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**Minority languages in social media:
A comparative European
study of digital vitality**

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Abstract

Minority languages in social media: A comparative European study of digital vitality

This article explores how the role of media in supporting minority languages is evolving in response to the expanding digital media landscape in the EU. It examines how the use of minority languages in media is influenced by their status within the growing digital market. As digital media become more dominant in everyday life, minority languages are susceptible to negative shifts, particularly with the rise of internet-based platforms. Through the analysis of four minority language secessionist movements (Scottish Gaelic, Provençal, Andalusian, and Silesian), the article examines whether each context can still support minority languages institutionally in their respective media landscape, and what conditions are necessary for that support. It also questions how EU policies aimed at protecting and promoting these languages can remain effective if they aren't adapted to fit the new digital realities. The significance of the study thus stems from its direct comparative approach and its comprehensive update of existing academic literature, assessing the changes that took place across the four media systems. The results showed an asymmetrical growth of traditional outlets as opposed to digital ones among all communities, owing largely to a lack of public policy initiatives within the free-market digital space and subsequent algorithmic prioritisation of majority languages. The article thus calls for a synthesis of top-down policy initiatives with bottom-up grassroots movements to enhance and develop new media services in minority languages.

Keywords: minority languages, social media, digital prestige planning, algorithmic bias, language policy, linguistic vitality

In an era of platform-dominated communication, social media have become central to how language is used, valued, and reproduced in everyday life. Across Europe, younger generations increasingly conduct their social, cultural, and even political interactions through digital platforms such as Instagram, TikTok, and X. This shift has profound implications for minority languages. If a language is absent from these spaces, it risks exclusion not only from daily communication, but also from the symbolic domains in which linguistic legitimacy and cultural relevance are negotiated.

Recent data on media consumption across Europe confirm the scale of this transformation. Digital platforms now dominate news access and interpersonal communication, particularly among younger users, for whom social

media constitute a primary environment of interaction rather than a supplementary one. In this context, linguistic presence online is no longer optional: it is a key indicator of vitality. As Kornai (2013) argues, only a small fraction of the world's languages are likely to achieve "digital survival," raising urgent questions about the future of linguistic diversity in increasingly algorithm-driven communication environments.

Within the European Union, this challenge is compounded by a structural lag between policy frameworks and media realities. The European Charter for Regional or Minority Languages (ECRML, 1992) established important protections for minority languages in traditional domains such as education, broadcasting, and public administration. However, it was designed in a pre-digital era and does not adequately address the dynamics of platform economies, algorithmic visibility, or user-generated content. While many minority languages have achieved a degree of institutional presence in radio, television, or regional press, their visibility in digital environments remains uneven and often marginal.

At the same time, social media offer new opportunities for minority language revitalisation. Digital platforms can create additional domains of written use, connect geographically dispersed speakers, and enhance prestige by associating minority languages with contemporary cultural practices. Yet these opportunities are unevenly distributed. Structural barriers—including algorithmic bias toward majority languages, limited technical resources, and insufficient content diversity—continue to constrain minority language use online. As a result, a growing tension emerges between institutional support and everyday practice: languages may be formally recognised and taught, yet remain marginal in the communicative spaces that shape daily interaction.

This article addresses this tension through a comparative analysis of four minority language contexts linked to regionalist or secessionist movements: Silesian in Poland, Provençal in France, Andalusian in Spain, and Scottish Gaelic in the United Kingdom. These cases were selected because they represent distinct configurations of institutional recognition, educational integration, and grassroots activism. Together, they provide a framework for examining how different combinations of top-down and bottom-up initiatives shape minority language presence in digital media.

While previous research has explored minority language use in both traditional and digital media, relatively few studies have systematically compared how institutional support and grassroots digital practices interact

across multiple European contexts. This study seeks to address that gap by integrating sociolinguistic and media-oriented perspectives within a comparative framework. In doing so, it moves beyond descriptive accounts of digital language use to examine the structural conditions that enable or constrain minority language vitality online.

The analysis is guided by established models of language vitality and planning, including the COD model of competence, opportunity, and desire (Grin, Sfreddo, & Vaillancourt, 2003), and Hinton's (2002) PIE cycle of planning, implementation, and evaluation. These frameworks are particularly relevant in digital environments, where linguistic success depends not only on institutional support, but also on user engagement, technological accessibility, and perceived prestige. Building on these perspectives, the article asks: under what conditions can European minority languages sustain meaningful presence in digital communication environments, and what policy interventions are necessary to ensure that social media function as a resource rather than a barrier to linguistic diversity?

By addressing these questions, the article contributes to interdisciplinary debates in media studies, sociolinguistics, and language policy. It argues that minority languages in Europe are at a critical juncture: without stronger integration into digital environments, institutional protections risk becoming symbolic rather than functional. However, where coordinated strategies align policy support with grassroots digital innovation, minority languages may not only survive but also gain renewed visibility and relevance in contemporary communicative life

Literature review

From traditional to digital media: Shifting domains of minority language use

Research on minority languages in Europe has consistently emphasised the central role of media in shaping linguistic vitality. Early scholarship focused primarily on traditional media—radio, press, and television—as key domains through which minority languages could gain visibility, legitimacy, and symbolic recognition (Cormack, 1998; Hogan-Brun & Wolff, 2003). Within this framework, policy instruments such as the European Charter for Regional

or Minority Languages (ECRML, 1992) encouraged states to institutionalise minority language presence through regional broadcasting and public service media (Guyot, 2007).

