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Abstract

We examine how social media users from eight European Union (EU) member states express their socio-political identities, focusing on users' online self-presentation and group identity cues conveyed through bios. Our goal is to explore commonalities and differences in topics discussed in social media profiles, across Left- and Right-wing user groups, within and across EU countries. Through a novel approach we map how identity-related discourse varies by country and political orientation, revealing how group identity is expressed within the EU. We find that topics related to *democracy*, *national way of life*, and *decentralization* emerge as particularly divisive, showing considerable variation both within and between EU countries. A subset of topics, which includes *education*, *environmentalism*, *sustainability, equality*, *freedom & human rights*, and *traditional morality,* among others, clearly differentiate Left- from Right-leaning user groups. These partisan topics are relevant as they could be leveraged for mobilizing ideological groups and highlight Left-Right identitarian differences at the EU level. Finally, we show that our Left-Right identity similarity metrics reflect aspects of real-world political fragmentation, which are closely aligned to the perceptions of political conflict intensity by country, as measured by the 2022 PEW survey.

Keywords

Online identities, European Union, Social media, Topic Modeling, Ideology Scaling, Manifesto Project.

Introduction

This study examines how social media users from eight European Union (EU) countries communicate their socio-political identities through their social media profile bios. These bios, as concise and relatively stable expressions of identity cues (Taylor et al., 2023; Hopkins, 2024), offer a unique lens for understanding socio-political self-representation and impression management, serving as reflections of users' socio-political stances on key issues that characterise the political debate at the national and EU level. These identity cues are relevant as it has been shown by Taylor et al. (2023) that *"content evaluation are mediated by identity cues"* and that these cues *"cause people to vote on content faster (consistent with heuristic processing) and to vote according to content producers' reputations, production history and reciprocal votes with content viewers"*, therefore affecting online political discourse by mediating content creation and diffusion.

Focusing on the self-representations of users on Twitter (now X, and still the most popular platform for political communication in the countries of our study), we model how, and to what extent, users communicate their socio-political identities, values, and affiliations through their bios. We also analyze how these short descriptions vary as a function of users' country of origin and position on the political spectrum. By building a framework to infer, map, and analyze at the aggregate level how specific dimensions of socio-political identities are framed within ideological groups -Left, Center, and Right- and across national contexts, this study provides fresh insights into the building blocks of collective identity cohesion and fragmentation within the European Union.

Despite the growing body of literature examining identity dynamics and their effects through social media data (Hopkins et al., 2024; Essig & DellaPosta, 2024; González-Bailón, 2023; Taylor et al., 2023; Kossowska et al., 2023), this study represents the first attempt to systematically explore and model group identity construction and online communication at a cross-country level, as a function of political orientations. Our work highlights the key role of social media platforms, which are used by social media communities and political groups to shape how identity discourse is publicly communicated and strategically framed.

The research is operationalized through a robust statistical modeling framework that integrates Structural Topic Modelling (Roberts et al., 2014), ideology scaling of interactional trace data on social media calibrated with survey data for cross-country comparability (Ramaciotti et al., 2022), and political topics seeded from the Manifesto Project annotated corpus (Merz, Regel, & Lewandowski, 2016). By enabling cross-context comparisons of identity framing, the proposed approach addresses many of the modeling and mapping gaps in existing identity communication and alignment research and provides a replicable methodology for analyzing political identity dynamics across countries and user groups as a function of ideology dimensions of interest, such as political orientation.

This is particularly relevant because high-heterogeneity, high-salience identity dimensions can become focal points of societal tension, potentially escalating into broader political debates at both national and European levels. Conversely, low-heterogeneity identity dimensions with high salience in users' bios might serve as connective threads across political divides, potentially supporting cohesion within and across EU countries.

The remainder of the article is structured as follows: the Literature Review section situates the study within existing theories of socio-political identity and political discourse, highlighting the contributions and limitations of previous works that seeked to study online identity expression using data from social media. The Framework & Hypotheses section outlines the conceptual and methodological foundations of the research together with the research questions and hypotheses. The

Data & Methods section describes the framework operationalisation strategy, the dataset(s) and the analytical tools and pipeline employed. The Results section presents the key results and their relevance, followed by a Conclusion that discusses the broader significance of our framework and findings for understanding political identity dynamics within the EU.

Literature review

Identity and identification

As Martin (1995) suggests, identity encompasses both *uniqueness and sameness*, shaping how individuals, groups, and communities see themselves and others (Hetherington, 1998), form representations of each other, and perform based on the latter (Dervin, 2012). To exist, identity therefore requires, at least, a (partial) mapping or categorization of human society and of its actors (Ashton et al. 2004), in terms of their attributes, relations and roles, as individuals, groups and organizations. Identities emerge through the constant interplay of the preferences, expectations, pressures and performative acts of individuals (Burke & Stets, 2009; Jenkins, 2014). They evolve within feedback loops of human anticipation and signaling behavior (Cast, 2003), through which people interact and coordinate on who they are -and aspire to be- (Smaldino, 2022), asserting their authenticity as individuals and groups (Archer, 2008; Schmader & Sedikides, 2018) and being recognized -or not- for it by others. Individuals and groups can appropriate and embody multiple identities (James, 1890), shifting between them depending on context and opportunity (Yavuz, 2004). Each context can elicit different aspects of identity, shaped by the implicit rules and roles that govern those interaction settings (Burke & Reitzes, 1981).

For example, the same person, in the workplace might express an identity that conforms to norms expected by their peers, emphasizing technical competence and respect for authority. Within the house, that person may revert to family roles, fulfilling long-standing expectations and relational patterns shaped by shared history and kinship, like being a parent. While on social media, that same person may express an identity that focuses on dimensions and roles that they consider more relevant for describing themselves to other online users (e.g., friends, school and university colleagues, citizens of the same city or country, members of a given political party or activist group, etc.), like highlighting career path and professionalism, or, for example, their views on environmental issues and related concerns for climate change. This is because social media platforms serve a vast array of functions, from entertainment to activism, their role in shaping and reflecting social and political identities is significant.

The representation and expression of identities within broader populations contribute to the ongoing processes that shape political discourses, which, in turn, can influence the framing and interpretation of identity-related cues. Within this iterative interaction, expressed identities reflect both individual values and goals, as well as the sociopolitical structures and contexts within which they are situated. The expression of multiple identities by the same person or group can be both authentic and performative (Taylor, 2022). Like projections of multifaceted constructs, some aspects of identity might gain or lose focus and salience from context to context, or be redefined through the forces and institutions at play (Heise & MacKinnon, 2010).

Socio-political identities and their effects

Multiple strands of research in political studies, particularly within the field of political psychology, have incorporated the notion of identity (Huddy, 2001, Simon, & Klandermans, 2001, Klandermans, 2014). By focusing on identity, political scholars aim to understand the underpinnings of socio-political engagement and the ways in which identity dynamics intersect with ideology, social

structures, voting, policy and public governance. This growing body of research examines, among others, how individual and collective identities shape socio-political attitudes and behaviors (Bonikowski, 2017), with issues, such as national identity and patriotism (Huddy & Khatib, 2007) and multiculturalism (Spencer, 1994, Tempelman, 1999) dominating the research agenda. Scholars have, for example, explored how these identity-related factors influence public opinion (Hooghe & Marks, 2005; Helbling et al., 2016), voting behavior (Pattie et al., 1999), political polarization (West & Iyengar, 2022), and policy preferences (Klar, 2013). In this sense, identity cues such as those publicly expressed in social media bios may be analyzed in their socio-political dimension whenever they exist in interaction with the political topics that determine political opinion, participation or preferences. Socio-political identities are also important because they can affect collective coordination and deliberation (Somer & McCoy, 2018), lower public goods provision (Chakravarty & Fonseca, 2014), exacerbate ingroup favoritism (Turner, Brown, & Tajfel, 1979), and, least but not last, because fragmented social identities can intensify ingroup-outgroup conflicts (Bonomi, Gennaioli, & Tabellini, 2021).

Identity expression and socio-technical systems

In contemporary societies, identities are continually shifting within the context of social interactions that are increasingly mediated by technology and related affordances (Gibson, 2014). Identity dynamics are embedded within socio-technical systems and their processes, being shaped and constrained by communication supports and expression spaces through which behaviors and interactions materialize (Baym, 2015; Slater, 2007). For example, as suggested by Erickson (1996), Web pages are not simply "*used to publish information; they are used to construct identity—useful information is just a side effect"*. Affordances provided by digital platforms and media (Khazraee & Novak, 2018; Phillips et al., 2024) can cast, frame, bind and sometimes even fix identity expression of individuals and groups. By affordance, we mean more than the features of digital platforms, which enable, facilitate or constrain specific actions, interactions and behaviors. Affordances are also socio-functional elements, they are "*perceptual cues that connote aspects of social structure to individuals thereby creating a functional difference for the individual*" (Hogan, 2009) thereby shaping the ways in which single users or groups can signal their identities online. For example, despite through the interface of social media platforms all users can hypothetically engage in actions such as posting, sharing, reading, and commenting, not all of them can enact these actions in the same way or to the same extent due to differences in technical literacy, platform subscription types, algorithmic visibility, or socio-cultural norms and contextual factors affecting envisageable behavior, among others. The interplay between platform affordances and user agency hence shapes identity constructs that are subject to subjective structural limitations, reflecting, among others, users' visions and contingencies, as well as the implicit norms, hierarchies, and power structures that are embedded in these online platforms, through their UI and algorithms. Therefore, identity should never be considered a medium-agnostic phenomenon as it unfolds within a social interaction web, constrained by affordances, power dynamics, norms, and contexts that selectively augment or diminish communicable aspects of identity, shaping their relevance, role, implications, and salience (McKenna & Seidman, 2005; Yoder et al., 2020).

Socio-political identities and online social media platforms

Online platforms are nowadays increasingly central to identity, and to the circulation of socio-political and cultural identity narratives (Lüders et al., 2022, Hopkins et al., 2024). As explained by Karahanna et al. (2018), these online platforms provide to their users affordances to satisfy their psychological "*self-identity needs of coming to know the self, expressing self-identity, and maintaining continuity of*

self identity", by allowing them to interact and express their views and positionings in relation to issues that are relevant to them -whether by engaging in conversations by posting opinions, sharing content via retweets, or following public figures who reflect their ideological leanings (Taylor et al., 2023; Ramaciotti et al., 2022; Wojcieszak et al., 2022). Although access to these platforms is democratized, since affordances are relational properties, the same platform may provide different affordances to different users and groups (Ronzhyn et al., 2022), also affordances might vary based on a user type of subscription plan. Among the different modes of participation, one of the most widespread, salient, and stable affordances of political identity expression lies in users' social media bios or profile pages (Rogers & Jones, 2021). These short, self-curated descriptions offer a snapshot of how individuals wish to be seen by others (Maíz-Arévalo & Carvajal-Martín, 2024). While a bio is concise, often limited to a few phrases, it encapsulates core aspects of one's political beliefs, affiliations, stances and values (Essig & DellaPosta, 2024). Also, unlike posts, which can be more volatile and reactive to specific events or trends, bios tend to provide a more enduring reflection of an individual's self-identified political stance (Marwick & Boyd, 2011) . While engaging on social media, individuals often curate a public identity that emphasizes dimensions and roles they deem most pertinent to their online interactions. These dimensions include familial roles, academic achievements, career milestones, or commitments to causes such as social justice advocacy and the promotion of gender equality. Each chosen aspect not only reflects the individual's priorities but also signals alignment with broader communities and values, more or less effectively bridging personal identity with collective discourse in the public sphere. It is worth noting that seemingly apolitical cues, related to career paths, family roles, hobbies, or even pictorial symbols such as emoji may convey signals that play determinant roles in groups of relevance for political discourse and debate (Luxmoore et al., 2023).

Framework & hypothesis

In this section, we outline our conceptual framework and relate it to the user biography medium and its data generating process, sketched in Figure 1. Also, we motivate the choice X/Twitter for our study and user population, explaining why we target it to examine how politically active users from EU countries construct and express political identities online through social media bios. Finally we introduce a set of research questions and hypotheses to guide our analysis, offering a clear picture of the steps we undertake to bridge the study of identity alignment and political expression on social media across varied national and ideological contexts.

As highlighted in our review, digital socio-technical systems, such as social media, have become key venues for social and political identity construction and expression (Hopkins et al., 2024). Within these spaces, users and groups present themselves and negotiate identities, with bios serving as highly condensed and purposeful containers of identity cues. As suggested by Bail (2022), the online signalling of identity -particularly by politically active and partisan groups- can amplify identity-based societal divisions, making them more salient. This mechanism resembles the social amplification of risks (Renn et al., 1992), where specific aspects of a phenomenon are socially magnified through public online interactions and discourse. Once these identity gaps and divergences are brought into focus through media, they may, in turn, make alignment between groups more complex to reach, and fuel greater polarization, exacerbating existing societal divisions and conflicts (Allen, 2023).

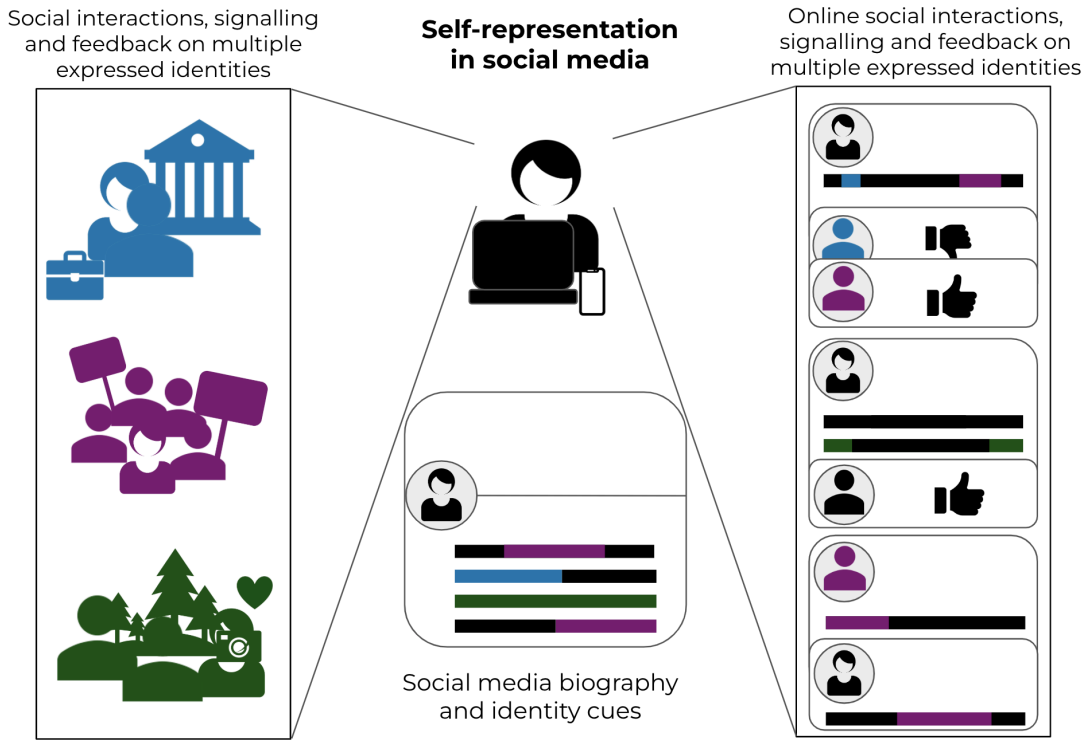

Figure 1: Schematic representation of the bio data generating process for one social media user, summarizing how multiple identities are expressed (through identity cues) in a bios, and how they relate to social interaction, identity signaling and feedback.

As exemplified in Figure 1, these identity cues are intentionally selected by users to communicate their self-perceptions, affiliations, and values, including their membership in specific political or social categories and groups. Social media platforms play a pivotal role in this process, as they enable impression management on an unprecedented scale by giving individuals control over their self-presentation through carefully curated public profiles. This control allows users to highlight

particular facets of their identities while downplaying others, tailoring their self-expression to align with how they wish to be perceived in a given online platform or context.

Even when online identity expression serves as a coherent and authentic extension of offline life, users are faced with the task of deciding "*which facets of their identities to emphasize and which to mask*" (Weinstein, 2014). By curating their expressed identities and selecting specific aspects of themselves to share publicly, users strategically engage in self-expression. This also shapes political dialogue in online spaces, as sharing selective identity cues can influence interactions with other users (Taylor et al., 2023), attracting those who identify with the signaled identity traits and repelling those who do not. Krämer & Winter (2008) argue that this level of curatorial flexibility makes social media platforms an ideal setting for impression construction, enabling users to manage their past, present, and anticipated identity images. This process is influenced by several factors, including:

- Role constraints, such as the expectations tied to one's -work, friendship and family- relations and -political or social- affiliations;
- Values, objectives and preferences, which can guide the framing of identity and online presentation style;
- A dynamic interplay between social and political contexts that inform how identities are expressed and perceived by within- and out-group members.

Despite the centrality of these constructs in recent identity literature that looks to social media (Hopkins et al., 2024; González-Bailón, 2023; Kossowska et al., 2023; Taylor et al., 2023; Essig & DellaPosta, 2024), current research lacks a robust and comparative framework that can bridge diverse geo-political contexts while maintaining statistical rigor and allowing for cross-group modelling and analyses of users' biographies. This gap is particularly evident when one needs to capture and map how political identities are framed, expressed, and contested across varying ideological groups and national landscapes. To address this, we propose a novel framework that leverages social media bios as a lens to proxy and study the dynamics of online socio-political identity construction, and map it at the aggregate level.

Our framework is characterized by a comparative approach, which allows, among others, to infer and relate to each other how different groups of users frame their identity conditional on their positioning in the political spectrum and/or country of origin. More specifically, our framework allows for a consistent comparison of identity cues and discourse across user groups of different size, making identity framing inference and modeling standardizable, aggregatable, comparable and contextually meaningful. As detailed in the Data & Methods section, we operationalise our framework using a combination of NLP techniques, ideology scaling, and seeded structural statistical modeling approaches for textual corpora, which together enable a systematic mapping and analysis of bios within a cross-country and cross-political orientation comparative paradigm.

Our framework is specifically designed to address the following set of research questions (RQ) regarding the construction and articulation of political identities on social media:

- *RQ1: Which issues (i.e, topics) are made salient within bios of users from different (country and political orientation) groups?*
- *RQ2: How does the framing of socio-political issues vary across countries and political orientations?*
- *RQ3: To which degree the framing of these issues is aligned (similar), or, on the contrary, heterogeneous, across or within EU countries and political orientation groups?*

Our aim is to infer through bios identitarian issues and identity cues that resonate with specific political groups or countries, shedding light on how the framing of identity in bios can reveal ideological divides and societal fragmentation.

We wish to advance research in political and social sciences by building a hybrid analysis approach that integrates both qualitative and quantitative aspects of identity discourse, contributing to the current state of the art (González-Bailón, 2023; Taylor et al., 2023; Essig & DellaPosta, 2024; Hopkins et al., 2024). As anticipated, to achieve this, our framework is built on top of powerful analytical and statistical tools that enable the aggregation, modelling and mapping of political identities, their discursive elements, and their interrelations across multiple levels, including both within-country and cross-country comparisons.

Through the proposed framework we enable researchers to project people's self descriptions on social media onto a set of theory-based topics, grounded in an existing socio-political categorization (i.e., ontology of identity related topics), in our application we use an ontology reconstructed from the Manifesto Project's annotated data, based on its topic labels and domains. However, our framework can be adapted to be used with any ontology of dimensions/topics that has an annotated corpus of texts from which a topic model seeding lexicon can be built. Thanks to this seeding process, the content of the resulting topics (i.e., identity-related dimensions) is not predetermined or static, but on the contrary, it is learned from the linguistic features and nuances of users' bios, yet, they will be alignable to the original theoretical framework and ontology used for seeding the model. This allows for an aggregate, yet in-depth, theory-grounded analysis of how identity-related issues are expressed and evolve in specific digital spaces/platforms. In summary, our framework integrates:

- **Quali-quantitative approaches to capture and map topic-specific content variations**: which enable an in-depth analysis of how different political groups articulate more or less differently their identities through the issues and themes discussed in their bios. Allow to map how these identity dimensions are framed by different groups as a function of some covariates of interest (e.g., country, political orientation).
- **Quantitative approaches to capture and map topic-specific propensity variations**: which allow to measure how frequently and with which proportions specific identity dimensions are referenced across different political groups, providing insights into the prominence and salience of these issues in shaping political identities.

By combining these approaches, we can model, visually map, and explore the similarities and differences in the expression of political identities among communities of users from diverse geographic areas. Also we are able to understand how political identities framed through social media biographies differ between user groups with different political orientations (e.g., left-leaning, centrist right-leaning), within the same country or across countries.

Identity and socio-political conflicts, a matter of salience and cross-group heterogeneity?

Metrics of identity dimension content heterogeneity, which measure the divergence in how different groups discuss a specific identity dimension (through words and associations in their bios), enable us to capture and model the ways in which politically oriented and country-specific groups frame identity online. These metrics can reveal whether framings align or diverge within and across groups, potentially influencing self-identification and perceptions of likeliness, both intra- and inter-group, for example within the right-side of the political spectrum across countries, or, between the left and right side of the political spectrum within a specific country. For the concept of identity framing and alignment we refer to the work of Eidson et al. (2017), which describe identity framings as the

qualitative base of social action, and claim that these frames, and their alignment, contribute to "*the production of relations of likeness and difference, complementarity and conflict*". For example, left-leaning political groups might want to frame *labour group* identity during election campaigns by emphasizing in their profiles identitarian issues related to workers' right to workplace safety, to foster perceptions of shared struggle and solidarity among blue collar workers.

Identity dimension salience, on the other hand, pertains to the coverage of a specific identity dimension, reflecting its visibility and hence the weight it might carry in shaping perceptions and influencing social interactions. By salience, in this work we specifically mean the likelihood that a given identity dimension is invoked (Stryker, 1968) by a member of a specific group, in his biography. For example, during election campaigns, right-leaning political groups could try to emphasize the salience of ethnicity-based national identity and *national way of life* to affect perceptions of unity within their electorate.

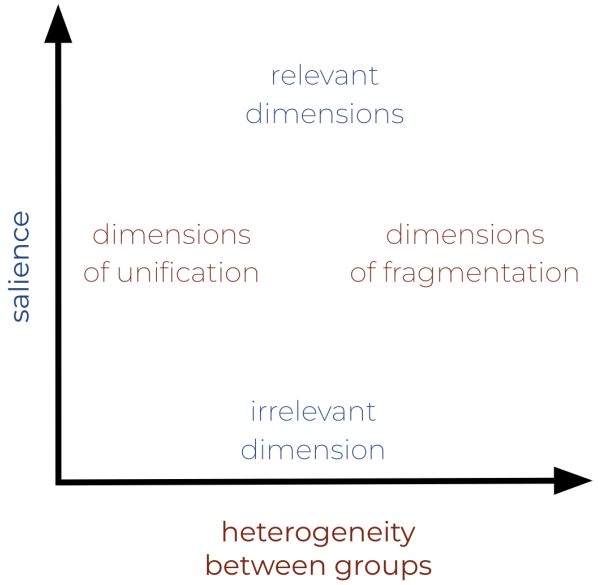

Figure 2: Identity dimension types as a function of identity dimension salience and similarity across groups

When certain identity dimensions are both salient and heterogeneous across political-orientation groups, they have the potential to act as flashpoints for identity-based conflict, amplifying perceptions of societal division. On the opposite side, identity dimensions that show high salience and low heterogeneity act as points of cohesion and shared identity, possibly fostering solidarity and reducing perceptions of conflict across groups. These dimensions can hence serve as bridges, creating a sense of common grounds for collective identity. Identity dimensions that show low salience and high heterogeneity can be considered hidden identitarian fault lines within society. They may not significantly impact social interactions until activated by specific events or contexts, at which point their latent divisive potential can emerge. Finally, identity dimensions that exhibit low salience and low heterogeneity are largely irrelevant in shaping socio-political discourse dynamics. These dimensions play a minor role in influencing group perceptions, and will be typically overlooked in identity discourse. Figure 2 summarizes this categorization of identity dimensions based on their salience and heterogeneity.

