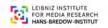




Platformised news, debate and video on the German public sphere. An empirical analysis

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101004488 The information and views in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

Document information

Grant Agreement #:	101004488
Project Title:	EUROPEAN MEDIA PLATFORMS: ASSESSING POSITIVE AND NEGATIVE EXTERNALITIES FOR EUROPEAN CULTURE
Project Acronym:	EUMEPLAT
Project Start Date:	01.03.2021
Related work packages:	WP2 Fake news: Platformisation of Journalism WP4 Exclusion: Platformisation of Media Representations WP3 Hegemony: Platformisation of Video
Related tasks:	T2.2 Platformisation of News in 10 Countries T4.2 Representation of Immigration in 10 Countries T4.3 Representation of Gender in 10 Countries T3.1 Patterns in Platform Video Provision in 10 Countries T3.2 Patterns in Platform Video Consumption in 10 Countries
Lead Organisation for DE:	P2 – HBI
Author(s):	Volker Grassmuck – P2 HBI Barbara Thomass – P2 HBI Jim Ingebretsen Carlson – P5 FUOC
Status	final
Version date:	28.11.2023
Dissemination Level:	public

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Introduction

The so called social media promised to democratise the public sphere. Has the promise come true? What is the actual mix of agents who post on user upload platforms? Do the same media outlets and politicians dominate here as did on broadcasting or do common citizens have a share in public discourse? What are the different actors talking about? What relative impact do their posts have? Are they having conversations across borders or even across the entire continent? And what does empirical evidence tell us about the state of platformisation and Europeanisation and therefore about the state of the democratic, European, digital public sphere?

We explored these questions in the EU Horizon 2020 funded research project <u>European Media Platforms</u>: <u>Assessing Negative and Positive Externalities for European Culture</u> (EUMEPLAT) conducted by a consortium of eleven partners in ten countries. We based our data-driven approach on the conceptual foundation of Hallin and Mancini's (2004) model of media systems which we fruitfully applied in Work Package 1 (WP1; see Papathanassopoulos/Miconi 2023).

The following data have been conceptualised, extracted, processed and analysed in the context of three work packages for the purpose of comparison between the ten EUMEPLAT countries. Our data were extracted at the end of 2021 and the analyses conducted in 2022 and 2023. The resulting reports are:

- WP2.2 Platformisation of News in 10 Countries (Cardoso et al. 2023)
- WP4.2. Representation of Immigration in Ten Countries (Carlson et al. 2023a)
- WP4.3. Representation of Gender in Ten Countries (Carlson et al. 2023b)
- WP4.5 Catalogue of Best Practices (Carlson et al. 2023c)
- WP3.2 Patterns in Platform Video Production in ten Countries (Boshnakova et al. 2023a)
- WP3.2 Patterns in Platform Video Consumption in ten Countries (Boshnakova et al. 2023b).

Out of these horizontal, comparative reports, the German national reports from the three work packages are compiled here in order to facilitate a vertical view. Readers who are interested in the results concerning only Germany might find this useful. We begin with a brief overview of our main findings, followed by the original German national reports.

Professional media and radical right-wing politicians dominate social media

WP2, under guidance by the Portuguese work package leaders, was dedicated to **the Platformisation of News** and researched posts on Facebook, Twitter and Youtube. A dictionary common to the ten EUMEPLAT countries and indicative of the four dimensions Climate, Economy, Health and Europe was used to extract the posts in the period from September to November 2021, ranked by interactions (Facebook), reach (Twitter) and relevance (YouTube). (Cardoso et al., 2021). In Germany, double coding of the posts of the first month did not yield the required intercoder reliability and had therefore to be discarded. The German dataset therefore contains posts from October and November 2021. The total of 451 posts includes ten each of the three Facebook user areas (All Users, Groups and Media), the two Twitter user areas (All Users and Media) and Youtube as well as ten each for the four dimensions.

For the case of Germany, the conventional idea that social media are competitors of traditional mass media and even threaten their relevance must be corrected. The results show that

social media are dominated by media outlets and journalists, with non-organisational actors, mostly common citizens, in second place, and politicians in third. Media agents published more than half (54%) of all the most "relevant" posts in our social media sample. Media also gathered the largest number of followers on Twitter, Facebook and Youtube. The impression that social media are primarily the place for non-professional voices to speak and debate has to be corrected for Germany. While mass media publishers do embrace social media as significant outlets, the platform environment remains problematic, particularly for PSM (Eichler 2022).

Out of our data, a picture emerges of social media as the meeting ground of the people, who are informed by and in critical dialogue with journalistic-editorial media, and are being communicated to by individual politicians, more than in an institutional party-to-citizen way.

Whether the citizen-media and citizen-politician communication is two-way or one-way – essentially the traditional broadcast model in digital guise – was not within the scope of our research. It would require analysing comments and other additional interaction data.

Climate

Even only four dimensions open an ample space of possibilities for interactions, including conflicts of objectives like fighting the climate crisis and at the same time ensuring that energy prices remain affordable, and problems that provide ammunition to bad and disillusioned actors for criticising the established institutions of government, media, science – and Europe. Immigration, gender and climate are the top issues for the radical right. And they are linked: climate change can trigger migration movements.

For Climate, our data show that media agents published 12% of the most "relevant" posts on that issue, compared to 18% by political agents and 23% by non-institutional agents. When we compare Public Service Media (PSM) and all other primarily commercial media, both print and broadcast, we find that PSM are strong on Health and Europe (both 35%) but not so much on Climate (10%), while non-PSM media are strongest on Climate (31%). Thus, while media report comparatively little on Climate, the issue continues to be held on the agenda by common citizens and civil society. And they look for improvements from politics: Political agents are addressed in posts on Economy (60%), Europe (57%) and Climate (55%), but less so on matters of Health (14%). Conversely, European Social Movements (7%) are mentioned most often in posts on Climate (15%)

On social media in Germany, Europe is perceived predominantly through its institutions. 57 percent of all posts in the entire sample refer to one or more European institution. These include legislative, executive and judiciary, mostly refer to the Commission, but the EP, the Council, the ECB, the CJEU, EMA and other agencies are mentioned as well. Posts on measures taken by EU institutions mostly refer to political aspects (50%, ranging from 20% in Health to 67% in Climate). Scientific aspects (9%) appear most often in Health (24%) and in Climate (7%). European Values (20%) feature in the debate about Europe (42%) and Climate (17%) and surprisingly least in Health (9%). European Industries (11%) are strongest in Climate (27%) and Economy (12%).

Far-right populists

Conclusions from WP2 indicate that far-right populist politicians tend to drive more engagement than other politicians, suggesting a correlation between more extremist content and algorithmic amplification (Cardoso et al., 2023).

Also in Germany, radical political actors utilize social media the most, particularly on Facebook where radical right-wing voices post three times as often as those from Communists and left. Also the impact of the radical right on the digital social sphere seems to be disproportionally

larger than in the parliamentary arena, particularly on Facebook where 5 of the top 20 posts by Interactions are by the AfD. Also the highest ranked video on Youtube by view count is from AfD TV, the third most viewed video in our sample is by the Austrian anti-Covid measures party MFG.

Users on social media are systematically triggered by tabloids like Bild who knew all along that enragement translates into engagement. Sensationalist media are very well prepared for the social media environment that rewards populism. From our study it remains unclear how much of dysfunctional communications is due to traditional populist media which find increased spreadability and findability and thereby a powerful resonance on the platforms and how much can genuinely be attributed to social media and their algorithmic preferences. The data give some indication that Youtube's recommendation algorithm is doing a better job at providing diversity and serendipity and avoiding sending users down rabbit holes of radicalisation.

Politically, the strong presence of radical right-wing actors on social media is striking. Voices who see the mainstream media as "liars press" and at the same time claim that they do not get enough airspace in them, find their communication channels in social media, particularly in Facebook.

Migration: solidarity and 'Great Replacement'

Migration and Gender are the topics of passionate, heated debates everywhere in Europe. Migration is the topic on which radical right wing parties emerged across Europe after 2015, and on which the AfD in Germany has grown to a fifth of voters' choice of Germans nationally, and more than a third in the East German states. Gender, – canonically combined with 'ideology' or 'madness' –, came to be the second most important mobilising issue for the AfD.

Under the direction of the Catalan team, WP4 was looking into the **Representations of Gender and Migration** on Facebook and Twitter (Carlson et al., 2022).

In Work Package 4.2, we looked at posts which have been published on German Facebook and Twitter in the period from September to including November 2021. Based on a jointly developed dictionary of words indicative of the topic **Migration** and of Europe, the Catalan team queried the APIs of the two platforms, generating two datasets: Germany–Migration–Europe and Germany–Migration–Not Europe. Out of each, the first 200 posts manually found to be on topic were then manually coded for mentioning or not one of six sub-topics considered important in the case of Migration – Law, People, Values, Territory, Institutions and Culture – and also whether the sentiment of a post is predominantly positive, neutral or negative. The 400 manually double-coded Migration posts in the Europe and Not-Europe datasets were then used by the Work Package leaders to train a neural network which then coded an additional 2,293 posts, bringing the total to 2,693 Migration posts. This mixed, manually and AI-coded corpus of posts forms the basis for the tables, figures and statistical analyses of this report.