However, subsequent research has highlighted the structural limitations of this model. Traditional media tend to operate within institutional and cultural domains that are increasingly disconnected from the everyday communicative practices of younger generations (Moring, 2007). As McQuail (2000) observed, media institutions often reproduce dominant language hierarchies, meaning that formal visibility does not necessarily translate into active use. This disconnect is particularly evident in contexts where minority languages are well represented in broadcasting but remain marginal in informal, peer-to-peer communication.

The transition to digital media has fundamentally reshaped these dynamics. Contemporary media environments are characterised by participatory, user-generated content and platform-based communication, where linguistic practices are shaped not only by institutions but also by users themselves. As Gnach, Engebretsen, and Weber (2022) argue, digital communication blurs the boundaries between producers and audiences, creating new forms of linguistic participation that differ significantly from traditional media models. This shift requires a reconceptualisation of minority language media from institutional provision to everyday digital practice.

Social media, digital linguistics, and new forms of language use

The rise of social media has generated growing interest in how digital environments reshape language use, identity, and communication. Studies in media linguistics emphasise that online communication is characterised by hybridity, multimodality, and fluid language practices that often transcend standardised forms (Calude, 2023; Dovchin, 2020). In these contexts, minority languages may function not only as tools of communication but also as markers of identity, authenticity, and resistance within digital cultures.

From this perspective, social media create new domains of linguistic vitality. UNESCO (2003) identified three key potentials: expanding written use, connecting dispersed communities, and enhancing prestige by linking minority languages with contemporary cultural forms. Empirical studies have confirmed these dynamics in cases such as Welsh, Basque, and Catalan, where

social media enable both linguistic innovation and identity performance (Jones, Cunliffe, & Honeycutt, 2013; Nguyen, Trieschnigg, & Cornips, 2015).

At the same time, digital communication introduces new challenges. The informal and often non-standard nature of online language use can complicate efforts at standardisation, particularly for languages with contested orthographies. Research on internet language practices highlights how variability and experimentation—while potentially empowering—can also limit wider accessibility and institutional uptake (Urzędowska, 2021). Similarly, Skowronek (2021) notes that contemporary media linguistics must grapple with the tension between linguistic creativity and communicative clarity in digital environments.

For minority languages, these dynamics create both opportunities and constraints. On the one hand, digital platforms lower barriers to entry, enabling grassroots communities to produce and disseminate content independently of institutional support. On the other hand, the lack of standardisation, resources, and technical infrastructure can restrict the scalability and sustainability of such initiatives.

Structural barriers in digital environments

Despite the potential of social media, structural barriers continue to limit minority language presence online. One of the most significant challenges is algorithmic bias. Digital platforms prioritise content based on engagement metrics and scale, which systematically advantages majority languages with larger user bases (Ferré-Pavia et al., 2018). As a result, minority language content often remains less visible, regardless of its cultural relevance or quality.

In addition, technical and linguistic constraints play a crucial role. Limited availability of standardised orthographies, spell-checking tools, and language-specific interfaces can hinder participation in digital communication. This is particularly evident in contexts where linguistic norms are still evolving or contested, as in the case of Silesian and Andalusian. Without accessible writing systems and technological support, users may default to majority languages in online interaction.

Another key factor is content diversity. As Gibson (2015) argues, digital vitality depends not only on the presence of a language online but also on the range and appeal of available content. Minority languages that lack representation in entertainment, humour, and youth-oriented media may

struggle to attract younger users, even when institutional support is present. This creates a paradox in which languages may be formally recognised yet remain socially marginal in everyday communication.

These barriers have broader sociolinguistic consequences. The absence of minority languages from digital spaces can weaken their perceived relevance, contributing to a shift toward majority language use in informal domains. Over time, this may lead to what has been described as “domain contraction,” where minority languages become confined to formal or symbolic contexts rather than functioning as living means of communication.

Institutional and grassroots approaches to digital vitality

The literature highlights an ongoing tension between institutional and grassroots approaches to minority language promotion. Institutional frameworks, such as education systems and public media, are effective in supporting language competence and standardisation (Fishman, 1991). However, they often struggle to adapt to rapidly changing digital environments and to engage younger audiences.

In contrast, grassroots digital initiatives—such as social media communities, blogs, and user-generated content—can foster creativity, engagement, and cultural relevance. These bottom-up practices are particularly visible in contexts where institutional support is limited, demonstrating the capacity of communities to sustain linguistic activity independently (Dołowy-Rybińska, 2021).

Yet both approaches have limitations when operating in isolation. Institutional strategies without digital adaptation risk producing “passive competence” without active use, while grassroots initiatives without structural support may remain fragmented and unsustainable. Recent studies suggest that successful cases of minority language revitalisation increasingly involve hybrid models that combine policy support with community-driven digital innovation.