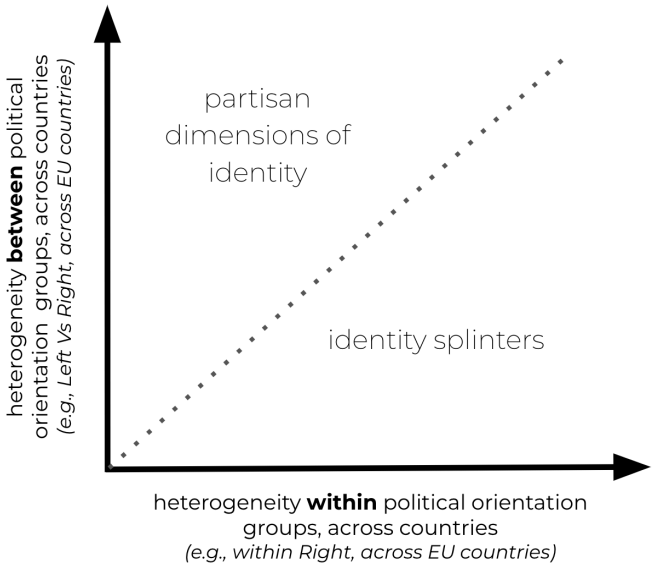

Figure 3: Identity dimension types as a function of heterogeneity within and between political orientation groups, across countries

Our framework also allows to project identity dimension heterogeneity (i.e., divergences) among groups along two other relevant dimensions: the framing heterogeneity of a specific identity dimension within political orientation groups (e.g. within the Right across countries, or, within the Left across countries) and the degree of framing heterogeneity between political orientation groups (e.g. between the Left and the Right, across countries). In Figure 3, the horizontal axis represents heterogeneity within groups that share the same political orientation, capturing how identity varies across countries within a shared political alignment, such as differences among groups of individuals from the Left (Right) across EU countries like France, Germany, Italy and Spain. The vertical axis, in contrast, measures heterogeneity between opposing political orientation groups across countries, illustrating to which degree opposing ideological groups (e.g., Left Vs Right) are more or less similar across countries.

This projection allows us to highlight two key cross-country heterogeneity patterns that must be conceptually distinguished. First, identity dimensions that exhibit greater heterogeneity (i.e, lower similarity) between political orientation groups than within them can be categorized as partisan dimensions of identity. These dimensions reflect a strong unifying influence of political orientation, with shared political alignment overriding country-specific differences. Second, identity dimensions where heterogeneity within political orientation groups exceeds heterogeneity between them are described as identity splinters. These dimensions reveal a dominance of national (cross-country) differences over political alignment, leading to fragmentation of identity even among country-specific groups who share the same political orientation. Together, these patterns allow us to map how political and national contexts interact to shape identity cohesiveness or division at the cross-country level, for example in the European Union.

The case of socio-political identities in EU countries and their online expression

In line with our objectives, the European Union (EU) is a relevant case for this type of analysis due to its multi-level governance structure and the distinctive political tensions arising from the interaction between national and European politics. As a supranational entity actually composed of 27 member states, the EU encompasses a broad spectrum of political identities and perspectives. Identity-related issues are often framed differently across the political spectrum and within varying national contexts

(Hameleers et al., 2021). Regarding the factors shaping public opinion on European citizen's identity and EU integration, Hooghe and Marks (2005) found that citizens' attitudes towards foreigners and foreign cultures play a crucial role. Additionally, they found that public opinion is strongly influenced by ideological orientations and cues provided by political elites and parties.

While EU countries have distinct political histories, traditions, and socio-political realities that give rise to varying national identities, their identities (and related features) do not exist in isolation, as they are linked to specific values and positionings on key socio-political identity issues, such as traditional morality, democratic values, nationalism, multiculturalism, environmentalism, europeanism, among many others. Also, through the EU integration, individuals increasingly relate to, and identify with, socio-political movements and identities that go beyond their nation-state, looking to other European countries and peoples. This gives rise to hybrid and multi-level identity layers that can be studied and related to each other to study differentiated European integration (Moland, 2024) and identity-related conflicts.

Why X/Twitter bios?

As anticipated in the literature section, social media platforms, like X (formerly Twitter), are virtual spaces where identity differences -and commonalities- are expressed, contested and (re)negotiated (González-Bailón, 2023; Taylor et al., 2023; Essig & DellaPosta, 2024; Hopkins et al., 2024). These platforms are actively used by millions of users, including political figures, journalists, and other key influencers and actors to engage in real-time political discourse, making them essential sites for the construction and dissemination of political narratives. Social media bios facilitate comparability across individuals, as X platform affordances and norms encourage users to curate an identity that is easily digestible, making it easier to establish connections and form communities. For those engaged in online political dialogue and debates, this often results in bios that succinctly convey multiple identity dimensions and related identity-signaling cues, such as interests, affiliations and political views on societal issues considered important to them, which can then be compared across a vast number of users. Social media bios are also valuable to study because they provide users with a space to broadcast support for movements and causes, acting as a mechanism for aligning with socio-cultural and political communities. In this sense, bios contribute to the formation of group and collective identities and related narratives, serving as a symbolic identity "beacon" that others with similar beliefs can relate to and rally around. Finally, they can foster the emergence of homophilic communities, where like-minded individuals are more likely to interact, hence reinforcing each other's shared views and identity traits.

Though bios may evolve and be updated over time, as personal characteristics or broader societal trends shift, they are generally more stable and deliberate than opinions expressed in posts and comments. This is because the bio represents a user's self-portrayal—an intentional and often carefully designed signal to others about who they are and what they stand for. This aspect is particularly relevant in the context of social media's role in fostering collective identities and political participation, as a user's bio will serve as an entry point for others to decide whether to follow or engage with them, functioning as a medium for impression management and self-branding (Picone, 2015). By signaling affiliation with specific groups or adherence to particular political stances, the bio not only attracts like-minded users but can also repel those with opposing views.

Within our framework, social media bios should therefore not be understood as purely personal identity declarations, but rather as socially-oriented identity expressions. Being shaped not just by individual preferences but also by the desire to communicate to (and attract) others. This distinction is

important also in relation to the way social media content curation and suggestion algorithms function. For example, words and hashtags in users' bios, can, among others, be used to suggest connections between users, thus influencing whom they follow and the content they see, shaping what they will be exposed to in the platform, and ultimately affecting the discourse they engage in and the communities they form. Therefore, in today's increasingly digitally mediated public sphere, social media bios can be seen as virtual observatories on the identity of users that are politically active online. These traces can hence be aggregated, modeled and analyzed for understanding the dynamics of political alignment and identity expression at different levels. Allowing us to gain valuable insight into how EU citizen's identity is curated and communicated in a platform-mediated environment, and how this, in turn, impacts political discourse and engagement.

We specifically focus on Twitter/X, as, despite recent critique, resistance and crowding-out movements that followed Elon Musk's takeover (Claesson, 2023), up until the 2024 US presidential elections, it has been the social media platform of choice for a very large,diverse, and active population of politicians and elected officials (Van Vliet et al., 2020), journalists (Revers, 2014; Molyneux & McGregor, 2022), and experts (Zhang & Lu, 2024) on a global scale, and specifically in the countries of our study (Ramaciotti & Vagena, 2022).

Politicians, in particular, have been using Twitter/X for a variety of purposes, including engaging with their supporters, sensing public opinion, disseminating political programs and manifestos, and shaping public discourse on actual or foreseen events (Santagiustina & Warglien, 2022). Twitter's design around short and public contents (Tweets and Bios) also facilitates immediate user identification and communication, enabling journalists, citizens, NGOs, and interest groups to interact with elected officials or to comment on their proposals and policies, often with the intention of soliciting feedback and/or influencing policy discussions and decision-making. This dynamic highlights X/Twitter's unique role as a tool for political engagement and its potential to (re)shape the political agendas of parties, governments and officials, in real time, at the world wide scale.

Delimiting social media populations for our study

Members of Parliament (MPs) on X constitute a user population that plays the role of backbone of the online political sphere (Van Vliet et al., 2020; Ramaciotti et al., 2022). This category of social media users is highly consistent, and hence comparable, across national borders among the countries of our study. National parliaments provide a homogeneous and standardized comparative layer that allows us to seed or start a delimitation for population of X users in each country. This contrasts with other political actors that may be active on X and relevant for online political debate, but not comparable across countries (e.g., Ministers organized in different ministries depending on the country, or even public positions that may not exist in every country, such as Regional Counselors in France or Minister-Presidents in Germany).

Starting from these political actors comparable across countries (i.e., MPs), we consider their followers as our populations of study. This choice follows two motivations. First, because MPs provide a comparable reference population, we expect their followers to provide a comparable population across countries with respect to the proximity or interest of individuals in national politics. Second, because we are interested in analyzing the variation of expression of identities cues across the Left-Right spectrum, we need to select populations of individuals that lend themselves to meaningful spatial political representation (i.e., displaying *political sophistication*; Luksin, 1990). Populations of followers of MPs on X/Twitter have been shown to display this property, exploitable with ideology scaling methods to infer their positions in Left-Right scales, in several national settings (Barberà et al.,

2015) and validated using voting registration records, affiliation to social movements, and media diets (Barberà, 2015).

With this framework in mind, we now turn to the specific hypotheses that aim to explore the online dynamics of right- and left-wing identity formation and expression, in the context of the European Union.

Hypotheses

Hypothesis 1 | Greater heterogeneity of socio-political identity cues expressed in social media profiles among Right-wing user group across EU countries (w.r.t Left-Wing)

We hypothesize that for some topics socio-political identity fragmentation will be more pronounced among right-wing compared to center and left-wing across EU countries. This expectation is based on the ideological heterogeneity within the right, where political stances are possibly rooted in nationalist, protectionist, and anti-EU sentiments. Chauvinistic stances related to national identity are likely to vary significantly across different national contexts due to the diverse historical and cultural backgrounds of member states. Also, right-wing movements tend to emphasize local and national concerns, increasingly related to migration and border protection, leading to more particularistic identities that reflect national priorities, such as sovereignty, immigration control, national way of life and traditional morality (Laffan, 1996). This fragmentation will likely be also observable in the content of social media bios, where we expect right-wing users to signal their identity through country-specific linguistic markers/cues tied to exclusive patriotic values and causes (Aichholzer et al., 2021), especially in relation to the aforementioned issues.

Hypothesis 2 | Higher levels of perceived political conflict within EU countries that exhibit higher heterogeneity of socio-political identity cues expressed in social media profiles between Left and Right users groups

We further hypothesize that expressed identity heterogeneity between left-wing and right-wing user groups (within single countries) will be more pronounced in countries where internal political conflict -be it cultural, socio-linguistic, historical, regional- intersects with political institutions. Countries that are more politically diverse or multi-national in composition, such as Germany and Spain, have experienced internal divisions and societal conflicts due to historical cultural and political cleavages (Borbáth et al., 2023), and for which mobility across cleavages is particularly low (Emanuele et al., 2020). In such contexts, we expect that socio-political identities expressed through the bios will diverge more sharply between left and right user groups, each political orientation group aligning along very different framings of the investigated identity-related topics.

Data & Methods

Setting X/Twitter populations in EU countries

We rely on the dataset of European MPs and their followers on X/Twitter by Ramaciotti et al. (2024). This dataset includes the most populous countries in the EU all of which have a high rate of MPs with active X accounts: 196/210 for Belgium, 881/925 for France, 676/805 for Germany, 469/606 for Italy, 197/225 for the Netherlands, 486/560 for Poland, 468/615 for Spain, with Romania being the exception in terms of X usage among MPs (81/466), and which we leave out of our study. The dataset also includes Slovenia (with a high rate of MPs that have active X accounts: 89/130), which we include in our study to diversify our set of countries.

This dataset was seeded with a manual identification and annotation of accounts of MPs during January, February, and March 2023, and their followers, collected during March 2023 using the platform's API. MPs-follower networks have been shown to be spatializable in ideology dimensions using scaling methods in several contexts on Twitter (Barberà, 2015; Barbera et al., 2015). The cited dataset includes a Left-Right scaling of MPs and their followers, calibrated using the Chapel Expert Survey (CHES; Jolly et al. 2022) data to provide spatial reference (i.e., reference positions on the Left-Right scale for far-left, center, and far-right parties and individuals). For each user of each country, the text of profile bios was also collected. The dataset documentation proposes benchmark validations for the position of users on the Left-Right scale based on text annotation. Please refer to the documentation of the dataset (Ramaciotti et al., 2024) for the details of the calibration and the validation procedure, and to Table 1 for a summary of the number of users with text bios available per country for our study. It is important to note that a user that follows MPs from a given country might not be neither a resident nor a citizen of that country, but merely display interest in the politics of that country. In our study, we attribute users to different countries according to whether they follow enough MPs from that country (the threshold in the used dataset is 3 MPs), taken as a signal of interest in the online political debate of that country. We additionally filter out users that, under this criterion, belong to two or more countries, to obtain populations for our 8 countries that can be considered as specifically interested in a single country.

Political categorization of the individuals in our populations

The Left-Right dimension we use captures users' political orientations along a left-right dimension, and is based on the CHES left-right (LR) scale, which ranges from 0 to 10. According to the codebook of the CHES data, this dimension is calibrated such that 0 marks the leftmost positions for political parties, while 10 marks the rightmost, with 5 being the center. It is important to remark that the CHES data is constructed so that political parties from European countries (including those in our study) have positions in a common Left-Right dimension, making the individuals of our populations comparable on this scale. To simplify this dimension for our analysis, we discretized it into three equal-sized categories: Left (0-3,33), Center (3,34-6,65), and Right (6,66-10). This discrete variable is then used as covariate within our topic model, influencing both topics' proportions and topics' contents.

Analyzing X/Twitter bios of the populations for our study

To explore the commonalities and differences in how X/Twitter users express their socio-political identities, we operationalise our framework design through a three-layer approach that integrates Structural Topic Modeling (STM; Roberts, et al., 2014), ideology Left-Right scaling from Ramaciotti

et al. (2024), and the Manifesto Project's annotated corpus (Merz, Regel, & Lewandowski, 2016) and its ontology of socio-political dimensions.

This multi-layered approach allows us to examine left–right and cross EU-country variations in self-representation within social media bios. The framework pipeline is summarized in Figure 4. Unlike our approach, embedding-based topic models, like the *manifestoberta* model[1], do not allow to model how topic contents and proportions vary depending on a covariate of interest (e.g., country or position in the political spectrum). By constructing a lexicon with the Manifesto Project annotated data from the targeted EU countries and using it to build informative topic priors, STM can learn in an unsupervised way how Manifesto Project topics are structured and framed within the context of user bios across different user groups. In contrast, the *manifestoberta* topic model is trained solely on the annotated Manifesto Project corpus, making it domain-agnostic but also more rigid as it cannot learn and incorporate information from the user bio domain. While embedding-based topic models can provide a distribution over topics for a text, they also lack a formal mathematical representation of the correlation structure between topics, meaning that, differently from STM, they do not integrate nor infer directly through the model the co-occurrence or conditional relationships between topics. Also, embedding-based models are not able to capture if and how the same topic is expressed and framed differently by the left and the right, and identifying and highlighting these distinctions is one of the key aims of this work.

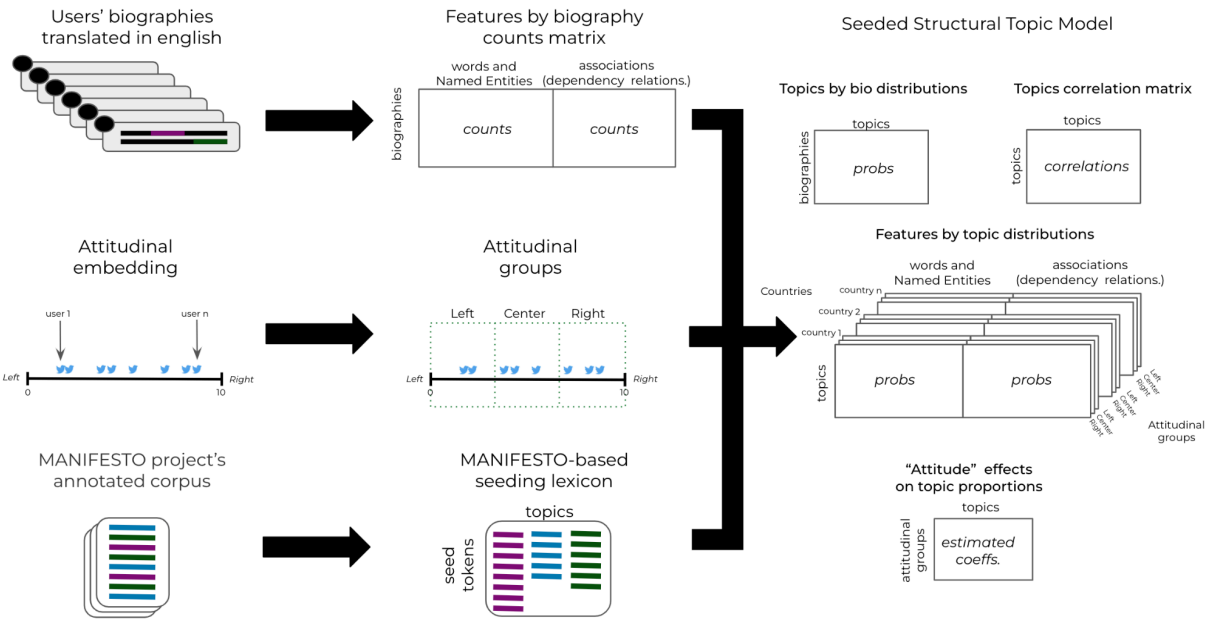

Figure 4: Framework operationalisation pipeline

We apply this seeded STM approach to our data, to which we firstly filter further to ensure consistency in our results. After filtering out empty or very short bios (i.e., those with less than 2 features among the ones in our final feature vocabulary, which contains 16 596 unique features), our study contains 1 201 600 observations (i.e., user biographies) from eight EU countries. To make the bios comparable and more easily modeled, we used the english-translated versions of users' bio[2], as described in Ramaciotti et al. (2024).

[1] https://doi.org/10.25522/manifesto.manifestoberta.56topics.sentence.2024.1.1
[2] Translations based on the M2M100 model by Facebook

The core of our framework relies on a Structural Topic Model of users' bio, estimated using both bios' words and dependency relations, which is seeded with a lexicon derived from the Manifesto Project—the second layer of our framework.

The Manifesto Project is a resource that provides annotated texts from political party manifestos, also translated in english, offering a structured and theoretically grounded source of topic labeled texts related to socio-political issues and identity. We selected the Manifesto Project after evaluating alternative resources such as the Chapel Hill Expert Survey (CHES) and the European Social Value Survey. Unlike these other sources, the Manifesto Project provides an annotated dataset, allowing for the automatic construction of a seed lexicon to initialize the STM. An in-depth description of the Manifesto Project topics and domains can be found in the Manifesto Codebook (2024) at the following URL:

https://manifesto-project.wzb.eu/down/data/2024a/codebooks/codebook_MPDataset_MPDS2024a.pdf

The main advantage of using STM (Roberts, et al., 2014), rather than more traditional topic modeling approaches, like Latent Dirichlet Allocation (Blei, Ng, & Jordan, 2003), or the Correlated Topic Model (Blei & Lafferty, 2006), is that STM is a generalization of the SAGE model (Eisenstein, Ahmed, & Xing, 2011) which allows for the incorporation of covariates, enabling these variables to influence topic proportions and topic contents. STM is therefore a more flexible and robust method for modeling how dimensions of interest for this study, such as political orientation, affect topic proportions and the way topics are framed (i..e, topic contents) in users' bios. By initializing the STM with a lexicon based on an expert-validated framework, like the Manifesto Project, we ensure that the inferred topics are closely aligned with theoretically grounded and well established categories, thus enhancing the interpretability and relevance of our results.

Country \ Political Position	**Left**	**Center**	**Right**	**Total**
Belgium	1 969	15 496	6 803	24 268
France	40 640	85 069	95 751	221 460
Germany	34 175	131 776	13 417	179 368
Italy	72 121	163 877	12 835	248 833
the Netherlands	13 051	37 608	34 244	84 903
Poland	3 407	40 577	21 447	65 431
Slovenia	416	2 329	1 137	3 882
Spain	134 671	145 659	93 125	373 455
Total	300 450	622 391	278 759	1 201 600

Table 1: Observations (users' bios) counts by country and political position category

By incorporating the Left-Right dimension in our model, the STM can account for variations in how users with different political orientations express their identities across topics derived from the Manifesto Project. For example, we can observe how topics related to Education or Culture are framed differently by users on opposite ends of the political spectrum (Left Vs Right). This approach not only enhances the model's ability to capture empirically observed nuances in discourse but also allows for a deeper understanding of the interaction between socio-political identity and group narratives across the left-right political divide.

As anticipated, to build a seed lexicon for the Structural Topic Model (STM), we use data from the Manifesto Project (Merz, Regel, & Lewandowski, 2016), which provides annotated political texts from various European countries. The data was retrieved using the ManifestoR package, which was used to query the Manifesto Project API, allowing us to collect all annotated texts for eight targeted countries: Italy, France, Germany, Spain, Belgium, the Netherlands, Poland, and Slovenia. In total we obtain a dataset with about 500 thousand observations. The retrieved data includes, in addition to the English translations of the texts and the assigned topic labels, other metadata such as the domain to which each label belongs. These domains include: **External Relations**, **Political System**, **Freedom and Democracy**, **Economy**, **Welfare and Quality of Life**, **Fabric of Society**, and **Social Groups**.

The Manifesto Project data is then processed by consolidating topic labels assigned by experts. This involved simplifying the labels by removing suffixes such as "+" and "-" as well as the ": general" designation as well as other patterns identifying subtopics (i.e., words that follow the ":" character). We also remove all topics that have less than 5000 annotated sentences in the Manifesto corpus. The aim of this step is to simplify and standardize the categories for further analysis, while also reducing their number. This step is crucial because the Manifesto project includes too many subcategories of topics with very similar features, which would overly complicate the analysis due to their very large number. For example this is the case for *National Way of Life*, which in our framework is represented by a single topic but which, in the original Manifesto Project ontology had 4 subcategories (per601_1 - *General: Positive*; per602_1: *General: Negative*; per601_2; *Immigration: Positive*; per602_2 - *Immigration: Negative*). Aside from the difficulty of separately identifying these subcategories in users' bios, our goal is not simply to focus on positive and negative sentiments or attitudes towards issues, as other tools, like *manifestoberta,* do. Even when identifiable, such a dual approach reduces socio-political identity complex subjects to oversimplified binaries. Instead, we aim to capture distinctive identity cues contained in users' bio for each topic, which may vary according to the political orientation of user groups, as informed by the ideology scaling. Also, without consolidation, these closely related categories would have required overlapping seed features, which could complicate the seed features attribution process by linking the same terms to multiple topics. This, in turn, would have also made the model more difficult to interpret. By merging these subcategories, we hence ensure that each topic can be based on a distinct set of seed features, enhancing both the interpretability of the STM seed lexicon and that of the model's output.

Next, using Spacy, we apply a natural language processing (NLP) pipeline to extract and consolidate features from the Manifesto Project data, such as words, named entities, and word dependency relations. To assess the importance of these features for each topic, we compute various topic-specific feature metrics, including Relative Frequency (RF) and Term Frequency - Inverse Document Frequency (TF-IDF). RF is then used to rank the features according to their relevance to each Manifesto Project topic. We then construct the seed lexicon through an iterative process: For each topic category, the highest-ranked features (words or word associations) in terms of RF were selected and assigned, one by one, to topics. We ensure that each feature is assigned to only one of the Manifesto topics to avoid overlap between topics at the seedling phase. This iterative assignment process continues until every topic has the targeted number of candidate seed features, that we fixed to one hundred (100) per topic. To further refine the lexicon and remove overly generic features, we set a TF-IDF threshold of five (5) and removed all features that fell below this threshold. Additionally, we filtered out all features that appeared fewer than fifty times, both in the Manifesto Project data and in our corpus of X users' bios. Finally we remove topics that have less than three seeding features in the final lexicon. The final output is a seed lexicon with 607 features assigned to 28 topics from the

Manifesto topics ontology. Figure 5 shows Manifesto domains and topics in our final lexicon. Although the initial lexicon of candidate features included an equal number of seeds for each topic, the final number varies across topics, as represented by the topic's box size in Figure 5.

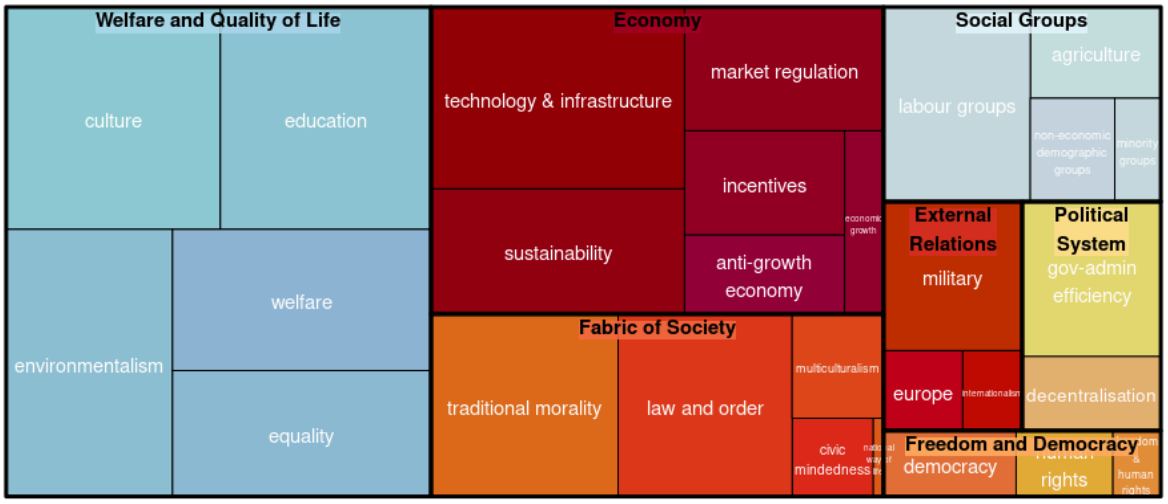

Figure 5: MANIFESTO-based seeding lexicon with topics and domains, box sizes proportional to the final number of seed features (i.e., words and associations) for each topic and domain.