Our analysis of the Social Media Representations of Migration focusses on two dimensions: the effects of a post being about Europe or not and the effects of the publisher of a post being a professional media actor versus a political actor, civil society organisation, common citizen or other.

Sonntagsfrage Bundestagswahl, 02.11.2023 https://www.infratest-dimap.de/umfragen-analysen/bundesweit/sonntagsfrage/. "The Sunday poll measures current voting inclinations and not actual voting behaviour."

Sonntagsfrage Mecklenburg-Vorpommern 19.09.2023,

https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/mecklenburg-vorpommern/sonntagsfrage/ Sonntagsfrage Brandenburg 13.09.2023,

https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/brandenburg/sonntagsfrage/
Sonntagsfrage Thüringen 05.07.2023, https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/thueringen/sonntagsfrage/

The current contestation over migration started in 2015/16. Two million refugees and migrants, many from Syria, came to the EU, one million of them to Germany. This led to opposing reactions. On the one hand, there was strong solidarity, an active welcoming culture in large parts of the German population. To this day, much of the weight of receiving and integrating those in need is born by volunteers. This attitude was expressed in Chancellor Merkel's famous "We can do it!" (see Schlott 2020).

On the other hand, the rejection of this sentence became a rallying point for the far-right ever since. They frame migration as the "Great Replacement", an alleged conspiracy of elites who want to replace the native population with migrants from Muslim countries.² The alleged threat to one's own identity and 'civilisation' is used to justify verbal and physical attacks against migrants as 'self-defence'. This kind of perpetrator-victim reversal is then utilised by mainstream conservative politicians who call the right of asylum into question because migrants cause "growing tensions and frustration" in Germany.³

The German debate on Migration during our research period was dominated by the escalation of the refugee crisis at the Belarusian-Polish border and by the national elections in Germany on 26 September 2021, in which all parties avoided the subject, while the AfD used every single bit of migration-related news to fuel fear and anger and expand its membership.

The WP4.3 Report on Representation of Gender showed a connection between **Migration/Islam and Gender** which also became evident in our Migration data. In the set of 400 manually coded posts on topic for Migration, a search for keywords indicative of Gender shows that about half the posts in that set refer to migrants in a supportive, solidary way while the other half of the posts is from AfD, often criticising the new government's plans as bringing more migration and more "gender insanity".

Among the latter, we find a number of expressions of the Great Replacement narrative, which at its core talks about a strategy of 'weaponising' sexual reproduction. E.g., the speaker on the topics of internal security, migration and asylum of the AfD in the Bundestag, in a lengthy post rants about how Germany "has been cleared by the naturalisation of an illegally imported army of foreigners numbering in the millions", who have "strikingly different demographic reproduction rates" from those of 'native' Germans.⁴

When looking at the effects of a Migration post being about **Europe** or not, we find statistically significant differences for all the variables. Law, Territory and Institutions occur more often in Europe posts. As we have seen, our research period was determined by the events at the Belarusian border, with thousands of refugees crossing into the EU, the EU institutions being worried and those in Poland taking action, including border guards and military, which in turn raises questions about the legality of certain measures as well as calls for stricter laws.

People, Values and Culture occur more often in Non-Europe posts, i.e. in those with a local or national scope. In People we would expect the rare cases where migrants speak in their own

The topos goes back at least to the 1916 book *The Passing of the Great Race* by US lawyer, zoologist, anthropologist, eugenicist and advocate of scientific racism, Madison Grant. More recently, the narrative was developed further by French philosopher and father of the Nouvelle Droite movement Alain de Benoist and particularly by Renaud Camus in *Le Grand Remplacement* (2011). In Germany, Thilo Sarrazin popularised the narrative in his book *Deutschland schafft sich ab* (Germany Abolishes Itself, 2010). S. A deadly ideology: how the 'great replacement theory' went mainstream, The Guardian, 08.06.2022, https://www.theguardian.com/world/2022/jun/08/a-deadly-ideology-how-the-great-replacement-theory-went-mainstream.

E.g. Saxony's Prime Minister Michael Kretschmer: "Höchste Zeit für beherzte Entscheidungen": Kretschmer stellt Asylrecht im Grundgesetz infrage, Tagesspiegel, 29.05.2023, https://www.tagesspiegel.de/politik/zu-grosse-zahl-an-menschen-die-nach-deutschland-kommen-kretschmer-stellt-asylrecht-im-grundgesetz-infrage-9895679.html

⁴ https://www.facebook.com/265344823886953/posts/1299423043812454

voice about their experience, journeys or profession. While in Gender, women and queer people are part of the debate, we would expect this barely to be the case for migrants. Typically, the migrant is the other who is being talked about not with. And indeed, very few posts coded positive for "Interactions & Dialogue", a variable that was later dropped. Yet, when we look at the 131 posts in the not-Europe dataset which were manually coded as not-Europe, we find 26 in the category People, i.e. an astonishing 20 percent. Here we find stories of successful integration of migrants who are now professionals or politicians.

Values are often brought up by local and national politicians and party sections, CSOs and common citizens. Democratic voices in the Migration debate regularly refer to fundamental values like the right to asylum, participation, feminism and gender neutrality, integration of migrants and democracy. An example is a post by Pax Christi Germany, the international Catholic peace movement, who called on the German government to release the refugees at the Polish-Belarusian border from their plight and take them to Germany. The Chairwoman of the organisation pointed out that the Interior Minister Seehofer (CSU) instead of a humanitarian solution has advocated the construction of a Polish border fence. "It is bitter that this is happening just as we Germans are commemorating the fall of the Berlin Wall." "The humanitarian, rule of law and moral crisis at the Polish-Belarusian border demonstrates once again the failure of EU cooperation on migration."

In the WP4.3 Report on Representation of Gender, we have noted that this values-based argumentation is in striking contrast to far-right posts, e.g. from the AfD, where we find no explicitly expressed values, not even general ones like 'fairness' or 'justice'. Instead, the right defend their **interests** and are very clear and aggressive about what they do not like and who to blame for it: the municipality, the social security system which creates a 'pull effect', the Red-Red-Green Senate in Berlin who does not deport even those who do not get asylum etc. Sometimes "our values and way of living" are mobilised generically, as just another element in the Us-vs-Them narrative, in the "clash of civilisations", as another AfD MP writes, between us and a "parallel society of Muslims", where "Islam as an exclusionary and imperialistic religion of war cannot be reconciled with the basic principles of the European value system." Here we find the juxtaposition of values- and interests-driven policies actually expressed.⁷

When looking at the effects of a Migration post being published by a professional **media** actor or not, we again find statistically significant differences in the proportions of all our Social Media Representations. All occur more often in Not Media posts, except for Territory which occurs in more than 70 percent of Media posts. As we have seen, the crossing of the border between Belarus and Poland was the dominant issue in Germany during our research period. This was reported by media, together with the reactions of the national and European Institutions.

That Law and Values appear significantly less in media posts, might reflect the failure of the EU, or rather its member states, to establish common policies and practices at the EU's external borders and in relation to refugees and other beneficiaries of protection. Since the situation at the Belarusian border was determined by lawlessness and panic-driven, militaristic, ad hoc measure

⁵ https://www.facebook.com/103935866334074/posts/4689739354420346

⁶ https://www.facebook.com/1695216187437098/posts/2832036297088409

In a post by Prof. Werner Patzelt on Hallo-meinung.de (https://www.facebook.com/watch/?v=1496783054036014). Referring to Lukashenko, he writes: "In any case, our do-gooders now also realise that we are being criminally blackmailed. They also feel that this blackmail hits our weakest point. That is where we want to be guided exclusively by values – and not at any price by interests. But what happens when value-led politics contradicts important interests in the long term? And what if such a contradiction is not about an individual who can certainly decide for himself whether he wants to put his own interests aside? But when it is about governing many people who see it as an important part of their freedom to define their own interests and then treat them as a priority? And what if they then also associate democracy with the idea that a government should take the majority interests of its people seriously?"

taken by the Polish government, media had little to report in this respect. Whereas, political and civil society actors mobilise fundamental rights and freedoms, primarily the right of asylum, to call for urgent humanitarian and other help.

When looking at the sentiments of the posts in our sample, we find that 85% of them are written in a neutral tone. About ten percent of the others are negative and less than five percent are positive. This is the opposite of our findings in the Gender Report. Of those who express a strong attitude at all, the majority in case of Migration express a Negative Sentiment, yet that difference is not statistically significant for either Europe or Media.

Gender and migration have become battlegrounds on which the antagonists do not struggle for the best possible solution, but one side, the radical right, is out to delegitimise, defame and destroy the other, the ruling system, and with it democracy, media and science. In this situation, best practices of (media) representations regarding gender and migration are crucial for fighting stereotypes and discrimination, and for making our democratic societies resilient against anti-democratic contestation.

