

RESEARCH ARTICLE

The clash of traditional values: opposition to female monarchs

Guoer Liu^{1,*} , Kenneth Mori McElwain²  and Yuki Shiraito³ 

¹Ph.D. Candidate, Department of Political Science, University of Michigan, Ann Arbor, MI, USA, ²Professor, Institute of Social Science, University of Tokyo, Bunkyo, Tokyo, Japan and ³Assistant Professor, Department of Political Science, University of Michigan, Ann Arbor, MI, USA

*E-mail: guerliu@umich.edu

(Received 21 February 2022; revised 16 August 2022; accepted 22 August 2022; first published online 27 September 2022)

Abstract

The revision of sexist laws is complicated not only by disagreements between progressives and traditionalists but also by opposing views held by different types of traditionalists. We design a two-wave list experiment with information treatments to examine public opinion toward reforming the Japanese monarchy's male-only patrilineal succession rule, focusing on two strands of traditionalism: conservatism and sexism. We show that conservatism, not sexism, is associated with stronger opposition to the ascension of female monarchs. Moreover, opinions toward gendered succession rules are hard to dislodge, because they are rooted in deep-held values. Treatments that highlight the capability of female heirs, the rarity of current practices in peer nations, and the perils posed by succession crises fail to change respondent preferences. Our study reveals the discordance within traditional values, and how this can impede efforts to reform statutory gender discrimination.

Keywords: gendered institution; constitutional monarchy; conservatism; sexism; survey experiment; item count technique

Introduction: Pandas and royal persons

Despite significant progress in gender equality, women continue to lag behind men in politics and business. As of 2019, just 24.5% of seats in national parliaments are held by women globally, and only 11.2% of countries have women as heads of state or government (UN Women, 2020). In 2016, there were more CEOs of large US companies who were named John (5.3%) or David (4.5%) than CEOs who were women (4.1%) (Johnson *et al.*, 2016).

Many inegalitarian outcomes persist because of traditional socio-cultural values about women's roles (Inglehart and Norris, 2003). While such values may be deeply rooted, they are not static. For example, improvements in women's economic opportunities can reduce gender gaps in other spheres, such as expectations of household work (Iversen and Rosenbluth, 2010). These normative shifts have made legalized gender discrimination rarer, especially in developed democracies. According to data from the Comparative Constitutions Project, the percentage of constitutions

This article was updated on 30th September 2022.

This work was supported by the University of Michigan Center for Japanese Studies Faculty Research Grant, titled 'Japanese Public Attitudes towards Gender-related Social Conventions.' The study was determined to be exempt from IRB review at the University of Michigan (HUM00173786) and approved by the IRB at the University of Tokyo (Institute of Social Science: 48) and was pre-registered with Evidence in Governance and Politics (EGAP: 20200723AA). We thank Margarita Estévez-Abe, Allen Hicken, Nahomi Ichino, Cecilia Hyunjung Mo, Iain Osgood, Kevin Quinn, Nuannuan Xiang, participants of the Japanese Politics Online Seminar Series and the University of Michigan Interdisciplinary Workshop on Comparative Politics, members of the Ichino Research Lab and the Shiraito Research Group, and three anonymous reviewers.

© The Author(s), 2022. Published by Cambridge University Press on behalf of European Consortium for Political Research. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

prohibiting unequal legal treatment based on gender has increased rapidly from 49% in 1950 to 87% in 2010 (Elkins *et al.*, 2014).

An important exception to this trend is the laws or customs governing succession in constitutional monarchies. As of 2020, thirty states allow for female monarchs while twelve reserve the throne for male royals. Historically, male-only patrilineal primogeniture – whereby the preceding ruler is succeeded by his sons in order of birth, followed by his male siblings through the same father and their descendants – sustained monarchies by reducing the pool of legitimate claimants to the throne and lessening the frequency of violent succession conflicts (Menaldo, 2012; Kokkonen and Sundell, 2014; Acharya and Lee, 2019; Gerring *et al.*, 2021). However, the gendered norms that underlie these rules are controversial today. Many monarchical families survived democratic transitions by accepting symbolic roles and adapting their practices to evolving social values (McDonagh, 2015; Dixon, 2020). Two key changes have been the proscription of plural wives and the removal of cadet family branches. However, these reforms have shrunk the pool of legitimate male heirs, threatening the viability of male primogeniture. The absence of heirs can provoke costly succession crises or even lead to the dissolution of the monarchy itself. Indeed, Mantel (2013), remarking on the difficulties of preserving sufficient heirs to the British monarchy, writes, ‘Pandas and royal persons alike are expensive to conserve and ill-adapted to any modern environment.’

The persistence of male-only succession rules poses a puzzle to existing research on political culture and gender equality. First, resistance to gender neutrality is often based on their redistributive consequences. Women may fight for employment equality or gender quotas in order to improve their professional prospects, while men may oppose it to preserve their privileged position (Hughes *et al.*, 2017). Changes to inheritance order in a royal family, however, only affect the fates of a few children. Political and fiscal consequences are likely to be minimal as well, given the monarch’s purely symbolic role.

Second, opposition to female monarchs cannot be reduced to the political dominance of traditionalists. On the one hand, traditionalists are more likely to desire the preservation of the monarchy than progressives. On the other hand, any plausible solution, such as the ascension of female monarchs or descendants through the maternal line, challenges the core principles that underlie the institution, such as a history of unbroken male lineages. Put differently, monarchical reform is an important case of a ‘*clash of values*,’ wherein institutional survival necessitates the sacrifice of deeply held preferences among those who seek its continuation the most.

We explore the determinants of and resolutions to this clash of values through the case of imperial succession in Japan, focusing on the conflicting priorities of *conservatives* versus *sexists*. The Chrysanthemum Throne is the foremost manifestation of political traditionalism in Japan, but its viability is threatened by the dearth of male children. Three options are currently under deliberation, but each poses an ideological challenge to male-only primogeniture. The first is to allow patrilineal women to succeed to the throne, including the daughter of the current emperor. The second is to accept matrilineal lineage, which would include the (potential) grandson of the current emperor through his daughter. However, those who embrace traditional gender norms may be wary of the ascension of female monarchs or non-male lineage. The third is to reincorporate cadet family branches whose succession rights were stripped in 1947, but this may undermine the legitimacy of the monarchical line.

We examine the palatability of these options, the values that underlie their support, and how these attitudes can be changed, through a two-wave list experiment with intervening information treatments. The list experiment, also known as the item count technique (ICT), is a common approach to eliciting truthful responses on sensitive issues, such as expressing negative attitudes toward a royal person. Using this design, we measure how Japanese citizens would feel if the only daughter of the current emperor, who would be the heir apparent should the first or second reform be adopted, succeeded to the throne. In addition, we estimate separate latent scales for two key flavors of traditionalism – conservatism and sexism. The former concerns preferences for status quo practices and hierarchies, while the latter relates to the perceived competence and appropriateness of women in positions of power.

In the first wave of our list experiment survey, we estimate baseline attitudes to distinct reform options. We find that opposition is greatest for the restoration of cadet lines, and least for allowing female successors. However, respondents with higher conservatism or sexism scores are more likely to oppose the latter than the former, with the pattern being stronger among conservatives.

We then conduct the survey again on the same set of respondents after an interval period. Prior to re-asking the list questions, we randomly assign three information stimuli that are designed to lessen the concerns of conservatives and sexists about a female monarch. These include information about the capability of female successors, the fact that female monarchs are common globally, and the strong possibility that the imperial line will die out. We then estimate whether the treatments influence respondents' preferences regarding reform proposals. We find evidence suggestive of a backlash to the second treatment, although future research with a larger sample is necessary.

This paper contributes to the literature on political values and gendered institutions by revealing a discordance between conservatism and sexism. Institutional survival may necessitate the sacrifice of deeply held preferences among those who seek its continuation the most. In the case of Japanese imperial succession, the persistence of conservative values, not sexism, impedes efforts to reform statutory gender discrimination. The fact that conservatives are willing to sacrifice the paramount institution in political traditionalism to preserve its gendered character suggests that reforms to other symbolic institutions may face similarly strong opposition. The lack of substantive or material stakes may make it harder to mobilize reformists, enabling ideological conservatives to block changes to the status quo.

The remainder of this paper proceeds as follows. The section 'Gendered institutions and clash of values' reviews the literature on gendered institutions and explains our thesis concerning the clash of values. 'Monarchical succession and the case of Japan' explores the history and function of monarchies, both globally and in Japan, and how these connect to our experimental design. 'Experiment design' describes our survey instruments, and 'Results: who opposes changes to succession rules, and why?' presents the results of the two-wave experiment. We end the paper with a discussion about the future of monarchical succession in Japan, as well as the relevance of our research to the broader literature on political values and gendered institutions.