Theoretical Frameworks for Analysing Digital Language Vitality

Several theoretical models provide useful tools for analysing minority language dynamics in digital contexts. Grin, Sfreddo, and Vaillancourt’s (2003) COD model—competence, opportunity, and desire—offers a multidimensional

framework for understanding language use. In digital environments, competence relates to literacy and technical resources, opportunity to platform accessibility, and desire to social prestige and peer networks.

Hinton's (2002) PIE model—planning, implementation, and evaluation—emphasises the importance of cyclical and adaptive language policy. Digital contexts highlight the risks of incomplete policy cycles, where planning and implementation are not matched by effective evaluation of changing communication practices.

Ethnolinguistic vitality theory (Landry & Bourhis, 1997; Ehala, 2015) further underscores the symbolic dimension of language use. Visibility in public and digital spaces contributes to perceptions of legitimacy and group identity, while absence may signal decline or irrelevance. In contemporary media environments, social media presence functions as a key indicator of this symbolic vitality.

Research gap and contribution of the study

While existing research has explored minority language use in both traditional and digital media, there remains a lack of comparative studies that systematically examine how institutional frameworks and grassroots digital practices interact across different European contexts. Much of the literature focuses on single-language case studies, limiting the ability to identify broader patterns and structural conditions.

This study addresses that gap by adopting a cross-national comparative approach, analysing four minority language contexts with differing levels of institutional recognition and digital engagement. By integrating insights from sociolinguistics, media studies, and language policy, it seeks to move beyond descriptive accounts of digital language use and to identify the key factors that enable or constrain minority language vitality in platform-based communication environments.

Methodology

Case selection

This study employs a comparative case-study design, examining four minority language contexts with active regionalist or secessionist movements:

Silesian (Poland), Provençal (France), Andalusian (Spain), and Scottish Gaelic (United Kingdom). These cases were selected for three principal reasons.

First, they represent different levels of institutional recognition. Gaelic has long enjoyed legal recognition and educational integration, while Provençal has partial support in schools but limited visibility elsewhere. By contrast, Silesian and Andalusian remain largely unrecognised at the state level, though both have been the focus of grassroots campaigns for recognition.

Second, the four cases illustrate contrasting balances between acquisition planning and prestige planning (Fishman, 1991). Gaelic and Provençal are taught in schools, which fosters competence but has not translated into strong digital prestige. Silesian and Andalusian, on the other hand, are energised by bottom-up digital activism, but lack systematic support for educational transmission.

Third, these languages are embedded in politically charged identity movements, where language is not only a communicative medium but also a symbol of cultural distinctiveness and, in some contexts, political autonomy. This makes them particularly useful for analysing how minority languages negotiate visibility in the digital sphere, where symbolic presence is tied directly to prestige and legitimacy.

Research design and data collection

The research adopts a mixed-methods approach, combining survey data with comparative analysis. The survey instrument was adapted from a model developed by Mentrau Iaith Cymru (Welsh Language Initiative, 2015), designed to measure minority language use in digital environments.

Fieldwork was conducted in 2024 across four regions: Scotland (Gaelic), Andalusia, Provence, and Silesia, with a total of 322 respondents (72 in Scotland, 88 in Andalusia, 59 in Provence, and 103 in Silesia). Respondents were stratified by age group (<18, 18–39, and 39+), enabling a generational comparison of social media use and attitudes towards digital resources.

The survey focused on three dimensions derived from Gibson's (2015) framework of enabling conditions for digital ascent (with participants self-evaluating the social media experience in their respective ML on a 5-point Likert scale):

- Use—the proportion of respondents reporting social media use in the minority language (ML) compared to the dominant language (DL).

- Resources—satisfaction with available orthographies, writing models, and technical support (such as keyboards or spell-checkers).
- Content—satisfaction with the diversity, appeal, and cultural relevance of available digital content in the minority language.

Responses were analysed through a Bayesian posterior probability model to estimate the likelihood of social media use across age groups. The resulting distributions, presented in the Results section, offer insights into generational differences in use, resource satisfaction, and content evaluation.

Analytical framework

The analysis is guided by three complementary theoretical frameworks:

- COD Model (Grin, Sfreddo, & Vaillancourt, 2003): used to interpret how competence, opportunity, and desire interact in digital contexts. For instance, competence is tied to orthographic accessibility, opportunity to digital platform availability, and desire to prestige and peer influence.
- PIE Model (Hinton, 2002): applied to evaluate the alignment of planning, implementation, and evaluation across cases. This is particularly relevant for comparing institutional approaches (Gaelic, Provençal) with community-driven ones (Silesian, Andalusian).
- Ethnolinguistic Vitality Theory (Ehala, 2015; Landry & Bourhis, 1997): used to frame the symbolic impact of digital presence. Online use functions both as a measure and a driver of perceived vitality.

By combining these frameworks, the study integrates sociolinguistic, policy, and media perspectives to interpret how minority languages navigate the challenges of digitalisation.

Limitations

Several limitations must be acknowledged. The relatively small sample sizes for each case restrict the statistical generalisability of the findings. The survey design captures self-reported use and satisfaction but cannot fully account for the complexity of digital behaviour in practice. Moreover, while the analysis centres on social media, other domains—such as family transmission or cultural production—also shape linguistic vitality but fall outside the scope of this study.