Best Practices on Migration

The best practices which stand out from our dataset concern media representations of migrants. Yet the first practice we would like to highlight is the **honorary integration work**, the "welcoming culture" of common citizens who in CSOs, churches, unions etc. support migrants on a daily basis. Many of the posts in our dataset concern volunteer work. These include municipalities organising weeks of engagement and integration, providing opportunities for encounters and getting a taste of the different initiatives and activities, as well as churches and CSOs. Most of these empower common citizens to support migrants with learning German and dealing with bureaucracy and other adversities of life. One of them stands out in that it is directed at refugees and migrants themselves and their political and social participation. The bilingual post announces the course "Get active". The willingness of common citizens, both locals and migrants and refugees to work together is a great asset in the strive for a successful integration and should be nurtured and promoted in any possible way.

Our second best practice is **Media Service Integration**, a project by the **Council for Migration** (Rat für Migration, RfM⁹). The RfM is a nationwide association of around 190 academics from various disciplines who conduct research on migration and integration issues. It was founded in 1998, based on a manifesto by 60 scientists who critically examined the migration and integration policy in the Federal Republic at the time and its consequences, which included rampant racism and related acts of violence, and called for an active and concept-oriented German immigration and integration policy (Bade (ed.) 1994). Its main task is to critically and scientifically accompany political decisions and public debates on migration, integration and asylum. This involves a range of opinions, publications and an annual conference and the project Media Service

[&]quot;The umbrella association of Saxon migrant organizations (Dachverband sächsischer Migrantenorganisationen e.V.) is offering a free further training series on intercultural political education for refugees and migrants in Leipzig, starting September 11, 2021. The eight-module advanced training course aims to win and empower people with refugee or migration experience for political participation and social engagement. ...

Building on the previous knowledge from the integration courses, the participants in the project have the opportunity to develop a broad understanding of society in Germany through inputs, excursions and exchange. In addition, they can reflect on their own role and their opportunities to participate in German society without having to deny their origins, the experiences they have brought with them and their knowledge." (https://www.facebook.com/1464334400557679/posts/3087846528206450)

The umbrella association of Saxon migrant organizations (DSD) was founded in 2017 and has 63 member associations (https://dsm-sachsen.de/).

https://rat-fuer-migration.de/

Integration.¹⁰ This is an information platform for journalists on the topics of flight, migration and discrimination, offering facts and figures, background reports and fact checks. The service organises regular information events for journalists with experts, arranges contacts to experts who report in media and it has set up an e-learning platform offering free-of-charge online courses to journalists and other interested parties. Since 2018, the project has also been coordinating the **European network for knowledge sharing on migration**¹¹ which connects organisations from all over Europe that work at the intersection of media and migration. The project is funded by several foundations, the Federal Ministry of the Interior and the European Commission.

While the RfM's media service improves the migration competence of journalist, the problem remains: "There is a lot of talk about migrants and migration in Germany. Especially by Germans. But in the chorus of the many, those of the migrants are usually missing." This is the gap that our third best practice is filling with high-quality texts and comprehensible reporting. **MiGAZIN**¹² was founded in 2009 by Ekrem Şenol who was born in 1975 in Gummersbach. In 2012, the magazine won the Grimme Online Award for concept and editing. The jury found that

"The editorial team, consisting mainly of migrants, creates new insights into an emotional topic with their points of view, without themselves succumbing to the temptation to slip into extremes. One focus of MiGAZIN is the positive portrayal of migrants in positions of social responsibility (police officers, lawyers) who serve as role models. It helps to break down clichés. These migrants are representative of many others and of their quiet and successful integration in Germany."¹³

During the first years, national integration issues dominated the magazine. Now it reports more often on events from abroad that can trigger migration movements directly or indirectly, such as climate change, poverty, wars and human rights violations. Since 2010, it has been financed by advertising revenue and donations.

Also in 2010, the editors launched MiGMACHEN¹⁴ to give interested people the chance to contribute to the magazine and help shape the discourse on integration and migration. Since then, more than 500 professional journalists and beginners became involved with MiGAZIN, gaining experience and sharpening their perspective. Today, many of them hold responsible positions, sit in the Bundestag and in state parliaments, are successful authors of books or work in large media companies. The post in our dataset that alerted us to MiGAZIN¹⁵ was a report on a new study showing that migrant-perceived people are hardly seen on TV in election reporting. And when they do get a chance to speak, it is often in the context of migration and flight.

There are certainly positive examples of media production. To shine a spotlight on them is the goal of CIVIS.¹⁶ The media prize for migration, integration, cultural diversity and social cohesion in Europe did not show up in our dataset, yet still deserves mention. It "honours programme achievements in radio, television and the Internet which promote peaceful coexistence in the European immigration society." In addition, the CIVIS Media Foundation organises annual media conferences and supports the networking of media professionals who deal with the diverse issues of the European immigration society.

¹⁰ https://mediendienst-integration.de/

¹¹ https://mediendienst-integration.de/artikel/european-network-for-knowledge-sharing-on-migration.html

¹² https://www.migazin.de/

Grimme Online Award 2012: MiGAZIN, https://www.grimme-online-award.de/archiv/2012/preistraeger/p/d/migazin/

¹⁴ <u>https://www.migazin.de/migmachen/</u>

¹⁵ https://www.facebook.com/264691680187/posts/10165720416335188

https://www.civismedia.eu/

Gender: normalising Feminisms and object of right-wing fear mongering

WP4.3. **Representation of Gender** applied the same methodology as WP4.2 on Migration. Again, the Catalan team queried the APIs of Twitter and Facebook for keywords indicative of the topic Gender and of Europe. The six sub-topics were slightly different from those on migration: Law, People, Culture, Values, Identity and New Social Movements. The ten national teams then had to manually code whether or not a post mentions one of the sub-topics as well as its predominant sentiment. The 400 hand-coded Gender posts, 108 in the Europe and 292 non-Europe datasets, were then used by the Work Package leaders to train a neural network which then coded an additional 1,393 posts, bringing the total to 1.793 Gender posts. This mixed, manually and Alcoded corpus of posts forms the basis for the national analyses. We again focussed on two dimensions: the effects of a post being about Europe or not and the effects of the publisher of a post being a professional media actor or not.

During our research period, the Gender debate on German Facebook and Twitter was dominated by the national elections in Germany on 26 September 2021: before, by the candidate's promises on Gender politics and after, by the plans of the newly elected government announced in the Coalition Treaty published on 24 November. This widely discussed announcement as well as the International Day for the Elimination of Violence against Women on 25 November with its numerous events across Germany contributed to a spike in social media activity in general and in all of our Social Media Representations.

For the radical right, **gender and migration** are the two core issues of their narratives. In WP2, we have found already that the far-right party AfD is particularly active on social media in Germany. Here we find this confirmed. Without looking for political leaning at all, the issues of gender and migration proved to be strong predictors of AfD and like-minded actors. "Gender ideology" is one of their central phrases. It assumes that Gender is a biological fact, whereas the Left-Green 'ideology' claims that it is socially constructed. The topos reproduces stereotypes of traditional Christian family values and a traditional role of women which are then framed as under threat from two sides: the women's and LGBTQ movements with their 'socialist egalitarianism' who want to exert their encroaching influence even on little children, and stereotypes of a migrant other.

This connection of Gender and Migration/Islam dates back at least to the sexual assaults on New Year's Eve 2015/16 in Cologne, where the culprits were identified as North-African, Muslim, young migrant men.¹⁷ It was escalated to top priority by AfD MP Alice Weidel's infamous speech in the Bundestag on 16.05.2018 in which she ranted about "Burqas, headscarf girls and alimented knife men".¹⁸ This creates a simplistic, yet highly toxic dualism: On the one side, there is the 'bio-German' man who claims his nativist right over his soil and his women. On the other, there are waves of young Muslim migrant men flooding Germany and its social security system, groupraping German women, reproducing like rabbits, with the ultimate goal of "The Great Replacement".¹⁹

The intersection of gender and migration becomes evident in our data. In the set of 400 manually coded posts on topic for Gender, a search for keywords indicative of migration shows that about half the posts in that set refer to migrants in a supportive, solidary way while about half the posts are from AfD, manifesting the linkage of the Gender topic with Migration.²⁰ The latter primarily

DW, Fünf Jahre danach: Lehren aus der Kölner Silvesternacht, 31.12.2020, https://www.dw.com/de/f%C3%BCnf-jahre-danach-lehren-aus-der-k%C3%B6lner-silvesternacht/a-55980209

Bundestag, Weidel-Einspruch gegen Ordnungsruf mit 549 Stimmen abgelehnt, 17.05.2018, https://www.bundestag.de/dokumente/textarchiv/2018/kw20-de-einspruch-ordnungsruf-555494

¹⁹ See above footnote 2.

https://www.facebook.com/105196990914241/posts/565182851582317, https://www.facebook.com/319006178685355/posts/968105463775420,

address the new government's Coalition Treaty: "Imagine the Merkel government, only with even more immigration, gender and climate delusions. This is the programme of the coalition government." They call the Treaty a "list of ideological insanities", ridiculing the concept of a "feminist foreign policy" and predicting a massive acceleration of Germany's decline: "Germany is facing dark times."