Gendered institutions and clash of values

Social structures have long differentiated women versus men's identities, expectations, and behaviors (Acker, 1992). While explicit sexism is increasingly frowned upon in many societies, it is not difficult to justify *de jure* laws and *de facto* practices based on religious or ideological principles. Nelson and Bridges (2003) writes that male-female earning differentials persist because employers deny organizational influence to those in predominantly female jobs. Franceschet (2011) argues that legislators assign lower priority and stature to representatives who work on 'women's issues'. As Dalton *et al.* (2020) notes, discrimination with respect to employment or inheritance functionally reproduces men's status quo advantages.

The survival of explicit gender discrimination is typically connected to clashes in social values between progressives and traditionalists (World Bank, 2011). However, this bimodal separation is arguably simplistic, as traditionalists are not a unified bloc. Some are 'conservatives' who oppose drastic social changes, particularly when imposed by the state. This belief may be rooted in a respect for time-tested traditions and a libertarian tolerance of inequality that is attributed to free market capitalism (Jost, 2017). The psychology literature also points to status-legitimizing ideologies that justify unequal opportunity structures (Duckitt and Sibley, 2010; Hodson *et al.*, 2017). For example, those who evince social dominant orientations support hierarchies that distinguish between 'superior' and 'inferior' groups, with status quo elites categorized in the former. Even within majority groups, right-wing authoritarian attitudes, or a conformist preference for collective security, are associated with prejudice against in-group members who threaten traditional

norms and authorities. Conservatives may thus resist social reforms that destabilize status quo power structures, whether these relate to gender or race or wealth.

Other traditionalists are ‘sexists’ who may be open to social transformation as long as it does not involve gender. Values relating to gender are complex, but generally pertain to views about the fitness and appropriateness of men versus women to serve distinct social functions. Glick and Fiske (1996) notes an important distinction between ‘hostile’ versus ‘benevolent’ sexism. The former represents antagonistic attitudes toward women and those who challenge prevailing gender roles. The latter, by contrast, reflects paternalistic ideas about women’s role in society, such as a belief in women’s greater purity and their need for men’s protection. Beauregard and Sheppard (2021) shows that benevolent, but not hostile, sexists are more likely to support gender quotas in order to bring ‘women’s perspectives’ into policymaking.

While conservatism and sexism are correlated (Austin and Jackson, 2019), socioeconomic and socio-cultural values do not inherently overlap. As such, competing priorities among these subgroups, which we term ‘clashes in traditional values,’ can impede reform initiatives, to the point where the long-term viability of the practice or institution in question is threatened. Even if citizens embrace equality as an ideal, they may nevertheless reject the means through which it might be addressed. For example, small government conservatives may disagree with pro-egalitarian measures such as gender quotas, not (necessarily) because they are sexist, but because of concerns about granting the government powers to intervene in private sector decisions. In the context of race, past studies have shown that opposition to affirmative action is a joint function of prejudice toward minorities and the perceived appropriateness of government intervention (Sniderman *et al.*, 1993; Kinder and Sanders, 1996).

An oft-discussed example of how traditional values can impede gender neutrality is the failure of the Equal Rights Amendment (ERA) to the United States Constitution. Proposed by Congress in 1971, the ERA would prohibit federal and state governments from denying equal rights under the law on account of sex and give Congress the power to enforce this provision through legislation. Despite broad public support and super-majorities in the House and Senate, it was only ratified by 35 out of the 38 states necessary. Manfredi and Lusztig (1998) argue that the ERA’s defeat was due not to public opposition to its goals, but to fears of its redistributive consequences. For one, it could expand the federal government’s power to regulate employment, which was anathema to conservatives and corporate interests. For another, it could allow women to serve in the military equally and influence maternal rights (including *Roe v. Wade*), which ran contrary to traditional notions of gender. Because the effects of the ERA on other legislation was unclear, and because the high hurdle for constitutional amendments made any changes hard to reverse, the bill did not pass.

The ERA’s failure illuminates the ways in which distinct strands of traditionalism can hinder reforms that require compromises to ideological or normative principles, particularly when their long-term consequences are uncertain. However, reforms whose material beneficiaries are minuscule constitute a different type of case. Extending full rights to small groups is unlikely to disadvantage most current beneficiaries, and so public sentiment is more likely to be based on normative principles. A clear example is reforming monarchical succession, specifically male-only primogeniture which restricts succession to living sons and their male offspring. Granting inheritance rights to sisters and daughters would not alter the odds that non-royal family members, that is, almost the entirety of society, can accede to the throne. Why, then, does this rule persist?

Monarchical succession and the case of Japan

Although absolute monarchies have become rare,¹ ‘royal families’ have not died out. There are currently 43 *constitutional* monarchies, where elected leaders have discretion over the foreign

¹According to data from Gerring *et al.* (2021), the proportion of absolute monarchies among all regime types fell from 76.4% in 1851 to 24.5% in 1950 and 7.6% in 2017.

and domestic functions of the government, but monarchs serve as nominal heads of state.² Their resilience is tied to the historical legacy of royal lines as familial foundations of the state (McDonagh, 2015). Monarchs continue to serve as national symbols and spokespersons during and after natural disasters and wars. Their faces are profiled on currency and their names are attached to universities and buildings. As with other civic or religious traditions that are celebrated across generations, royal families are living reminders of their nation's founding and unity. Because monarchs are expected to be removed from partisan conflicts and electoral politics, their symbolic legitimacy carries great weight even in democracies (Dixon, 2020).

Because constitutional monarchs depend on public acceptance, they cannot ignore modern social norms. This has put rules of male-only patrilineal succession in the crosshairs. Male succession was historically legitimized by a number of biases: that women were less intelligent; that women were more likely to obey their husbands, making marriages to foreign princes problematic; that only men received military training, making them more capable as heads of state (Corcos, 2012). Where social norms shifted toward gender equality, however, male-only succession became harder to justify, and switches to absolute primogeniture (succession by eldest child regardless of gender) became common. Sweden was the first country to amend its Act of Succession to absolute primogeniture in 1980. The Netherlands followed in 1983, and then Norway in 1990, Belgium in 1991, Denmark in 2009, Luxembourg in 2011, and the United Kingdom in 2013. Others, such as Tonga, Spain, and Monaco, employ male-preference primogeniture, which does not exclude sons born from female heirs (matrilineal succession) or daughters in the absence of male-line sons. By contrast, Liechtenstein, Lesotho, and Japan still require monarchs to be male descendants of kings.

Given the strides made toward gender egalitarianism in civil-political rights and socioeconomic opportunities, the survival of male-only succession in some constitutional democracies, but not others, is puzzling. Western cases suggest the importance of critical junctures. One, as seen in Sweden and the United Kingdom, is the impending marriage of crown heirs and the births of next-generation royals, which prompts national soul-searching and institutional change. Non-reforms also speak to the importance of context, particularly the sequence of children's gender. Spain has employed male-preference primogeniture since 1812. Corcos (2012) discusses failed law suits filed against this rule in domestic and international courts, but the matter became moot when then Crown Prince Felipe VI had no sons. In effect, once a decision to reform (or not) status quo practices is made, the urgency for further changes wanes until questions about the youngest generation's succession arise.

This makes Japan, where there is a dearth of patrilineal sons, an excellent laboratory to test whether tensions between the reverence of tradition and need for monarchical reform can be resolved. Because decisions about succession rules tend to be baked in for one generation or more, studying the issue as it is being debated is crucial to understanding how the public views the survival of constitutional monarchies.

'The Y-chromosome must be royal'³

The Japanese Imperial House is facing a long-term crisis due to the current male-only patrilineal succession law.⁴ Because the current Emperor Naruhito's only child, Aiko, is a daughter, the heir presumptive is his younger brother, Fumihito. Fumihito has a son, Hisahito, who was born in 2006 and is the only male in the next generation of the Imperial House. Hisahito, still a teenager, may have male children in the future. But if not, there will be no heirs under the status quo.

With this danger to monarchical survival, the Japanese Diet urged the executive branch to compile proposals for succession law reforms in 2017, when they approved the previous emperor's

²This number includes Commonwealth realms, but excludes absolute monarchies, such as Oman and Saudi Arabia.

³We thank Amy Catalinac for pointing to the existence of this phrase.

⁴See Supplementary Information (SI) A for more detail.

abdication. Two options have been discussed publicly. One is to extend the right of succession to current female Imperial House members and their descendants. Since both Naruhito and Fumihito have unmarried daughters, this reform would increase the number of descendants in the line of succession from one to three and create two additional succession lines.⁵

The alternative advocated by some conservative politicians is to sustain male-only patrilineal succession by re-incorporating male descendants of those who became commoners in 1947. While the imperial line historically included cadet branches, these were formally excised during the Allied Occupation after World War II. Those who support this proposal claim that the imperial male line has never been broken and that its continuation is essential to the Imperial House. Whether rhetorically or seriously, these proponents maintain that all emperors have carried identical Y-chromosomes for over a thousand years (Cyranoski, 2006). They thus insist that succession should be limited to male descendants of male emperors, as female descendants and their sons lack the imperial Y-chromosomes.