Despite these limitations, the study offers an empirically grounded and theoretically informed account of how minority languages engage with digital media. By adopting a comparative lens across four distinct contexts, it provides insight into the interplay of institutional recognition, grassroots innovation, and generational dynamics in shaping the digital futures of minority languages.

Results and analysis

Overview of findings

The survey data reveals a clear asymmetry between generational engagement and structural support for minority language (ML) use in digital media. While younger respondents (<18 and 18–39) demonstrate relatively higher levels of engagement, this is not consistently supported by the availability of adequate resources or content. Conversely, older respondents (39+) report low levels of both use and satisfaction, indicating that digital engagement remains limited across all groups.

Table 1. Posterior probabilities of social media use, resource satisfaction, and content satisfaction by age group

ML Group	Use (<18)	Use (18–39)	Use (>39)	Resources (<18)	Resources (18–39)	Resources (>39)	Content (<18)	Content (18–39)	Content (>39)
Scottish Gaelic	0.22	0.18	0.08	0.65	0.62	0.55	0.4	0.35	0.25
Provençal	0.2	0.12	0.05	0.7	0.68	0.6	0.3	0.28	0.18
Andalusian	0.42	0.35	0.12	0.38	0.35	0.2	0.55	0.5	0.25
Silesian	0.48	0.4	0.15	0.45	0.42	0.28	0.6	0.55	0.3

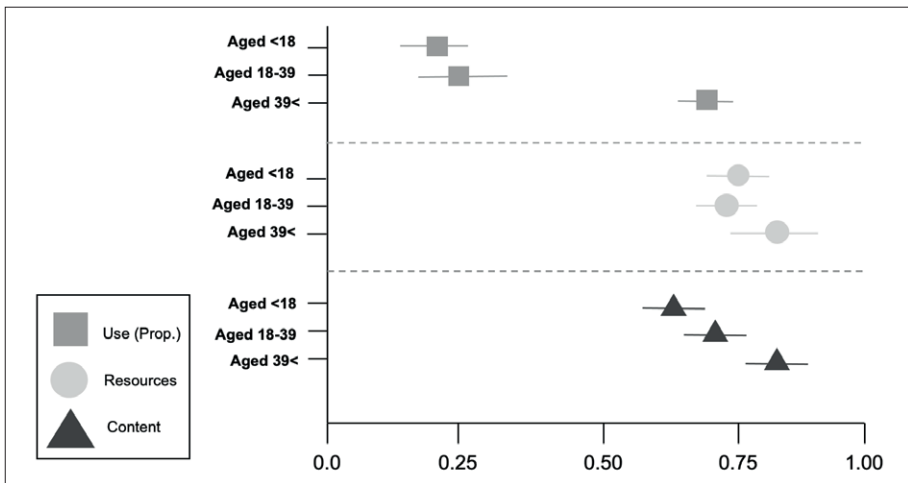
Source: Author’s own survey data (2024). Note: Values represent posterior probabilities derived from Bayesian estimation based on survey responses (N = 322).

Three key patterns emerge. First, overall use of minority languages on social media remains low across all cases, rarely exceeding a probability of 0.50 even among younger cohorts. This suggests that digital environments, while offering opportunities, do not automatically translate into widespread linguistic adoption. Second, there is a divergence between institutional support and actual use: languages with strong educational and policy backing (Gaelic, Provençal) show higher satisfaction with resources but lower levels of digital engagement. Third, grassroots-driven contexts (Silesian, Andalusian) exhibit higher levels of use and content satisfaction despite weaker institutional support, indicating that cultural relevance may outweigh formal standardisation in digital settings.

Taken together, these findings suggest that minority language vitality in digital environments is shaped less by institutional provision alone and more by the interaction between resources, content, and user motivation.

Scottish Gaelic

Figure 1. Posterior probability that Scottish respondents use social media in the ML



Source: Author's own survey data (2024).

The Gaelic case illustrates a mismatch between institutional competence and digital engagement. While younger respondents report relatively high satisfaction with orthographic and technical resources (0.65 among

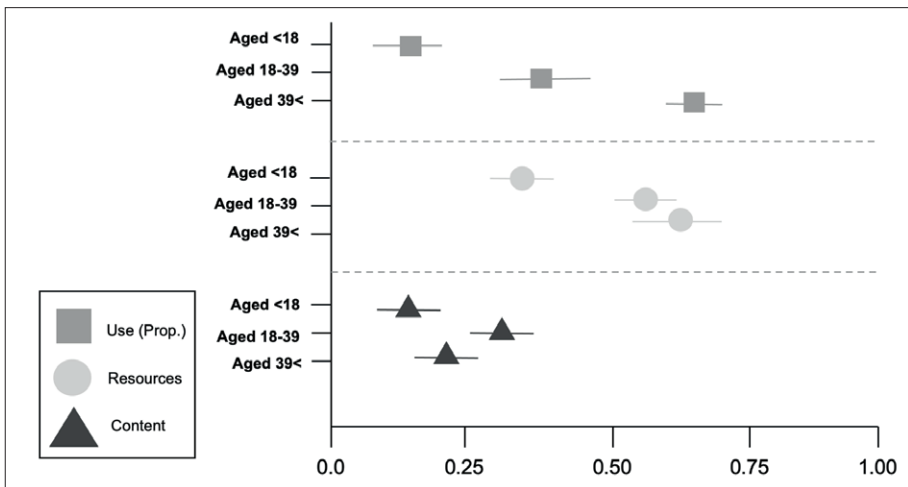
under-18s), actual use of Gaelic on social media remains limited (0.22 for under-18s, declining further among older cohorts).