When looking at the effects of a Gender post being about **Europe** or not, we find statistically significant differences for four of our Social Media Representations. The variable **Values** proved to be particularly expressive. It appears more often in Europe posts. This might be an indication that Gender legislation to a certain degree has moved to the Union level. Values are mentioned to legitimise law making and civil society actions by linking them to fundamental rights and freedoms. They are expressed positively in award ceremonies for achieving steps towards realising values and in the context of international days of commemoration. Values are also brought up where they are trampled underfoot, in the ongoing Metoo movement, in statistics on gender-related crimes, in reports about the continuing Gender pay gap.

In short, values are called up in the Gender debate in order to measure reality against them and to mobilise political will for legislation and other measures to improve reality where it is lacking. In this sense, democratic voices in the gender debate regularly refer to fundamental values like non-discrimination, self-determination and equality. In striking contrast, when we look at far-right post, e.g. from the AfD, we will find there are no explicitly expressed values, not even general ones like 'fairness' or 'justice'. The right are very clear and aggressive about what they do not like, but do not offer any positive value alternatives. The AfD party slogan is: "Germany, but normal". This "normality" is not a value, but the longing for an imaginary status quo ante, before the arrival of migrants and before the sexual confusion caused by the women's and the LGBTQ movements.

The variable "Values" therefore proved to be a good indicator of two kinds of policy frameworks: Democratic actors base their policy narratives on values and principles, at the highest level expressed in the Constitution and the Declaration of Human Rights, which are thought of as universal and as entailing the obligation to positively make these values a reality everywhere, regardless of one's own conflicting interests or those of others. The other framework is promoting purely **interest-based policies**. "Germany First" is an expression of group egotism at national level. This goes along with identity-based expression which demands the monopolisation of privileges and power by 'Bio-Germans'. Where Thatcher's statement that "there is no such thing as society" has sunk in, there is no space anymore where values can be agreed and agreed values can guide policies. What remains then is resistance against change and the idealisation of a "normality" projected back to various periods of history (Reichsbürger!) 'when a man was still a man and woman still woman'.

Identity occurs more often in Not-Europe posts. This seems to indicate a more local or national perspective. On the positive side, here we find posts about the International Coming Out Day, WorldMen'sDay and the Transgender Day of Remembrance as well as first-person accounts of a person's gender identity. On the negative side, we see reports on thousands of women and hundreds of trans-persons killed globally every year and about state persecution of trans identities in the Near-East. And again, we find far-right posts, e.g. ridiculing 'lifestyle feminism' or an

https://www.facebook.com/459077044164282/posts/6621052127966712, https://www.facebook.com/105196990914241/posts/565182851582317, https://www.facebook.com/827542717585199/posts/1637835483222581, https://www.facebook.com/173415666027913/posts/4550256851677084.

²¹ https://www.facebook.com/1162229030454420/posts/4944283395582279

²² https://www.facebook.com/100232087997794/posts/630662658288065

Margaret Thatcher, Interview for Woman's Own, 23.09.1987, https://www.margaretthatcher.org/document/106689

exhibition asking whether god is male, female or divers as well as a British professor arguing that gender is biological.

When looking at the sentiments of the posts in our sample, we find that 85% of them are written in a neutral tone. Ten percent of the others are positive. That leaves only five percent of posts expressing a negative sentiment. This is in contrast to the impression often conveyed in public discussion of social media leading to a brutalization of the debate, to constant boundary crossings, trolling and hate speech. The latter, we can confirm, is not present in our sample. Since we can safely assume that Gender is an issue prone for triggering hate speech, we must conclude that Facebook and Twitter did a good job in detecting and removing it.²⁴ Considering that the majority of posts in our sample are not by media actors, who we might assume to be guided by professional ethics to separate reporting and opinion, we can conclude that the debate we find is quite civilised and considerate. The impression that social media are dominated by excited, hateful, toxic communications seems to be caused by a small minority. In both cases, comparing for Europe and for Media, the differences for Negative and Positive Sentiment are statistically significant.

How does the gender debate on German social media compare to that in the other nine partner countries? Are there similarities or even conversations across borders? Carlson et al. (2023b) conclude that "a 'European public sphere' – or a common European way of representing gender across the 10 European countries from a quantitative perspective" does not exist (19). Yet they do see "some hint of 'a European sphere' in representations across the countries by looking at the average estimates across the 10 countries." These suggest that when Europe is discussed, Values and Law are the most important social media representations (20).

Best Practices on Gender

Our dataset contains many examples of practices which are able to improve both media representations and the actual lives of minority groups. These include regular events such as the Pride Week, the Black History Week, the International Day against Violence against Women or the European Gender Week in the European Parliament which are occasions for celebrating diversity and the successes that have been achieved and jointly devising ways to address issues that remain. A participation format was tested by the EU for the first time during our research period: the Citizens' Forums of the Conference on the Future of Europe.²⁵ A Facebook post by the European Commission²⁶ announced the Forum on 12 November 2021, asking for suggestions on "How equality between men and women should be promoted more strongly? What should be done to further strengthen the rights of LGBTIQ+ and of people with disabilities?" and announcing the address where citizens could participate online in the process.

Much of the effort to improve the situation of those suffering from gender discrimination, just as in the case of migration, is born by volunteers. Among the different feminisms showing up in our data, we would like to mention several projects run by countrywomen. One is the counselling centre "Country Graces" in Lauenburg, Schleswig-Holstein: the model project of women helping women affected by violence received funding from Aktion Mensch.²⁷ Another one concerns the Saxon Rural Women's Association which unites women who stand up for the interests of women and their families in rural areas. The post is a job advertisement for a staff member for coordination

While this seems to be case for our research period, it might no longer be so, since Elon Musk took over Twitter.

https://futureu.europa.eu/en/

²⁶ https://www.facebook.com/123332714357231/posts/4827897980567324

²⁷ https://www.facebook.com/1476144382621338/posts/3064102257158868

and administration for which the women's association has applied for funding at the Saxon State Ministry of Justice and for Democracy, Europe and Equality.²⁸

Among the data on gender extracted from Twitter and Facebook, three projects stand out. The **MaLisa Foundation**²⁹ goes back to Maria Furtwängler, physician, television actress and former wife of billionaire publisher Hubert Burda, and her daughter, musician and art historian Elisabeth Furtwängler, who in 2011 established Malisa Home³⁰ in the Philippines, a safe house for girls who had become victims of prostitution and human trafficking. In 2016, the two of them established the MaLisa Foundation which aims to create a free, equal society, to end violence against women and girls and to empower them to live a self-determined life. The foundation now runs Malisa Home and it initiates research into audiovisual diversity, gender representations in the media and their social impact. Together with partner organisations (GEMA, UFA GmbH, Keychange, public and commercial broadcasters etc.) the foundation initiates studies which are conducted by different universities. Main research areas are gender (representations) in music,³¹ in film,³² in TV,³³ in both film and TV³⁴ and online.³⁵ In addition, they conducted a special study on the Covid-19 crisis.³⁶

All these studies help shed light in areas where the anecdotal evidence gives the impression of persisting gender inequality, yet actual methodically collected figures would not exist otherwise. The foundation actively promotes its works so that the results are distributed by media and activists. In the German WP4 datasets, a Twitter post by a PSM station (RBB) reported on MaLisa's Progress Study on Audiovisual Diversity which had been published shortly before.³⁷

Our second best practice is **Wahltraut.de**.³⁸ In our dataset it is being referenced in several posts. One by an educational CSO³⁹ asks its readers: 'Concerning the Bundestag elections on 26 September 2021, are you still undecided?' and then suggests a number of services which help them find out about the different election programmes and positions of the parties. The original Wahl-O-Mat,⁴⁰ launched by the Federal Agency for Civic Education (Bundeszentrale für politische Bildung/bpb) in 2002, is first on the list. It presents the user with a quiz containing 38 theses with proposals from different policy areas which he or she can agree, not agree or be neutral on. The user can then mark those proposals she or he finds the most important. All the parties participating in the given election had answered the theses as well, so that the Wahl-O-Mat in the end presents

²⁸ https://www.facebook.com/550027598481230/posts/2119567728193868

²⁹ https://malisastiftung.org/en/

³⁰ https://www.malisa-home.org/en/

Gender in Music – Charts, Works and Festival Stages (2021) (https://malisastiftung.org/en/gender-in-music/),
Gender Justice in the Music Business (2021) (https://malisastiftung.org/en/gender-justice-in-music-business/).

Diversity in German Film (2022) about representations in German cinema (https://malisastiftung.org/en/diversity-in-german-film/).

Portrayal of Gender-Based Violence on German TV (2021) (https://malisastiftung.org/en/study_gender-based-violence-german-tv/).

Progress Study on Audiovisual Diversity (2021) (https://malisastiftung.org/en/audiovisual-diversity-tv-germany/), Audiovisual Diversity? Gender Representation in Film and TV (2017) (https://malisastiftung.org/en/audiovisualdiversity/).

So Multi-Colored and Diverse – Really? Gender Representations and Diversity in Streaming and SVOD Series (2020) (https://malisastiftung.org/en/gender-representations-and-diversity-in-streaming-and-svod-series/), Female (Self-) Representation in Social Networks (2019) (https://malisastiftung.org/en/female-self-representation-in-social-networks/).

Who Explains the Crisis? Gender Distribution in Corona Reporting (2020) (https://malisastiftung.org/en/whoexplains-the-crisis/).

