. Panel (a): "Contemporary culture upheld to a significant degree by the Nordic race: A popular version of Svensk Raskunskap and its lessons". Panel (b): "The racial-hygiene problems require a rapid solution". Source: archives of the State Institute for Race Biology.

Figure A1: Coverage of race biology in newspaper media

Figure A2: Examples of right-wing election posters







(b) Conservative Right, 1930s

Note: Examples of right-wing election posters. Panel (a): National Socialist poster from the 1930s. Top of poster reads: "Wake up, Sweden!". Bottom of poster reads: "Away with the class struggle! Forward the National Socialists! The workers of the hand and the mind. Unity and people's community!". Author's translation. Source: Nordiska museet. Panel (b): Conservative Right poster from the 1930s. Poster reads: "Protect your home. Vote decisively with the *borgerliga* [Conservative Right]" Author's translation. Source: Vänersborgs museum.



Figure A3: Robustness – county jackknife

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t \operatorname{Post-1927}_t \times \operatorname{Low} \operatorname{ceph}$. $\operatorname{index}_i + X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. Regressions include district and election fixed effects, time-varying district-year controls and time-invariant characteristics interacted with year fixed effects (see text for details). Each coefficient is from a separate regression where each county has been excluded in turn, as indicated on the vertical axis. The dashed vertical line indicates the coefficient estimate from the unrestricted regression using the full sample. Error bars indicate 90 percent confidence intervals, with standard errors clustered at the level of the district.



Figure A4: Robustness – election jackknife

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t \operatorname{Post-1927}_t \times \operatorname{Low} \operatorname{ceph}$. $\operatorname{index}_i + X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. Regressions include district and election fixed effects, time-varying district-year controls and time-invariant characteristics interacted with year fixed effects (see text for details). Each coefficient is from a separate regression where each election has been excluded in turn, as indicated on the vertical axis. The dashed vertical line indicates the coefficient estimate from the unrestricted regression using the full sample. Error bars indicate 90 percent confidence intervals, with standard errors clustered at the level of the district.

		Dependent variable: Vote share of									
	Farm	ners	Libe	rals	Social I	Democrats	Far	Left			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
Low ceph. index \times post-1927	-2.15^{***} (0.56)	-1.28^{*} (0.74)	-1.46^{**} (0.63)	-0.11 (1.13)	0.13 (0.82)	-1.32 (1.27)	$\begin{array}{c} 0.46 \\ (0.58) \end{array}$	$\begin{array}{c} 0.71 \\ (0.98) \end{array}$			
District FE	Y	Y	Y	Y	Y	Y	Y	Y			
Election FE	Υ		Υ		Υ		Υ				
County \times election FE		Υ		Υ		Υ		Υ			
Controls	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ			
District chars. \times election FE	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ			
Observations	3,064	3,064	3,064	3,064	3,064	3,064	3,064	3,064			
Districts	383	383	383	383	383	383	383	383			
Outcome mean	14.20	14.20	18.18	18.18	35.73	35.73	5.93	5.93			

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Note: Regressions of the form: Vote share_{it} = $\gamma_i + \eta_t + \delta_t \operatorname{Post-1927}_t \times \operatorname{Low} \operatorname{ceph.} \operatorname{index}_i + X'_{it}\beta + \epsilon_{it}$. Vote share_{it} is the vote share of the indicated parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. Regressions include district, election and county-by-election fixed effects as indicated. Time-varying district-election controls and time-invariant characteristics interacted with election fixed effects are included in all regressions (see text for details). Standard errors clustered at the level of the district reported in parentheses; *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.

	Dependent variable: Vote share of right-wing parti							
	(1)	(2)	(3)	(4)				
Low ceph. index \times post-1927	3.41^{***} (0.69)							
Ceph. index (std.) \times post-1927		1.46^{***} (0.31)						
Morph. index (std.) \times post-1927			0.87^{**} (0.34)					
Q2 ceph. index \times post-1927				-1.76 (1.09)				
Q3 ceph. index \times post-1927				1.00 (0.94)				
Q4 ceph. index \times post-1927				(0.80) (0.80)				
District FE	Y	Y	Y	Y				
Election FE	Υ	Υ	Υ	Υ				
Controls	Υ	Υ	Υ	Υ				
District chars. \times election FE	Υ	Υ	Υ	Y				
Observations	3,064	3,064	3,064	3,064				
Districts	383	383	383	383				
Outcome mean	25.49	25.49	25.49	25.49				