Conservatism, sexism, and the Chrysanthemum Taboo

While traditionalists broadly want to uphold the Imperial House, the succession issue is an iconic example of political dilemmas caused by the clash between two traditional values. On the one hand, accepting female emperors and/or their offspring is opposed by sexists. On the other hand, granting succession rights to de facto commoners undermines the historical sanctity of the imperial line, which conservatives oppose. It should be noted that these two values are not completely independent, as support for status quo practices implies a tolerance, if not a preference, for gender inequalities. The political psychology literature notes that sexism correlates with conservatism and anti-egalitarianism, and that political ideology is a strong predictor for not just sexism, but also racism and homophobia (Hodson *et al.*, 2017; Jost, 2017; Austin and Jackson, 2019). Because the distinction between conservatism and sexism may differ at the elite and mass levels, as well as across national contexts, let us expand on the current political context in Japan.

Preferences for the two reform options manifest along partisan grounds, particularly at the elite level. Postwar Japanese politics has been dominated by the conservative Liberal Democratic Party (LDP), which has been in government for all but four years since its founding in 1955. On nationalist issues, the party has long advocated a hawkish foreign policy, including amending Article 9 of the national constitution, which proscribes a formal military (McElwain, 2020). Focus on ideological issues has increased since the 1990s, due to changes in the electoral system (Catalinac, 2016) and party leadership primaries (Sasada, 2010) that emphasized programmatic policy competition. On socio-cultural matters, the LDP has been staunchly traditionalist: it is in favor of elevating the role of the family (over individuals) in social affairs, and of emphasizing the emperor's symbolic role as head of state. It has also opposed progressive social reforms, such as allowing married couples to adopt separate surnames or extending marriage and welfare rights to LGBTQ+ couples. These are reflected in its parliamentary representation: the LDP nominates very few women in elections, including just 9.8% in the 2021 lower house election.

Regarding the long-term viability of the Imperial House, LDP members include vocal supporters of reincorporating former cadet branches. According to the 2019 University of Tokyo-Asahi Survey (Taniguchi and the Asahi Shimbun, 2019) of Upper House election candidates, 30% of LDP candidates supported the reintroduction of ex-imperial descendants, compared to 13% of all others. On allowing female emperors, the numbers were 32 and 70%, respectively. However, the LDP has stopped short of making any concrete proposals, either in parliament or in election manifestos.

⁵Under the current law, female members leave the Imperial House when they marry commoners. Fumihito has two daughters, but the elder married in October 2021. Naruhito and Fumihito have three unmarried female second cousins who are still in the Imperial House, although they are unlikely to succeed the throne under any proposed reform.

Whether and how the Imperial House Law is amended will be shaped by public opinion. As discussed above, constitutional monarchies depend on citizens' veneration for their survival. Indeed, Ruoff (2020) writes that the imperial family has striven to cast itself as a model 'middle-class' household in the postwar period. While governments may hesitate to push changes that may cost them in elections, the conservative LDP may be more attentive to the preferences of their traditionalist base, making the 'clash of values' particularly salient to future debates.

That said, the public's views on whether and how to reform imperial succession is not easy to assess. Japan is a laggard on most metrics of socioeconomic and political gender equality, ranking 120th among 156 countries in the World Economic Forum's Gender Gap Index in 2021. However, surveys that inquire about monarchical reforms are rare. One reason is the 'Chrysanthemum Taboo'. *Lèse-majesté* laws were abolished after WWII, and courts have upheld the right of free expression regarding the monarchy. However, extreme rightist groups have threatened, and in some cases carried out, violence against critics of the imperial system (Ruoff, 2020). The mass media, which has been the frequent target of such threats, has self-regulated coverage of imperial matters, including critical commentary about individual imperial family members.

Citizens' stated attitudes may also be subject to social desirability biases, albeit in two opposing directions. On the one hand, there may be hesitation toward voicing criticism of the Imperial House, even in an anonymized setting. On the other hand, there may be implicit psychic pressure to support female emperors on grounds of political correctness. Both constraints suggest that we may not be able to assess preferences toward reforming imperial succession using traditional survey methods.

Experiment design

To elucidate which values are in conflict over changes to imperial succession rules, and what factors can mitigate hesitance to institutional reform, we conduct an original two-wave survey experiment with information treatments. This unique design is intended to (1) mitigate the social desirability bias when estimating attitudes to sensitive topics, (2) explore the salience of two traditional values – sexism and conservatism – that underlie sensitive attitudes, and (3) estimate the effect of information treatments. We use the ICT to elicit truthful attitudes toward royal persons, and randomly assign information treatments in the second wave to identify the causal effect of the treatments on those sensitive attitudes. In short, our experiment is a factorial design in which the assignment of list questions and the information treatments are independent of each other.

Item count technique

Given the subject matter of our study, the primary hurdle is inquiring about the desirability of succession by particular members of the imperial family. Amendments to the Imperial House Law are inherently personal, in that they change the status of specific royal persons. Emperor Naruhito's only daughter, Aiko, is practically the only person whose inheritance status would be affected by the abandonment of male-only rule. Thus, voters' attitudes toward reforms should not be decoupled from their opinions about her. Given the Chrysanthemum Taboo, there is likely to be social desirability bias for expressing attitudes toward royal persons. Accordingly, we use ICT to measure respondents' true preferences.

The ICT elicits truthful answers by concealing respondents' item-specific answers from researchers (Miller, 1984; Blair and Imai, 2012). Instead of asking directly about respondents' attitudes toward imperial succession, we ask them to provide the total number of items that upset them.⁶ Individual respondents' true preferences are hidden from the researchers: we

⁶We used a Japanese translation of the term 'upset' instead of 'refuse' or 'oppose.' Political scientists have used 'upset' in list experiments to measure sensitive attitudes such as racial prejudice (Kuklinski *et al.*, 1997). Moreover, because the latter two terms in Japanese represent strong negative sentiment, respondents would not think that items including those words apply to them unless they have exceptionally strong attitudes.

only observe the *total number* of affirmative answers to a list of statements, not whether a respondent has answered affirmatively to the sensitive statement specifically. Respondents are randomly assigned to lists that include the sensitive item and to lists that do not. Due to randomization, the difference in the number of items selected between these lists is an unbiased estimator of the prevalence rate of agreement with the sensitive item. ICT has been used to measure attitudes that respondents are expected to hide, such as discrimination against African-Americans in the USA (Kuklinski *et al.*, 1997) and support for combatants during wartime in Afghanistan (Lyll *et al.*, 2013).

Figure 1 provides a specific example comparing information presented to respondents in the *sensitive group* and *non-sensitive list* groups. The non-sensitive items were selected to be sufficiently controversial and negatively correlated, so as to avoid the list experiment's potential floor and ceiling effects (Blair and Imai, 2012; Glynn, 2013). Because considering either zero or all of the statements as upsetting will reveal respondents' attitudes toward the sensitive item, respondents may obscure their true response, defeating the purpose of the ICT design.

Our survey estimates attitudes to reforming rights of succession through four sensitive items. Two reference Aiko, the current emperor's daughter, directly: one on Aiko replacing her uncle as the next emperor (i.e. absolute primogeniture), and the other about Aiko's hypothetical son ascending the throne in the future (i.e. matrilineal lineage). We include a third, more abstract, item that an unspecified female emperor ascends to the throne. We also measure respondents' attitudes toward giving succession rights to descendants of pre-1947 Imperial House members to sustain male-only patrilineal primogeniture. Unfortunately, because there are no public figures among these descendants, we cannot name them directly, as we do with the Aiko items. Translated texts of the four sensitive items are as follows:

1. *Princess Aiko*: The next Emperor will be Princess Aiko, the daughter of the Emperor, instead of Prince Akishino, his younger brother.
2. *Female Emperor*: In the future, a female emperor will succeed the throne.
3. *Aiko's Son (Hypothetical)*: If Princess Aiko, the daughter of the Emperor, has a son in the future, that child will have the right to succeed the throne.
4. *Imperial Descendant*: The descendants of the imperial family, who have lived as ordinary people since the end of World War II, gain the right to succeed the throne.

The complete ICT questions, including the non-sensitive items, can be found in SI C.

Measuring conservatism, sexism, and other covariates

A central theoretical interest of this paper is to understand how the 'clash of traditional values', notably conservatism versus sexism, influences acceptance of distinct imperial reform proposals. Because these values are fundamental dispositions that underlie preferences on specific issues, they are best estimated as latent, multi-dimensional variables. Partisanship – a common indicator for social or ideological attitudes – is too blunt, as it subsumes both conservatism and sexism. At the same time, motivated partisan reasoning can prompt respondents to support or oppose specific policies, not because of value-based agreement, but because these are the positions of preferred parties.