³⁷ https://twitter.com/rbb24/status/1445407146519187468

^{38 &}lt;u>https://wahltraut.de/</u>

³⁹ https://www.facebook.com/120508577977637/posts/4955499377811842

⁴⁰ https://www.bpb.de/themen/wahl-o-mat/

the party whose programme most closely matches the preferences of the user. She can ask for the rationale for the recommendation, compare parties and retrieve additional information, helping voters to orientate themselves in the political landscape.

The Wahl-O-Mat has since become a fixture in all elections in Germany, and it has spawned a number of similar services which focus on particular policy areas. The second one listed in our post is directed at climate policy. The third one is Wahltraut which allows users to match their positions on equality, LGBTQ+ rights, anti-racism and inclusion against those of the different parties. Just as MaLisa, Wahltraut does not directly improve gender inequality, but both help citizens to make better informed decisions.

Informing citizens is the task of the media. Knowing how media content is made, enables citizens to critically appreciate it. It also allows them to actively express themselves in media. Therefore, we have chosen media literacy training as our third example. Again, there are several mentions in our data. Our best practice is **Alex Berlin**, 42 a facility of the Media Authority, Medienanstalt Berlin-Brandenburg (mabb). It is one of the non-commercial citizens' and educational channels which were established in the course of the nationwide introduction of cable television in 1985 and are financed by broadcasting fees. Our post is entitled "Feminism Worldwide. Activism from different perspectives". 43 It is a one-hour talkshow format in which moderator Nyima Jadama talks with women from diverse cultures on feminism, female empowerment and activism. It provides a space for those involved in the struggle against gender inequality to speak in their own voice and share their experiences in solidarity. Empowering women and members of the LGBTQ+ community to represent themselves in media is a crucial practice for improving their biased media representations which MaLisa are documenting but also their political representation so that decisions about them are not made over their heads, but they are active participants on an equal footing.

Online Video: influencer marketing and entertainment

In this Work Package under the direction of the Bulgarian team, we have taken an empirical look at the platformisation of video, or more exactly at the top 100 channels on the most relevant Video Sharing (VSP: Youtube, Tiktok, Instagram and Dailymotion), commercial Video-on-Demand (VoD: Netflix, Amazon, Apple and Disney) and Public Service Media VoD (ARD, ZDF) platforms in Germany (Boshnakova et al. 2021). What emerges from the results are three entirely separate and unconnected bodies of online video, where VSPs are primarily for commercial communications by brands and influencers and VoD platforms nearly exclusively contain fictional entertainment.

According to the 2022 ARD/ZDF Online Study (Beisch/Koch 2022), 95 percent of Germans used the Internet at least occasionally, 80 percent or 57 million people on a daily basis. Among 14-19-year-olds daily use was 100%. 72% of what Germans did online on a daily basis was media use (97% among 14-29-year-olds) as compared to individual communications (email, chat) and other activities like banking or gaming. Looking at time spent on the Internet, media eclipse all other. Germans spent 160 minutes per day on media (284 min. the young ones), compared to 59 minutes for individual communications (100) and only 16 minutes for social media (39) (Beisch/Koch 2022).

The research period from the end of 2021 to early 2022 was very much overshadowed by the Covid-19 pandemic which put a halt to public life in physical spaces and lead to a boom in online communications and entertainment.⁴⁴ "Video is and remains ubiquitous. The past few years under the influence of the Corona pandemic have produced new highs in terms of usage frequency

⁴¹ https://klimawahlcheck.org/

⁴² https://www.alex-berlin.de/

^{43 &}lt;u>https://www.facebook.com/watch/?v=573607230546221</u>

and volume. The main reason for this surge is the use of moving images on the Internet, accompanied by high, albeit declining, linear usage." (Rhody 2022: 487)

Audiovisual services which are provided inside the EU single market fall under the Audiovisual Media Services Directive 2018/1808 and need to register in their country of settlement within the EU. The national audiovisual regulatory authorities then notify the European Commission about the services under its jurisdiction, which publishes this information in the MAVISE database.⁴⁵

Searching MAVISE for "Germany", in July 2022 resulted in 649 services. Of these, 540 are TV Channels. 23 are what is called "Free on-Demand (FOD)". These include AVoD (Amazon Freevee, Netzkino, Joyn, etc.) and PSM (ARD, ZDF, Funk). 29 are TVoD service (Amazon Prime Video Store, Maxdome, PŸUR advance TV, Sky, Sport1, Telekom Videoload, Vodafone Videothek etc.), nearly all of which are in the category "Film and TV fiction" and one each in "Music", "Entertainment" and "Sport". Finally, there are 57 SVoD services, where the categories include "Documentary" with two entries, the nature channel Geo Wild (RTL/Bertelsmann) and the science channel Spektrum TV.

When we look at the reach of services in Germany,⁴⁶ it is striking that Youtube is in a category of its own. With three billion visits in three months registered on Similarweb,⁴⁷ Google's site is way ahead of the next video site Instagram with 415 million visits. French Dailymotion is the only European VSP platform in our sample and by far the smallest.

Amazon does not provide its video services under a separate URL. Therefore traffic analysis cannot distinguish between video and shopping or other activity on Amazon.de. Likewise, itunes.apple.com has too little data for Similarweb to calculate a German traffic rank but does register 1.8 million visits in the three-month period, which would put it on the low end of the table. But that site is likely only the point of discovery for people who are not already inside the app Apple TV whose traffic cannot be seen by Similarweb.

Also the PSM services are difficult to put on a common scale. Simply adding up the visits of Tagesschau, ZDF and ARD (630.6 million) would put them ahead of all other services except Youtube, including ahead of the first commercial broadcaster, n-tv.

In the list of VSPs on MAVISE we noticed a group of four services that under the claim of radical freedom of expression host far-right expressions, conspiracy theories and hate speech. They are the Canadian **Rumble** (2013), the British **Bitchute** (2017), **Dlive.tv** (2017), like Bitchute based on the Bittorrent P2P protocol, and the most recent one, **Odysee.com** (2020), also a decentralised VSP based on a blockchain and Bittorrent.⁴⁸

With the exception of PSM and Itunes, we see the hierarchy of the sites in our present study: For VSPs, Youtube is way ahead of Instagram and Tiktok, and Dailymotion is far behind. For VoD platforms, traffic data cannot decide the front-runner between Netflix, which is only VoD traffic, and Amazon, which includes all sorts of VoD-unrelated traffic. Dailymotion is last and Itunes as well as Apple TV+ are off the grid.

VSPs

To the point even where the EU had asked Netflix and Youtube to throttle picture quality in Europe for fear of overloading the European Internet (Auch YouTube drosselt Bildqualität in Europa, RP, 20.03.2020, https://rp-online.de/panorama/coronavirus/coronavirus-auch-youtube-drosselt-bildqualitaet-in-europa_aid-49660333)

⁴⁵ http://mavise.obs.coe.int/

Website traffic by Country rank Germany from Similarweb (23.1.2023), https://www.similarweb.com/de/top-websites/germany/

^{47 &}lt;u>https://www.similarweb.com/</u>

⁴⁸ At the end of 2023, all but Bitchute have disappeared from the database.

We looked at the top 100 channels on four video sharing platforms – Youtube, Tiktok, Instagram and Dailymotion – ranked by the total number of video views of a channel. A channel's number of subscribers, video uploads, video views, category and starting date were extracted from us.youtubers.me. Its description, language(s) and country of origin were taken from the Youtube and Dailymotion channel info, i.e. self-declared information by the provider. While the original data for Youtube and Dailymotion were selected based on the channel having its origin in Germany, selection for Tiktok and Instagram were taken from Hypeauditor⁴⁹ and are based on an audience-centred country rank.⁵⁰ This led to a mixed sample with all the Youtube and Dailymotion channels, 83 percent of Tiktok and only 19 percent of Instagram channels originating in Germany while 51% on Instagram were from the US. This obviously limits the comparability of the two kinds of sets. Average views per video, number of subscribers from Germany, average likes and average comments were taken from Hypeauditor. The genre was coded manually. For Youtube, Instagram and Tiktok, the top 100 channels were complemented with information on the location, the sex and age of their audiences acquired from Hypeauditor.

Comparing the number of followers or subscribers on the four platforms, the difference is evident. While Youtube and Tiktok show similar values and Dailymotion is the smallest platform in our sample, the top channels on Instagram have nearly a power of ten more subscribers than Youtube and Tiktok. We have to keep in mind that rather than at the national champions, in case of Instagram, we are looking at the global champions who are not in any way connected to Germany (only 19% of the channels in our sample are based in Germany, 51% in the US). The German contributions to these global top 100 on Instagram are astonishingly focussed on two kinds of brands: automobiles and football.

Comparisons by views show that channels on Dailymotion get about three powers of ten less views than on market leader Youtube. Tiktok clearly surpasses Youtube in usage intensity. Half of the videos on our top 100 channels get more than one million views on average, while only eight

Upon request, the company gave us this information: "Here is the information on how we calculate the Top Rankings: We analyzed a vast number of Instagram users [i.e. influencers] and ranked them by the number of real followers and authentic engagement (number of likes and comments that come from real people and influencers). All the users take part in several country rankings. If the majority of users' audience come from Germany, France or UK, then they would participate in the following countries' rankings respectively."