This discrepancy suggests that competence alone is insufficient to sustain digital use. Despite strong support in education and traditional media, Gaelic lacks a robust presence in the types of content that dominate contemporary digital platforms, such as short-form video, influencer-driven content, and interactive formats. The relatively low levels of content satisfaction (0.40 among under-18s) indicate that users do not perceive Gaelic as a viable medium for everyday digital interaction.

From a broader perspective, this pattern reflects a competence–prestige gap: users possess the skills to use the language but lack sufficient social and cultural incentives to do so in digital environments. As a result, Gaelic remains institutionally strong but digitally marginal.

Provençal

Figure 2. Posterior probability that Provençal respondents use social media in the ML



Source: Author’s own survey data (2024).

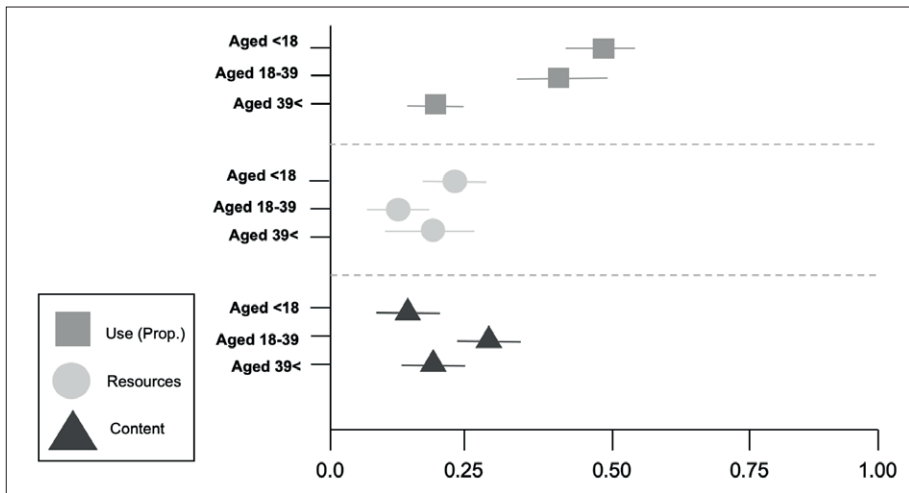
The Provençal case reinforces this pattern but with even lower levels of digital engagement. Although respondents report the highest satisfaction with resources across all cases (0.70 among under-18s), social media use remains minimal (0.20 for under-18s, 0.12 for 18–39).

This suggests that standardisation and educational support, while necessary, do not automatically generate active use. Provençal appears to function primarily as a symbolic or heritage language, associated with cultural preservation rather than everyday communication. The low levels of content satisfaction further indicate that available media do not align with contemporary digital practices, particularly those of younger users.

In contrast to Gaelic, where institutional structures are relatively dynamic, Provençal demonstrates a more static model of language maintenance. The result is a form of “passive competence,” where speakers may understand or value the language but do not actively use it in digital interaction.

Andalusian

Figure 3. Posterior probability that Andalusian respondents use social media in the ML



Source: Author’s own survey data (2024).

The Andalusian case presents a contrasting dynamic. Despite low satisfaction with orthographic resources (0.38 among under-18s), respondents report relatively high levels of social media use (0.42 for under-18s) and strong content satisfaction (0.55).

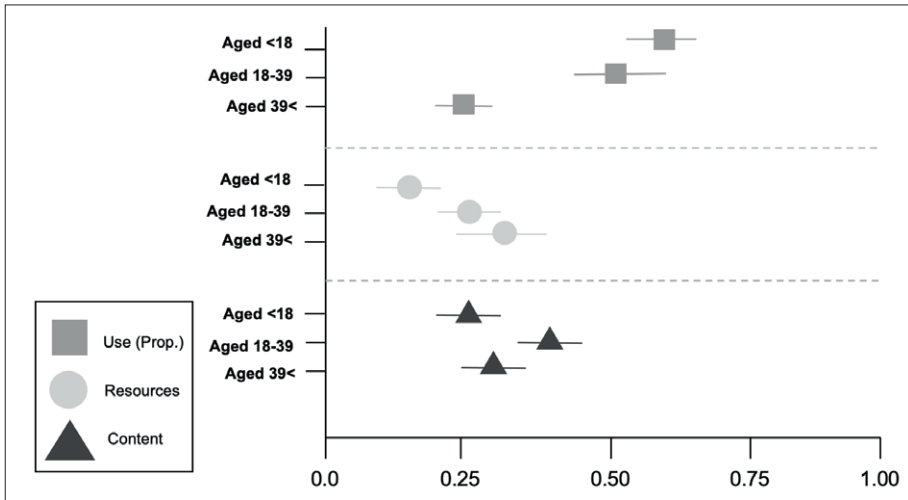
This indicates that grassroots digital practices can compensate for the absence of institutional support, at least in the short term. The popularity of memes, blogs, and culturally resonant content suggests that linguistic vitality

in digital environments is closely tied to identity expression and cultural relevance. In this context, non-standardised forms do not necessarily hinder participation; instead, they may facilitate creative and flexible language use.