Our strategy is to estimate these values separately, using pre-treatment (Wave 1) question batteries that were designed to distinguish between them. We use Bayesian factor analysis for ordinal response (Quinn, 2004) to compute a sexism score and conservatism score for each individual. Compared with traditional factor analyses, the Bayesian model is better suited when mixing ordinal and continuous data and allows us to easily calculate posterior quantities of interest.⁷

⁷We use the MCMCordfactanal function from the MCMCpack package (Martin *et al.*, 2011).

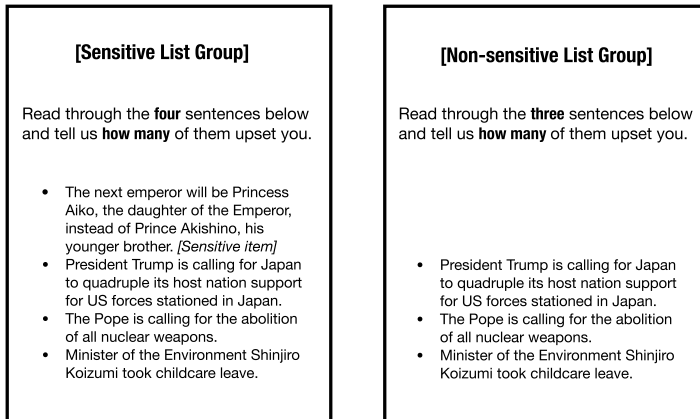


Figure 1. An example of the item counting technique (list experiment).

We use four items related to political ideology in Japan to generate our conservatism scale. Conservative values cannot be separated from gender egalitarianism, including a wariness toward policies related to affirmative action, childcare, or equal employment and pay (Miura, 2012). However, incorporating these topics in our conservatism scale risks excessive overlap with our sexism variable. Accordingly, we asked questions to assess more nationalist and status-quo oriented attitudes underlying conservatism in Japan, as discussed in the section ‘Conservatism, sexism, and the Chrysanthemum Taboo’. These include items that previous studies have identified as relevant: nationalistic education, patriotism, constitutional amendment, and social order (Taniguchi, 2020; Miwa *et al.*, 2021). A one-dimensional scale summarizes the latent concepts of conservatism underlying the four items well.

To capture both benevolent and hostile sexism, we construct our sexism score using a battery of six questions from the Japanese translation of the Ambivalent Sexism Inventory (Glick and Fiske, 1996; Ui and Yamamoto, 2001). As with our conservatism measure, the one-dimensional score effectively summarizes the six items well.

We also collected additional demographic and attitudinal information of interest prior to treatment assignment. Demographic variables include Age decile, a binary *Female* indicator, and a binary *College* indicator (attended university of not). We also measure partisanship with a binary indicator, *LDP*, which equals 1 for LDP supporters, and 0 otherwise. SI E presents all items used to construct the latent measures.

Information treatment

Another key element in our research design is the information treatments. Immediately before answering the list questions in the second wave, we randomly assigned respondents to one of the following four groups with equal probability. Each group was shown different information relating to the imperial family. Three treatment arms were designed to alleviate distinct concerns among traditionalists about changing male-only patrilineal succession.

First, those who embrace traditional gender norms may have misgivings about the capability of women to fulfill the symbolic functions of the emperor. These include ceremonial state visits overseas, hosting international dignitaries, and embracing Japanese arts and customs. Accordingly, the *Capability* treatment (Figure 2a) shows Princess Aiko’s personal achievements, including her fluency in English and skills in calligraphy and music, to assuage concerns that women may be incapable of performing the emperor’s symbolic roles.

(a)



These three photographs feature Aiko, the daughter of the current Emperor. Left: Calligraphy written by Aiko in 2016, when she was a first-year middle school student; Top right: Playing the cello in the Gakushuin Orchestra in 2017; Bottom right: conversing in English with the actor Francesca Hayward during the premiere of the movie *Cats* in 2020.

Capability Treatment

(c)



This figure shows the family tree of the imperial household. Because imperial succession is currently limited to men from the paternal line, the right of succession is limited to the three persons whose headshots are in the orange background, out of the 18 living members (names bolded). Of the three, only one person is from a younger generation than the current Emperor.

Necessity Treatment

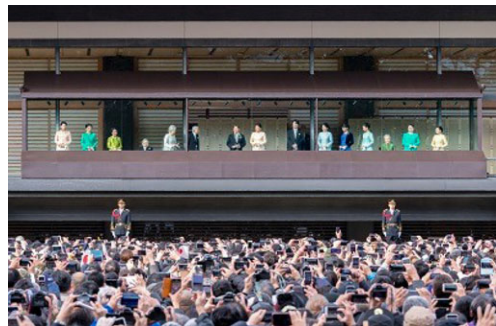
(b)

Political System		Democracy	Dictatorship
Succession Rule			
No gender restriction	England Denmark Sweden Netherlands Monaco	Norway Spain Belgium Luxembourg	
Males given priority over females	Tonga		Thailand Bhutan
Only males eligible	Lesotho Liechtenstein	Japan	Kuwait Bahrain Oman Morocco Saudi Arabia United Arab Emirates Cambodia Jordan Qatar Eswatini

This table shows the regime type and rules of succession of monarchical nation-states around the world. Japan is located in the bottom-left cell, and it is a rare exception among democracies in having a male-only succession rule, which is more common among autocracies.

Global Practice Treatment[†]

(d)



This photograph features the New Year's public palace visit of 2020. New Year's Day in 2020 was the first New Year's public palace visit since the current Emperor ascended to the throne. The Emperor and Empress are at the center and the other imperial household members are around them.

Control

Figure 2. Treatment information. Subfigures (a), (b), (c), and (d) are three treatments and the control, respectively. Respondents assigned to each group saw the image along with the captions in Japanese.

[†]We realized an error in this table after fielding the survey. Spain and Monaco should be in the row, 'Males given priority over females.'

Second, while conservatives may disapprove of reforms that reflect progressive values and change the status quo, they would also like to sustain the Imperial House in the long run. Therefore, we expect those who espouse politically conservative values to be less opposed to gender-neutral primogeniture when they are told that the male line of imperial succession is endangered. The *Necessity* treatment (Figure 2c) displays the imperial family tree and emphasizes the dearth of male successors today compared to previous generations.

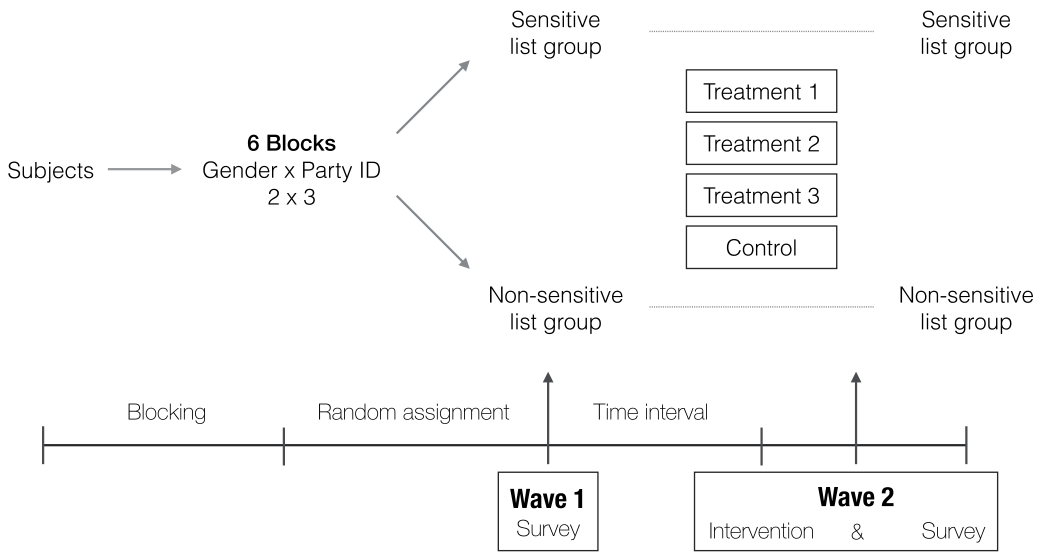


Figure 3. Research design.

Finally, the *Global Practice* treatment (Figure 2b) shows the rarity of male-only succession among other constitutional monarchies and emphasizes Japan’s outlier status. We hypothesize that this treatment may assuage concerns among both types of traditionalists. The fact that most peer countries allow female monarchs may prompt sexists to put aside fears about the intrinsic capabilities of women. Among conservatives, this treatment may engender the sense that female monarchs are common solutions to ensuring stable royal succession, particularly among peer democracies.

The *Control* (Figure 2d) presents a distant-view photograph of *Shin-nen Ippan Sanga* (Citizens’ New Year Greetings to the Imperial Family). This event is a well-known tradition in Japan that involves the imperial family. The photograph include all adult members of the imperial family, but it does not contain other national symbols. SI F presents further details on the treatment information.

Protocol

Since the design consists of two experimental components, one being the list experiment and the other being the random assignment of information treatments, we use the following nomenclature. Respondents who receive list questions with the sensitive items are the *sensitive list group*, those who receive list questions without the sensitive items are the *non-sensitive list group*, those who were assigned to one of the information treatment arms are the *treatment group*, and those who were assigned to the control are the *control group*. Figure 3 illustrates the full workflow of our experimental design.