And they added a link with information on their Country Rankings (https://help.hypeauditor.com/en/articles/2385922-how-does-country-ranking-work) that is no less unclear, but confirms that it is an opaque composite metric, based on followers and interactions of a channel rather than its place of origin.

⁴⁹ https://hypeauditor.com/

For Tiktok and Instagram, data were extracted from a dataset called "Top 1000 Influencers in Germany" (https://hypeauditor.com/top-tiktok-germany/). Here the analytics company does give some, if rather unintelligible explanation on its site: "Find the top TikTok accounts in Germany on HypeAuditor, the most integrity TikTok influencers ranking. Find out who is the #1 TikTok influencer in Germany in 2023 and get a list of the most popular TikTok accounts. ... How we calculate: Find top TikTok influencers to work with by the number of average views per video, average likes, comments, and shares" (ibid.). This is different for Instagram: "How do we calculate ranks? We pull data from different open sources. Then we process and group data into clusters. Our AI only considers real audience members and authentic engagement. We track who's rising and falling. Then we update the rankings accordingly." (https://hypeauditor.com/top-instagram-all-germany/). This seems to imply that they rank influencers globally by a combination of the numbers of their followers and interactions, and then allow to display subsets by content category or by country. A high Country Rank for Germany therefore says that a channel is popular with German audiences, while it may be located in Brazil or in the US. On how the company detects location, it explains: "We detect influencer's audience location by the analysis of active and engaged audience (those who put likes and write comments)." (https://help.hypeauditor.com/en/articles/3433448-how-do-you-detect-instagram-audiencelocation). And more on location detection of the influencers themselves: https://help.hypeauditor.com/en/articles/3433068-how-do-you-detect-instagram-users-location.

of those on Youtube do. For Instagram, Hypeauditor provides no information on views, but only a composite metric called "Average engagement" which contains views.

The top channels on Youtube and Tiktok are predominantly German-speaking, while the German section of Dailymotion is more linguistically diverse and Instagram is again showing a global dominance of the English language.

Looking at all of the hand-coded content categories in our sample, some characteristics of the platforms emerge. Tiktok and Instagram have a common focus on "Self and Private Life" and on "Fashion, Beauty and Make-up". "Music" is something that Youtube and Dailymotion have in common, the latter also with a focus on sports. "Parodies and Funny Videos" constitute an overlap of Youtube and Tiktok.

Online **news**, **current affairs** and debate have been the subject matter in WP2 but are not in our focus in WP3. Also, by selecting the top 100 channels, it is to be expected that we get the most widely connectable and least controversial messengers. Even so, "News and Political Content" is visible on Dailymotion (10%) and Youtube (7%), while at least among the top 100 it is absent on Tiktok (1%) and Instagram (1.6%). To what degree these platforms are used for political campaigning and debate was not within the scope of our research, but from the results it is clear that it takes place below the threshold set by the top 100.

Looking at additional demographics, we find that the audience of the top 100 Youtube channels in Germany tends to be between 18 and 34 years old and male. The Tiktok audience is younger, between 13 and 24 years old and female. Our Instagram sample again is global rather than German, therefore also the largest audience for the top 100 channels is in the US (60%) and only 16% of the audience is in Germany. In this sample, the audience tends to be between 18 and 34 years old and female. Hypeauditor does not provide demographics for Dailymotion.

How much do influencers earn, respectively cost? That is, of course, the crucial question for advertisers, competitors, wannabe influencers and the tax office. As such, reliable estimates are hard to come by. Also, calculating income from social video is not straightforward. A footballer like Ronaldo, a model, actor, singer will typically earn most on their main job. The social video income is gratefully taken along. As a side-product, social media posts are cheap to make, they regularly reach millions, are free advertising that even earn them a few hundred thousand euro. For others, their e.g. food videos serve to draw audiences to their recipe blog where they run ads and sell merch. Others rose from being unknown to celebrity purely on social media.

According to the UK based Social media agency Hopper, the 2022 Instagram Rich List is led by Cristiano Ronaldo (442 million followers) at US\$ 2,397,000 per post, followed on place 3 by another footballer, Lionel Messi (327 million followers, \$1,777,000 per post). On place 2 is the first of four Kardashians/Jenners in the top 10 (Kylie Jenner, 338 million followers, \$1,835,000 per post). Musician Beyonce at place 8 (256 million followers, \$1,393,000 per post) is among the sports stars and models.⁵¹

For TikTok, Hopper's 2022 Rich List⁵² is led by 18-year old model Charlie D'Amelio (142.4 million followers, US\$ 105,770 per post, US\$ 20 million net worth). Her 21-year old sister Dixie D'Amelio is on place 9 (57.4 million followers, US\$ 42,567 per post, US\$ 10 million worth). The two Tiktok megastars had been offered their own eight-episode Hulu series in 2020.⁵³ An example that it is possible to rise to fame purely by one's social videos is the number 3 on Hopper's list: Bella

The 2022 Instagram Rich List – Who Earns The Most From Sponsored Instagram Posts?, Hopperhq, 04.10.2022, https://www.hopperhq.com/blog/2022-instagram-rich-list/

The 2022 TikTok Rich List: Who Earns The Most from TikTok Sponsored Posts?, Hopperhq, 05.10.2022, https://www.hopperhq.com/blog/2022-tiktok-rich-list/

TikTok Superstars Charli And Dixie D'Amelio Are Officially Getting Their Own Hulu Show, 18.12.2020, https://www.forbes.com/sites/abrambrown/2020/12/18/tiktok-superstars-charli-and-dixie-damelio-are-officially-getting-their-own-hulu-show/

Poarch was born in the Philippines, raised in Texas and served in the US Navy as a helicopter mechanic. In August 2020 she posted a lip-sync video to "M to B," a song by a British rapper, which became the most-viewed TikTok in 2020. Since then, she struck deals with Google, Prada and Tinder and in in May 2022 released her first single (90.1 million followers, US\$ 66,829 per post, US\$ 2 million net worth). Another example is Kris Collins, number 5 on Forbes' Tiktok list of top-earners (\$4.75 M, 42 M Followers). Before the pandemic, Collins was a hairdresser in Vancouver. When Covid made working impossible she discovered Tiktok, developed a sketch comedy show and within only one year amassed 42 million followers on Tiktok and 4.5 million subscribers on Youtube. Her family-friendly humour attracted sponsors like Hershey, Lionsgate and Pantene.⁵⁴

Looking only at the high end of top-earners gives a misleading picture of the overall state of affairs. In June 2021, Hypeauditor conducted a survey of 1,865 Instagram influencers, which gives a more realistic impression.⁵⁵ 48.49% of influencers said they earn money from their accounts, on average \$2,970 per month. Only 4.27% said they live on income from an account, on average, these influencers receive US\$ 5,912 per month.⁵⁶

Youtubers.me publishes income estimates for most of our top 10 channels. The number one in our German Youtube sample is "Tsuriki Show", a sitcom format without words, a couple playing pranks on each other. In Youtubers.me's list of "The Highest-Paid YouTubers of 2021", the Tsuriki Show is on place 35 globally, with an estimated income of US\$ 13.5 million.⁵⁷ The others in the top 10 seem to earn around US\$ 3 million each. The numbers, again, are difficult to interpret, but a rough comparison between incomes on Youtube and on Tiktok seems to indicate that significantly more money is being made by the top 10 on Tiktok.

In summary, we see a universe of video that is very different from the one on VoD platforms. VSP videos, particularly on Instagram and Tiktok, retain the casual, highly subjective, selfie-kind of perspective of Youtube's cofounder Karim's first ever Youtube video in 2005⁵⁸: the influencer sharing her private life with her fans, taking them along to photo-shootings, trips to spectacular locations, parties, intimate cuddle sessions with the cat. Being 'authentic' has become the core selling point in the age of fake. Yet, while today's top videos still have some of casualness and intimacy of the early days, there is nothing amateurish about them. They have become part of the professionally staged public image of an influencer.

VoD Platforms

In the next section of this work package we looked at commercial video-on-demand (VoD) platforms and found an entirely different universe of online video from that on VSP platforms. Instead of stars and influencers, we see traditional scripted fictional movie and serial productions, long-form story telling, produced by studios, production companies and TV networks.

Our four for-profit VoD platforms include two pure SVoD players (Netflix, Amazon), one tech player (Apple) and one Hollywood studio (Disney). While three of these offer both SVoD and TVoD services, Apple separates them. We have no data on its SVoD Apple TV+, the exclusive place for Apple Originals. We can only see its TVoD service Itunes.

Top-Earning TikTok-ers 2022: Charli And Dixie D'Amelio And Addison Rae Expand Fame – And Paydays, Forbes, 07.01.2022, https://www.forbes.com/sites/abrambrown/2022/01/07/top-earning-tiktokers-charli-dixie-damelio-addison-rae-bella-poarch-josh-richards/

Among those surveyed 45.74% were women and 33.19% were men. 23% were in the 18-24 age group, 28% in the 25-34 age category.