However, this model raises questions about sustainability. Without consistent orthographies or institutional integration, Andalusian risks remaining confined to informal or niche domains. While digital visibility is high, its long-term impact on linguistic stability and broader recognition remains uncertain.

Silesian

Figure 4. Posterior probability that Silesian respondents use social media in the ML



Source: Author’s own survey data (2024).

Silesian represents the most balanced case, combining relatively high levels of digital use (0.48 for under-18s) with moderate satisfaction in both resources and content. This suggests a more integrated model of minority language vitality, where grassroots digital activity is beginning to align with emerging institutional support.

The high levels of content satisfaction (0.60 among under-18s) indicate a strong presence of culturally relevant digital material, while ongoing developments in language recognition and education point toward increasing

formal support. This convergence creates the potential for a reinforcing cycle in which competence, opportunity, and desire mutually strengthen one another.

Silesian thus illustrates a transitional stage in minority language development, where digital vitality may serve as a foundation for broader institutional recognition and long-term sustainability.

Cross-case synthesis

A comparative analysis of the four cases highlights three overarching dynamics.

- Generational divides: Younger respondents consistently report higher engagement with minority languages online, but even among them, use remains below half. This highlights both the potential of digital platforms to foster vitality and the fragility of these gains.
- Institutional versus grassroots asymmetry: Institutional support (Gaelic, Provençal) secures competence through education but fails to generate digital prestige, while grassroots activism (Silesian, Andalusian) creates engaging content but struggles with sustainability. Neither approach alone appears sufficient.
- Resource–content mismatch: Languages with strong orthographic resources often lack diverse content (Gaelic, Provençal), while those with weaker resources compensate through creative digital cultures (Silesian, Andalusian). This mismatch underscores the need for policy frameworks that simultaneously address competence and prestige.

Together, these findings demonstrate that social media functions as both a mirror and a driver of minority language vitality. It mirrors broader structural imbalances between institutional and grassroots initiatives, while also driving new patterns of prestige and identity. The challenge, therefore, lies in harnessing digital platforms to align competence, opportunity, and desire in ways that sustain minority language use across generations.

Discussion

Interpreting the findings through COD, PIE, and vitality models

The findings demonstrate that social media are not merely an additional domain of language use but a central arena in which linguistic vitality is negotiated. This aligns with recent work in media linguistics, which emphasises that digital communication environments reshape not only how language is used but also how it is valued and legitimised (Calude, 2023; Gnach, Engebretsen, & Weber, 2022). Across all four cases, institutional recognition alone does not ensure active use in digital environments. Instead, vitality depends on the interaction between competence, opportunity, and desire, as conceptualised in the COD model (Grin, Sfreddo, & Vaillancourt, 2003).

In institutional contexts such as Gaelic and Provençal, competence is relatively well developed through education and standardisation. However, limited opportunities for meaningful digital engagement and low levels of user-driven content reduce the incentive to use the language in everyday communication. This finding supports earlier observations that formal visibility does not necessarily translate into functional use (McQuail, 2000; Moring, 2007). Conversely, in Andalusian and Silesian, grassroots digital practices generate strong opportunities and desire, but competence remains uneven due to limited standardisation and institutional support. Similar patterns have been observed in other minority language contexts, where user-generated content plays a crucial role in sustaining engagement (Jones, Cunliffe, & Honeycutt, 2013).

Generational gaps and the risk of split maintenance

A key finding of this study is the emergence of a generational divide in minority language use. Younger speakers are more likely to engage with minority languages in digital contexts, yet their overall use remains limited. This reflects broader trends identified in studies of digital communication, where younger users shape linguistic practices through platform-based interaction (Dovchin, 2020).

In institutional contexts, this dynamic leads to what may be described as functional displacement: minority languages are maintained in formal domains such as education but are replaced by majority languages in informal,

everyday communication. This phenomenon is consistent with Fishman's (1991) theory of domain-specific language shift, where languages may survive in institutional settings while declining in everyday use. In grassroots contexts, the opposite pattern emerges, with active digital use but limited integration into formal structures. However, without institutional reinforcement, such practices may remain unstable and fragmented (Dołowy-Rybińska, 2021).

Institutional versus grassroots approaches

The contrast between institutional and grassroots approaches highlights the need for hybrid models of language support. Institutional frameworks provide stability, legitimacy, and resources, particularly through education and standardisation (Fishman, 1991). However, they often struggle to adapt to rapidly evolving digital environments and to engage younger audiences.

Grassroots initiatives, by contrast, are characterised by flexibility and cultural relevance. Digital communities, memes, and user-generated content can foster engagement and identity expression, particularly among younger users (Nguyen, Trieschnigg, & Cornips, 2015). Yet these initiatives may lack long-term sustainability without structural support.

Recent research suggests that successful minority language revitalisation increasingly depends on combining these approaches. For example, studies of Basque and Welsh digital media show that institutional support for online content creation can significantly enhance both visibility and engagement (Zabaleta et al., 2013). The Silesian case reflects a similar trajectory, where emerging institutional recognition may reinforce existing grassroots vitality.