Survey wave 1. Respondents were recruited from the national sample pool of Nikkei Research,⁸ a prominent survey vendor in Japan, between July 27th–31st, 2020. There are 5442 valid respondents in this wave. We employed quota sampling by age (20–69), gender, and region to match the most recent national census distribution. We used a block randomization scheme for treatment assignment, based on respondents’ *gender* (two levels) and *party identification* (three levels).⁹ Within each block, half of the respondents were assigned to the *sensitive list group* and received

⁸Nikkei Research (English website): <https://www.nikkei-r.co.jp/english/>

⁹The three levels are respondents who 1) identified as LDP supporters, 2) identified with none of the existing political parties, and 3) chose a non-LDP party.

the questionnaire *with* sensitive items in the list questions. The other half were assigned to the *non-sensitive list group* and received the questionnaire *without* sensitive items in the list questions. Each respondent saw all four list questions, but they were shown on separate pages in a random order. The ‘next page’ button on each page was hidden for 5 seconds so that respondents could not click through. SI B explains in detail how the sensitive and non-sensitive were selected, and how each list question is constructed.

Time interval. Respondents were not contacted by the research team between August 1st, 2020 and August 20th, 2020. The 20-day gap is enough spacing for memory on Wave 1 to decay (Hill *et al.*, 2013) and minimize within-subject spillover in the second wave.

Survey wave 2. All respondents from the first survey wave were invited to participate in the second wave between August 21st–24th, 2020. 3156 responses were valid and entered the analysis. Before answering the second wave survey, they were randomly assigned by Qualtrics to one of four groups (three treatment arms and one control). The informational intervention was randomized completely, that is, treatment assignment was *independent* of whether respondents answered the sensitive or non-sensitive lists in Wave 1. Respondents saw only one of the subfigures in Figure 2 after assignment. They could not click through to the following page until 20 seconds had passed, so as to better ensure that they would read the treatment/control information carefully. Each respondent then proceeded to the second wave survey questions. Respondents in the *sensitive list group* were assigned to the same group in this round, as were those in the *non-sensitive list group*. In other words, identical list questions were used in the first and second waves.¹⁰

Estimation

Our analyses proceed in two steps. First, we use the standard ICT analysis to estimate the baseline prevalence rate from the first wave survey (Imai, 2011; Blair and Imai, 2012).¹¹ The goal is to examine the extent to which respondents oppose different monarchical reform proposals, and how these attitudes vary across key subgroups, including between conservatives and sexists. The results for this analysis are presented in the section ‘Who opposes women’s succession?’ below.

Next, we estimate the effect of information treatments on sensitive attitudes by a difference-in-difference-in-differences estimator, whose results are shown in the section ‘What factors sway public attitudes?’, using responses from both survey waves. The estimator first computes the difference-in-differences estimates based on two survey waves and the information treatment within each list group, and then takes the difference in the diff-in-diff estimates between the sensitive and non-sensitive list groups. Formally, our estimator denoted by $\hat{\tau}$ is defined as:

$$\hat{\tau} \equiv \left\{ \left(\frac{\sum_{i=1}^N Y_{i2} D_i T_i}{\sum_{i=1}^N D_i T_i} - \frac{\sum_{i=1}^N Y_{i1} D_i T_i}{\sum_{i=1}^N D_i T_i} \right) - \left(\frac{\sum_{i=1}^N Y_{i2} (1 - D_i) T_i}{\sum_{i=1}^N (1 - D_i) T_i} - \frac{\sum_{i=1}^N Y_{i1} (1 - D_i) T_i}{\sum_{i=1}^N (1 - D_i) T_i} \right) \right\} - \left\{ \left(\frac{\sum_{i=1}^N Y_{i2} D_i (1 - T_i)}{\sum_{i=1}^N D_i (1 - T_i)} - \frac{\sum_{i=1}^N Y_{i1} D_i (1 - T_i)}{\sum_{i=1}^N D_i (1 - T_i)} \right) - \left(\frac{\sum_{i=1}^N Y_{i2} (1 - D_i) (1 - T_i)}{\sum_{i=1}^N (1 - D_i) (1 - T_i)} - \frac{\sum_{i=1}^N Y_{i1} (1 - D_i) (1 - T_i)}{\sum_{i=1}^N (1 - D_i) (1 - T_i)} \right) \right\} \tag{1}$$

¹⁰The attrition rate is 46.1%, which is comparable to other multi-wave online surveys in Japan according to Nikkei Research. We did not find any correlation between dropout status and response to list questions in Wave 1, making us less concerned about self-selection problems. See SI K for more information.

¹¹The analysis is performed using the `ictreg` function in the `list` package version 9.2 (Blair and Imai, 2010).

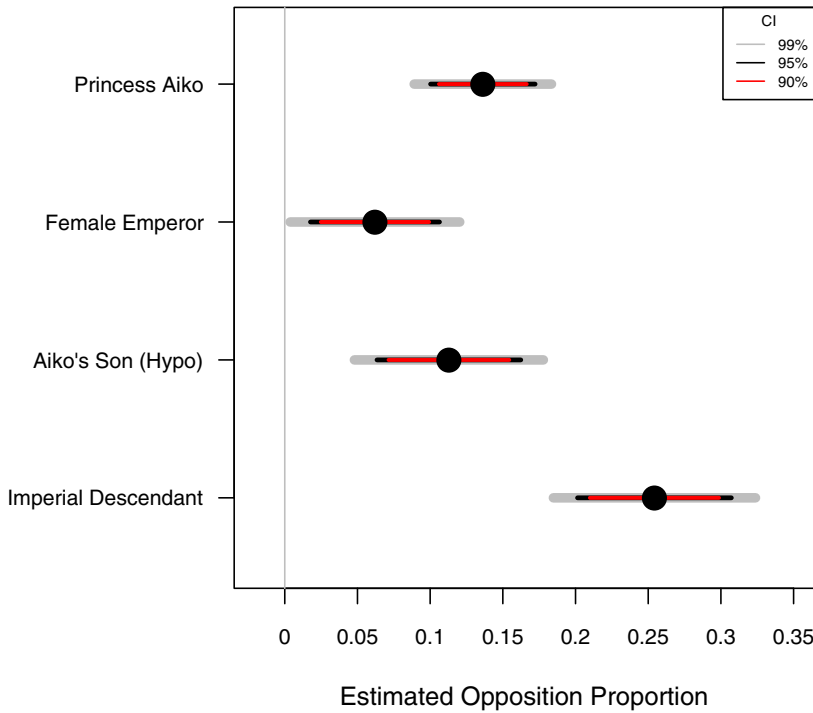


Figure 4. Estimated proportion of population who are upset by the four sensitive items. 90%, 95%, and 99% asymptotic confidence intervals are represented by red lines, black lines, and gray lines, respectively.

where i denotes respondents, D_i is the information treatment indicator, $T_i \in \{0, 1\}$ denotes the sensitive list status with $T_i = 1$ indicating the sensitive list, Y_{ij} is i 's response to the list question in wave j . Under the standard assumptions¹² of list experiments, we can point identify the average treatment effect with list design. (See proof in SI J).

We use nonparametric bootstrapping with a thousand replications to compute the standard errors and construct confidence intervals of the point estimates, as it is more accurate in small samples than closed-form asymptotic inferences (Gonçalves and White, 2005).¹³

Results: who opposes changes to succession rules, and why?

We first describe baseline attitudes toward reforming rules of imperial succession, using responses to the first-wave list questions. We also estimate differences across subpopulations, focusing on variations by our conservatism and sexism scores. Finally, we examine the effects of the information treatments on these attitudes, utilizing responses from both survey waves.

Who opposes women's succession?

Figure 4 presents the results from the standard list experiment in the first wave ($n = 5442$). Each estimate denotes the proportion of respondents who are upset by the sensitive statement. All estimates are positive and statistically significant from zero, suggesting that a non-negligible

¹²There are three assumptions: 1) randomization, 2) no design effect, and 3) no liar. See Imai (2011) for more details.

¹³We derived the asymptotic variance estimator in SI I.