The seed features of the final lexicon are displayed in Figure 6. As the word clouds reveal, in general, the selected seed features for each topic provide a very good coverage of their respective Manifesto Project topics, containing terms that, to an expert eye, appear both relevant and distinctive to those themes. However, very few topics, probably because of the rather stringent exclusivity criteria imposed by filtering our features with a TF-IDF score inferior to 5, appear to specialize on specific topic sub-issues, like the *minority group* topic that contains terms like "*disability(ies)*" and "*victim(s)*".

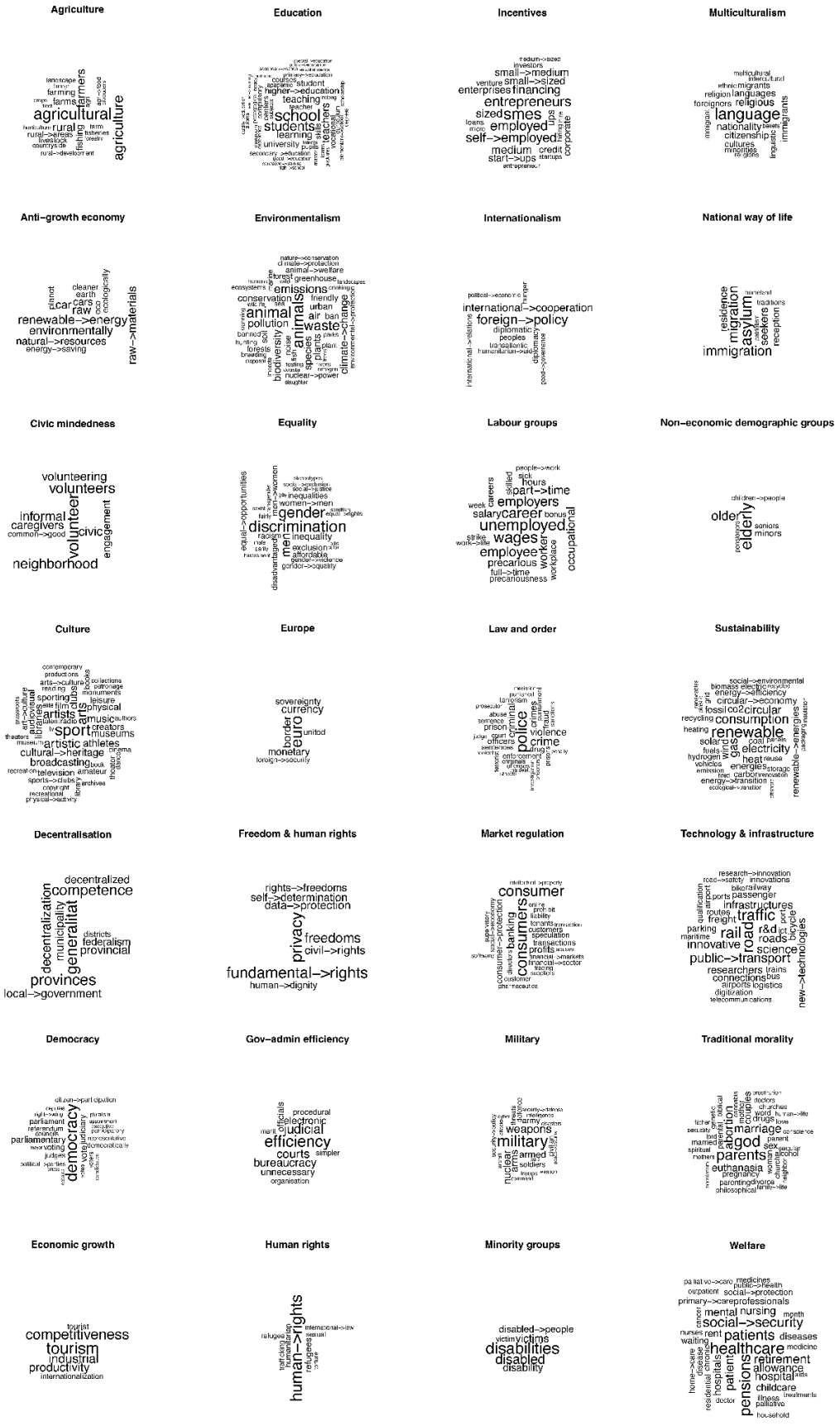

Figure 6: Wordclouds of the final features in our MANIFESTO-seeded lexicon, by topic. Feature font size proportional to feature relative frequency in Manifesto corpus for the selected topic.

This lexicon is used to seed the estimation of the STM, guiding the model to associate relevant words and word-associations with topics from the Manifesto Project. At the initialization, 0.25 of the distribution mass is evenly distributed across topic-specific seed features in the lexicon, while the remainder of the distribution mass (0.75) is uniformly distributed across all features. We also add a residual topic, with a non-informative (i.e., uniform) prior, to capture issues that are not captured by the topics and domains in the seeding lexicon, this also allows seeded topics to better specialize on the target issues (i.e., those of the Manifiesto Project ontology). For more details about the STM and its DAG, we refer the reader to Roberts et al. (2014), and to Santagiustina & Warglien (2022) for a beyond bag-of-words application of this topic modelling framework.

The convergence criterion (*emtol*) is set to 1e-2. We remark that this threshold is higher than what we would use with a non-seeded STM as we want the model to infer topics from the data without diverging too much from the Manifesto-seeded categories[3].

The LR (Left, Center, Right) and Country (Belgium, France, Germany, Italy, the Netherlands, Poland, Slovenia, Spain) categorical variables, representing respectively the political positioning of users from the ideology scaling and the EU country of the MPs they follow, are included as a covariates affecting both topic proportions and topic content (see Table 1 for observations counts by category). The model estimation converges after 3 iterations with a lower bound on the marginal likelihood of -62849647.

[3] As a robustness check we repeated the STM estimation process with lower convergence criteria (respectively 1e-3 and 1e-4). Results and findings obtained by lowering *emtol* (available upon request) are similar for most topics, but for some the content diverges significantly from the Manifesto seeded categories (i.e., none of the seeds is contained in the corresponding top topic features) and for this reason we here select and present the version of the STM for *emtol*=1e-2.

Results

To begin our analysis, we focus on examining the extent to which MANIFESTO-seeded topics are represented in the bios of our sample of users' bio from eight European countries. To visualize this, we use a boxplot to display the average proportions of topics and domains in our corpus. Figure 7 shows that the most covered domains include **Welfare and Quality of Life**, particularly the topics of *culture*, *education*, and *environmentalism*. **Fabric of Society** is dominated by the *traditional morality* topic, followed by *multiculturalism* and *national way of life*. In the **Economy** domain, *market regulation* and *incentives* are the most covered topics. In contrast, for the least covered domains, top topics include *non-economic demographic groups* (**Social Groups**), *europe* (**External Relations**), and *democracy* (**Freedom and Democracy**).

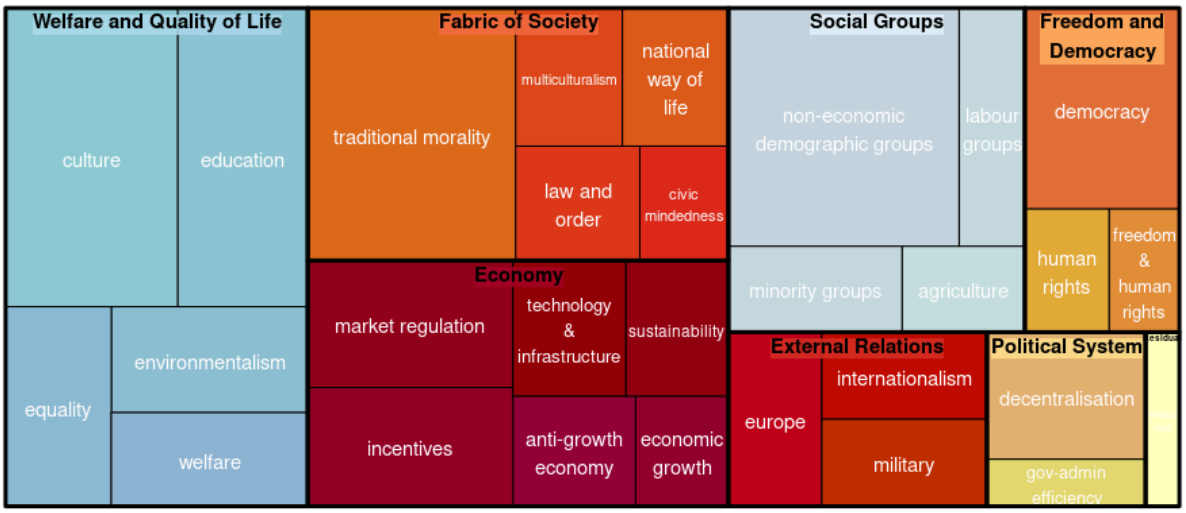

Figure 7: Topics and domains with topic box areas proportional to observed proportion in users' biographies.

As detailed in Framework and Hypothesis section, mapping both the heterogeneity (i.e., divergence) and salience of Manifesto topics (i.e., identity dimensions) in users' bios by country and political orientation allows for an in-depth understanding of identity-based societal fragmentation and identity-conflict potential within the EU and within specific countries, across the political spectrum. We remark that, while content heterogeneity/similarity measures capture how identity dimensions are framed differently across ideological and country-specific lines, examining their propensity -the prominence of these topics in users' bios- reveals their actual salience and significance within online social media and in related online communities and debates. This, in turn, sheds light on their potential influence on social perceptions of sameness or conflictuality in European users' identities, whether for all or specific dimensions, likely affecting political debates and shaping the broader sense of unity or division within member states and within the whole EU.

To assess differences in the salience of Manifesto-seeded identity dimensions across countries and across the political spectrum, in Figure 8, we plot average propensities by topic, by country and by political orientation (Left, Center, Right), to facilitate comparison propensities have been normalized by row. Topic propensities represent the average proportion of a given topic in the user biographies for a given category of users, where categories are based on users' countries and political orientations -coming from a discretization of the Left-Right CHES dimension in the ideology scaling by Ramaciotti et al. (2024, see details in Data & Methods section).

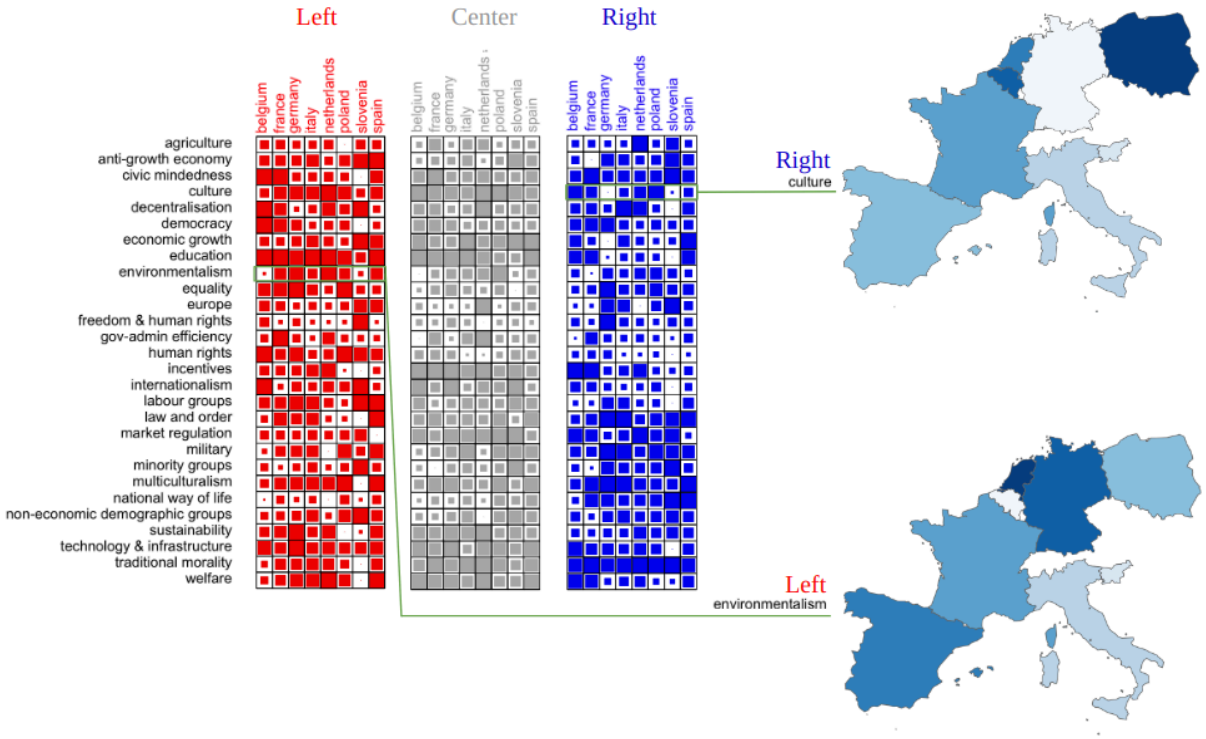

Figure 8: Average topic propensities by country, and by political orientation group. Size of square proportional to topic propensity (i.e., avg. probability of topic across biographies, by user pol.pos. and country group). Propensity values normalized in the zero-one range by row (i.e., topic).

In Figure 8, we highlight differences in average topic propensities by country and by political orientation (Left, Center, Right). To facilitate within-topic comparisons for different country and political orientation groups, propensities in Figure 5 have been normalized by row.

Figure 8 —and Table A.1 in the Appendix— show that some topics, like *economic growth, technology & infrastructure*, *gov-admin efficiency*, *civic mindedness*, *market regulation*, *anti-growth economy*, and *welfare* exhibit rather consistent levels of prevalence across the Left, Center, and Right, and also across countries, suggesting a shared baseline interest/concern for these topics, which transcends ideological boundaries within and across the countries examined. In contrast, other dimensions, like *culture*, *education*, *democracy*, *incentives*, *europe*, *decentralisation* and *traditional morality* show significant variations in coverage across political groups and among countries. For instance, *education* is notably less emphasized in Slovenia and Poland, compared to other countries, who generally give education a relatively higher profile in their bios. Also, on the Right side of the political spectrum *education* receives comparatively low salience when contrasted with the Left, highlighting a notable difference in how education features as part of group's identity communication. This pattern is consistent across most countries, underscoring a cross-national trend in which educational related contents and identity cues are, on average, more relevant to Left-leaning users groups. For other topics, like *democracy*, differences between political orientation and country groups are also very pronounced. While democracy tends to be more prominent overall in Left-oriented users groups compared to Center- and Right-oriented ones, there are significant country-specific differences among countries. For instance, Left-oriented user groups in countries like Slovenia show significantly lower topic propensities for *democracy*.

Figure 8 also shows that some topics, like *national way of life, environmentalism, equality, internationalism*, and *technology & infrastructure, welfare* mainly present major variations across

countries. For example, users from Spain, Poland and Italy tend to dedicate more space, on average, to *national way of life* discourse in their bios. This emphasis forms a distinctive dimension of how individuals from these countries communicate their identity on social media, highlighting more issues related to national pride, patriotism and migration as central elements of their online bio.
Environmentalism also exhibits significant country-specific variations, with nations like the Netherlands and Germany demonstrating higher topic propensities. Interestingly, the Netherlands and Germany, which exhibit the two higher propensities for discussing *environmentalism*, also ranked among the top 15 in the World Economic Forum's 2024 Environmental Performance Index (EPI): Germany holds the 3rd position, while the Netherlands is ranked 13th.

Identity dimensions similarity across EU countries and political orientations

To assess, for a given topic, how similar the words and associations used by users from different EU countries are, also based on their political leanings, we compute the Jensen-Shannon (JS) divergence between pairs of features distributions. These distributions inferred through STM represent the probabilities of words and associations observed in the bios corpus, by topic (for $i \in [1,29]$), by users' country group ($j \in$ [Belgium, France, Germany, Italy, the Netherlands, Poland, Slovenia, Spain]), and by political orientation ($g \in$ [left, center, right]). To measure the heterogeneity within the left and right across our sample of EU countries—and also to quantify how the two sides of the political spectrum differ—we calculate the average JS divergence by topic, and by political orientation group. This can be done within political groups (e.g., within Left and within Right) and between groups (e.g., Left & Right)[4], the latter representing the average pairwise distance between left-leaning and right-leaning user groups across the eight selected EU countries.

As an illustrative example, in Figure 9 we show the similarity (1-JS divergence) between groups for the topic *national way of life*. Figure 9.a. reveals, for example, that the way the *national way of life* topic is framed by right-leaning users in Italy is more similar to that of right-leaning users in Germany (0.82), compared to right-leaning users in France (0.76) or Spain (0.78). Interestingly, Figure 9.b., which shows within and across political orientation groups similarity averages among the eight countries, reveals that, for *national way of life*, there appears to be more similarity between EU country identities on the left side of the political spectrum (0.86) compared to the right (0.76). This suggests that there may be some structural differences in how the two sides of the political spectrum define their political identities across the investigated group of EU countries, warranting further investigation if this pattern, supporting the non rejection of *Hypothesis 1*, is observed only for this topic or also for others.

[4] *Within Left* group captures the average dissimilarity (JS divergence) of topic-specific feature distributions, by topic, for users on the left side of the political spectrum, across all pairs of EU countries in our dataset. *Within Right* group captures the average dissimilarity (JS divergence) of topic-specific feature distributions, by topic, for users on the right side of the political spectrum, across all pairs of EU countries in our dataset. *Left & Right* group captures the average dissimilarity (JS divergence) of topic-specific feature distributions, by topic, between users on the left and right sides of the political spectrum, across all combinations of left-leaning and right-leaning user groups from EU countries in our dataset. When computing averages we omit values in the diagonal of the JS divergence matrix (which are all equal to 0).

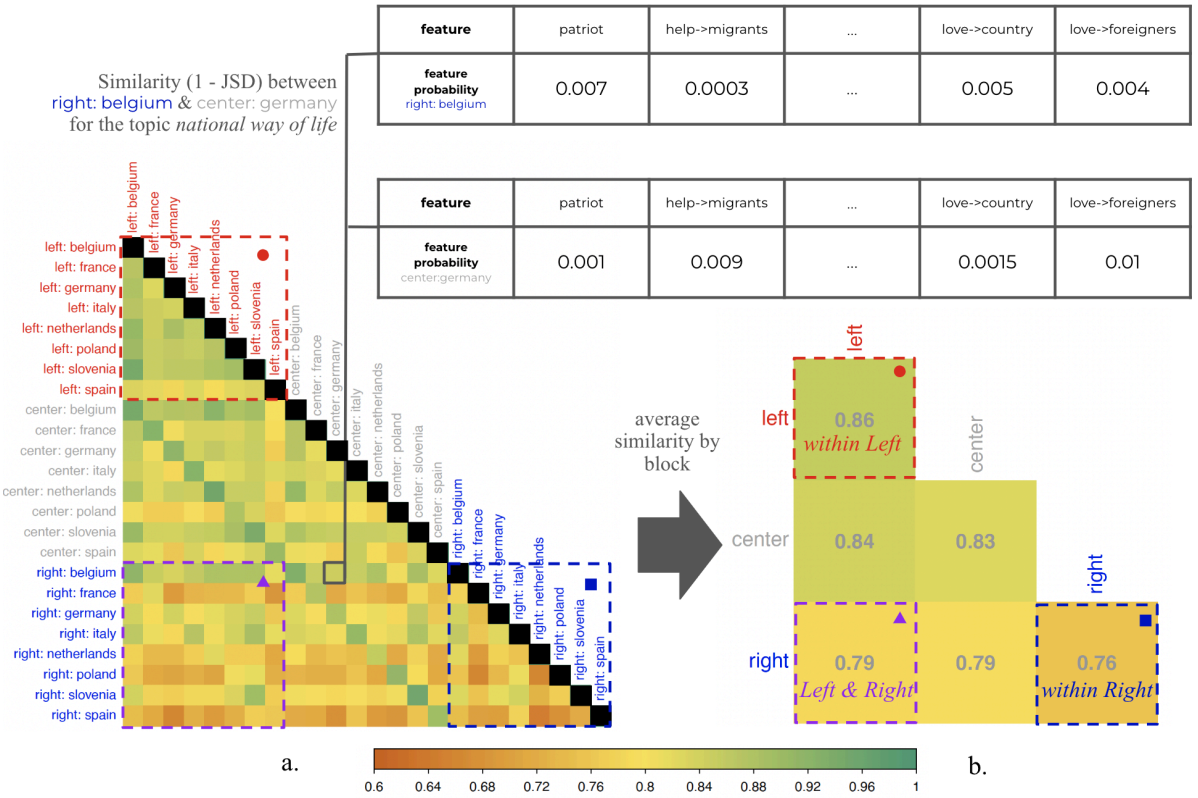

Figure 9: **9.a.** matrix with pairwise similarities (1-JS divergence) between topic contents (i.e., topic features distributions), by group (pol.pos.*g*: country.*j*), for the topic *national way of life*. **9.b.** matrix with average topic similarities by block, within and between (left, center and right) political orientation groups for the selected EU countries, for the topic *national way of life*.

Figure 10, which shows the average similarity of topic contents within political groups (*within Left* and *within Right*) and across groups (*Left & Right*), highlights that certain identity dimensions (i.e., topics) are generally less uniform across our eight EU countries on both sides of the political spectrum. These topics, which rank in the bottom 10 by average similarity in all three columns of Figure 10, include *democracy, national way of life, decentralization, education, multiculturalism,* and *gov-admin efficiency*. These issues represent key "dimensions of fragmentation" within European identities, as they exhibit significant variation in how they are expressed and framed and discussed across different countries and political alignments. On the other hand, there are some topics that exhibit high similarity scores across the political spectrum for the eight considered countries. in particular *non-economic demographic groups*, *minority groups*, *market regulation*, *human rights*, and *military*, which rank in the top 10 by average similarity in all three columns of Figure 10. These issues represent key "dimensions of unification" within European identities, as they exhibit little variation in how they are framed and discussed across different countries and political alignment groups.

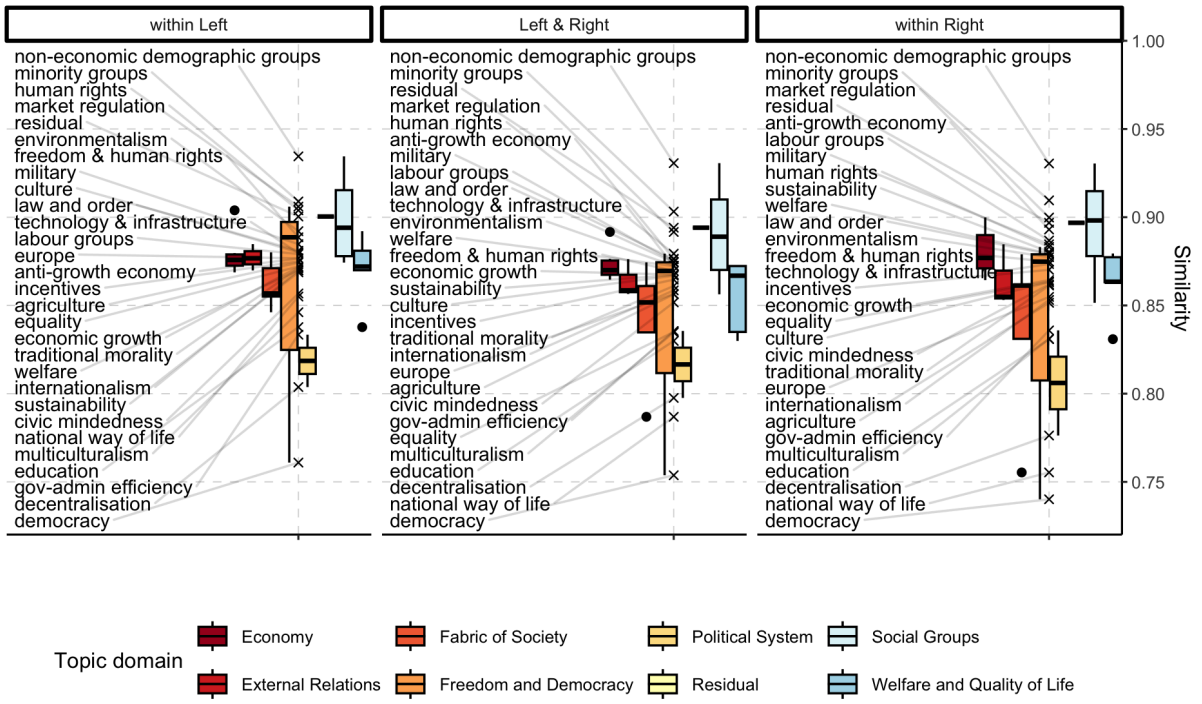

Figure 10: Block-wise average similarity in identity-dimension expression (1-JSD of features by topic probability distributions), by topic, by group, with domain-specific boxplots.