Our Survey Data of 1865 Instagram Influencers, Hypeauditor, 28.06.2021, https://hypeauditor.com/blog/data-from-our-study-of-1865-instagram-influencers/

https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

Me at the zoo, 24.04.2005, https://www.youtube.com/watch?v=jNQXAC9IVRw

For the commercial VoD platforms – as well as those in the final section VoD services of Public Service Media –, data were gathered for the top 10 most viewed titles in Germany in the 17 weeks period from the beginning of November 2021 to the end of February 2022. Since titles reoccur in the top 10 lists, we removed the doubles for our analysis. For **movies** this gave us a corpus of 83 movies made available on Netflix, 54 on Amazon and 72 on Itunes. Data were extracted from the platforms, from Flixpatrol and IMDb and the number of Google users who liked this movie were taken from Google.

The range and weight of their genres is to be expected for such entertainment services. Non-fictional elements (Documentary, potentially Biography and History) are marginal on Netflix and entirely absent on Amazon and Itunes.

With nearly a quarter, the share of movies at least coproduced in the EU is highest on Netflix (24%), followed by Itunes (22%) and Amazon (18.5%). The AVMSD of 2018 requires that VoD services under EU jurisdiction "secure at least a 30% share of European works in their catalogues and ensure prominence of those works." While our research does not allow us to look at an entire catalogue of a platform, we do find that among the most prominent top 100 most viewed, the share of European works on all of our platforms falls short of that threshold.

On Netflix, 36 out of the 83 movies in our sample are Netflix Originals. Amazon and Apple keep their Originals exclusive to their premium services, therefore we do not see them in our sample.

That German is one of the original languages spoken in a movie, is an indicator that it is either about German history (Anne Frank, World War II, princess Elisabeth "Sissi" of Austria; on Netflix) or, in a contemporary setting, it is a comedy ("Fack ju Göhte 3", "Catweazle", "Kaiserschmarrndrama" and "I'm Your Man"; Amazon and Itunes). The original languages spoken in a movie are indeed promising signals for comparative film semantic studies unveiling the stereotypes of each others nations that circulate in the collective audiovisual imaginary.

A few movies address current affairs issues and thereby might actually impact opinion forming. "I'm Your Man", in a comical way, sketches our future of living together with robots. The terrorism drama "The Mauritanian" (UK/US 2021) is based on the memoir "Guantánamo Diary" by Mohamedou Ould Slahi who had been imprisoned without charge by the U.S. government for years.

For **series** we chose Disney+ as our third platform, because Flixpatrol does not provide data on the series on Amazon. This gave us a corpus of 53 TV series on Netflix, of 21 on Disney and 61 on Itunes.

With 40 of 53 series (75.5%) being Netflix Originals, Netflix series is even more of its own universe than Netflix movies. These include non-US titles like "Money Heist" (Original title: "La casa de papel") from Spain and "Squid Game" from South Korea, and "Das Haus Anubis" and "Kitz" from Germany. The latter two and the German-Danish coproduction "Sløborn" (2020) were the only German productions in our Netflix sample.

In our Disney sample, 7 of the 21 series are Originals (33%). On Itunes we do not see any Apple Originals which, again, the company keeps exclusive to Apple TV+. What we do see is, that Itunes is the only platform to include originals from PSM stations BBC, Channel 5 and PBS. Itunes and Disney have some overlap between them, e.g. both have "Grey's Anatomy", "Brooklyn Nine-Nine" and "Family Guy". Itunes has "Star Trek", Disney has "Star Wars". They share no titles with Netflix, with one exception: "Brooklyn Nine-Nine" which was available on Itunes and Netflix.

The share of series at least coproduced in the EU is again highest on Netflix (21%), followed by Itunes (16%), while on Disney all the series were purely US-American with one exception, the

⁵⁹ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L1808#d1e1669-69-1

documentary mini-series "The Beatles: Get Back" (2021) coproduced by UK, New Zealand and the US.

Non-fictional or fictionalised current affairs elements are absent from the series on all three of our VoD platforms, with two exceptions: Disney has the documentary mini-series "The Beatles: Get Back" (2021) and Itunes had the food documentary "The Event: Inside Wolfgang Puck Catering" (US 2021).

Public Service Media Platforms

In the final section of WP3 we look again for movies and series, only this time on the VoD platforms of PSM in Germany, or more specifically those of ARD and ZDF. Just as in the case of the for-profit VoD platforms, we took the top 10 most viewed movies and series in the 17 weeks period from the beginning of November 2021 to the end of February 2022⁶⁰ and removed the doubles, which gave us a dataset with 79 movies and another one with 92 series.

These corpora are entirely different from those of the commercial platforms with essentially no overlap (one exception is the New Years classic "Dinner for One" (DE 1963) that we also found on Amazon and Itunes). Even though there is no clear indication in the data, we can assume that a large percentage of both movies and series, including coproductions, are PSM originals.

3sat would expect us to see more coproductions of Germany, Austria and Switzerland, yet in our sample there is none in movies and only two in the series set: "Tatort" and "Aktenzeichen XY... ungelöst". The German stations have bilateral cooperations with both, as well as with partners in Germany's other immediate neighbours France, Belgium, Poland, Denmark and Sweden.

There was only a single **series** available on German PSM, which had US involvement: "Atlantic Crossing" (Norway, Germany, US, Sweden, Denmark, UK, 2020), which is also the largest series cooperation in our sample. It is a historic family war drama about Norwegian Crown Princess Märtha who finds refuge from Nazi occupation in the US and influences President Roosevelt into joining the War in Europe.

The second largest coproduction is the eight-episodes series "Around the world in 80 days", a 2021 remake of the Jules Verne novel which dominated the top positions at Christmas 2021. The series is produced as a joint project of the **European Alliance** by the public broadcasters Rai, France Télévisions and ZDF with partners in the UK and South Africa. The European Alliance of the three PSMs had been announced at the Series Mania festival in Lille in May 2018. In order to address the new VoD offers, namely Netflix, the Alliance, which is open to participation of other PSM, provides a cooperation platform for the production of high-end fictional series. The Alliance also declared that it will ensure that linear and non-linear TV rights shall remain within the European PSM services. Delphine Ernotte Cunci, CEO of France Télévisions exlained: "The European Public Broadcasters invest €14 billion annually in original programming, while Netflix invests only €7 billion. If we share some of these resources, we can tomorrow weigh on the international scene." At its launch, three initial projects were announced: "Leonardo", based on the life of Leonardo da Vinci to mark the 500th anniversary of the artist's death in 2019, "Mirage", a

Kindly provided by Camille Zubayr, Media Research at ARD, and Natalie Beisch and Stefanie Best, Media Research at ZDF.

⁶¹ Cf. Around the world in 80 days Filming resumes in Romania on the Jules Verne Classic, Federationstudios PR, 10.11.2020, https://federationstudios.com/around-the-world-in-80-days-filming-resumes-in-romania-on-the-jules-verne-classic-adventure-for-france-televisions-zdf-rai-the-european-alliance-masterpiece-pbs/

France Télévisions, RAI and ZDF decide to create The Alliance, Francetvpro, 03.05.2018, https://www.francetvpro.fr/contenu-de-presse/1762

spy thriller set in Dubai, and "Eternal City", a murder mystery thriller set at the time of President Kennedy's visit to Rome in 1963.⁶³

In our PSM **movies** dataset, there are some more countries involved (Spain, Turkey, Luxembourg, Singapore). The US are involved in six coproductions, including the docu drama "Challenger" (US, UK 2013). The largest cooperation (Spain, France, Italy, Argentina and Germany) here is "Everybody Knows" (orig.: Todos lo saben, 2018), a Mystery-Thriller-Crime-Drama between Buenos Aires and the Madrid region.

Non-fictional elements in PSM Movies are there in the genres "Biopic" ("Die Herzogin" about the 18th century Duchess of Devonshire, "Lauf Junge lauf" about a young boy fleeing from the Warsaw ghetto in 1942, "Verleugnung" about Deborah E. Lipstadt's legal battle against Holocaust denier David Irving, "Ottilie von Faber-Castell – Eine mutige Frau" about the granddaughter of the director of the famous pencil corporation, etc.) and "History" ("Challenger – Ein Mann kämpft für die Wahrheit" about Richard Feynman's role in the investigation of the 1986 Challenger space shuttle disaster, "Der Medicus" about a quest of an Englishman to gain medical knowledge in 11th-century Ispahan, etc.).

Also in PSM Series, there is a strong presence of fictionalised history. These include "Eldorado KaDeWe" about a Berlin department store, "Der Palast" about the Berlin theatre Friedrichstadt-Palast, and "Die Wannseekonferenz" about the conference in January 1942 where the Nazis decided on the "Final Solution to the Jewish Question". The latter two also each had a documentary shedding factual light on the subject matter of the fictionalised series. Notable is also the Polish series "Wataha" about an elite squad of border guards at the Polish-Ukrainian border which shows how quickly a current affairs issue is turned from news into a fictionalised reflection.

We may assume that fictional formats, even though they might not be directed at public opinion forming, do have an effect by allowing viewers to get into the scene and see issues from different perspectives. With European production rates of 90 and 99 percent it is clear that PSM remain the lighthouse of European sovereignty, providing Europeans with glimpses into life in neighbouring countries, both culturally and economically nurturing European audiovisual expressions which provide an alternative to US cultural hegemony.