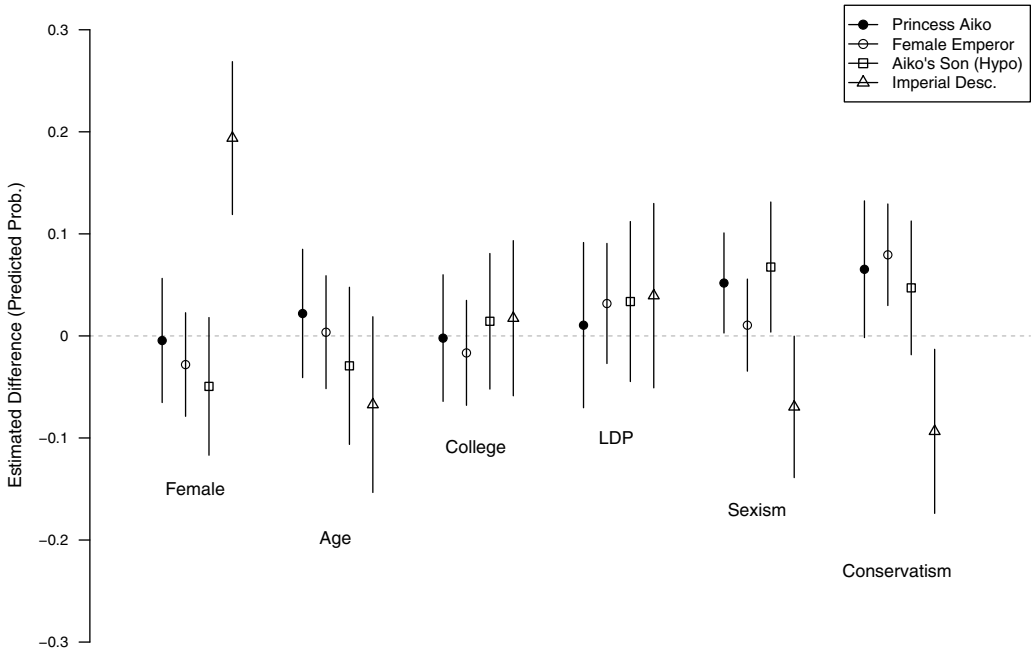


Figure 5. Estimated difference in the average predicted probabilities of being upset by the four sensitive items between sub-populations. Solid circles represent the sensitive item *Princess Aiko*, open circles represent *Female Emperor*, open squares represent *Aiko's Son*, and open triangles represent *Imperial Descendants*. The solid lines represent 95% asymptotic confidence intervals.

proportion of the general population opposes all four solutions to Japan's succession crisis. *Imperial Descendant*, or giving succession rights to far-flung descendants of the imperial family, elicits the strongest opposition, estimated at 0.254 (SE 0.027). This option is considered to be the only solution to preserving the male-only patrilineal succession rule. The least controversial is *Female Emperor*, or permitting the ascension of a female emperor in principle (0.062, SE 0.023), although the more specific case of granting eligibility to Aiko (*Princess Aiko*) is less popular (0.136, SE 0.018). Allowing Aiko's hypothetical son to inherit the throne (*Aiko's Son*), which would expand the pool of male successors by accepting matrilineality, has an estimated opposition of 0.113 (SE 0.023). In short, it appears that respondents would prefer to keep the imperial family as is, but allow for changes to the male-only or patrilineality requirements.

While these estimates provide a snapshot of social attitudes, of greater interest is *who* favors or opposes changes to succession rules. Figure 5 presents estimated sub-population differences in proportions who are upset by each sensitive item. Our primary factors of interest are latent sexism and conservatism, but for reference, we also show differences by gender (female or not), age (above 60 or in their 30s), educational attainment (university-educated or not), and party identification (LDP supporter or not). Positive values indicate that sub-population is more likely to oppose a particular statement.

Beginning with demographic characteristics, we find that female respondents are more likely to oppose the restoration of far-flung imperial descendants (open triangle). The estimated difference is positive and statistically significant, meaning that a higher proportion of women are upset by this statement than men. Regarding age, respondents in their sixties and above are less likely to be upset than those in their thirties and below, although the estimates are not statistically significant. We find no consistent differences between those who are university educated or not, or between those who support the ruling LDP or not.

Our key interest is to examine whether the level of opposition varies based on respondents' *sexism* and *conservatism* – the core traditional values that are in tension with respect to imperial succession. Figure 5 shows differences in attitudes between those who score one standard deviation above and below mean scale values. The results indicate that sexism and conservatism are associated with different levels of opposition to the sensitive items. First, both groups are less upset by the restoration of imperial descendants. Since this option is most likely to preserve 'traditional' male-only patrilineal succession, it is not surprising that these latent dimensions are associated with greater acceptance. Second, conservatives are more likely to oppose having a *female emperor in principle* (open circle), while those with higher sexism scores are more likely to oppose having a female emperor *in the concrete case of Aiko* (solid circle). Further, among those with higher sexism scores, we find greater opposition to the succession of Aiko's hypothetical son (open square) than among conservatives. The results generally hold after adjusting for multiple hypothesis testing (see SI H for more details).

The baseline analysis suggests that while those who score high in conservatism and high in sexism are unified by their support for the status quo male-only patrilineal succession, there is a schism between the two subgroups. Conservatives seem to prioritize the male-only principle over patrilineality. Sexists are more likely to oppose changes when specific female figures are evoked.¹⁴

What factors sway public attitudes?

Next, we examine the degree to which these attitudes are malleable versus ingrained. As noted above, our three information treatments are designed to address underlying concerns about abandoning male-only patrilineal succession. Because these treatments emphasize different facets and consequences of changing succession rules, we also expect them to have non-uniform effects on attitudes toward the four sensitive items.

Figure 6 shows the effects of the three treatments estimated by the diff-in-diff-in-diff estimator defined by Equation (1). None of the treatments produces a statistically significant effect on any sensitive items, but the directions of the effects are informative. First, the *Capability* treatment's point estimates are in the expected directions on the *Aiko* and *Imperial Descendant* items. Information about Aiko's capability reduces opposition to her enthronement but increases opposition to measures that preserve male-only patrilineal succession, which are both expected. The estimated effects of this treatment on the other sensitive items are in the opposite direction from expectation, although none is statistically significant at the 5% level.

Second, there is an unusual pattern regarding the *Global Practice* treatment. The information that Japan is an outlier in keeping male-only succession appears to *strengthen* negative attitudes toward any rule changes. Particularly surprising is the backlash against female emperors in general. We expected respondents to become less hesitant about accepting a female emperor once they were made aware that most other monarchies allowed women to ascend the throne. One interpretation is that the fact that Japan is an outlier stimulates people's pride in the institution's unique tradition and history, making them prefer to uphold the status quo. We will further explore the heterogeneous effect of this treatment below.

Lastly, the *Family Tree* treatment, which notes the dearth of male heirs, does seem to reduce opposition to the *Aiko* item, but it is not statistically significant. The treatment effects on other sensitive items are also indistinguishable from zero.

The item counting technique estimates from the first wave suggest that conservatism and sexism are salient to support for or opposition to reforming imperial succession, albeit for different reasons. As such, the effects of our three information treatments may also differ based on these values. Figure 7 shows the effects of the three treatments by value orientation. We divide

¹⁴SI D.5 discusses several methodological concerns, including the design effects (De Cao and Lutz, 2018) regarding ICTs.

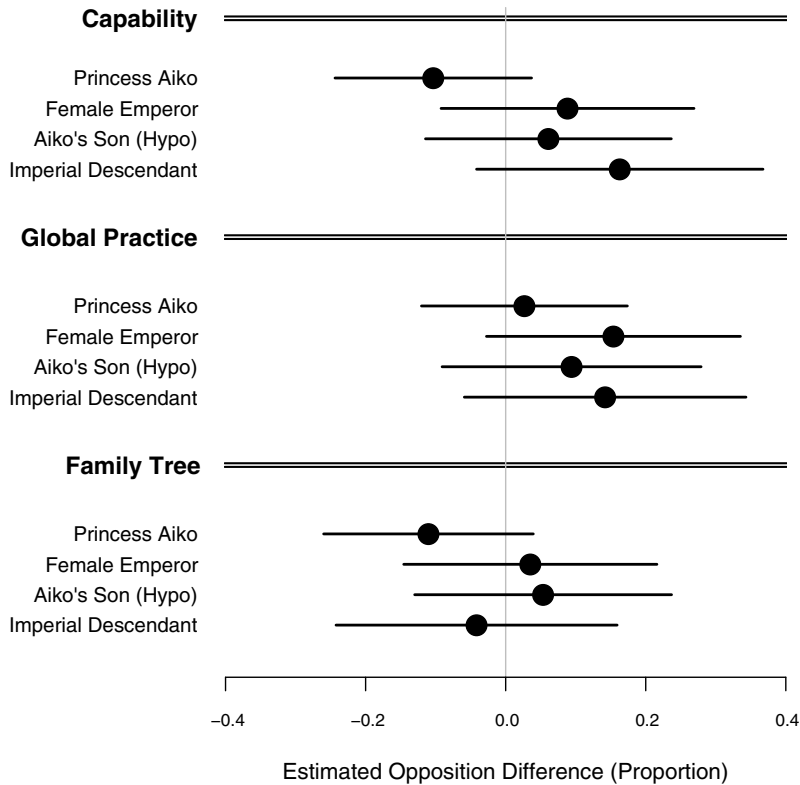


Figure 6. Effects of informational treatments on the estimated change (across two waves) in the proportion of respondents who are upset by the four sensitive items. The interpretation of the treatment effects is relative to the control group. *Princess Aiko*, *Female Emperor*, *Aiko's Son (Hypo)*, and *Imperial Descendant* represent the four sensitive items. The solid lines represent 95% nonparametric bootstrap confidence intervals.