Similarities among and between political orientation groups, in terms of the distributions of words and associations for a specific topic are highlighted in Figure 11. The figure shows us that, for a large majority of the identity dimensions (21 topics out of 29), average differences in topic contents among pairs of EU countries for the Left (*within Left*) are smaller than those for the Right (*within Right*). This means that on average, country-specific groups on the left side of the political spectrum are more similar to each other, for these 21 topics, than users on the right side of the political spectrum, this evidence strongly supports our first Hypothesis. It also reveals that there is less identity alignment among EU countries for the right-wing w.r.t. the left wing, suggesting that finding a common identity ground and communicating a cohesive shared identity for the European Right might be more challenging than for the opposite side of the political spectrum.

For a majority of the topics (16), average similarities among countries within the right (see Fig. 10 *within Right*) and within the left (see Fig. 10 *within Left*) are larger than the average similarity between the right and the left (see Fig. 10 *Left & Right*), this includes *anti-growth economy, civic mindedness, education, environmentalism, equality, freedom & human rights, human rights, incentives, labour groups, law and order, market regulation, military, minority groups, sustainability, technology and infrastructure, traditional morality*, plus to the *residual topic* that captures issues that are not included in the Manifesto categories. As dimensions of identity differentiation between the Left and Right, these topics have the potential to be leveraged in constructing and communicating partisan European identities, potentially deepening perceived divisions across the political spectrum in the EU. Since these dimensions exhibit higher within-group than between-group similarities, both sides of the political spectrum may have incentives to exploit them (e.g., in their communication strategy and manifestos) to rally and/or entrench their supporters. For this reason, we refer to these topics as the "partisan dimensions" of identity within the EU.

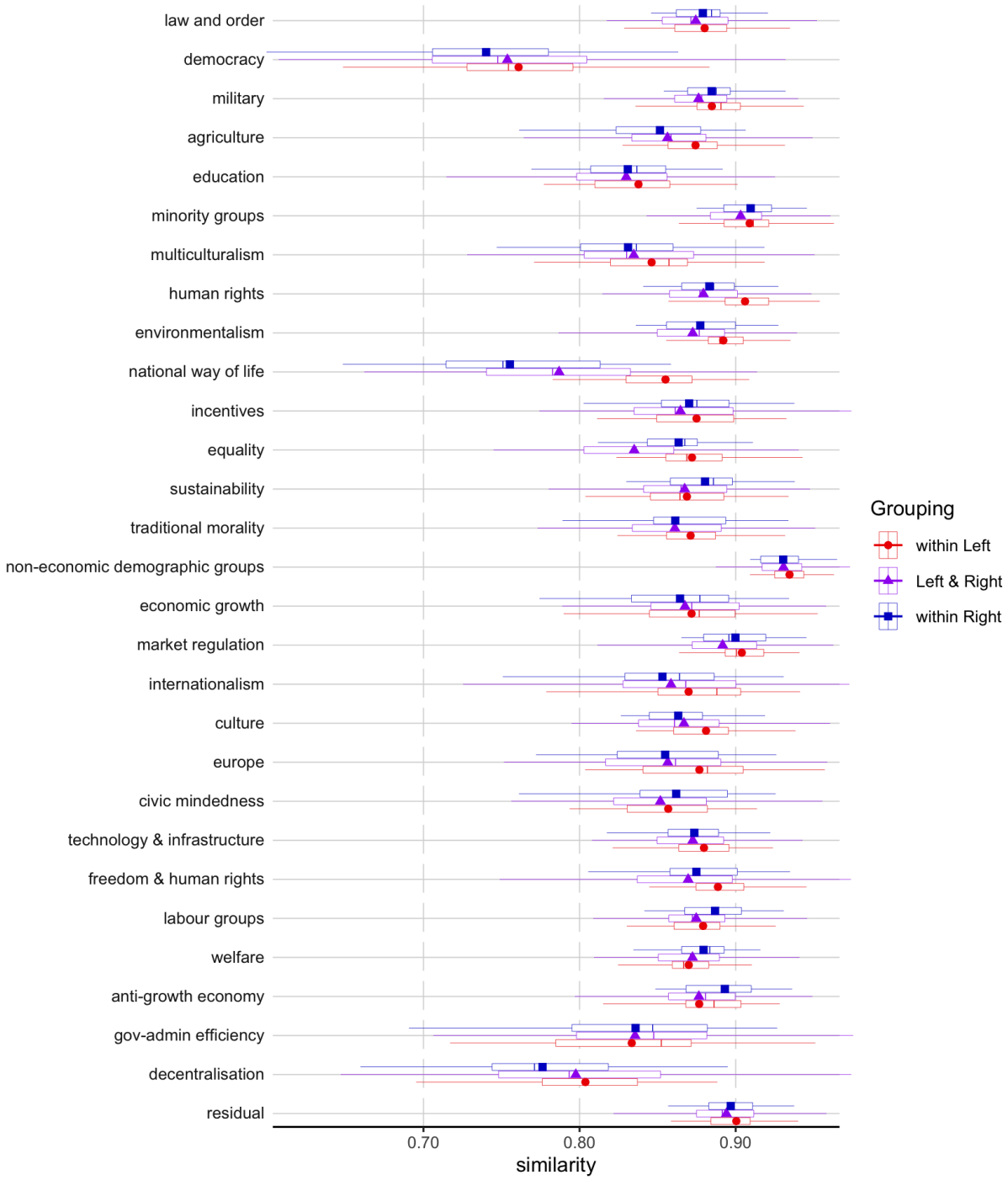

Figure 11: Shapes represent political blocks' average similarity scores by topic and by political orientation grouping (red circles: *within Left*; violet triangles: *Left & Right*; blue squares: *within Right*). Box-plots represent the dispersion of similarities between pairs of countries, by topic and by grouping (red boxes: *within Left*; violet boxes: *Left & Right*; blue boxes: *within Right*).

To delve into topics, and to see to which degree discourse about these identity dimensions varies between the left and the right, through Figure 11 we explore differences between the left and the right side of the political spectrum in terms of average feature probability (averaged for the 8 EU countries) by topic, showing only the 20 most frequent feature for that topic (top 10 features for the left and top

10 features for the right).

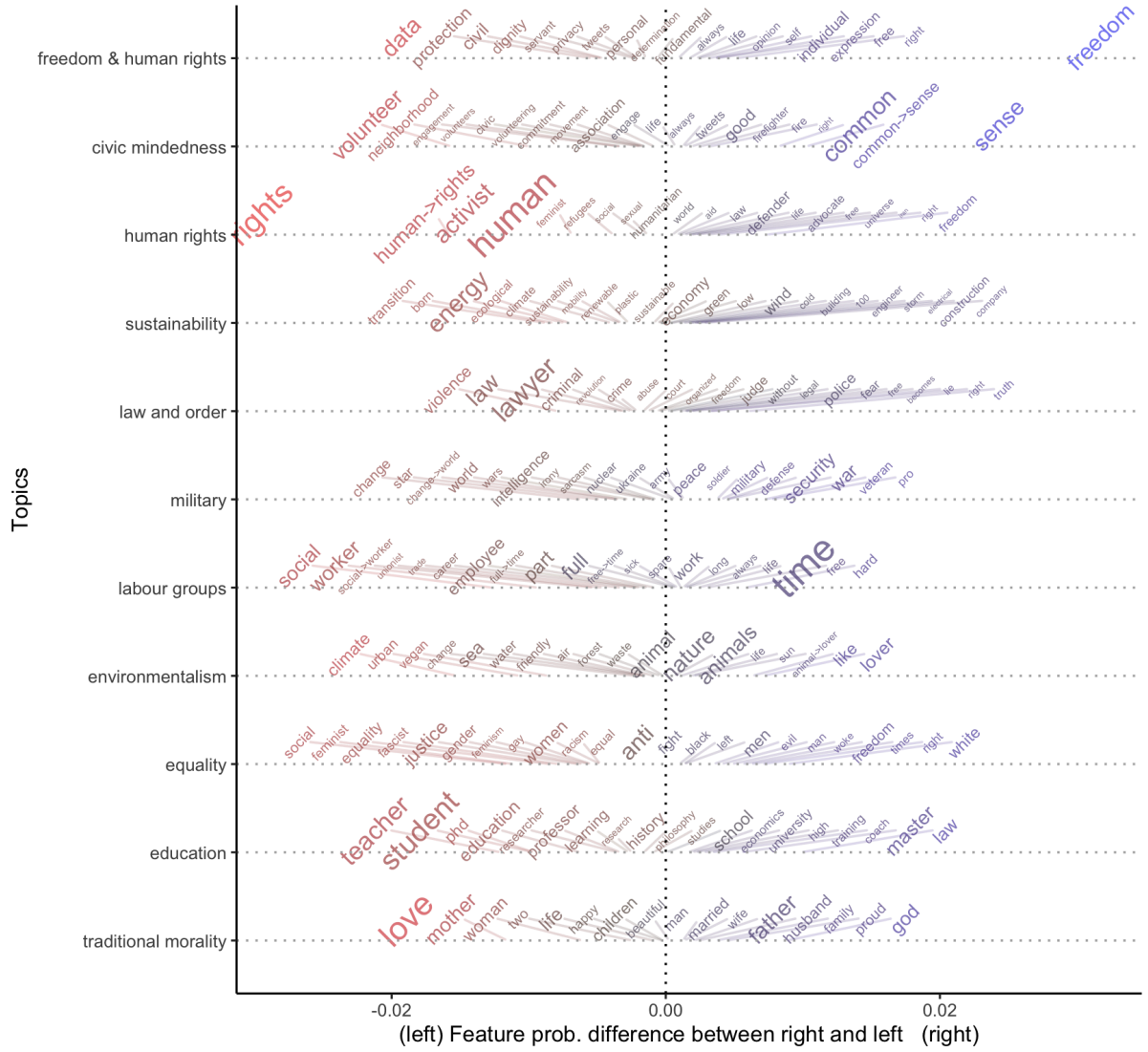

Figure 12: Top features by topic and differences in topic-specific features probability between the left and the right, for a subset of identified "partisan dimensions" of identity. Feature font size proportional to average frequency for the topic, feature position on the x-axis and color scale represents differences in feature probability between the Right and the Left, by topic.

In Figure 12, each topic is represented by a row, and the size of features is proportional to their average probability by topic. Features' color and their positioning on the x-axis represent differences in probabilities between the right and the left side of the political spectrum: *prob(*feature*.x,* pol.pos*.right,* topic*.j) - prob(*feature*.x,* pol.pos*.left,* topic*.j)*.

As we can observe from Figure 12, for the identity dimension *freedom & human rights*, the left side of the political spectrum appears to highlight in their bio terms connected to data protection, privacy, and collective liberties, with words like "*data*", "*protection*", "*privacy*" and "*personal*" prominently featured. This suggests a focus on safeguarding citizens within a framework of mutual rights and responsibilities, with an emphasis on protection against digital surveillance, corporate privacy intrusion, and commercial usage of personal data. On the right side of the political spectrum, users tend to focus their attention around individual freedom of expression and autonomy, with terms such as "*free*", "*expression*", "*opinion*", "*individual*", and "*self*" being relatively more frequent. This

contrast suggests that the left users' communication of freedom, as an identitarian dimension, involves collective structures and protections, while users from the right tend to be more focused on personal liberties and self-expression rights at the individual level.

Regarding the topic *civic mindedness*, the left's discourse reflects an orientation towards active community engagement, marked by associationism and volunteerism. Terms like "*volunteer*", "*neighbourhood*", and "*engagement*" indicate a hands-on approach to community support and service, with an emphasis on grassroots movements ("*association*", "*movement*") and civic responsibility ("*civic*"). In contrast, users on the right side of the political spectrum tend to employ a more abstract, value-judgment based discourse, with terms like "*good*", "*right*", and "*common->sense*", reflecting a view of civic duty that is perhaps less rooted in direct participation and more connected to traditional moral codes. Terms like "*firefighter*" and "*fire*" appear more frequently on the right side of the spectrum, suggesting that certain roles, especially those tied to public safety, are particularly valued, as civic identity signaling cues, on this side of the political spectrum (this is also true for the *military* topic). The *civic mindedness* topic also shows that on the left, this identity dimension is communicated as a more active collective endeavor, while users on the right tend to frame it as a moral duty, tying it to value-judgements.

When it comes to the topic of *human rights*, right-leaning users employ more often general terms like "*defender*", "*advocate*", and "*aid*", focusing on broad concepts of freedom ("*freedom*", "*free*"), as if to emphasize universal rights and self-determination. On the other hand, users on the left side of the spectrum tend to invoke more frequently the label "*human->rights*" and to focus on more concrete issues such as gender equality, women's rights, and refugee protections, with terms such as "f*eminist*", "*sexual*", and "*refugees*" being relatively more frequent. This shows that while users on the right tend to embrace a more individualistic and opportunistic notion of human rights, the left tends to focus discourse about this dimension on targeted protections for marginalized groups, like women and migrants.

Sustainability, an issue that is known to be highly divisive at the EU level, reveals some very informative identity-communication differences between the users from the left and the right. Left-leaning identity discourse is related to "*climate*", and is focused on sustainable transition related terms like "*transition*", "*ecological*", "*sustainability*", "*renewable*", with specific concerns for major industry transitioning issues, signaled through terms like "*energy*" and "*plastic*". This underscores a commitment to change, with a focus on sustainable production and environmentally friendly practices. On the right side of the political spectrum, sustainability-related language is more focused on issues related to "*green*" engineering and the real estate business ("*construction*", "*building*", "*company*", "*engineer*"), suggesting a different framing of environmental risks, focusing on motivating cues like extreme weather ("*wind*", "*storm*") rather than climate change, and with a lesser emphasis on transitioning. This communicated identity gap indicates that users on the left tend to regard sustainable transition as key for defining their identities, while the right appears to prioritize business and cautious progress in relation to specific issues (e.g., sustainable buildings), more wary of the economic implications that a broader sustainable transition process might entail.

For what concerns the *law and order* identity dimension, discourse differs notably between users on the left and right sides of the political spectrum. Left-leaning individuals tend to frame their discourse around crime and social justice issues, with frequent references to terms like "*violence*", "*crime*", "*criminal*", "*abuse*", and law related institutions and roles ("*law*", "*court*", "*lawyer*"). There is also some emphasis on anti-establishment concepts like "*revolution*" suggesting a focus on addressing systemic injustice and advocating for reform. Conversely, right-leaning users are more inclined to use

language centered on authority, insecurity related emotions, and traditional values, with frequent mentions of terms like "*police*", "*security*", "*fear*", "*truth*", "*freedom*", "*lie*", "*judge*", and "*order*". This terminology reveals a focus on security issues and enforcing societal order. Also, *law and order* appear to be viewed as inseparable from the institutions and civil servants that enforce it (i.e., the police and the judges).

Discussions of the *military* dimension highlight further ideological differences between users on the left and right side of the political spectrum. Among left-leaning individuals, commonly used terms include "*change*", "*wars*", "*change->world*", "*intelligence*", ""*irony*", and "*sarcasm*". This suggests a critical stance toward military power, likely implying an inclination toward re-evaluation or reform of military roles and interventionism, suggesting skepticism about the current state of affairs and a probable desire to shift focus towards intelligence- and diplomacy-based intervention approaches. Conversely, on the right side of the political spectrum, frequently used terms include "*peace*", "*defense*", "*soldier*", "*military*", "*war*", "*security*", "*veteran*", and "*pro*". This vocabulary usage underscores a strong emphasis on the importance of militarism in the right side of the spectrum, and of related beliefs about the role of the military forces for national security. The portrayal of this identity dimension suggests that this user group sees it as being essential for defending the national interests and security, maintaining peace, and honoring those who serve. These contrasts confirm a fundamental and well-known difference between ideological camps, users on the left see military power as something to be limited and cautiously managed, while the right tends to view it as indispensable to national security and international influence, supporting a more assertive defense policy and a greater recognition of military personnel.

For what concerns *labour groups*, left-leaning users tend to employ more terms like "*social->worker*", "*employee*", "*trade*", "*unionist*", and "*union*", reflecting a focus on workers' rights and collective bargaining. This suggests an identity that prioritizes the protection and empowerment of workers, viewing labor as a domain for promoting unity and solidarity among workers. The *labour groups* dimension is portrayed by the left as a collective experience in which rights and work conditions are secured through trade union activity. Right-leaning users use more terms like "*hard*", "*always*", and "*time*", indicating a more productivity-oriented view of labor. This description of labour tends to suggest a more individualistic perspective, where one's job and role in the workforce are reflections of individual effort and where success and empowerment is achieved through hard work. This difference underscores very distinct approaches to labour as an identitarian dimension: users on the left tend to view it as a collective bargaining space where group identity and mutual support is key for success, while right-leaning users tend to portray it as an arena for individual achievement, where effort and dedication justify one's position within a competitive landscape.

Environmentalism is known to be an especially relevant issue for users on the left side of the political spectrum. For this identity dimension, left-leaning users more frequently employ in their bio terms like "*climate*", "*change*", "*water*", "*sea*", "*forest*", "*air*", "*waste*", and "*vegan*", signaling their commitment to addressing ecological issues and animal welfare. The left's discourse conveys a sense of urgency, framing environmental concerns as issues that require action to fight climate change and ensure the preservation of ecosystems. In contrast, right-leaning users approach *environmentalism* with a discourse reflecting a more personal and sentimental connection to nature and animals. More frequent terms, like "*animal->lover*", "*lover*", "*nature*", "*like*", and "*life*", suggest a focus on the appreciation and enjoyment of the natural world and wildlife, evoking traditional and romanticized aspects of the relationship between humans and nature, also focusing on non-anthropogenic elements of nature, like the "*sun*", which suggests that nature is framed as being external and separate from

humans and their activities. This language implies a different approach to environmentalism, which is less focused on climate related issues and systemic reform and more oriented toward the enjoyment of nature and wildlife. On one hand, the left's discourse suggests an imperative to address climate change and ecological degradation as urgent collective challenges. One the other, the right's discourse around nature tends to center on an appreciation of the beauty and inherent value of animals and the natural world.

For the *equality* dimension, left-leaning users tend to emphasize issues related to gender and LGBTQIIA+, using terms such as "*gender*", "*women*", "*gay*", "*feminism*", and "*feminist*". They also frequently refer to discrimination against (ethnic) minorities, through terms like "*racism*", "*anti*" and "*fascist*", alongside broader social justice issues, using terms such as "*social*", "*justice*", "*equality*", and "*equal*". This discourse underscores left users' commitment to social equity, with a focus on historically marginalized or discriminated groups. Conversely, right-leaning discourse around equality often revolves around terms related to skin color, such as "*black*" and "*white*", and invokes controversial characterisations of egalitarian values, expressed through terms like "*evil*" and "*woke*", which suggest a focus on countering what users in the right might see as excessive political correctness on the left side of the political spectrum. Right-leaning users also emphasize on identity cues related masculine identity and individual freedoms, using more often terms like "*freedom*", "*men*", and "*man*". This language suggests a concern with protecting traditional values and social hierarchies (e.g., male dominance), and freedom from alleged impositions related to equality discourse and values in the opposite camp. This split highlights the contrasting identities of the two camps, with the left advocating for egalitarianism and the right emphasizing the preservation of values and gender-roles instrumental to the legitimation and preservation of traditional socio-economic structures and hierarchies.

Education discourse highly differs between the two sides of the political spectrum, with the left emphasizing institutions of education ("*education*", "*learning*"), related roles ("*teacher*", "*professor*", "*phd*", "*student*"), humanities studies ("*history*", "*philosophy*"), and scholarly pursuits ("*researcher*", "*research*"). This discourse suggests a view of education as a vehicle for empowerment, social mobility, and status-building. Right-leaning users tend to emphasize more the role of institutions of professionalization ("*training*"), related roles ("*coach*"), along with pragmatic disciplines like "*economics*" and "*law*". This signals a perspective that portrays education primarily as a means for professional development.

Least but not last, the *traditional morality* topic, reveals clear differences in discourse between left- and right- leaning users. Right-leaning users emphasize identity cues related to traditional family structures and roles, with terms like "*married*", "*husband*", "*father*", "*wife*", "*family*", and "*proud*", along with religious references, like "*God*", being more frequent and indicating a commitment to christian institutions and traditional family roles. This suggests a worldview rooted in adherence to traditional norms, often with a focus on man-centric and religion-inspired family narratives, which appear to guide identity construction and communication for this dimension. In contrast, left-leaning users use more generic terms related to affective relationships and fulfillment, such as "*love*" and "*happy*", alongside discourse focused on women-centric family narratives, like "*motherhood*", "*woman*", and "*mother*". This discourse hints at a more religion-agnostic, nurturing approach to morality, one that values emotional bonds and individual well-being over strict adherence to traditional roles and norms.

Interestingly, Figure 11 also reveals that for ten topics (*agriculture, culture, decentralization, democracy, economic growth, europe, internationalism, multiculturalism, national way of life, and*

non-economic demographic groups), the average similarity among EU countries within the Right side of the political spectrum is smaller than that between the Right and Left, suggesting that, at least for these dimensions, finding common ground for constructing or communicating a multi-partisan EU identity (i.e., one which should allow users in both sides of the political spectrum to self-identify with) would be easier than constructing on top of them a unified "European Right" identity. We call these topics "right-wing identity splinters". On the other hand, in Figure 11, there are two topics (*welfare* and *gov.admin efficiency*) for which average similarities among the eight EU countries within the Left side of the political spectrum are smaller than those between the Right and Left. We call these topics "left-wing identity splinters" within the EU. In Figure 13 we showcase differences between left and right for some of these identity splinters.

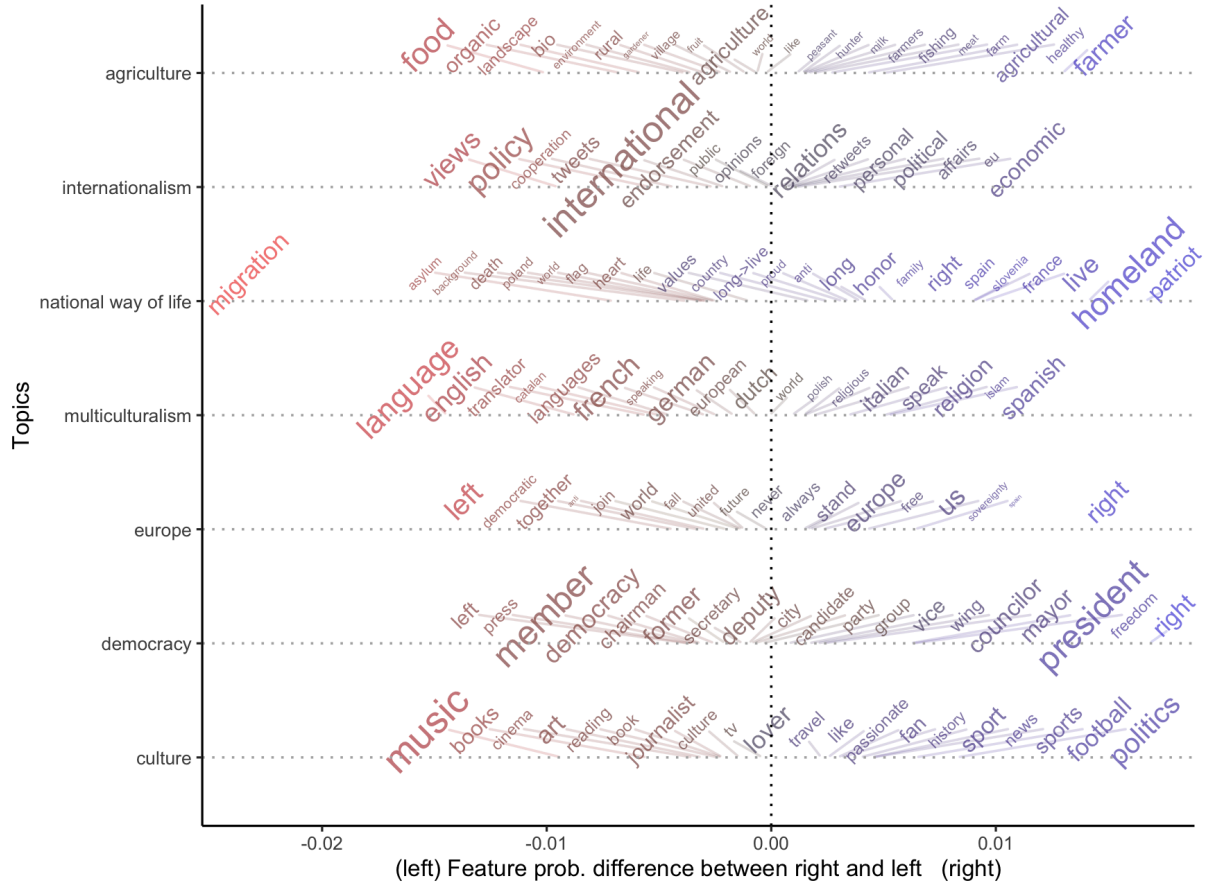

Figure 13: Top features by topic and differences in topic-specific features probability between the left and the right, for a subset of "identity splinters". Feature font size proportional to average frequency for the topic, feature position on the x-axis and color scale represents differences in feature probability between the Right and the Left, by topic.