The politics of algorithmic visibility

The role of algorithmic systems emerges as a critical factor shaping minority language use. Digital platforms prioritise content based on scale, engagement, and commercial value, systematically favouring majority languages with larger user bases (Ferré-Pavia et al., 2018). As a result, minority language content is less likely to be recommended, shared, or encountered by users, regardless of its quality.

This dynamic reflects what Kelly-Holmes (2019) describes as “digital language policy,” where platform design and algorithmic processes implicitly regulate language visibility. The consequences are twofold. First, reduced

visibility undermines prestige, as users may perceive minority languages as less relevant or modern. Second, it limits opportunities for interaction, reinforcing patterns of language shift toward dominant languages.

These findings suggest that digital inequality is not only a matter of user behaviour but also of structural constraints embedded within platform architectures.

Policy implications

The findings point to several key directions for language policy in the digital age. First, existing frameworks such as the ECRML (1992) must be updated to reflect the centrality of digital platforms in contemporary communication. As Hogan-Brun and Wolff (2003) note, policy frameworks designed for traditional media cannot fully address the dynamics of digital environments.

Second, policy should extend beyond acquisition planning to include active prestige planning. Supporting digital content creation, particularly in youth-oriented formats, is essential for maintaining relevance in platform-based communication (Gibson, 2015). Third, grassroots initiatives should be integrated into broader policy frameworks, ensuring both flexibility and sustainability. Finally, policymakers must engage with technology companies to address algorithmic bias and improve digital infrastructure for minority languages (Kelly-Holmes, 2019).

Minority languages at a crossroads

Taken together, the findings indicate that minority languages in Europe are at a critical juncture. Institutionalised languages risk stagnation without digital adaptation, while grassroots-driven languages risk fragmentation without structural support. This dual challenge has been noted in broader research on linguistic vitality, which emphasises the importance of aligning policy, practice, and social context (Ehala, 2015; Landry & Bourhis, 1997).

Social media thus represent both a risk and an opportunity. If minority languages fail to establish a meaningful presence in digital environments, their long-term vitality will be undermined. However, where institutional support and grassroots innovation are effectively combined, digital platforms may provide new pathways for revitalisation, enabling minority languages to remain visible, relevant, and actively used across generations.

Conclusions

This article has examined how minority languages navigate digital communication environments across four European contexts: Silesian, Provençal, Andalusian, and Scottish Gaelic. The findings reveal a consistent structural asymmetry. Institutional support plays a crucial role in developing linguistic competence through education and standardisation, yet it does not automatically translate into active use in digital spaces. Conversely, grassroots digital practices generate visibility, engagement, and cultural relevance, but often lack the structural support necessary for long-term sustainability.

By applying the COD model (Grin, Sfreddo, & Vaillancourt, 2003), the PIE framework (Hinton, 2002), and ethnolinguistic vitality theory (Ehala, 2015; Landry & Bourhis, 1997), this study has demonstrated that minority language vitality in the digital age depends on the alignment of competence, opportunity, and desire within platform-based communication environments. Social media emerge not simply as an additional domain of use, but as an arena in which linguistic relevance, prestige, and intergenerational transmission are negotiated.

The comparative analysis highlights that neither institutional nor grassroots approaches are sufficient in isolation. Institutional models risk producing passive competence without everyday use, while grassroots initiatives may remain fragmented without policy support. The most promising pathway lies in hybrid strategies that integrate top-down frameworks with bottom-up digital innovation, ensuring both stability and adaptability in rapidly evolving media environments.

The implications for policy are clear. Existing frameworks, such as the European Charter for Regional or Minority Languages, must be updated to reflect the realities of algorithm-driven communication systems. Acquisition planning should be complemented by active prestige planning, particularly through investment in digital content creation and support for minority language presence on major platforms. At the same time, policymakers must engage with technology companies to address structural inequalities in algorithmic visibility and digital infrastructure.

At a broader level, the study suggests that minority languages in Europe are at a critical crossroads. Without meaningful integration into digital communication practices, institutional protections risk becoming increasingly symbolic. However, where policy support and community-driven innovation

are effectively aligned, digital environments may offer new opportunities for revitalisation, enabling minority languages to remain visible, relevant, and actively used in contemporary society.

Finally, this study also points to important directions for future research. In particular, the conclusions would benefit from comparative analysis involving majority languages, allowing for a more precise assessment of whether the observed patterns are specific to minority language contexts or reflect broader dynamics of digital communication. Further research could also explore platform-specific practices (e.g., TikTok, YouTube) and longitudinal changes in language use, providing deeper insight into how digital environments shape linguistic vitality over time.

In this sense, the future of linguistic diversity in Europe will depend not only on preservation, but on adaptation. The challenge is no longer simply to maintain minority languages, but to ensure that they function as living, dynamic means of communication within the digital spaces that increasingly define everyday life.