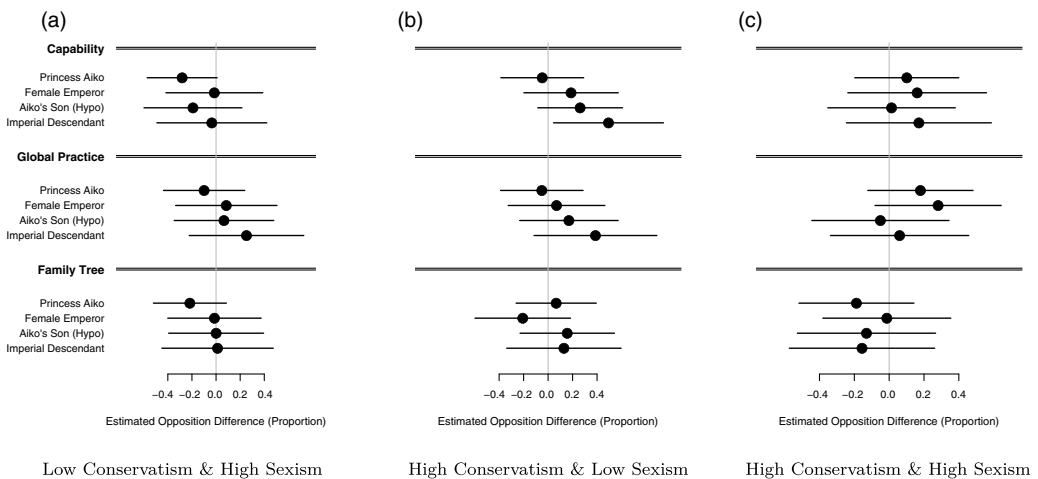


Figure 7. Effects of informational treatments (*Capability*, *Global Practice*, *Family Tree*), relative to *Control*, on the estimated proportion of sub-populations who are upset by the four sensitive items (*Princess Aiko*, *Female Emperor*, *Aiko's Son (Hypo)*, and *Imperial Descendant*) across two waves. The subfigures summarize the results of respondents who scored (a) below average in conservatism but above average in sexism; (b) above average in conservatism but below average in sexism; (c) conservatism and sexism are both above average. The solid lines represent 95% asymptotic confidence intervals.

respondents into four groups by whether they scored above or below the mean on each dimension. We then examine the effects of the three treatments on the four outcome measures, so as to assess which value dimension drives beliefs about reforming imperial succession.

Again, except for some subgroups, almost all effects are not statistically significant. The *Capability* treatment reduces opposition for the Aiko item for people who score low on conservatism but high on sexism (Panel A). Moreover, the *Capability* treatment increases opposition for the imperial descendant item for those scoring high on conservatism but low on sexism (Panel B). The statistical significance should be interpreted with caution, however. These results are indistinguishable from zero once we account for multiple hypothesis testing using a lenient Benjamini–Hochberg correction method (Benjamini and Hochberg, 1995).

There are two explanations for these null results. First, our experiment might have failed to detect the treatment effects due to insufficient power or weak stimuli. The anonymity in the ICT comes at a cost of greater uncertainty in estimation. Blair *et al.* (2020, p. 9) show that a sample of at least 4500 respondents is necessary to detect a prevalence of 15% with power at 80%, and the prevalence rate of all items other than *Imperial Descendants* is under 15% in our experiment (see Figure 4). While the two-wave design provides more data, our diff-in-diff-in-diff estimator might be underpowered to detect the treatment effects.

The stimulus caused by each treatment may also have been insufficient. There were few public pictures that showed Princess Aiko's abilities, because she was a minor during our research period. Alternatively, we could have chosen a control that does not mention the imperial family at all. However, the control showing an image of the imperial house unrelated to succession allows us to distinguish different rationales for supporting rule changes without the framing effect of the imperial family itself. This choice can be thought of as a harsh test.

Some estimates are substantively large but not statistically significant due to wide confidence intervals. For example, the estimated effect of *Global Practice* on the female emperor item in Figure 7c, compared with Figure 7a and b, suggests that the backlash against global standards, if any, occurs only if respondents espouse both traditional political and gender values. Only the combination of sexism and conservatism, not just either one, may become powerful hurdles to de-gendering imperial succession.

The second explanation for the null results is that the treatment effects are indeed zero. To ascertain this possibility, future research can build on this study and increase the sample size, choose sensitive items with a higher prevalence rate, and design stronger treatments. These improvements would lead to a more precise estimation of the treatment effects to help confirm the null results in our experiment.

Concluding remarks

The inability to reconcile the contemporary need for monarchical reform with the historical values that legitimized the monarchy can impede necessary institutional changes, hastening its demise. Over 40 nation-states still retain constitutional monarchs as their head of state. These royal families serve important, albeit informal, functions as living reminders of national history and non-partisan symbols of civic unity. Maintaining the linkage between tradition-based legitimacy and contemporary social relevance requires a delicate balancing act.

The foremost manifestation of this tension is whether and how to reform rules of monarchical succession. Restricting legitimate claimants to patrilineal male descendants increased the risk that there would be no legitimate heir once monarchies became embedded in democracy, removed cadet branches, and proscribed polygyny. A simple solution that is compatible with contemporary gender norms is to extend rights of succession to daughters and their offspring. However, this reform may be opposed by voters and legislators with more traditional gender values and conservative political ideologies, who ironically are also more likely to have strong affinities for royal families.

We examined the nature and consequences of such 'clashes in traditional values' using the case of imperial succession in Japan. Beyond the current emperor and his brother, there is only one

legitimate successor in the youngest generation. This has precipitated calls to reform the succession rule, but every proposal conflicts with some cherished preference or value. The topic itself is politically sensitive, since public criticism of imperial practices, much less of the imperial family itself, risks harassment and violence from far-right nationalists.

Using a two-wave survey experiment that combines ICT with information treatments, we analyzed the determinants of opposition to monarchical reform. In the first wave sample, we found that the restoration of distant imperial descendants was the least popular option, while allowing for female emperors was considered the most palatable. However, those who scored high on our conservatism and sexism scales were less opposed to the former and more wary of the latter.

In the second wave, we randomly presented three types of information to respondents, and then re-asked their preferences regarding imperial succession. Overall, we found that informing respondents of the capabilities of Princess Aiko, the dearth of male successors, or the global prevalence of female monarchs did not change their attitudes. However, there is tentative evidence of backlash, particularly among those with greater conservatism and sexism scores. In addition, attitudes toward female monarchs in the abstract and the succession of Aiko in particular may differ. Information of Aiko's capability and the dearth of male heirs both weakly reduced opposition to Aiko's succession. Collectively, these suggest that many respondents value the status quo rule because of its global rarity, not in spite of it. However, opposition to female emperors may be mitigated by a better personal image of female descendants in the public sphere.

This paper offers three broader contributions to the literature. First, attitudes toward symbolic institutions cannot be easily reduced to differences along a single progressive-traditional ideological dimension. In the case of gendered institutions, such as monarchical inheritance, it is valuable to separate traditionalism into conservatism and sexism. Similar disaggregations may be relevant to debates over race- or ethnicity-based institutions. While traditionalists may, on average, be more hostile to changing historical practices or legacies, there are critical differences among them on which reforms are more palatable.

Second, *changing* attitudes toward symbolic institutions, which reflect deeply held values, may require concerted public relations efforts. Our information treatments did not change respondents' preferences at statistically significant levels, although this may be related to the need for a larger sample size (see Section 'What factors sway public attitudes?'). Alternatively, our results may reflect the fact that monarchical succession has limited material impact on most citizens, and so preferences are dictated almost entirely by normative or cultural values, which take more time to influence. While political elites may be able to nudge supporters toward more progressive reforms, we are ultimately pessimistic. Most LDP politicians seem unwilling to accept female monarchs, and many seem to favor the re-integration of male descendants of former cadet branches, even though this is the least popular option.

Finally, we developed and applied a novel two-wave survey design using ICT and a difference-in-differences-in-differences estimator for measuring sensitive attitudes and for estimating treatment effects on these attitudes. This design can be used to explore treatment effects on other sensitive attitudes, such as support for authoritarian leaders and regimes, which also suffer from social desirability bias.

Supplementary material. To view supplementary material for this article, please visit <https://doi.org/10.1017/S1755773922000418>.

References

- Acharya, A. and A. Lee (2019), 'Path Dependence in European Development: medieval politics, conflict, and state building', *Comparative Political Studies* 52(13–14), 2171–2206.
- Acker, J. (1992), 'From sex roles to gendered institutions', *Contemporary Sociology* 21(5), 565–569.
- Austin, D.E.J. and M. Jackson (2019), 'Benevolent and hostile sexism differentially predicted by facets of right-wing authoritarianism and social dominance orientation', *Personality and Individual Differences* 139, 34–38.