As we can observe from Figure 13, discourse about *agriculture* highly differs between the two sides of the political spectrum, with the left emphasizing its ecological, local, and sustainable aspects, where agriculture is valued for its connection to "*rural*" life, environmental stewardship, and "*organic*" or "*bio*"(logical) food production. By focusing on terms like "*rural*", "*village*", and "*organic*", left-leaning discourse suggests an appreciation for agriculture as part of a lifestyle that respects the "*environment*" and emphasizes small-scale, community-oriented food production. On the other hand, the discourse among right-leaning users emphases traditional food production practices like "*farming*", "*fishing*", and "*hunting*", along with associated figures ("*farmer*", "*farmers*"). Terms

focusing on food products and their characteristics, such as "*meat*", "*milk*" and "*healthy*" indicate a perspective that values agriculture primarily as a tool for providing high-quality raw food.

For what concerns *internationalism*, right-leaning users appear to focus more on "*economic*", "*political*", and "*EU*"-related affairs and foreign relations, while left-leaning users more frequently use terms like "*cooperation*", "*endorsement*", and "*policy*", suggesting a perspective that emphasizes collaborative approaches to international affairs, and policy-driven solutions over traditional inter-state power dynamics dominated by national economic and political interests.

For the *national way of life* dimension, users on the left side of the political spectrum tend to use more terms related to migration issues ("*migration*", "*asylum*", "*world*") and people's "*background*", while right-leaning users focus more on words like "*homeland*", "*patriot*", "*honor*", and "*family*", signaling a perspective that values tradition, patriotism, and the preservation of national identity and territory.

For what concerns *multiculturalism*, left-leaning users more frequently employ terms such as "*language*", "*languages*", "*translator*", "*speaking*", and "*European*", indicating an identification with multicultural values and a focus on linguistic diversity within the European context. In particular, English, as lingua franca, characterizes this topic for the left side of the spectrum. On the other hand, right-leaning users employ more terms related to religion ("*religious*", "*religion*", "*islam*") to express their views on the identity dimension of *multiculturalism*. This suggests that left-leaning users view *multiculturalism* primarily through the lens of language and communication, linguistic inclusivity, while right-leaning users tend to focus on cultural and religious aspects of identity, which may reflect concerns about the preservation of national or traditional values within a multicultural society.

Europe represents another key issue where we expect to observe significant discourse differences between right-leaning and left-leaning users in how they employ and frame their identities through bios. We observe that left-leaning users more frequently employ terms like "*together*", "*democratic*", "*join*", "*fall*", and "*united*" for this topic, emphasizing the desire for European unity, support towards its democratic values, and suggesting a positive framing of European identity and integration. In contrast, right-leaning users are more likely to use terms like "*stand*", "*free*", and "*sovereignty*", suggesting skepticism toward the EU and the prioritization of (national) sovereignty. However, they use the term "*Europe*" relatively more than users on the opposite side of the spectrum (the opposite was true for the term "*European*" in the *multiculturalism* topic).

Identity dimensions similarity between pairs of EU countries by political orientations

Our framework's capacity to infer and map, for different levels of aggregation and categorical layers, identity communication similarities and differences among groups, offers a powerful tool for understanding both convergence and divergence in political identity discourse across EU countries. By examining the degree to which, for a given side of the political spectrum, pairs of EU countries share a common discourse in relation to the investigated Manifesto dimensions allows us to see which issues and discourses resonate across national borders and which ones reflect distinct national views and identity framings within these countries. To delve into the key similarities and differences among pairs of EU countries, we focus on the four largest EU countries in our sample: Germany, France, Italy, and Spain. For each pair of countries, we identify the topics with the greatest similarities and differences within the Left and within the Right of the political spectrum. This approach allows us to examine not only the common identity grounding shared by politically aligned groups across countries but also the unique national perspectives that emerge within the same ideological spectrum (i.e., within the Left or within the Right) for pairs of countries. By exploring these identity dimensions, we can better understand both shared identity aspects that unite European democracies

and distinctive features that characterize these nations' political identity landscapes. This analysis is particularly relevant given the complex history of European integration, where both shared values and enduring national identity differences play crucial roles. For example, the historically intricate relationship between Germany and France underscores how political convergence on shared identity dimensions and values -such as EU *market regulation* and *human rights*- has often been essential to fostering unity and cooperation in Europe. At the same time, unique national perspectives on issues like *decentralization*, *democracy* and *national way of life* continue to shape each country's identity.

Table 2 (and Table 3) provide a top-down view of these relationships by highlighting the top three identity dimensions for which country pairs exhibit the highest or lowest similarity scores within the Left (and within the Right). The top-right triangle of the matrix displays the topics with the highest similarity among country pairs, while the bottom-left triangle shows the topics with the lowest similarity. This configuration allows us to compare how consistently within pairs of countries align or diverge on specific identity dimensions.

	Left: France	Left: Germany	Left: Italy	Left: Spain
Left: France		non-economic demographic groups (0.9105) human rights (0.8960) market regulation (0.8922)	non-economic demographic groups (0.9278) human rights (0.9024) market regulation (0.8940)	non-economic demographic groups (0.9234) minority groups (0.8905) human rights (0.8841)
Left: Germany	democracy (0.6484) gov-admin efficiency (0.7171) decentralization (0.8033)		non-economic demographic groups (0.9092) human rights (0.9023) market regulation (0.8895)	non-economic demographic groups (0.8963) labour groups (0.8728) minority groups (0.8674)
Left: Italy	democracy (0.7204) gov-admin efficiency (0.7239) decentralization (0.7709)	democracy (0.6864) decentralization (0.7758) education (0.8204)		non-economic demographic groups (0.9471) minority groups (0.9110) residual topic (0.9086)
Left: Spain	democracy (0.6895) gov-admin efficiency (0.7176) multiculturalism (0.7889)	democracy (0.6839) multiculturalism (0.7708) education (0.7771)	democracy (0.7304) education (0.7813) internationalism (0.7993)	

Table 2: Matrix representing the three topics for which pairwise country similarities on the left side of the political spectrum are higher/lower, considering only four largest EU countries. **Top-Right triangle:** Top 3 topics by average similarity among pairs of countries matching political spectrum groups (1-JS(Left:country.i ; Left:country.j)) **Bottom-Left triangle:** Last 3 topics by average similarity among pairs of countries matching political spectrum groups (1-JS(Left:country.i ; Left:country.j))

Table 2 indicates substantial alignment among pairs of countries on certain social topics, particularly *non-economic demographic groups*, *human rights*, and *minority groups* which consistently appear as high-similarity topics across several country pairs. For example, the pairs of France-Germany, France-Italy, and Germany-Italy show high similarity scores on the *human rights* topic, with values around 0.9. Similarly, the pairs of Spain-Germany, Spain-Italy, and Spain-France also show high similarity scores for the *minority groups* topic. This pattern suggests that, in the four largest EU

countries, user groups in the Left side of the political spectrum share a foundational commitment to social issues related to marginalized groups and human rights. Such consistency points to a relatively cohesive stance across the European Left on core identitarian values, potentially informed by shared socio-political challenges within the EU context, such as discrimination, inequality, and social rights of minorities.

Among topics with notable differences within the left-wing of the political spectrum, *democracy* stands out, showing a particularly low similarity score (0.6484) for the pair Germany-France. Other topics, like *multiculturalism*, *education* and *decentralization* are low-similarity topics across at least two country pairs, however, their similarity scores are systematically higher w.r.t. that of *democracy*.

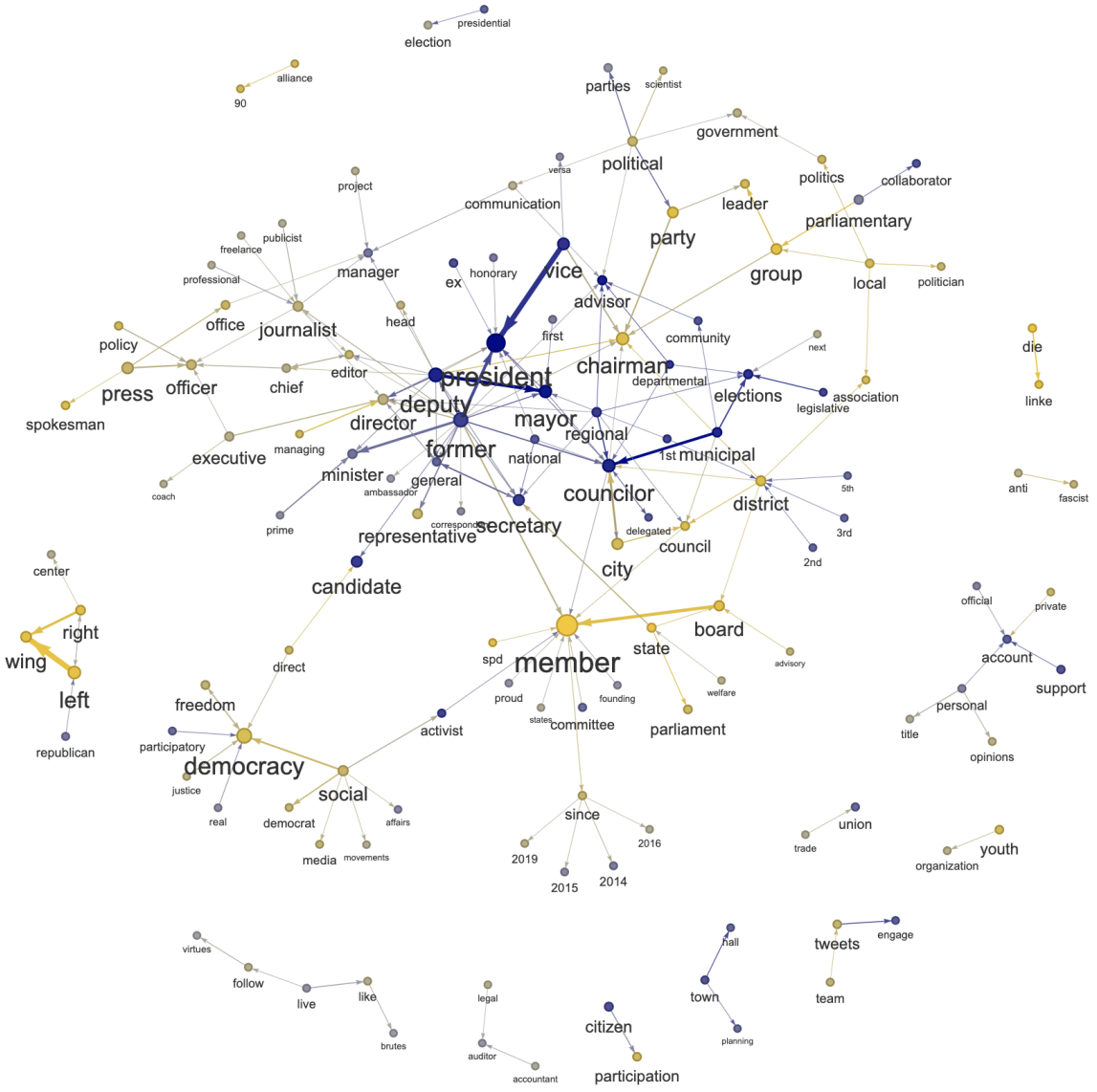

Figure 14: Words association network for the topic *Democracy*, for the Left group in Germany (Left:Germany) and France (Left:France). Nodes and edges have been filtered based on their probability at the 97.5th percentile threshold. Node and edge widths are proportional to the average topic-specific feature probability for the Left (among all 8 EU countries). The color scale indicates country differences: yellow represents features predominantly associated with the Left in Germany, blue with the Left in France, and gray where the probability difference between the Left in Germany and the Left in France is near zero.

This substantial heterogeneity makes the *democracy* dimension an ideal candidate for a detailed examination through a words association network visualization approach, based on a method proposed by Santagiustina & Warglien (2022) -here based on word dependency relations rather than bigrams-, which highlights the differences in topic-specific associations and terminology used for the selected dimension (*democracy*) by left-leaning users' groups from two selected countries (Left:France Vs Left:Germany).

In Figure 14, the words association network for the topic *democracy* reveals some important insights into how the left-wing political discourse around this identity dimension differs between Germany and France, reflecting broader cultural and political distinctions. In the French-left context, democracy appears to be more tightly associated with formal political roles, institutional structures and events. Words like "*president*", "*mayor*", "*advisor"*, "*deputy"*, "*chairman*", and "*secretary"* appear prominently and are closely connected, suggesting that *democracy* is framed in terms of official roles and hierarchies. The network also shows that terms such as "*regional"*, "*national"* and "*municipal"* are more frequently used in the Left:France group (w.r.t. the Left:Germany group) indicating a structured focus on the different levels of political administration and governance. The strong linkages around "*elections*" -and the term "*legislative*"- imply a heightened relevance of electoral events, likely reflecting an election cycle in France (that of 2022) that has brought these institutional roles and candidacies to the forefront of public discourse on social media, to such a point that these are integrated into users' bios. This suggests that, in France, democracy is strongly experienced through participation in the electoral processes, with a top-down view that sees institutional structures and roles as the backbone of democratic life and citizen participation. Since the last legislative elections in Germany -prior to our collection of Twitter/X bios- took place in 2021 we lack definitive evidence to confirm that this high sensitivity to political events and electoral cycles is unique to France and not also present in other EU countries, like Germany. The discourse by the Left:Germany group on democracy appears to orbit around broader social concepts and values rather than specific institutional roles. Key features here include "*social->democracy*", "*freedom*", "*local->group*", "*left->wing*", "*association*", "*party*", "*activist"*, and "*participation"*, among others (see node and edges in yellow in Figure 14), creating a identity dimension discourse that speaks to a different understanding of democracy, emphasizing more ideals like political engagement, and pointing to a conception of democracy that is more deeply connected to collective participation. The weak presence of terms tied to formal political roles highlights a more bottom-up orientation in the German context, where democracy seems to be intertwined with local-level civic engagement and activism.

Table 3 shows the (dis)alignment among pairs of EU countries on specific social and economic dimensions on the right side of the political spectrum. Identity alignment appears to be particularly strong for *non-economic demographic groups*, *minority groups,* and *market regulation* which appear as high-similarity topics across at least two country pairs. The *non-economic demographic groups* and *minority groups* topics appear across all country pairs, with values above 0.875, revealing a very similar framing of identity discourse for these two dimensions. Also, the Spain-Germany and Spain-France pairs exhibit high similarity scores for the *market regulation* topic. This pattern suggests that the identity of Right-leaning users shares a foundational commitment to economic issues related to *market regulation.* This topic appears to be one of the main commonalities between the Spanish Right and the French and German Right identities. This suggests that right-leaning users (and related conservative parties) can easily self-identify and unite, at the European level, under the flag of a shared vision of *market regulation*, likely related to the alignment across EU countries of protectionist

agendas. Interestingly, as shown in Figure 11, a similar level of alignment, on a different framing of *market regulation*, is observable on the opposite side of the political spectrum.

Among topics with notable differences within the right-wing of the political spectrum, as for the left, *democracy* stands out, showing an even lower similarity score (0.5993) for the pair Germany-France, wr.r.t. the opposite side of the political spectrum. Also *national way of life* is among the three topics with lower similarity scores for all country pairs, with values ranging from 0.6997, for the France-Spain pair, to 0.8246, for the Italy-Germany pair.

	Right: France	Right: Germany	Right: Italy	Right: Spain
Right: France		non-economic demographic groups (0.9142) residual topic (0.8789) minority groups (0.9165)	non-economic demographic groups (0.9211) minority groups (0.9051) residual topic (0.8974)	non-economic demographic groups (0.9105) minority groups (0.8750) market regulation (0.8692)
Right: Germany	democracy (0.5993) national way of life (0.7435) gov.admin efficiency (0.7496)		non-economic demographic groups (0.9263) minority groups (0.9165) anti-growth economy (0.9107)	non-economic demographic groups (0.9092) minority groups (0.8888) market regulation (0.8777)
Right: Italy	decentralisation (0.7290) gov.admin efficiency (0.7551) national way of life (0.7598)	democracy (0.6952) decentralisation (0.7491) national way of life (0.8246)		non-economic demographic groups (0.9294) minority groups (0.9195) military (0.9090)
Right: Spain	democracy (0.6470) gov.admin efficiency (0.6907) national way of life (0.6997)	democracy (0.6542) national way of life (0.6963) multiculturalism (0.7567)	decentralisation (0.7317) democracy (0.76039) national way of life (0.77738)	

Table 3: Matrix representing the three topics for which pairwise country similarities on the right side of the political spectrum are higher/lower, considering only four largest EU countries. **Top-Right triangle:** Top 3 topics by average similarity among pairs of countries matching political spectrum groups (1-JS(Right:country.i ; Right:country.j)) **Bottom-Left triangle:** Last 3 topics by average similarity among pairs of countries matching political spectrum groups (1-JS(Right:country.i; Right:country.j))

In Figure 15, we highlight key differences for the *democracy* dimension for the country pair Germany-France, which exhibits the lower similarity score observed (0.5993) on the right side of the political spectrum. This word-association network reveals some country differences that are similar to those observed on the opposite side of the political spectrum, with the Right:France group appearing to also highlight formal political structures and roles, with terms like "*president*", "*mayor*", "*advisor"*, "*deputy"*, "*councilor*", and "*candidate"* being more frequently used w.r.t the Right:Germany group. The French emphasis on elections ("*elections*", "*legislative->elections*","*municipal->elections*") is also present, showing that the salience of the electoral events and candidacies in France is bipartisan. As for the German left, the German Right's discourse on democracy appears to be also centered around participatory values and bottom-up political activism ("*direct->democracy*", "*local->politics*", "*local->political*", "local->association"),

similarly to the German left. However, features like "*social->justice*", "*defend->freedom*", "*conservative->liberal*" , and "*right->wing*", among others, clearly distinguish the framing of this topic by the German Right from that of the German Left.

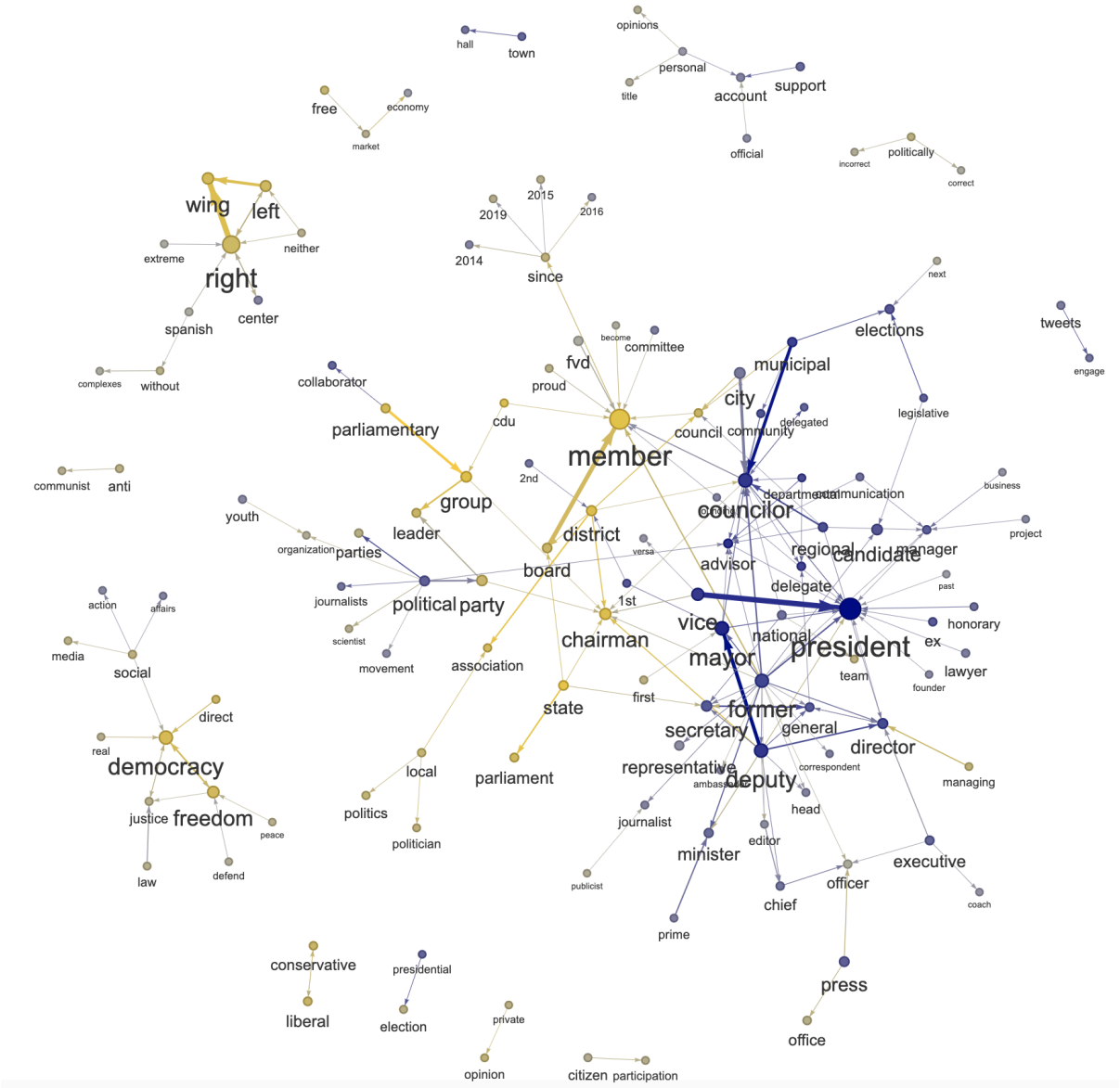

Figure 15: Word and word-association network for the topic *Democracy*, for the Right group in Germany (Right:Germany) and France (Right:France). Nodes and edges have been filtered based on their probability at the 97.5th percentile threshold. Node and edge widths are proportional to the average topic-specific feature probability for the Right (among all 8 EU countries). The color scale indicates country differences: yellow represents features predominantly associated with the Right in Germany, blue with the Right in France, and gray where the probability difference between the Right in Germany and the Right in France is near zero.

Identity dimensions similarity within countries, between left and right political orientations

We now explore the similarities in identity dimensions between left- and right-leaning political groups for each of our eight European countries. Table 4 summarizes the related results, highlighting the average similarity scores for each country, alongside the top three and bottom three topics where left-right alignment within the country is strongest and weakest, respectively.

Country	**Average similarity Left & Right** *(all topics)*	**Top 3 topics by country-specific Left-Right similarity**	**Last 3 topics by country-specific Left-Right similarity**
Germany	0.8866	non-economic demographic groups (0.9278) residual topic (0.9127) culture (0.9101)	equality (0.8258) freedom & human rights (0.8353) democracy (0.8370)
Spain	0.8870	non-economic demographic groups (0.9528) minority groups (0.9459) residual topic (0.9369)	national way of life (0.7604) internationalism (0.7987) democracy (0.8133)
Poland	0.8971	non-economic demographic groups (0.9528) market regulation (0.9293) minority groups (0.9252)	national way of life (0.8062) democracy (0.8376) equality (0.8393)
France	0.9077	non-economic demographic groups (0.9552) minority groups (0.9455) residual topic (0.9409)	national way of life (0.8231) equality (0.8640) europe (0.8692)
the Netherlands	0.9084	non-economic demographic groups (0.9493) traditional morality (0.9426) residual topic (0.9422)	national way of life (0.8226) democracy (0.8286) agriculture (0.8651)
Italy	0.9254	non-economic demographic groups (0.9549) residual topic (0.9548) labour groups (0.9458)	democracy (0.8624) decentralisation (0.8646) national way of life (0.8699)
Belgium	0.9379	non-economic demographic groups (0.9732) minority groups (0.9607) residual topic (0.9582)	democracy (0.8726) decentralisation (0.8979) national way of life (0.9137)
Slovenia	0.9590	non-economic demographic groups (0.9769) residual topic (0.9775) human rights (0.9769)	national way of life (0.8968) traditional morality (0.9303) democracy (0.9320)

Table 4: Summary of the average similarities, by topic and by country between the left and the right, and list of three topics by country for which within country similarities between the left and the right are higher/lower.