References

- Calude, A. S. (2023). *The linguistics of social media: An introduction*. Routledge.
- Cormack, M. (1998). Minority language media in Western Europe: Preliminary considerations. *European Journal of Communication*, 13(1), 33–52. <https://doi.org/10.1177/0267323198013001002>
- Costa-Carreras, J. (2021). Catalan in the digital world: Challenges and opportunities. *Journal of Multilingual and Multicultural Development*, 42(4), 315–329. <https://doi.org/10.1080/01434632.2020.1715991>
- Cunliffe, D. (2020). Minority languages, social media and the digital divide: A Welsh case study. *International Journal of the Sociology of Language*, 263(1), 111–130. <https://doi.org/10.1515/ijsl-2020-2096>
- Dołowy-Rybińska, N. (2021). *Cultural and linguistic minorities in the digital age: The case of Breton*. De Gruyter Mouton.
- Dołowy-Rybińska, N., & Hornsby, M. (2021). Digital practices and minority language ideologies: Young speakers of Breton, Kashubian and Welsh. *Language Policy*, 20(1), 25–47. <https://doi.org/10.1007/s10993-020-09585-1>

- Dovchin, S. (2020). *Language, social media and ideologies: Translingual Englishes, Facebook and authenticities*. Springer. <https://doi.org/10.1007/978-3-030-55759-5>
- Ehala, M. (2015). *Ethnolinguistic vitality and intergroup processes*. *Multilingual Matters*.
- Engesser, S., & Franzetti, A. (2011). Media systems and minority languages: The digital challenge. *Communications*, 36(1), 45–68. <https://doi.org/10.1515/comm.2011.003>
- Ferré-Pavia, C., Zabaleta, I., Gutiérrez, M., Fernández-Astobiza, I., & Xamardo, N. (2018). Minority language media and social media: Usage and challenges. *International Journal of Communication*, 12, 1185–1204.
- Fishman, J. A. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages*. *Multilingual Matters*.
- Gibson, M. (2015). Minority languages online: A sociolinguistic perspective. *Journal of Multilingual and Multicultural Development*, 36(3), 235–248. <https://doi.org/10.1080/01434632.2014.936874>
- Gnach, A., Engebretsen, M., & Weber, W. (2022). *Digital communication and media linguistics: With case studies in journalism, PR, and community communication*. Cambridge University Press. <https://doi.org/10.1017/9781108907255>
- Grin, F., Sfreddo, C., & Vaillancourt, F. (2003). *The economics of the multilingual workplace*. Routledge.
- Guyot, J. (2007). Regional television and minority language identity in France. *Journal of Contemporary European Studies*, 15(1), 69–84. <https://doi.org/10.1080/14782800701273317>
- Hinton, L. (2002). How to teach when the teacher isn't fluent. In L. Hinton & K. Hale (Eds.), *The green book of language revitalization in practice* (pp. 217–230). Academic Press.
- Hogan-Brun, G., & Wolff, S. (2003). *Minority languages in Europe: Frameworks, status, prospects*. Palgrave Macmillan.
- Jones, E. H. G., Cunliffe, D., & Honeycutt, Z. (2013). Social media and minority languages: A Welsh case study. *Journal of Multilingual and Multicultural Development*, 34(7), 671–689. <https://doi.org/10.1080/01434632.2013.807273>
- Kelly-Holmes, H. (2019). Digital language policy: Minority languages in the algorithmic age. *Language Policy*, 18(4), 473–490. <https://doi.org/10.1007/s10993-019-09532-4>
- Kornai, A. (2013). Digital language death. *PLOS ONE*, 8(10), e77056. <https://doi.org/10.1371/journal.pone.0077056>

- Landry, R., & Bourhis, R. Y. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology*, 16(1), 23–49. <https://doi.org/10.1177/0261927X970161002>
- McQuail, D. (2000). *McQuail's mass communication theory* (4th ed.). Sage.
- Moring, T. (2007). Functional completeness in minority language media. *Journal of Multilingual and Multicultural Development*, 28(3), 197–211. <https://doi.org/10.2167/jmmd495.o>
- Nguyen, D., Trieschnigg, R., & Cornips, L. (2015). Audience and the use of minority languages on social media. *Social Media + Society*, 1(2), 1–13. <https://doi.org/10.1177/2056305115609709>
- Ó Murchadha, N. (2020). New speakers and digital media in Irish: Language, identity and innovation. *Language, Culture and Curriculum*, 33(3), 264–279. <https://doi.org/10.1080/07908318.2019.1676761>
- Skóra, A. (2021). Grassroots digital activism and Silesian language promotion. *Slavia Meridionalis*, 21(1), 155–178. <https://doi.org/10.11649/sm.2321>
- Skowronek, B. (2021). Knotty problems of media linguistics (from today's perspective). *Tekst i Dyskurs*, 15, 157–170. <https://doi.org/10.7311/tid.15.2021.06>
- Stern, A. (2024). Andalusian identity and the politics of recognition. *Nations and Nationalism*, 30(1), 122–140. <https://doi.org/10.1111/nana.12900>
- Tilles, D. (2024, January 15). Poland recognises Silesian as a regional language. *Notes from Poland*. <https://notesfrompoland.com>
- UNESCO. (2003). *Language vitality and endangerment*. UNESCO Ad Hoc Expert Group on Endangered Languages.
- Urzędowska, A. (2021). Polish internet language—selected forms. *Social Communication*, 7(1), 58–66. <https://doi.org/10.2478/sc-2021-0005>