- Beauregard, K. and J. Sheppard (2021), 'Antiwomen but proquota: disaggregating sexism and support for gender quota policies', *Political Psychology* 42(2), 219–237.
- Benjamini, Y. and Y. Hochberg (1995), 'Controlling the false discovery rate: a practical and powerful approach to multiple testing', *Journal of the Royal Statistical Society: Series B (Methodological)* 57(1), 289–300.
- Blair, G., A. Coppock and M. Moor (2020), 'When to worry about sensitivity bias: a social reference theory and evidence from 30 years of list experiments', *American Political Science Review*, 1–19.
- Blair, G. and K. Imai (2010), 'List: statistical methods for the item count technique and list experiment', Available at The Comprehensive R Archive Network (CRAN). <https://CRAN.R-project.org/package=list>
- Blair, G. and K. Imai (2012), 'Statistical analysis of list experiments', *Political Analysis* 20(1), 47–77.
- Catalinac, A. (2016), *Electoral Reform and National Security in Japan: From Pork to Foreign Policy*. Cambridge University Press.
- Corcos, C. (2012), 'From agnatic succession to absolute primogeniture: the shift to equal rights of succession to thrones and titles in the modern European Constitutional Monarchy', *Michigan State Law Review*, 1587–1670.
- Cyranoski, D. (2006), 'Y chromosome fuels dynastic dilemma', *Nature* 439(7079), 898–898.
- Dalton, P., D. Devrim, R. Blomeyer, and S. Mut-Tracy (2020), *Discriminatory Laws Undermining Women's Rights: In-depth Analysis*. European Parliament.
- De Cao, E. and C. Lutz (2018), 'Sensitive survey questions: measuring attitudes regarding female genital cutting through a list experiment', *Oxford Bulletin of Economics and Statistics* 80(5), 871–892.
- Dixon, R. (2020), 'Gender and constitutional monarchy in comparative perspective', *Royal Studies Journal* 7(2), 1–9.
- Duckitt, J. and C.G. Sibley (2010), 'Personality, ideology, prejudice, and politics: a dual-process motivational model', *Journal of Personality* 78(6), 1861–1893.
- Elkins, Z., T. Ginsburg, and J. Melton (2014), 'Characteristics of national constitutions, version 2.0. Comparative Constitutions Project', 29–42.
- Franceschet, S. (2011), 'Gendered institutions and women's substantive representation: Female legislators in Argentina and Chile', In *Gender, Politics and Institutions*. London: Palgrave Macmillan UK, pp. 58–78.
- Gerring, J., T. Wig, W. Veenendaal, D. Weitzel, J. Teorell, and K. Kikuta (2021), 'Why monarchy? The rise and demise of a regime type', *Comparative Political Studies* 54(3–4), 585–622.
- Glick, P. and S.T. Fiske (1996), 'The ambivalent sexism inventory: differentiating hostile and benevolent sexism', *Journal of Personality and Social Psychology* 70(3), 491–512.
- Glynn, A.N. (2013), 'What can we learn with statistical truth serum?', *Public Opinion Quarterly* 77(S1), 159–172.
- Gonçalves, S. and H. White (2005), 'Bootstrap standard error estimates for linear regression', *Journal of American Statistical Association* 100(471), 970–979.
- Hill, S.J., J. Lo, L. Vavreck, and J. Zaller (2013), 'How quickly we forget: the duration of persuasion effects from mass communication', *Political Communication* 30(4), 521–547.
- Hodson, G., C.C. MacInnis, and M.A. Busseri (2017), 'Bowing and kicking: rediscovering the fundamental link between generalized authoritarianism and generalized prejudice', *Personality and Individual Differences* 104, 243–251.
- Hughes, M.M., P. Paxton, and M.L. Krook (2017), 'Gender quotas for legislatures and corporate boards', *Annual Review of Sociology* 43, 331–352.
- Imai, K. (2011), 'Multivariate regression analysis for the item count technique', *Journal of the American Statistical Association* 106(494), 407–416.
- Inglehart, R. and P. Norris (2003), *Rising Tide: Gender Equality and Cultural Change Around the World*. Cambridge: Cambridge University Press.
- Iversen, T. and F. Rosenbluth (2010), *Women, Work, and Politics: The Political Economy of Gender Inequality*. New Haven, CT: Yale University Press.
- Johnson, S.K., D.R. Hekman, and E.T. Chan (2016), *If There's Only One Woman in Your Candidate Pool, There's Statistically No Chance She'll Be Hired*. Harvard Business Review. <https://hbr.org/2016/04/if-theres-only-one-woman-in-your-candidate-pool-theres-statistically-no-chance-shell-be-hired>, Accessed: August 25th, 2022.
- Jost, J.T. (2017), 'Ideological asymmetries and the essence of political psychology', *Political Psychology* 38(2), 167–208.
- Kinder, D.R. and L.M. Sanders (1996), *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
- Kokkonen, A. and A. Sundell (2014), 'Delivering stability—Primogeniture and autocratic survival in European monarchies 1000–1800', *American Political Science Review* 108(2), 438–453.
- Kuklinski, J.H., M.D. Cobb, and M. Gilens (1997), 'Racial attitudes and the "new south"', *Journal of Politics* 59(2), 323–349.
- Lyll, J., G. Blair, and K. Imai (2013), 'Explaining support for combatants during wartime: a survey experiment in Afghanistan', *American Political Science Review* 107(4), 679–705.
- Manfredi, C.P. and M. Lusztig (1998), 'Why do formal amendments fail?: An institutional design analysis', *World Politics* 50(3), 377–400.
- Mantel, H. (2013), 'Royal bodies', *London Review of Books* 35(04). <https://www.lrb.co.uk/the-paper/v35/n04/hilary-mantel/royal-bodies>, Accessed: August 25th, 2022.

- Martin, A.D., K.M. Quinn and J.H. Park** (2011), 'MCMCpack: Markov Chain Monte Carlo in R', *Journal of Statistical Software* **42**(9), 22.
- McDonagh, E.** (2015), 'Ripples from the first wave: the monarchical origins of the welfare state', *Perspectives on Politics* **13**(4), 992–1016.
- McElwain, K.M.** (2020), 'When candidates are more polarised than voters: constitutional revision in Japan', *European Political Science* **19**(4), 528–539.
- Menaldo, V.** (2012), 'The Middle East and North Africa's resilient monarchs', *The Journal of Politics* **74**(3), 707–722.
- Miller, J.D.** (1984), 'A new survey technique for studying deviant behavior', PhD Dissertation. George Washington University.
- Miura, M.** (2012), *Welfare through Work: Conservative Ideas, Partisan Dynamics, and Social Protection in Japan*. Cornell University Press.
- Miwa, H., R. Arami, and M. Taniguchi** (2021), 'Detecting voter understanding of ideological labels using a conjoint experiment', *Political Behavior*. <https://doi.org/10.1007/s11109-021-09719-5>.
- Nelson, R.L. and W.P. Bridges** (2003), *Legalizing Gender Inequality: Courts, Markets, and Unequal Pay for Women in America*, Volume 47. Cambridge University Press.
- Quinn, K.M.** (2004), 'Bayesian factor analysis for mixed ordinal and continuous responses', *Political Analysis* **12**(4), 338–353.
- Ruoff, K.J.** (2020), *Japan's Imperial House in the Postwar Era, 1945–2019*. Harvard University Press.
- Sasada, H.** (2010), 'The electoral origin of Japan's nationalistic leadership: primaries in the LDP presidential election and the "pull effect"', *Journal of East Asian Studies* **10**(1), 1–30.
- Sniderman, P.M., R.A. Brody, and P.E. Tetlock** (1993), *Reasoning and Choice: Explorations in Political Psychology*. Cambridge: Cambridge University Press.
- Taniguchi, M.** (2020), *Gendai Nihon no Daihyousei Minshu-Seiji: Yuukensha to Seijika*. University of Tokyo Press.
- Taniguchi, M. and the Asahi Shimbun** (2019), The University of Tokyo-Asahi Survey. http://www.masaki.j.u-tokyo.ac.jp/utas/utasindex_en.html
- Ui, M. and M. Yamamoto** (2001), 'Reliability and validity of a Japanese version scale of Ambivalent Sexism Inventory (ASI)', In *Proceeding of the 42nd Annual Conference of the Japanese Society of Social Psychology*, pp. 300–301.
- UN Women** (2020). Facts and figures: Women's leadership and political participation. <https://www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures>, Accessed: August 25th, 2022.
- World Bank** (2011), Gender Equality and Development in the Middle East and North Africa region. <https://www.worldbank.org/en/news/feature/2011/09/19/gender-equality-development-middle-east-north-africa-region>
- World Economic Forum** (2021), Global Gender Gap Report 2021. <https://www.weforum.org/reports/global-gender-gap-report-2021/>