Results indicate highly varying levels of similarity between left and right political orientation groups within the countries examined, with average similarity scores ranging from 0.8867 (Germany) to 0.9590 (Slovenia). Notably, identity dimensions with the highest similarity scores consistently include *non-economic demographic groups* across all countries, suggesting that the framing of discussions around demographic aspects (e.g., being young, old, etc.) are largely shared across political divides. Other high-similarity topics, albeit with some variation, include *traditional morality* and *minority groups*, which seem to be framed in a similar way by left- and right-leaning users groups, especially in Spain, France, and Belgium. Conversely, the topics with the least similarity are more country-specific but generally include themes such as *national way of life*, *democracy*, and *equality*, suggesting that discourse around these dimensions is likely more framed along political lines. For example, in Germany, the topics with the least alignment between the left and right are *equality*, f*reedom & human rights*, and *democracy*. Similarly, in France and the Netherlands, national way of life and democracy show substantial left-right heterogeneity. Belgium and Slovenia exhibit, overall, the highest similarity scores (0.9379 and 0.9590), indicating a closer alignment between Left and Right on identity dimensions in these countries. In contrast, Germany and Spain are near the bottom of the rankings (0.8866 and 0.8870), suggesting relatively more heterogeneity between political

orientations on identity topics compared to other countries. This supports to some extent our second hypothesis. Examining the specific topics that show low similarity scores can provide us with additional insights.

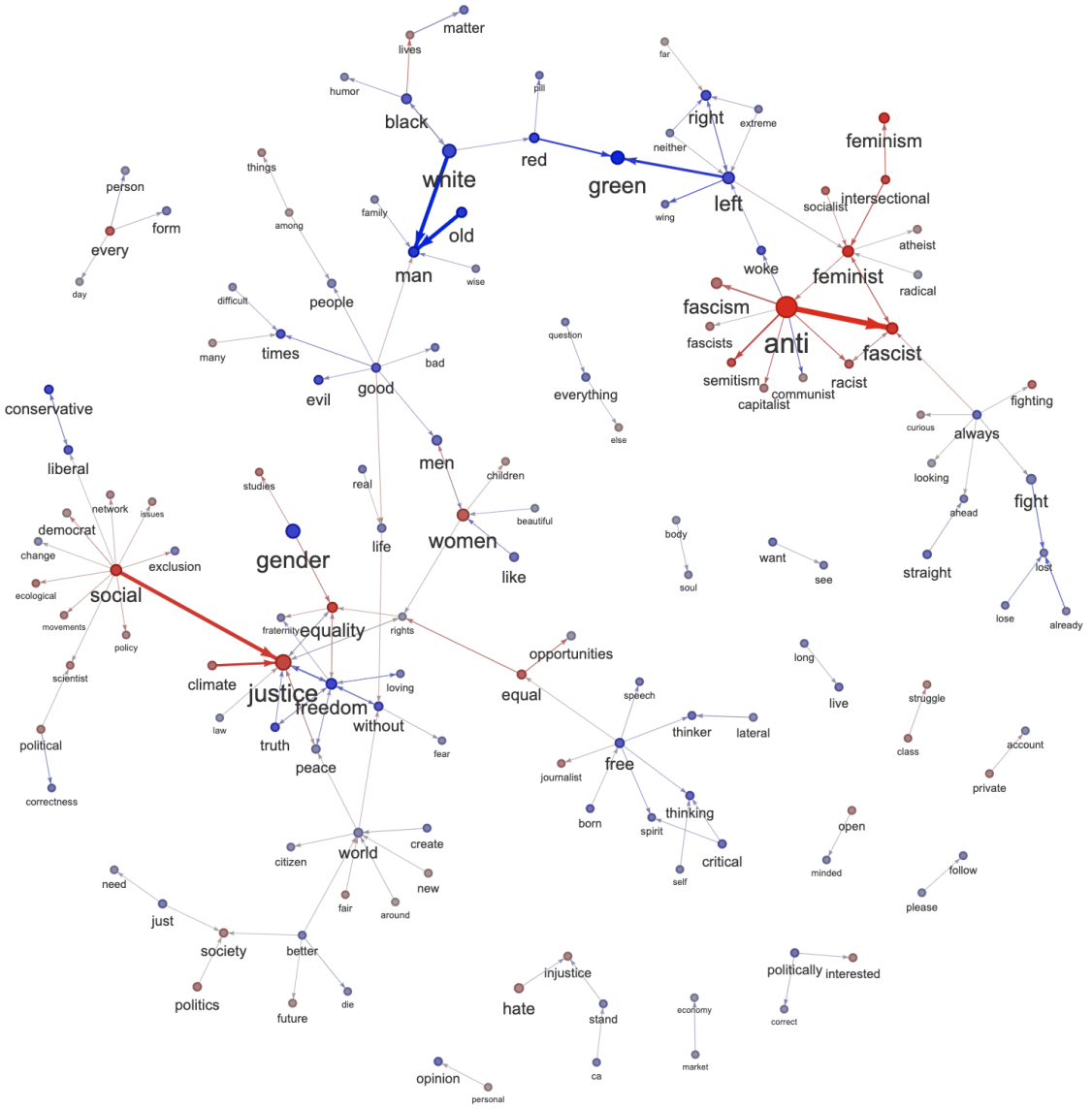

Figure 16: Word and word-association network for the topic *Equality* for Germany. Nodes and edges have been filtered based on their probability at the 97.5th percentile threshold. Node and edge widths are proportional to the average topic-specific feature probability in Germany. The color scale indicates differences between political orientations: red represents features predominantly associated with the Left, blue with the Right, and gray where the probability difference between Left and Right factions in Germany is near zero.

As an illustrative example, to highlight which are the possible sources, in terms of differences in discourse, of the low similarity score between Left and Right in Germany, in Figure 16, we highlight key differences for the *equality* dimension, which exhibits the lower Left-Right similarity score observed for Germany (0.8258). The discourse that dominates the left-leaning user group (shown in red) in Germany emphasizes discourse features such as "*feminist*", "*intersectional*", "*anti->racist*", "*anti->capitalist*", "*climate->justice*", and "*social->justice*". These terms cluster, suggesting that

left-leaning users focus on equality-related issues such as racial and gender discrimination, intersectionality, and critiques of capitalism. The language on the left side of the spectrum reflects a critical, activist-oriented discourse that emphasizes structural inequalities and social justice. In contrast, more right-leaning discourse, in blue, revolves around terms like "*good*", "*evil*", "*bad*", "*good->men*", "*white->men*", "*old->men*", "*truth*", "*freedom*", "*born->free*", "*left->green*", and "*black->white*". These identity cues suggest a different framing on the Right, where equality issues may be interpreted through a conservative lens that emphasizes traditional values, individual freedom, and skepticism of Left-leaning narratives. German Left- and Right-aligned user groups thus appear clearly divided on issues having to do with race, gender, feminism, and capitalism. This polarization reflects differing ideological interpretations of equality, with each side reinforcing distinct social and cultural identities within a broader political discourse.

Left-Right identity similarity and the perceptions of political conflict intensity by country

Finally, to explore the relevance of our Left-Right identity similarity metric as a measure of political identity fragmentation within countries, we compare our metric, and conduct a correlation analysis, between our metric and an external measure of perceived political conflict. For this comparison, we used data from the Pew Global Attitudes and Trends survey (Spring 2022), which assesses public perceptions of political conflict intensity within certain countries. The survey includes a question on perceived political conflicts: "In your opinion, in [Survey Country], are the conflicts between people who support different political parties very strong, strong, not very strong, or are there no conflicts at all?" Responses were categorized into five options (Very strong conflicts, Strong conflicts, Not very strong conflicts, No conflicts, Don't know/Refused to answer).

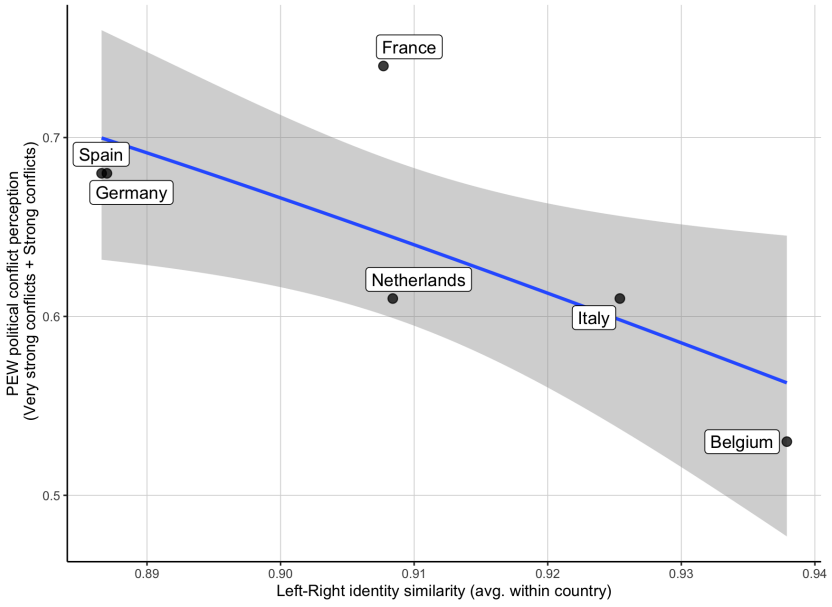

Figure 17: Scatter plot of PEW perceived political conflict score as a function of average Left-Right identity similarity by country. Line represents fitted values based on a GLM with a *quasibinomial* family, shaded area represents a 90% Confidence Interval.

Unfortunately, the Pew 2022 survey only covers a limited number (8) of European Union countries: Belgium, France, Germany, Italy, the Netherlands, Spain, Greece, and Sweden. This restricted country selection is based on Pew's methodological and surveying choices and not on our own selection process. Thus, our analysis is limited to the six countries that overlap between the Pew 2022 survey

and our study, that is: Belgium, France, Germany, Italy, the Netherlands, and Spain. Figure 17 shows the positioning of these countries for the two metrics.

For these countries, we calculated the correlation between our Left-Right identity similarity index and the proportion of survey respondents who selected either "Very strong conflicts" or "strong conflicts" in response to the question about political conflict intensity. This allowed us to derive a quantitative measure of perceived political fragmentation and conflict within each country.

We observe a strong negative Pearson correlation coefficient (r = -0.7383) between our similarity metric and the percentage of respondents reporting "Very strong" or "strong" conflicts by country[5]. Despite the weak power of this statistic due to the number of observations, this strong negative correlation suggests that higher similarity between Left and Right identity dimensions within a country is associated with lower levels of perceived political conflict, while lower identity similarity correlates with higher perceived conflict. We also estimate a generalized linear model (GLM) using a quasi-binomial family, where the PEW political conflict perception index is the dependent variable and our similarity score is the independent variable. The estimated coefficient for our similarity score is negative (-11.565) and significant at the 0.1 significance level ($Pr(>|t|) = 0.0915$). Although further investigation and a larger number of observations would be desirable to establish definitive conclusions, these results provide preliminary evidence suggesting that our similarity metric may well reflect aspects of real-world political fragmentation and related conflicts, which are also captured by the PEW survey, through the question on the perceptions of political conflict intensity by country.

Interestingly, the country for which the fitted value of the political conflict index deviates the most from the observed one is France. France's perceived political conflict intensity appears to be particularly high with respect to the observed Left-Right groups identity similarity metric. This could be due to the fact that political conflict in this country might well depend on some other dimensions of political conflict which cannot be captured by the political orientation dimension. This finding appears to be coherent with the work by Ramaciotti et al. (2022), which finds that political attitudes in France appear to be strongly fragmented in relation to sentiments towards elites.

[5] As a robustness check, we bootstrap 10 000 samples from our observation set, and analyze the distribution of the resulting Pearson correlation coefficients. We obtain the following average value: -0.7086316 and 5% (-0.99964357) 95% (-0.08288634) quantiles, which can be used as a confidence interval for the value of our correlation coefficient.

Conclusions

By analyzing socio-political identity discourse expressed in social media biographies, our study has mapped identity discourse across eight EU countries and as a function of users' political orientation, revealing important aspects of identity similarity and heterogeneity across the political spectrum within and among countries of the European Union. First, *democracy*, *national way of life*, and *decentralization* emerge as particularly divisive identity dimensions, showing considerable variation both within and between countries. For example, the diversity in how democracy is evoked and communicated in users' biographies underscores complex Left-Right and cross-country layers of identity fragmentation at the European level, revealing the different ways groups interpret democracy and related principles or preferences for decentralization in political participation and public governance. These divergences are relevant because they are likely contributing to broader debates on European integration, and hence affecting related institutional tensions and the national and supranational level.

Second, our framework identifies a set of "partisan dimensions" of identity -that reflect and reinforce ideological differences between the Left and Right at the EU level. These dimensions include *anti-growth economy*, *civic mindedness*, *education*, *environmentalism*, *equality*, *freedom & human rights*, *incentives*, *labor groups*, *law and order*, *market regulation*, *minority groups*, *sustainability*, *technology*, and *traditional morality*. These partisan topics may potentially serve political communicators online as tools for strategically constructing and mobilizing ideological groups. We also hypothesize that highlighting these dimensions, and making them more salient through communication, can deepen perceptions of division across the political spectrum, further reinforcing Left Vs Right identity divides.

In addition, we identified another set of dimensions, which we call "identity splinters", where the average similarity among EU countries within the Right (or Left) side of the political spectrum is lower than the average similarity between the Right and the Left. Therefore, for these dimensions, finding common ground to construct or communicate a multi-partisan EU identity may be easier than building a unified European Right (or Left) identity in political spheres on social media. These dimensions, which include *agriculture*, *culture*, *decentralization*, *democracy*, *economic growth*, *europe*, *internationalism*, *multiculturalism*, and *national way of life*, show greater average heterogeneity within Right (or Left) political groups at the EU level than between them. Unlike partisan dimensions of identity, by exhibiting relatively low alignment even within the same ideological spectrum across EU countries, these identity splinters are potential sources of intra-ideological tensions within the Right (or Left) at the European level. This can complicate the self-identification with a unified Right (or Left) wing European identity, as these dimensions highlight national perspectives that resist simplification along traditional ideological lines.

More generally, the inferred landscape of online self-presentations suggests that high-heterogeneity, high-salience identity dimensions -particularly those frequently present in bios across political alignments- may become focal points of societal tension, as these differences can escalate into broader socio-political debates. Conversely, low-heterogeneity (i.e., high similarity) dimensions with high salience (i.e., high average propensity in biographies) might serve as connective threads across political divides, potentially supporting social cohesion within and across EU countries. We hypothesize that, in contexts where divisive dimensions dominate political discourse (at the national or EU level), the likelihood of fragmented collective identities and socio-political conflicts increases.

Conversely, if low-heterogeneity dimensions are prominent, they may foster a more cohesive national or European identity by providing common ground.

Our analysis of social media bios also highlighted distinct patterns in relation to identitarian issues that are extremely relevant at the EU level, such as *environmentalism* and views of *sustainability*. Our results show that left-leaning users groups tend to emphasize in their bios climate urgency and sustainable practices, while right-leaning users frame environmental issues more in terms of economic impact and technological progress. These observations highlight the varied narratives emerging around socio-political issues and reflect the potential for both alignment and conflict within the European digital public sphere. Future studies by the authors will examine how these identity issues relate to political behaviors and activism, such as supporting petitions and crowdfunding initiatives having to do with environmental issues, among others.

Regarding our framework operationalisation, the combined use of seeded Structural Topic Modeling (STM) and ideology scaling appears promising. This approach provides a robust and transferable framework for disentangling the complexities of identity communication, offering a nuanced understanding of socio-political identity dimensions within and across countries. Moreover, by aligning through a seeding process the topics with the Manifesto Project's well-established ontology, the study presents a systematic view of identity cues on social media, contributing both a replicable methodology and valuable insights into online socio-political discourse.

Thanks to our framework we can infer the likelihood of words and associations for Manifesto-seeded identity dimensions not just for explicit political identity cues, but also for terms and associations that are not strictly political or related to politics, but which are politically relevant in relation to one or more identity dimensions, and tied to the way identities are communicated in bios by different (political orientation- and country-based) user groups. A beautiful example of this is that of the term "*history*", which is not per se political, but which reveals to be a political-orientation identity cue in relation to some of our identity dimensions: it appears in the right side of the political spectrum for the *culture* topic. One can imagine, for example, its use by many right-leaning users interested in history documentaries related to their own country. However, that same term (i.e., "*history*") also appears on the left side of the political spectrum for the topic of *education*. One can imagine, for example, left-leaning users claiming that they studied history at university.
This process of disentangling dimension-specific identity cue usage, as a function of covariates of interest, is likely one of the main strengths of the proposed approach, which clearly distinguishes it from other language modelling tools, such as embeddings.

Finally, our similarity metrics emphasize the importance of ideological and national variations in expressed identities, likely capturing underlying social and political divides that align with public perceptions of conflict intensity. Lower similarity between Left and Right identity dimensions suggests heightened political polarization, while higher similarity aligns with perceptions of socio-political unity (i.e., lower perceived conflict). These insights set the stage for future research to expand, potentially across more countries and over time, enabling a longitudinal understanding of how identity similarity/heterogeneity correlates with shifts in political conflicts. In summary, the present work and its framework provide a valuable lens for exploring the interplay between identity fragmentation and societal dynamics across countries, which appears to be particularly fit for reconstructing and explaining identity puzzles at the European level.

One of the key limitations of this work is that our findings are specific to a targeted population, namely MP followers in the eight selected EU countries. Additionally, to focus on linguistic cues, we

deliberately omitted the use of emojis and URLs in bios from our analysis and also did not consider user profile images. However, we acknowledge that these are potentially relevant ways to signal and communicate socio-political identity, and we leave these aspects as steps for future research.

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Appendix

STM nomenclature and covariate levels

In our Structural Topic Model (STM), represented by the directed acyclic graph (DAG) in Figure S.6, topics are indexed by k, with $k \in (1, \ldots, 29)$. Bios of users are indexed by d, with $d \in (1, \ldots, 1\,201\,600)$ Features in each bios are indexed by n. Features in the vocabulary are indexed by v with $v \in (1, \ldots, 16\,596)$.

The levels of the user political orientation categorical variable ($pol.pos$) are indexed by g, with $g \in [Left, Center, Right]$.

The levels of the user country variable $country$, are indexed by j, with $j \in [Belgium, France, Germany, Italy, the\ Netherlands, Poland, Slovenia, Spain]$.

Since STM requires a single categorical covariate for topic content, the $country$ and $pol.pos$ variables are combined into one with 24 levels, indexed by l, with

$l \in [Belgium\_Left, Belgium\_Center, Belgium\_Right, Italy\_Left, Italy\_Center, Italy\_Right, France\_Left, France\_Center, France\_Right, Germany\_Left, Germany\_Center, Germany\_Right, the\ Netherlands\_Left, the\ Netherlands\_Center, the\ Netherlands\_Right, Poland\_Left, Poland\_Center, Poland\_Right, Slovenia\_Left, Slovenia\_Center, Slovenia\_Right, Spain\_Left, Spain\_Center, Spain\_Right]$)

STM specification and DAG

Through STM, we model topic prevalence $\mu_{d,k} = X_d \gamma_k$ as a function of the values of two categorical variables, and their interaction, contained in the $X_d = [country_d ; pol.pos._d ; country_d * pol.pos._d]$ vector, that is the $country$ and the $pol.pos.$ of the user profile corresponding to the document (i.e., bio) d.

For each feature v, the probability of the feature ($\beta_{d,v}^{k}$) is modelled as a combination of three sparse deviations from a baseline token frequency m_v:

- A topic effect $k_v^{\cdot,k}$
- A covariate effect $k_v^{y,\cdot}$ where

- A topic-covariate interaction effect $k_v^{y,k}$

For additional details about STM please refer to Roberts et al. (2014).

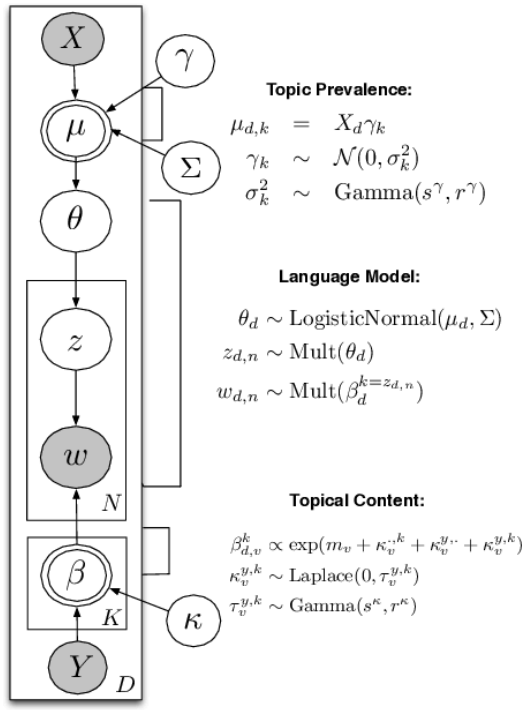

Figure S.6: directed acyclic graph of the STM,
from Roberts et al. (2014)

Topic propensity modeling: estimated coefficients

Table A.1, here below, presents the estimated parameters for the STM's topic propensity model, which captures how the prevalence of different topics in user biographies varies as a function of user specific covariates $country$, $pol.pos.$, and their interaction. The table provides a detailed breakdown of these estimates, their SE, p-values, and significance level, with the intercept representing the baseline scenario for users in Belgium ($country$ = belgium) with a centrist political orientation ($pol.pos.$ = center).

Topic	Term	Estimate	Std. Error	t value	Pr(>|t|)	Signif.
law and order	(Intercept)	0.03152062	0.00139354	22.61904654	0.00000000	***
	left	-0.00119762	0.00363157	-0.32978029	0.74156604	
	right	-0.00035638	0.00228685	-0.15584054	0.87615874	
	france	0.00057226	0.00149342	0.38318498	0.70158268	
	germany	-0.00007306	0.00141392	-0.05166989	0.95879174	
	italy	0.00022548	0.00143021	0.15765281	0.87473041	
	netherlands	-0.00081763	0.00172829	-0.47308726	0.63615101	
	poland	0.00070689	0.00162891	0.4339685	0.6643114	
	slovenia	-0.00024414	0.00338237	-0.07217927	0.94245925	
	spain	0.00080317	0.00151647	0.52963273	0.59636669	
	left:france	0.00145344	0.00387958	0.37463916	0.70792891	

	right:france	-0.00004846	0.00241731	-0.02004599	0.98400669	
	left:germany	0.00141962	0.00370273	0.38339892	0.70142407	
	right:germany	0.00291149	0.00254458	1.14419303	0.25254382	
	left:italy	0.00146328	0.00368212	0.39740255	0.69107071	
	right:italy	0.00234872	0.00274403	0.85593705	0.39203277	
	left:netherlands	0.00073779	0.00401042	0.18396863	0.85403809	
	right:netherlands	0.00078185	0.00268119	0.29160373	0.77058967	
	left:poland	-0.00013586	0.00500209	-0.02716108	0.97833126	
	right:poland	0.00030017	0.00289663	0.10362817	0.91746445	
	left:slovenia	-0.00130208	0.00843733	-0.15432388	0.8773544	
	right:slovenia	0.00141738	0.00641537	0.22093568	0.82514256	
	left:spain	0.00197798	0.00377009	0.52464869	0.59982753	
	right:spain	0.00082123	0.00241132	0.34057149	0.73342626	
democracy	(Intercept)	0.04006952	0.0014559	27.52220525	0.00000000	***
	left	0.01340708	0.00474379	2.82624073	0.00470986	**
	right	0.00061556	0.00265313	0.23201279	0.81652812	
	france	0.00243833	0.00154262	1.58064499	0.1139595	
	germany	-0.00047771	0.00156953	-0.30436872	0.76084705	
	italy	-0.00631101	0.00150555	-4.19184584	0.00002767	***
	netherlands	-0.00407126	0.00182957	-2.22525245	0.02606448	.
	poland	-0.00333036	0.00184651	-1.80359789	0.07129462	.
	slovenia	-0.00467411	0.00386049	-1.21075763	0.22598855	
	spain	-0.00436064	0.00151625	-2.87594426	0.00402828	**
	left:france	-0.01100367	0.00497691	-2.21094511	0.02703983	.
	right:france	0.00174193	0.00289865	0.60094465	0.54787696	
	left:germany	-0.01338015	0.00484959	-2.7590254	0.00579749	**
	right:germany	0.00622657	0.00314965	1.97691084	0.04805194	.
	left:italy	-0.01370443	0.00495455	-2.76602685	0.00567447	**
	right:italy	0.00248333	0.00326804	0.7598838	0.44732419	
	left:netherlands	-0.01305705	0.00501854	-2.60176343	0.00927469	**
	right:netherlands	-0.0017476	0.00312529	-0.55918093	0.57603835	
	left:poland	-0.01330193	0.00559193	-2.3787712	0.01737061	.
	right:poland	-0.00022558	0.00315694	-0.07145653	0.94303444	
	left:slovenia	-0.01877378	0.01064015	-1.76442875	0.07766008	.
	right:slovenia	-0.00094684	0.00728706	-0.12993499	0.89661788	
	left:spain	-0.01551132	0.00493649	-3.1421774	0.001677	**
	right:spain	0.00107066	0.00277698	0.3855493	0.69983056	
military	(Intercept)	0.03206206	0.00161383	19.86705276	0.00000000	***
	left	-0.00020639	0.00434248	-0.04752876	0.96209182	
	right	0.00161933	0.00264156	0.61302105	0.53986254	