Table A2: Robustness – alternative treatment definitions

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t \operatorname{Post-1927}_t \times \operatorname{Treatment}_i + X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of the indicated parties in district *i* in election *t*. Treatment_i are various definitions of treatment, as indicated. Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). Ceph. index (std.)_i is a standardised (mean zero, standard deviation one) version of districts' cephalic indexes, such that larger values indicate more "purely Nordic". Morph. index (std.)_i is a similar variable, using instead districts' morphological indexes. Finally, Q2 ceph. index_i, Q3 ceph. index_i and Q4 ceph. index_i are indicators for districts in the second, third and fourth quartile of the cephalic index distribution. See Section 2 for historical details. All regressions include district and election fixed effects, time-varying district-election controls and timeinvariant characteristics interacted with election fixed effects (see text for details). Standard errors clustered at the level of the district reported in parentheses; *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.

	Dependent variable: Vote share of right-wing parties						
	(1)	(2)	(3)	(4)	(5)	(6)	
Low ceph. index \times post-1927	$3.41^{***} \\ (0.69)$	3.31^{***} (0.70)	3.48^{***} (0.68)	$3.72^{***} \\ (0.70)$	3.40^{***} (0.70)	3.65^{***} (0.71)	
District FE	Y	Y	Y	Y	Y	Y	
Election FE	Υ	Υ	Υ	Υ	Υ	Υ	
Agr. land share $(1927) \times \text{election FE}$		Υ					
Agr. employm. (1920) \times election FE			Υ			Υ	
Ind. employm. (1920) \times election FE				Υ		Υ	
Trade employm. $(1920) \times \text{election FE}$					Υ	Υ	
Controls	Υ	Υ	Υ	Υ	Υ	Υ	
District chars. \times election FE	Υ	Υ	Υ	Υ	Υ	Υ	
Observations	3,064	3,064	3,064	3,064	3,064	3,064	
Districts	383	383	383	383	383	383	
Outcome mean	25.49	25.49	25.49	25.49	25.49	25.49	

Table A3: Robustness – controlling for land and employment shares

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t$ Post-1927_t × Low ceph. index_i + $X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. All regressions include district and election fixed effects, and time-varying district-election controls and time-invariant characteristics interacted with election fixed effects (see text for details). In addition, 1927 agricultural land shares interacted with election fixed effects and 1920 employment shares interacted with election fixed effects included as indicated. Standard errors clustered at the level of the district reported in parentheses; *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.

	Dependent variable: Vote share of right-wing parties								
	Baseline	errors							
	(1)	County (2)	$\begin{array}{c} 100 \mathrm{km} \\ (3) \end{array}$	$\begin{array}{c} 200 \mathrm{km} \\ (4) \end{array}$	$\frac{300 \text{km}}{(5)}$				
Low ceph. index \times post-1927	$3.41^{***} \\ (0.69)$	3.41^{**} (1.42)	$3.41^{***} \\ (1.04)$	$3.41^{***} \\ (1.21)$	$3.41^{***} \\ (1.22)$				
District FE	Y	Y	Y	Y	Y				
Election FE	Υ	Υ	Υ	Υ	Υ				
Controls	Υ	Υ	Υ	Υ	Υ				
District chars. \times election FE	Υ	Υ	Υ	Υ	Υ				
Observations	3,064	3,064	3,064	3,064	3,064				
Clusters	383	24	383	383	383				
Outcome mean	25.49	25.49	25.49	25.49	25.49				
Wild cluster bootstrap p-value		0.03							

Table A4: Robustness – alternative standard error structures

Note: Regressions of the form: Right-wing share_{it} = $\gamma_i + \eta_t + \delta_t$ Post-1927_t × Low ceph. index_i + $X'_{it}\beta + \epsilon_{it}$. Right-wing share_{it} is the vote share of right-wing parties in district *i* in election *t* and Low ceph. index_i is an indicator equal to 1 if district *i* is of below-median cephalic index (and therefore more "purely Nordic" according to the *Institute's* definitions). See Section 2 for historical details. All regressions include district and election fixed effects, and time-varying district-election controls and time-invariant characteristics interacted with election fixed effects (see text for details). Standard errors reported in parentheses. In column 1, standard errors are clustered on the level of the district. In column 2, standard errors clustered on the level of the district; wild cluster bootstrapped p-value from 1,000 repetitions reported in the bottom row of the table (Cameron, Gelbach and Miller, 2008). Columns 3 to 5 implement Conley (1999) standard errors using the acreg package of Colella, Lalive, Sakalli and Thoenig (2019), with distance cut-offs at 100, 200 and 300 kilometres, respectively. *, ** and *** indicate significance at the 10, 5 and 1 percent levels, respectively.