	france	0.00092	0.00174903	0.52600789	0.59888282	
	germany	0.00155055	0.00164191	0.94435368	0.34498913	
	italy	0.00242825	0.00164092	1.47980448	0.1389257	
	netherlands	0.00000789	0.00187717	0.00420325	0.99664631	
	poland	0.00222602	0.00179423	1.24065563	0.21473324	
	slovenia	0.00188277	0.00416171	0.45240368	0.65097828	
	spain	0.00203527	0.00161508	1.26017132	0.20760781	
	left:france	0.00076752	0.00443333	0.17312376	0.86255418	
	right:france	-0.00104342	0.00276908	-0.37681112	0.70631404	
	left:germany	0.00004831	0.00457915	0.01054959	0.99158281	
	right:germany	0.00144964	0.00296933	0.4882037	0.62540566	
	left:italy	-0.00068471	0.00450913	-0.15185078	0.87930466	
	right:italy	-0.0010664	0.00302887	-0.35207709	0.72478051	
	left:netherlands	-0.00101565	0.0047779	-0.21257319	0.83165992	
	right:netherlands	-0.00035695	0.00295769	-0.12068696	0.90393901	
	left:poland	0.00094342	0.00525273	0.17960651	0.85746153	
	right:poland	-0.00046685	0.00327686	-0.14246939	0.88670928	
	left:slovenia	-0.00190596	0.01009933	-0.18872159	0.85031106	
	right:slovenia	-0.00082151	0.00713973	-0.11506156	0.90839635	
	left:spain	0.00073318	0.00437342	0.16764498	0.86686261	
	right:spain	-0.00133436	0.00267862	-0.49815263	0.61837656	
agriculture	(Intercept)	0.03054766	0.00129312	23.62326905	0.00000000	***
	left	0.00066277	0.00387831	0.1708914	0.86430919	
	right	-0.00057931	0.00232683	-0.24896978	0.8033842	
	france	0.00147232	0.00137593	1.07005637	0.28459415	
	germany	-0.00034044	0.00136146	-0.2500569	0.80254339	
	italy	0.00097812	0.00135636	0.72113575	0.47082614	
	netherlands	0.0004839	0.00163007	0.29685769	0.76657521	
	poland	-0.00033283	0.00153759	-0.21646539	0.82862504	
	slovenia	0.00055116	0.00404028	0.13641653	0.89149203	
	spain	0.00015505	0.00135495	0.11442847	0.90889816	
	left:france	-0.00127334	0.00387644	-0.32848065	0.74254833	
	right:france	-0.00101814	0.00232263	-0.43835632	0.66112808	
	left:germany	-0.00033608	0.00387059	-0.08682999	0.93080666	
	right:germany	0.00117443	0.00268386	0.43759038	0.66168332	
	left:italy	-0.00129928	0.0038529	-0.33722124	0.73595018	
	right:italy	-0.00050227	0.00259266	-0.19372892	0.84638818	
	left:netherlands	-0.00070195	0.00437813	-0.16033095	0.8726204	
	right:netherlands	0.00440086	0.00267696	1.64397715	0.10018118	
	left:poland	-0.00123583	0.00480697	-0.25709088	0.79710866	

	right:poland	0.00097264	0.00281112	0.34599908	0.72934347	
	left:slovenia	-0.0002081	0.00943467	-0.02205676	0.98240269	
	right:slovenia	0.0025764	0.00676382	0.38090881	0.70327098	
	left:spain	-0.00007714	0.00390081	-0.01977558	0.9842224	
	right:spain	0.00059514	0.00242919	0.24499372	0.80646134	
education	(Intercept)	0.04148623	0.00131949	31.4410098	0.00000000	***
	left	-0.000951	0.00413665	-0.22989531	0.81817316	
	right	-0.00746046	0.00280454	-2.6601375	0.00781098	**
	france	-0.00423052	0.0014641	-2.88951073	0.00385849	**
	germany	-0.00537216	0.0014279	-3.76226642	0.00016839	***
	italy	-0.00384124	0.00138215	-2.77917383	0.00544982	**
	netherlands	-0.00632063	0.0015867	-3.98351758	0.00006791	***
	poland	-0.01051984	0.00156617	-6.71691971	0.00000000	***
	slovenia	-0.01211526	0.00358771	-3.37687673	0.00073316	***
	spain	-0.00072128	0.00135523	-0.53221981	0.59457386	
	left:france	0.00417908	0.00430193	0.97144335	0.33132775	
	right:france	0.00625902	0.00305556	2.04840396	0.04052065	.
	left:germany	0.00180117	0.0041716	0.43177042	0.66590836	
	right:germany	-0.00364539	0.00334088	-1.09114615	0.2752088	
	left:italy	0.004108	0.00425947	0.96443895	0.33482609	
	right:italy	-0.00220759	0.00319049	-0.69192857	0.48898232	
	left:netherlands	0.00898179	0.00448646	2.0019784	0.04528728	.
	right:netherlands	0.00131363	0.00319705	0.41088742	0.68115516	
	left:poland	0.00578209	0.00584855	0.98863708	0.32284094	
	right:poland	0.00418659	0.00333341	1.25594749	0.20913525	
	left:slovenia	0.00384412	0.00956136	0.40204735	0.68764925	
	right:slovenia	0.00192149	0.00627279	0.30632079	0.75936046	
	left:spain	-0.00000457	0.00412838	-0.00110766	0.99911622	
	right:spain	0.00267352	0.00281882	0.94845386	0.34289864	
minority groups	(Intercept)	0.03688699	0.00165806	22.24703121	0.00000000	***
	left	0.00054573	0.00466316	0.11702922	0.90683692	
	right	0.0006246	0.00282592	0.22102623	0.82507205	
	france	-0.00132388	0.00185695	-0.71293431	0.47588654	
	germany	0.00108874	0.00173029	0.62922564	0.52920147	
	italy	0.00210899	0.00167989	1.25543118	0.20932252	
	netherlands	-0.00016763	0.00191312	-0.08762265	0.93017661	
	poland	0.00186383	0.0019043	0.97875268	0.32770239	
	slovenia	0.00682757	0.004369	1.56273047	0.11811627	
	spain	0.0015271	0.00172101	0.88732275	0.37490534	
	left:france	0.00027888	0.004961	0.05621388	0.95517144	

	right:france	-0.00052405	0.00300129	-0.174608	0.86138769	
	left:germany	-0.00088595	0.00482658	-0.18355716	0.8543609	
	right:germany	0.00306138	0.00344337	0.88906415	0.37396878	
	left:italy	-0.0004447	0.00477531	-0.09312585	0.9258036	
	right:italy	-0.00009113	0.00342999	-0.02656715	0.97880498	
	left:netherlands	-0.00126672	0.00503635	-0.25151596	0.80141527	
	right:netherlands	0.00211947	0.00322635	0.65692515	0.51122917	
	left:poland	-0.00099353	0.00583364	-0.17031083	0.86476572	
	right:poland	0.00048275	0.00325664	0.14823554	0.88215691	
	left:slovenia	-0.00123063	0.01082665	-0.11366632	0.90950233	
	right:slovenia	0.00260575	0.00765491	0.34040256	0.73355345	
	left:spain	-0.0005018	0.00465285	-0.10784866	0.91411576	
	right:spain	-0.00023708	0.00293858	-0.08067944	0.9356969	
multiculturalism	(Intercept)	0.03209719	0.00130272	24.63853197	0.00000000	***
	left	-0.00058488	0.00374217	-0.15629519	0.87580037	
	right	-0.00000597	0.0024565	-0.00243073	0.99806056	
	france	0.00114126	0.00141934	0.8040775	0.42135238	
	germany	0.00098093	0.00144203	0.68024454	0.49634977	
	italy	-0.00016701	0.00140138	-0.1191721	0.90513903	
	netherlands	-0.00094717	0.00171143	-0.55343922	0.57996279	
	poland	0.00107854	0.00140519	0.76754123	0.44275994	
	slovenia	-0.00017086	0.00385726	-0.04429671	0.9646679	
	spain	0.00107611	0.00133071	0.80867396	0.41870287	
	left:france	-0.00007366	0.00384426	-0.01916166	0.98471215	
	right:france	0.00017317	0.00250233	0.06920462	0.94482676	
	left:germany	0.00032733	0.003828	0.08550843	0.9318572	
	right:germany	0.00150302	0.00312817	0.48047829	0.63088742	
	left:italy	0.00174346	0.00378407	0.46073815	0.64498656	
	right:italy	0.00176703	0.00303381	0.58244392	0.56026781	
	left:netherlands	0.00256019	0.00385742	0.66370491	0.50687932	
	right:netherlands	0.00068885	0.00289841	0.2376647	0.81214121	
	left:poland	0.00217296	0.00505461	0.42989612	0.66727129	
	right:poland	-0.0007849	0.00276556	-0.28381331	0.7765535	
	left:slovenia	-0.0016766	0.00962028	-0.17427767	0.86164727	
	right:slovenia	0.00025121	0.00619822	0.04052905	0.96767135	
	left:spain	0.00128142	0.00382259	0.33522203	0.73745766	
	right:spain	0.0008578	0.0025897	0.3312336	0.7404681	
human rights	(Intercept)	0.02998891	0.00128391	23.35742597	0.00000000	***
	left	0.00365795	0.00386711	0.94591237	0.34419347	
	right	-0.00014863	0.00234376	-0.06341584	0.94943539	

	france	0.00095073	0.00136631	0.69583744	0.48653077	
	germany	0.00002275	0.00137523	0.01654082	0.98680294	
	italy	-0.00078179	0.00135508	-0.57693419	0.56398402	
	netherlands	-0.00176702	0.00163881	-1.07823557	0.28092886	
	poland	-0.00010845	0.00155827	-0.06959434	0.94451655	
	slovenia	0.00055813	0.00405489	0.13764298	0.89052261	
	spain	0.00044454	0.00138462	0.3210587	0.74816597	
	left:france	-0.00341949	0.0039138	-0.87370133	0.3822811	
	right:france	-0.00073849	0.00241652	-0.30560005	0.75990924	
	left:germany	-0.00118125	0.00395184	-0.29891062	0.76500829	
	right:germany	0.00013315	0.00290587	0.04582135	0.96345265	
	left:italy	-0.00248909	0.00389185	-0.63956367	0.52245643	
	right:italy	0.00082324	0.00279827	0.29419484	0.76860907	
	left:netherlands	-0.00169978	0.00444416	-0.38247579	0.70210855	
	right:netherlands	0.00085561	0.00286495	0.29864784	0.76520881	
	left:poland	0.00178054	0.00516825	0.34451432	0.73045959	
	right:poland	0.00000499	0.00289205	0.00172406	0.9986244	
	left:slovenia	0.00034261	0.00927053	0.03695679	0.97051947	
	right:slovenia	-0.00132814	0.00652307	-0.20360631	0.8386612	
	left:spain	-0.00246983	0.00392441	-0.62935087	0.52911949	
	right:spain	-0.00079452	0.00248562	-0.31964649	0.74923638	
environmentalism	(Intercept)	0.03082897	0.00128923	23.91270521	0.00000000	***
	left	0.00031504	0.00466601	0.06751879	0.94616872	
	right	0.00136929	0.00257786	0.53117501	0.59529761	
	france	0.00158476	0.00140148	1.1307804	0.25814776	
	germany	0.00260633	0.00146713	1.77648341	0.07565353	.
	italy	0.00226316	0.00138422	1.63497364	0.10205484	
	netherlands	0.00359838	0.00146251	2.46041553	0.01387776	.
	poland	0.0039489	0.00152942	2.58195494	0.00982436	**
	slovenia	-0.00005324	0.00369062	-0.01442458	0.98849125	
	spain	0.0015031	0.00139484	1.07761878	0.28120413	
	left:france	0.00149898	0.00480923	0.31168688	0.75527855	
	right:france	-0.0028959	0.00278304	-1.04055379	0.2980829	
	left:germany	0.00204627	0.00475118	0.43068638	0.6666965	
	right:germany	-0.0011442	0.00318736	-0.35897967	0.71961036	
	left:italy	-0.00061982	0.00464619	-0.13340466	0.89387338	
	right:italy	-0.0020723	0.00307141	-0.6747062	0.49986258	
	left:netherlands	0.00376267	0.00477321	0.78828908	0.43052779	
	right:netherlands	-0.00177847	0.00273213	-0.65094515	0.51508202	
	left:poland	-0.00122182	0.00562845	-0.21707921	0.82814665	

	right:poland	-0.00256142	0.00291816	-0.8777498	0.38007969	
	left:slovenia	0.00022077	0.00940242	0.02347973	0.98126761	
	right:slovenia	0.00046105	0.00634099	0.07270914	0.94203759	
	left:spain	0.00118306	0.00476958	0.24804394	0.80410045	
	right:spain	-0.00189085	0.00259346	-0.72908527	0.46594964	
national way of life	(Intercept)	0.0316422	0.00146655	21.57590573	0.00000000	***
	left	-0.0007753	0.00420599	-0.18433201	0.85375304	
	right	0.00202004	0.00247242	0.81702908	0.41391197	
	france	0.00248309	0.00155042	1.60155383	0.10925457	
	germany	0.00111031	0.00161944	0.68561236	0.49295772	
	italy	0.00298989	0.00144559	2.06828709	0.03861325	.
	netherlands	-0.00010448	0.0016747	-0.06238666	0.95025492	
	poland	0.00380388	0.0016521	2.30245053	0.02130995	.
	slovenia	0.00401014	0.00420128	0.95450471	0.33982842	
	spain	0.00537034	0.0015746	3.41059975	0.00064822	***
	left:france	0.00067676	0.00441718	0.153211	0.87823191	
	right:france	0.00320728	0.00272292	1.17788133	0.23884415	
	left:germany	0.00068569	0.0042802	0.16019948	0.87272397	
	right:germany	0.00399797	0.0032171	1.24272342	0.21397001	
	left:italy	-0.00014413	0.00442625	-0.03256192	0.97402394	
	right:italy	-0.00025284	0.00270995	-0.09330158	0.925664	
	left:netherlands	-0.00014775	0.00468139	-0.03156163	0.97482165	
	right:netherlands	0.00342667	0.00302427	1.13305622	0.25719087	
	left:poland	0.00101246	0.0050747	0.19951048	0.84186348	
	right:poland	0.00063537	0.00291533	0.2179409	0.8274752	
	left:slovenia	-0.00191612	0.00943471	-0.20309291	0.83906245	
	right:slovenia	0.00942621	0.00792553	1.18934689	0.23430343	
	left:spain	-0.00117387	0.00429579	-0.2732606	0.78465295	
	right:spain	0.00300401	0.00271933	1.10469021	0.26929407	
incentives	(Intercept)	0.04179493	0.00134652	31.03922165	0.00000000	***
	left	-0.0076535	0.00406359	-1.88343066	0.05964227	.
	right	0.00013129	0.00293014	0.04480828	0.96426013	
	france	-0.00218566	0.00154482	-1.41483103	0.1571183	
	germany	-0.00225615	0.00148518	-1.51911372	0.12873414	
	italy	-0.00484994	0.00143759	-3.3736506	0.00074181	***
	netherlands	-0.00177192	0.00157105	-1.12785612	0.25938091	
	poland	-0.00641125	0.00150773	-4.25226651	0.00002116	***
	slovenia	-0.00476593	0.00359348	-1.32627167	0.18474998	
	spain	-0.00672271	0.00142792	-4.7080395	0.0000025	***
	left:france	0.00214896	0.00439503	0.48895152	0.62487611	

	right:france	-0.00027368	0.00311606	-0.08782753	0.93001377	
	left:germany	0.00250848	0.00420425	0.59665374	0.5507387	
	right:germany	-0.00685897	0.00331384	-2.06979668	0.0384716	.
	left:italy	0.00683285	0.0041363	1.65192367	0.09855037	.
	right:italy	-0.0027571	0.00321341	-0.85799866	0.39089337	
	left:netherlands	0.00629105	0.00434519	1.44781987	0.14766769	
	right:netherlands	-0.00190994	0.00307212	-0.62170208	0.5341379	
	left:poland	0.00244961	0.00470002	0.52119223	0.60223296	
	right:poland	-0.00251739	0.00299945	-0.83928413	0.40131006	
	left:slovenia	0.00178779	0.00966184	0.18503595	0.85320087	
	right:slovenia	-0.00624366	0.00714547	-0.8737937	0.38223078	
	left:spain	0.00519522	0.00409928	1.26734926	0.20503068	
	right:spain	-0.0018633	0.00309113	-0.6027912	0.54664771	
equality	(Intercept)	0.03221627	0.00139925	23.02402661	0.00000000	***
	left	0.00487374	0.00424472	1.14818734	0.25089146	
	right	0.00172914	0.00251171	0.6884302	0.49118204	
	france	0.00266912	0.0015106	1.76693073	0.07724008	.
	germany	0.00413015	0.00154607	2.67138396	0.00755402	**
	italy	0.0018888	0.00142874	1.32200959	0.18616521	
	netherlands	0.00077012	0.00156239	0.49291563	0.62207229	
	poland	0.00292457	0.0016227	1.80228535	0.07150077	.
	slovenia	-0.00058057	0.00373661	-0.15537394	0.87652655	
	spain	0.00281686	0.00142205	1.98084799	0.04760855	.
	left:france	-0.00027113	0.00451177	-0.06009347	0.9520812	
	right:france	-0.00187868	0.00269247	-0.69775297	0.48533183	
	left:germany	0.00105986	0.00432251	0.2451963	0.80630448	
	right:germany	0.00351827	0.00314025	1.12037732	0.26255323	
	left:italy	-0.00281352	0.00437483	-0.64311452	0.52014992	
	right:italy	-0.00030838	0.00310621	-0.09927901	0.92091676	
	left:netherlands	-0.00343335	0.00489379	-0.70157315	0.48294554	
	right:netherlands	0.00105173	0.00284265	0.36998293	0.71139527	
	left:poland	0.00395521	0.00553211	0.71495541	0.47463674	
	right:poland	0.00078976	0.00283876	0.27820532	0.7808548	
	left:slovenia	-0.00061302	0.00948058	-0.06466008	0.94844466	
	right:slovenia	0.00044649	0.00755706	0.05908307	0.95288595	
	left:spain	-0.00519151	0.00419642	-1.23712825	0.21603971	
	right:spain	-0.00032727	0.00270905	-0.12080607	0.90384466	
sustainability	(Intercept)	0.0324665	0.00133216	24.37140268	0.00000000	***
	left	-0.00070116	0.00436041	-0.16080256	0.87224894	
	right	-0.00197032	0.00220355	-0.89415337	0.37124001	

	france	-0.00040794	0.00142171	-0.28693273	0.77416388	
	germany	0.00006812	0.00145838	0.04671112	0.96274348	
	italy	-0.00003472	0.00138954	-0.02498431	0.98006748	
	netherlands	0.00205822	0.00167674	1.22751131	0.21963071	
	poland	-0.00090201	0.00152287	-0.59230824	0.55364431	
	slovenia	0.00077949	0.00412452	0.18898902	0.85010145	
	spain	-0.00090457	0.00138886	-0.65130278	0.51485118	
	left:france	0.00103321	0.0044433	0.23253227	0.81612467	
	right:france	0.00084485	0.00240949	0.35063333	0.72586351	
	left:germany	0.0015156	0.00441515	0.34327181	0.73139404	
	right:germany	0.00073876	0.00272824	0.27078064	0.7865598	
	left:italy	-0.00012906	0.00436104	-0.02959418	0.97639071	
	right:italy	0.00073711	0.00286367	0.25740053	0.79686964	
	left:netherlands	-0.00110392	0.00485524	-0.22736568	0.82013945	
	right:netherlands	-0.00009732	0.00277969	-0.03501007	0.97207172	
	left:poland	-0.00136133	0.00502631	-0.27084141	0.78651305	
	right:poland	0.00198282	0.0025047	0.79163709	0.42857247	
	left:slovenia	-0.00398769	0.01079103	-0.36953794	0.71172686	
	right:slovenia	0.00094475	0.00708377	0.13336864	0.89390187	
	left:spain	0.00171726	0.00448111	0.38322284	0.70155461	
	right:spain	0.00212738	0.00228977	0.92907984	0.3528479	
traditional morality	(Intercept)	0.03985265	0.00174673	22.81552788	0.00000000	***
	left	-0.0083701	0.00430973	-1.94213977	0.05212042	.
	right	0.00540977	0.00321376	1.6833156	0.09231427	.
	france	0.00721285	0.0019305	3.73625429	0.00018679	***
	germany	0.00156986	0.00179386	0.87513166	0.38150245	
	italy	0.00695084	0.00178287	3.89869311	0.00009672	***
	netherlands	0.00865799	0.00209278	4.13708552	0.00003518	***
	poland	0.00321086	0.00192042	1.67195939	0.09453259	.
	slovenia	-0.00160636	0.00406214	-0.39544707	0.69251305	
	spain	0.00294246	0.00180619	1.62910295	0.10329149	
	left:france	-0.00077373	0.00446219	-0.17339693	0.86233947	
	right:france	-0.00034157	0.00336085	-0.10163207	0.91904874	
	left:germany	0.00596103	0.00451024	1.32166442	0.18628017	
	right:germany	-0.00307395	0.00338571	-0.90791788	0.36392179	
	left:italy	0.00327069	0.00438956	0.74510551	0.45620808	
	right:italy	-0.00510156	0.00350075	-1.45727553	0.1450406	
	left:netherlands	0.00173428	0.00483274	0.35886021	0.71969973	
	right:netherlands	-0.00195434	0.00369996	-0.52820588	0.59735655	
	left:poland	-0.00055989	0.00519672	-0.10773855	0.91420311	

	right:poland	0.00079158	0.00346127	0.22869776	0.81910388	
	left:slovenia	-0.00261858	0.01075152	-0.2435545	0.80757591	
	right:slovenia	0.01061547	0.00741108	1.4323786	0.15203576	
	left:spain	0.00565458	0.00442631	1.27749314	0.20142845	
	right:spain	-0.00233958	0.00328707	-0.71175356	0.47661753	
non-economic demographic groups	(Intercept)	0.05134578	0.00181437	28.29953539	0.00000000	***
	left	0.00376914	0.00516187	0.73018967	0.4652744	
	right	0.0059079	0.00373805	1.5804773	0.11399786	
	france	-0.00092688	0.00190707	-0.48602384	0.62695035	
	germany	0.00467534	0.00199825	2.33971222	0.01929877	.
	italy	0.01133878	0.00194632	5.82574079	0.00000001	***
	netherlands	-0.00705549	0.00226583	-3.1138703	0.00184655	**
	poland	0.00911756	0.00224922	4.05365796	0.00005043	***
	slovenia	0.01432732	0.00613301	2.33610184	0.0194861	.
	spain	0.0088208	0.00181833	4.85104642	0.00000123	***
	left:france	0.0010066	0.00532027	0.1892014	0.849935	
	right:france	-0.00673129	0.00394501	-1.70627838	0.08795652	.
	left:germany	-0.0026205	0.00544771	-0.48102774	0.63049687	
	right:germany	-0.00170547	0.00448912	-0.37991083	0.70401168	
	left:italy	-0.00234598	0.00558379	-0.42014136	0.67438226	
	right:italy	-0.00216114	0.00411082	-0.5257188	0.5990837	
	left:netherlands	0.00141017	0.00567347	0.248555	0.80370506	
	right:netherlands	0.00805068	0.00401205	2.00662526	0.0447898	.
	left:poland	0.00171655	0.00720915	0.23810662	0.81179844	
	right:poland	-0.00516039	0.00453858	-1.13700542	0.25553625	
	left:slovenia	0.0172475	0.01342789	1.28445321	0.19898367	
	right:slovenia	-0.00476741	0.01016908	-0.4688148	0.63920211	
	left:spain	-0.00163376	0.00527841	-0.30951696	0.75692836	
	right:spain	-0.00555332	0.00383663	-1.44744583	0.14777236	
economic growth	(Intercept)	0.03275519	0.0014626	22.39515992	0.00000000	***
	left	-0.00109636	0.00386446	-0.28370318	0.77663791	
	right	-0.00017134	0.00275626	-0.06216293	0.95043309	
	france	-0.000684	0.00145286	-0.47079952	0.63778399	
	germany	-0.00091417	0.001537	-0.59477318	0.55199521	
	italy	0.00089158	0.00149604	0.5959633	0.55119986	
	netherlands	-0.00072471	0.0017233	-0.42053976	0.67409126	
	poland	-0.00008924	0.00170667	-0.05228918	0.95829828	
	slovenia	-0.00056789	0.00412293	-0.13773969	0.89044617	
	spain	0.00066548	0.00147114	0.45235586	0.65101272	
	left:france	0.00071284	0.00400333	0.178063	0.85867353	

	right:france	-0.00023734	0.00301409	-0.07874357	0.9372366	
	left:germany	0.00124132	0.00392742	0.31606472	0.75195344	
	right:germany	-0.00037367	0.00299942	-0.1245805	0.90085569	
	left:italy	-0.00020866	0.00389484	-0.05357474	0.95727399	
	right:italy	-0.00158332	0.00334889	-0.47278918	0.63636368	
	left:netherlands	0.00051883	0.00439485	0.11805423	0.90602471	
	right:netherlands	-0.00021296	0.00324383	-0.06565152	0.94765528	
	left:poland	0.00058318	0.00496985	0.11734369	0.90658772	
	right:poland	-0.00057967	0.00320515	-0.1808559	0.85648071	
	left:slovenia	0.00144918	0.00870335	0.16650822	0.86775704	
	right:slovenia	0.0003433	0.00648738	0.05291772	0.95779747	
	left:spain	0.00068499	0.00387908	0.17658611	0.85983354	
	right:spain	0.00025526	0.00291197	0.08765864	0.93014801	
market regulation	(Intercept)	0.04038128	0.00145426	27.76756148	0.00000000	***
	left	-0.00507783	0.0042799	-1.18643723	0.23544991	
	right	0.00005785	0.00269193	0.02148859	0.98285591	
	france	-0.00247629	0.00154012	-1.60785252	0.10786775	
	germany	-0.00006573	0.0015389	-0.042715	0.96592873	
	italy	-0.0009896	0.00149518	-0.66186042	0.50806081	
	netherlands	-0.00020073	0.0016633	-0.12068432	0.9039411	
	poland	0.00053753	0.00178287	0.30149745	0.76303525	
	slovenia	0.00294388	0.00432127	0.68125444	0.49571064	
	spain	-0.00333211	0.00155994	-2.13605574	0.03267507	.
	left:france	0.00340553	0.00439179	0.77543215	0.43808449	
	right:france	0.00140179	0.00282413	0.49636307	0.61963836	
	left:germany	0.00077779	0.00448156	0.1735528	0.86221696	
	right:germany	-0.00444278	0.00321315	-1.38268881	0.16676056	
	left:italy	0.00267947	0.00430659	0.62217872	0.53382448	
	right:italy	-0.00212841	0.00283485	-0.75079985	0.45277327	
	left:netherlands	0.00154983	0.00469823	0.32987547	0.74149411	
	right:netherlands	0.00122509	0.00290632	0.42152626	0.67337092	
	left:poland	0.000893	0.00558006	0.16003415	0.8728542	
	right:poland	-0.00262059	0.00339842	-0.77112072	0.44063553	
	left:slovenia	-0.00035633	0.01068962	-0.0333339	0.97340833	
	right:slovenia	-0.00423866	0.0075233	-0.56340395	0.57315995	
	left:spain	0.00179961	0.00436157	0.4126055	0.67989574	
	right:spain	-0.00210325	0.00269765	-0.77966092	0.43559064	
internationalism	(Intercept)	0.0381881	0.00126402	30.21163844	0.00000000	***
	left	0.00164451	0.00461869	0.35605519	0.7217993	
	right	-0.00287965	0.00254023	-1.13362089	0.25695383	

	france	-0.0035983	0.00138332	-2.60121085	0.00928965	**
	germany	0.00032477	0.00135941	0.2389014	0.81118208	
	italy	-0.00504543	0.00136818	-3.68770699	0.00022629	***
	netherlands	-0.00320073	0.00163407	-1.95874858	0.05014247	.
	poland	-0.00333912	0.00148712	-2.24536561	0.02474485	.
	slovenia	0.00207656	0.00343543	0.6044528	0.54554275	
	spain	-0.00500115	0.00133262	-3.75287701	0.00017482	***
	left:france	-0.00378533	0.0048099	-0.78698716	0.43128954	
	right:france	0.00278147	0.00265958	1.04583046	0.29563953	
	left:germany	-0.00520301	0.00478626	-1.08707134	0.2770055	
	right:germany	-0.00199986	0.00280201	-0.71372328	0.47539845	
	left:italy	-0.0009652	0.00482511	-0.20003619	0.84145231	
	right:italy	0.0027026	0.003069	0.88061172	0.37852819	
	left:netherlands	-0.00231204	0.00508584	-0.45460375	0.64939442	
	right:netherlands	0.00072658	0.00304161	0.2388795	0.81119906	
	left:poland	-0.00119579	0.00530073	-0.22559029	0.82152013	
	right:poland	0.00244913	0.00295953	0.82753966	0.40793142	
	left:slovenia	-0.00116993	0.01016335	-0.11511314	0.90835547	
	right:slovenia	-0.00491828	0.00646693	-0.76052756	0.44693945	
	left:spain	-0.0016439	0.00461503	-0.3562063	0.72168614	
	right:spain	0.00307499	0.00259975	1.18280412	0.23688702	
culture	(Intercept)	0.04980564	0.00156944	31.73467249	0.00000000	***
	left	-0.01189572	0.00459663	-2.58792401	0.00965574	**
	right	-0.00340577	0.00334251	-1.01892584	0.30823838	
	france	-0.00533031	0.00171629	-3.10571238	0.00189826	**
	germany	-0.00654184	0.00167902	-3.89622088	0.00009771	***
	italy	-0.00548862	0.00157435	-3.4862768	0.00048981	***
	netherlands	-0.00001709	0.00195341	-0.00874795	0.99302024	
	poland	0.00026099	0.00179593	0.14532066	0.88445772	
	slovenia	-0.00806261	0.00432782	-1.86297126	0.06246655	.
	spain	-0.0080403	0.00164008	-4.90237962	0.00000095	***
	left:france	0.01073104	0.00461232	2.32660342	0.01998655	.
	right:france	0.00008875	0.00330075	0.02688762	0.97854937	
	left:germany	0.01391639	0.00481214	2.89193489	0.00382884	**
	right:germany	-0.00897097	0.00362375	-2.47560405	0.01330124	.
	left:italy	0.0132148	0.00457021	2.89150918	0.00383403	**
	right:italy	-0.00333695	0.00385412	-0.86581418	0.38659225	
	left:netherlands	0.01735456	0.00497837	3.48599016	0.00049034	***
	right:netherlands	-0.00458378	0.00339089	-1.35179518	0.1764411	
	left:poland	0.00689752	0.00577885	1.19358122	0.23264206	

	right:poland	0.00088222	0.00378631	0.23300288	0.81575921	
	left:slovenia	0.00490323	0.01119954	0.43780662	0.66152655	
	right:slovenia	-0.00738382	0.00810027	-0.91155279	0.36200437	
	left:spain	0.01284189	0.00459242	2.79632395	0.00516884	**
	right:spain	-0.0007483	0.00337567	-0.22167483	0.82456707	
europe	(Intercept)	0.03904852	0.00155824	25.05936629	0.00000000	***
	left	0.0018092	0.00491637	0.36799635	0.71287602	
	right	0.0001042	0.00278299	0.03744047	0.97013381	
	france	-0.000661	0.00177408	-0.37258838	0.70945489	
	germany	-0.00043174	0.00155815	-0.27708661	0.78171365	
	italy	-0.00029209	0.00155561	-0.18776557	0.85106046	
	netherlands	0.00507695	0.00183059	2.77339442	0.00554757	**
	poland	-0.00030038	0.00175614	-0.17104572	0.86418785	
	slovenia	0.00157226	0.00437157	0.35965498	0.71910523	
	spain	0.00083309	0.00169422	0.49172709	0.62291238	
	left:france	0.00014313	0.00517514	0.02765703	0.9779357	
	right:france	0.00015204	0.00307535	0.04943977	0.96056884	
	left:germany	-0.00132361	0.00509117	-0.25998193	0.79487776	
	right:germany	0.00384447	0.00310168	1.23947802	0.21516877	
	left:italy	-0.00065547	0.00490999	-0.13349726	0.89380015	
	right:italy	0.00286571	0.00317333	0.90306108	0.36649366	
	left:netherlands	-0.00735082	0.00523201	-1.40497	0.16003046	
	right:netherlands	-0.00610685	0.00296482	-2.05977011	0.03942074	.
	left:poland	-0.0008297	0.00549632	-0.15095518	0.8800111	
	right:poland	0.00179106	0.00322975	0.55455027	0.57920242	
	left:slovenia	0.00129546	0.01225177	0.10573624	0.91579165	
	right:slovenia	0.00397951	0.00800135	0.49735451	0.61893917	
	left:spain	0.00001013	0.00502724	0.00201434	0.99839279	
	right:spain	0.00024387	0.0028986	0.08413232	0.93295124	
civic mindedness	(Intercept)	0.03254719	0.00140701	23.1321159	0.00000000	***
	left	0.0028945	0.00444215	0.65159738	0.51466106	
	right	0.00062161	0.00278004	0.22359636	0.82307144	
	france	0.00208238	0.00151968	1.37027515	0.17060128	
	germany	-0.00020071	0.00153414	-0.13082945	0.89591025	
	italy	0.00024493	0.00142873	0.17142932	0.86388623	
	netherlands	-0.00003524	0.00170273	-0.0206947	0.9834892	
	poland	0.00005396	0.00168329	0.03205725	0.9744264	
	slovenia	0.00021448	0.0037362	0.05740507	0.95422254	
	spain	0.00037511	0.00152641	0.24574866	0.80587685	
	left:france	-0.00364023	0.00447893	-0.81274564	0.41636407	

	right:france	-0.00130114	0.00290565	-0.44779423	0.65430179	
	left:germany	-0.00295968	0.00452753	-0.65370721	0.51330058	
	right:germany	0.00039147	0.0032154	0.12174993	0.90309709	
	left:italy	-0.00326502	0.00462236	-0.70635356	0.47996843	
	right:italy	-0.00021737	0.00337391	-0.06442743	0.9486299	
	left:netherlands	-0.00389147	0.00479587	-0.81142125	0.41712396	
	right:netherlands	-0.00070842	0.00312628	-0.22660242	0.82073295	
	left:poland	-0.00247381	0.0057956	-0.42684172	0.66949469	
	right:poland	-0.00005241	0.00317892	-0.01648708	0.98684581	
	left:slovenia	-0.00357728	0.01087474	-0.32895304	0.74219124	
	right:slovenia	0.00135704	0.00668723	0.20293051	0.83918938	
	left:spain	-0.00238092	0.00448816	-0.53048946	0.59577271	
	right:spain	-0.00024368	0.00273183	-0.08920061	0.92892249	
technology & infrastructure	(Intercept)	0.03058437	0.00131442	23.26828902	0.00000000	***
	left	0.00000465	0.00424038	0.00109636	0.99912523	
	right	-0.00003137	0.00227872	-0.01376647	0.98901629	
	france	-0.00124659	0.00140122	-0.88964784	0.37365519	
	germany	0.00230731	0.00137769	1.67476307	0.09398099	.
	italy	-0.00290232	0.0013686	-2.12064789	0.03395165	.
	netherlands	-0.00040233	0.00145686	-0.27616335	0.78242265	
	poland	-0.00062022	0.00141557	-0.43813727	0.66128686	
	slovenia	-0.00206531	0.00372134	-0.55499002	0.57890159	
	spain	-0.00079089	0.0014479	-0.54622964	0.5849082	
	left:france	-0.00025809	0.00441729	-0.05842752	0.9534081	
	right:france	-0.00030955	0.00223349	-0.13859314	0.88977169	
	left:germany	-0.0008956	0.00422833	-0.21180844	0.83225652	
	right:germany	-0.00449798	0.00290001	-1.55102586	0.12089575	
	left:italy	0.00132698	0.00428761	0.30949112	0.75694802	
	right:italy	0.00030932	0.00278428	0.11109405	0.91154179	
	left:netherlands	-0.00046629	0.00431977	-0.10794422	0.91403996	
	right:netherlands	-0.00096561	0.00236526	-0.40824695	0.68309246	
	left:poland	-0.00138935	0.00503336	-0.2760273	0.78252715	
	right:poland	-0.00159975	0.00264812	-0.60411016	0.54577052	
	left:slovenia	-0.00226167	0.00949	-0.23832098	0.81163219	
	right:slovenia	-0.00349925	0.00615155	-0.56884126	0.56946398	
	left:spain	-0.00029611	0.00431224	-0.06866756	0.94525426	
	right:spain	-0.00132882	0.00241793	-0.54956863	0.58261538	
freedom & human rights	(Intercept)	0.03391257	0.00150265	22.5684637	0.00000000	***
	left	0.00090008	0.00463382	0.19424058	0.84598754	
	right	-0.00036284	0.00260495	-0.13928998	0.88922103	

	france	-0.00024006	0.00159341	-0.15065739	0.88024601	
	germany	0.00070157	0.00151987	0.46159918	0.64436887	
	italy	0.000412	0.00153609	0.26821661	0.78853264	
	netherlands	-0.0014251	0.00191859	-0.74278372	0.45761278	
	poland	0.00008777	0.00163584	0.05365323	0.95721145	
	slovenia	0.00100654	0.00406518	0.24759939	0.80444443	
	spain	-0.00022098	0.00162655	-0.13585796	0.8919336	
	left:france	-0.00123634	0.00470492	-0.26277575	0.79272347	
	right:france	0.00034195	0.00283862	0.12046515	0.9041147	
	left:germany	-0.00167084	0.00471126	-0.35464901	0.72285262	
	right:germany	0.0046946	0.00301227	1.55849486	0.11911625	
	left:italy	-0.00149606	0.00470167	-0.31819663	0.75033584	
	right:italy	0.00147947	0.00307411	0.48126971	0.63032491	
	left:netherlands	-0.00055612	0.00487484	-0.11408061	0.90917392	
	right:netherlands	0.00196823	0.00303165	0.6492285	0.51619082	
	left:poland	-0.00061714	0.00572822	-0.10773604	0.9142051	
	right:poland	0.00068751	0.0027413	0.25079833	0.80197008	
	left:slovenia	0.00346428	0.01187217	0.29179817	0.77044099	
	right:slovenia	0.00093274	0.00760841	0.12259281	0.90242957	
	left:spain	-0.00090475	0.00463873	-0.19504282	0.84535946	
	right:spain	0.00153209	0.00274221	0.55870445	0.57636354	
labour groups	(Intercept)	0.03301851	0.00121608	27.15166062	0.00000000	***
	left	0.00030334	0.00397914	0.07623355	0.93923331	
	right	-0.00194484	0.00210652	-0.92324852	0.35587789	
	france	-0.00148281	0.00143263	-1.03502698	0.30065652	
	germany	-0.00102818	0.00128709	-0.79884015	0.42438327	
	italy	-0.00066277	0.00135552	-0.48894436	0.62488118	
	netherlands	-0.00073989	0.00147771	-0.50069806	0.61658373	
	poland	-0.00060414	0.00145869	-0.41416301	0.6787548	
	slovenia	-0.0004193	0.00385957	-0.10863879	0.91348901	
	spain	-0.00046448	0.00124816	-0.37213582	0.70979179	
	left:france	0.00075882	0.00418329	0.18139349	0.85605876	
	right:france	0.00151661	0.00224494	0.67556575	0.49931653	
	left:germany	0.00118441	0.00396375	0.29881067	0.76508456	
	right:germany	0.00257636	0.00247395	1.04139534	0.29769231	
	left:italy	0.0004021	0.0041304	0.09735013	0.92244836	
	right:italy	0.00197261	0.0025656	0.76886906	0.4419712	
	left:netherlands	-0.00036955	0.00450126	-0.08209844	0.93456845	
	right:netherlands	0.00121223	0.0024421	0.49638934	0.61961984	
	left:poland	-0.00141714	0.00515786	-0.27475355	0.78350564	

	right:poland	0.00135965	0.00257881	0.52724079	0.59802649	
	left:slovenia	0.00429819	0.01018948	0.42182618	0.67315197	
	right:slovenia	0.00057522	0.00713812	0.08058483	0.93577214	
	left:spain	0.00206538	0.00394967	0.52292414	0.60102714	
	right:spain	0.00176644	0.00224987	0.7851312	0.4323768	
welfare	(Intercept)	0.03220322	0.00122658	26.25442045	0.00000000	***
	left	-0.00325617	0.00411521	-0.79125369	0.42879612	
	right	-0.0007155	0.00221063	-0.32366561	0.74619126	
	france	-0.00080938	0.00136931	-0.59108494	0.55446362	
	germany	-0.00105388	0.00129154	-0.81598713	0.41450766	
	italy	-0.00233715	0.00127755	-1.82939256	0.06734107	.
	netherlands	0.00222832	0.00163227	1.36516934	0.17220009	
	poland	-0.00269765	0.0014008	-1.92579593	0.0541301	.
	slovenia	-0.00379999	0.00326432	-1.16409816	0.24438446	
	spain	-0.00041932	0.00126575	-0.33128345	0.74043045	
	left:france	0.00114004	0.00417109	0.27332023	0.78460711	
	right:france	0.00019866	0.00237493	0.08364794	0.93333636	
	left:germany	0.00273114	0.00428394	0.6375312	0.52377901	
	right:germany	-0.0029377	0.00247239	-1.18820493	0.23475292	
	left:italy	0.00418305	0.00416165	1.00514214	0.31482862	
	right:italy	-0.00035942	0.00260552	-0.13794517	0.89028377	
	left:netherlands	0.0027631	0.00420343	0.65734391	0.51095994	
	right:netherlands	-0.00417406	0.00261364	-1.5970321	0.11025882	
	left:poland	0.00396564	0.00509299	0.77864682	0.43618794	
	right:poland	-0.00102894	0.00253704	-0.4055668	0.685061	
	left:slovenia	0.00099793	0.00997784	0.10001431	0.92033298	
	right:slovenia	-0.00068855	0.0057681	-0.11937142	0.90498112	
	left:spain	0.00367323	0.00415813	0.88338411	0.37702895	
	right:spain	-0.00124296	0.00231016	-0.53803824	0.59055075	
anti-growth economy	(Intercept)	0.03207944	0.00137531	23.32531362	0.00000000	***
	left	0.00072634	0.00449147	0.16171553	0.8715299	
	right	0.00031038	0.00254923	0.12175285	0.90309478	
	france	0.0007189	0.00147544	0.48724438	0.62608525	
	germany	0.0002404	0.00151137	0.15906175	0.87362025	
	italy	0.0011961	0.0014171	0.84405109	0.39864103	
	netherlands	-0.00039938	0.00165426	-0.24142831	0.80922322	
	poland	0.00059562	0.00157183	0.37893663	0.70473499	
	slovenia	0.00230176	0.0038888	0.59189509	0.55392096	
	spain	0.00110857	0.00140634	0.78826703	0.43054068	
	left:france	-0.00038069	0.00453268	-0.08398836	0.9330657	

	right:france	-0.00142031	0.00274528	-0.51736609	0.60490072	
	left:germany	0.00008581	0.00457223	0.01876798	0.9850262	
	right:germany	0.0013815	0.00283342	0.48757338	0.62585215	
	left:italy	-0.00033284	0.00460492	-0.07227968	0.94237935	
	right:italy	-0.00025222	0.00292018	-0.08637108	0.93117145	
	left:netherlands	0.0000415	0.00476913	0.00870165	0.99305718	
	right:netherlands	0.0008208	0.00306734	0.26759293	0.78901272	
	left:poland	0.0001006	0.00556114	0.01808968	0.98556731	
	right:poland	0.00015661	0.0029353	0.05335338	0.95745036	
	left:slovenia	-0.00110817	0.00972914	-0.11390181	0.90931565	
	right:slovenia	0.00003017	0.00677557	0.00445324	0.99644684	
	left:spain	0.00139611	0.00447067	0.31228109	0.75482696	
	right:spain	-0.00006092	0.00267873	-0.02274222	0.9818559	
gov-admin efficiency	(Intercept)	0.03166811	0.00135084	23.44318863	0.00000000	***
	left	0.00023354	0.00381299	0.06124886	0.95116103	
	right	0.00014694	0.00266012	0.05523683	0.95594979	
	france	0.00117054	0.00146932	0.79665329	0.42565258	
	germany	-0.00003848	0.00144004	-0.02672234	0.9786812	
	italy	0.00129147	0.00144046	0.8965631	0.36995228	
	netherlands	0.00197764	0.00148074	1.33557252	0.18168929	
	poland	0.00044006	0.00164985	0.26673089	0.78967641	
	slovenia	0.0009379	0.00409459	0.22905764	0.81882416	
	spain	0.00069557	0.00138321	0.50286679	0.61505803	
	left:france	0.00168557	0.00385734	0.43697866	0.6621269	
	right:france	-0.00021891	0.00277401	-0.07891541	0.93709992	
	left:germany	0.0000601	0.00382969	0.01569416	0.98747839	
	right:germany	0.00084873	0.00290277	0.29238527	0.76999212	
	left:italy	-0.00120342	0.00412509	-0.29173074	0.77049255	
	right:italy	-0.00113267	0.00301669	-0.37546898	0.70731178	
	left:netherlands	-0.00144588	0.00405588	-0.35648915	0.72147434	
	right:netherlands	-0.00188451	0.00291539	-0.64639865	0.51802134	
	left:poland	-0.00070953	0.00500777	-0.14168558	0.88732839	
	right:poland	0.00008014	0.00313819	0.02553575	0.97962764	
	left:slovenia	0.00108657	0.01094972	0.09923243	0.92095374	
	right:slovenia	0.00090931	0.00628158	0.1447574	0.88490244	
	left:spain	-0.0003601	0.00392902	-0.09165248	0.92697417	
	right:spain	0.00002887	0.00264248	0.01092582	0.99128263	
decentralisation	(Intercept)	0.03817088	0.00153842	24.81179384	0.00000000	***
	left	0.00602833	0.00487601	1.2363242	0.21633832	
	right	-0.00061647	0.00284385	-0.21677308	0.82838523	

	france	0.00022802	0.00171353	0.13306869	0.89413908	
	germany	-0.00255078	0.00170942	-1.49219314	0.13564878	
	italy	-0.00149677	0.00157077	-0.95288948	0.34064626	
	netherlands	0.00538563	0.00181551	2.96646301	0.00301253	**
	poland	-0.00155475	0.00176517	-0.88079156	0.37843082	
	slovenia	-0.00066776	0.00354242	-0.18850335	0.85048212	
	spain	-0.00014193	0.0016648	-0.08525312	0.93206017	
	left:france	-0.00554069	0.00502514	-1.10259496	0.27020332	
	right:france	0.00026361	0.00310418	0.08492105	0.93232417	
	left:germany	-0.00698237	0.00505688	-1.38076526	0.1673514	
	right:germany	0.00106356	0.00324073	0.32818416	0.74277248	
	left:italy	-0.00644072	0.00519304	-1.2402607	0.21487923	
	right:italy	0.00806559	0.00324411	2.48622364	0.01291081	.
	left:netherlands	-0.00893815	0.0048972	-1.82515448	0.06797797	.
	right:netherlands	-0.00219927	0.00317239	-0.69325299	0.48815093	
	left:poland	-0.00489661	0.00611569	-0.80066398	0.42332636	
	right:poland	-0.00002684	0.00321188	-0.00835707	0.9933321	
	left:slovenia	0.00116409	0.01367951	0.08509728	0.93218407	
	right:slovenia	-0.00407002	0.00666298	-0.61084001	0.54130562	
	left:spain	-0.00813349	0.00503008	-1.61697102	0.1058848	
	right:spain	0.00199947	0.00291488	0.68595182	0.49274362	
residual topic	(Intercept)	0.00080879	0.00001943	41.61868583	0.00000000	***
	left	-0.00001403	0.00005261	-0.26669237	0.78970607	
	right	-0.00000585	0.00003185	-0.18366687	0.85427483	
	france	-0.00000477	0.00002084	-0.22881581	0.81901212	
	germany	-0.00000341	0.00002085	-0.163354	0.87023974	
	italy	0.0000007	0.00001994	0.03511275	0.97198984	
	netherlands	-0.00001713	0.0000252	-0.67969862	0.49669544	
	poland	0.00000737	0.00002141	0.34435824	0.73057695	
	slovenia	0.00001049	0.00005451	0.19244088	0.84739691	
	spain	0.00000515	0.00002024	0.25427949	0.79927969	
	left:france	0.00002399	0.00005621	0.42679047	0.66953202	
	right:france	0.00000252	0.00003302	0.07628457	0.93919271	
	left:germany	0.0000224	0.00005442	0.41172637	0.68054006	
	right:germany	0.0000177	0.00003771	0.46924494	0.63889465	
	left:italy	0.0000202	0.0000539	0.37482752	0.70778881	
	right:italy	0.0000081	0.00003837	0.21107904	0.83282563	
	left:netherlands	0.00001832	0.00005634	0.32522766	0.74500883	
	right:netherlands	0.00001986	0.00003543	0.56059409	0.57507439	
	left:poland	0.0000141	0.00006485	0.21736184	0.82792641	

	right:poland	0.00001117	0.00003502	0.31895848	0.74975805	
	left:slovenia	0.00001547	0.00012898	0.11995271	0.90452063	
	right:slovenia	0.00000454	0.00008968	0.05067781	0.95958227	
	left:spain	0.00002071	0.00005318	0.38952472	0.6968881	
	right:spain	0.00000807	0.00003437	0.23471122	0.81443292	

Signif. codes: 0.0001 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1

Table A.1: Estimated topic propensity parameters. Intercept corresponds to covariate levels center:belgium ($pol.pos.$ = center and $country$ = belgium)