Updates between now and then

Looking back from late 2023 at our research period in late 2021, some updates are called for in order to put the following in perspective for current readers. During those two years there were major changes in the subject areas we addressed, the platforms and their regulatory environment.

Particularly Twitter, now X, is very different after Elon Musk took over in October 2022. During a chaotic and erratic ride,⁶⁴ Musk restored the account of Donald Trump⁶⁵ and other radical right-wingers, while suspending those of journalists and anti-fascists, fired thousands of employees including many of the content moderators, dismantled Twitter's safety standards which lead to a surge in Russian disinformation, as a study by the European Commission has found⁶⁶ and a decrease of diversity and an increasing dominance of right-wing accounts on German-language

⁶³ France Télévisions, Rai and ZDF team up to take on Netflix, Digitaltv Europe, 04.05.2018, https://www.digitaltveurope.com/2018/05/04/france-televisions-rai-and-zdf-team-up-to-take-on-netflix/

Twitter unter Elon Musk: Die Timeline des Grauens, Zeit 24.10.23, https://www.zeit.de/digital/internet/2023-10/twitter-musk-timeline-shitstorms-entscheidungen-x/komplettansicht

Jan-Hinrik Schmidt, "Auf Twitter ließ er Medien nach seiner Pfeife tanzen", HBI Media Research Blog, 25.11.2022, https://leibniz-hbi.de/de/blog/auf-twitter-liess-er-medien-nach-seiner-pfeife-tanzen

European Commission, Directorate-General for Communications Networks, Content and Technology (2023). Digital Services Act – Application of the risk management framework to Russian disinformation campaigns, Publications Office of the European Union, https://data.europa.eu/doi/10.2759/764631

Twitter (Hammer & Schories 2023). Worrying for us as scientists is that the new restrictive policies for access to the platform's API make it seem questionable, whether data-based research like ours will still be possible in the future.⁶⁷

A trend that is already visible in our data has become more pronounced: **Mass-communication platforms turn into broadcasters**. The trend started on Instagram as the culture of the selfie out of which emerged the influencer. By professionalising and investing ever more effort in designing and staging themselves, making themselves larger than life by means of filters and now AI, influencers raise the bar and create a divide between creators and audiences, the famous and their fans.⁶⁸ The conversation at eye-level that made these media 'social' is lost.

The changing nature of social media led to "the most striking findings" in the 2023 Reuters Institute Digital News Report, ⁶⁹ "partly characterised by declining engagement with traditional networks such as Facebook and the rise of TikTok and a range of other video-led networks." (10) Fewer people access news on the website or app of a publisher. Particularly younger groups prefer "to access news via side-door routes such as social media, search, or mobile aggregators." Chinese Tiktok "reaches 44% of 18–24s across markets and 20% for news." (ibid.)

Our EUMEPLAT data have shown that media and journalists were important voices on Facebook and Twitter. This is confirmed in the 2023 Reuters Institute Report. But audiences have been moving on to VSP sites. "When it comes to news, audiences say they **pay more attention to celebrities, influencers, and social media personalities than journalists** in networks like TikTok, Instagram, and Snapchat." (ibid.). This is another major change from our research period, when we had found news and current affairs to be essentially absent on Tiktok and Instagram. Online consumers are accessing news less frequently than in the past and are also becoming less interested. The researchers found that the number of news avoiders remains close to all-time highs at 36% across markets. Among those who still consume news, fewer interact with it. "Aggregated across markets, only around a fifth (22%) are now active participators, with around half (47%) not participating in news at all." (ibid.). Trust in the news has fallen again, where PSM continue to gain the highest levels of trust but have been declining in reach.

The Reuters Institute report for Germany⁷⁰ shows that in this country online (63%) has surpassed TV (59%) as source of news, while a staggering 29% were looking for news on social media. The most popular social platform for news in Germany is Youtube (16%) followed by Whatsapp and Facebook (both 14%) and trailed by Instagram (8%), Twitter (5%) and Telegram (4%).

What does the world look like if you get your news about it through social media? The current Hamas-Israel conflict again triggered a surge of disinformation that the platforms are unable or unwilling to contain.⁷¹ This makes them highly problematic as news sources. And audiences are aware of it. Reuters Institute found evidence that public disquiet about

In Mach 2023, the company announced three new price tiers of API access (<u>Twitter Details How Much Money API Access Will Cost Now</u>, Gizmodo 30.03.2023). By November 2023, more than one hundred ongoing studies were affected (<u>Elon Musk's X restructuring curtails disinformation research</u>, spurs legal fears, Reuters 06.11.2023)

[&]quot;Instagram ushered in the age of self-commodification online – it was the platform of the selfie – but TikTok and Twitch have turbocharged it. Selfies are no longer enough; video-based platforms showcase your body, your speech and mannerisms, and the room you're in, perhaps even in real time. Everyone is forced to perform the role of an influencer. The barrier to entry is higher and the pressure to conform stronger. It's no surprise, in this environment, that fewer people take the risk of posting and more settle into roles as passive consumers." Kyle Chayka, Why the Internet Isn't Fun Anymore, New Yorker, 09.10.2023, https://www.newyorker.com/culture/infinite-scroll/why-the-internet-isnt-fun-anymore

⁶⁹ https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-06/Digital News Report 2023.pdf

https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2023/germany

EU warns X, Meta and TikTok over Israel-Hamas disinformation, DW 13.10.2023, https://www.dw.com/en/eu-warns-x-meta-and-tiktok-over-israel-hamas-disinformation/a-67081766

misinformation and algorithms is at near record highs. Yet, growing numbers particularly of young people go to these platforms to get their news.

On **migration**, our research period was dominated by accounts from the border between Belarus and Poland. Refugees keep coming through Russia into Belarus, even though their number seems to be lower than in 2021⁷² and reporting in the media has all but disappeared. Russia's invasion of Ukraine on 24 February 2022 dominated attention and led to a great number of refugees from Ukraine coming into Europe.

The EU's response was swift. On 4 March 2022, it activated the Temporary Protection Directive⁷³ giving displaced persons from Ukraine shelter in the EU. This temporary measure has just been extended to 4 March 2025 in order to give the 4 million Ukrainian refugees currently living in the EU certainty.⁷⁴

In case of the Belarusian crisise, a joint European migration policy again proved to be lacking. The **New Pact on Migration and Asylum** proposed on 23 September 2020 was one of the centrepieces of the Commission van der Leyen. The complex package of five interlinked pieces of legislation is only now entering the final phase of negotiations. To strike a balance between the responsibility of frontline nations, like Italy, Greece and Spain, which receive the bulk of asylum seekers, and the principle of solidarity that other countries should uphold, is inherently difficult. Meanwhile, Germany, in what observers called a major U-turn, has tightened its asylum laws to speed up procedures and deportations, deter asylum seekers and take the wind out of the sails of right-wing radicals.

In conclusion, we must say that the objective of our EUMEPLAT research remains elusive. We were able to show that media are becoming thouroughly platformised. To what degree this has led to a Europeanisation of the public sphere is less clear. Certainly there are no commonly accepted pan-European fora where citizens routinely go to debate EU issues such as migration. Fengler & Kreutler (2020) have shown in their comparative analysis of migration coverage in the media of 17 countries, there is a lack of European reporting.⁷⁷ Debates do still take place online but inside national public spheres.

Therefore the final spotlight is shined on another best practice: A flagship project for cross-border cooperative journalism is the <u>Arena for Journalism in Europe</u> whose founder and editorial director is Brigitte Alfter. Since 2003, she has developed European support- and infrastructures for cross-border journalism. This includes the Crossborder Journalism Campus that allows students of three journalism schools in Sweden, Germany and France to work together on crossborder

Lage an der Grenze zu Belarus. "Sie gehen perfide vor", Tonline, 2.7.23, https://www.t-online.de/nachrichten/ausland/id_100196486/fluechtlinge-an-belarus-polen-grenze-zurueckgedraengt-aktivisten-kaempfen.html; Wieder mehr Flüchtlinge auf der Belarus-Route, Mediendienst Integration, 31.08.2023, https://mediendienst-integration.de/artikel/wieder-mehr-fluechtlinge-auf-der-belarus-route.html

https://home-affairs.ec.europa.eu/policies/migration-and-asylum/common-european-asylum-system/temporary-protection_en

Council of the EU, Ukrainian refugees: EU member states agree to extend temporary protection, 28.09.2023, https://www.consilium.europa.eu/en/press/press-releases/2023/09/28/ukrainian-refugees-eu-member-states-agree-to-extend-temporary-protection/

EC, What is the New Pact on Migration and Asylum of the EU?, https://home-affairs.ec.europa.eu/policies/migration-and-asylum_en; EU migration reform enters final stretch. Here's what you need to know, Euronews, 11.10.2023, https://www.euronews.com/my-europe/2023/10/11/eu-migration-reform-enters-final-stretch-heres-what-you-need-to-know

Germany tightens its asylum laws, Eurotopics, 09.11.2023, https://www.eurotopics.net/en/310405/germany-tightens-its-asylum-laws

Elisa Simantke und Harald Schumann, Kontinent ohne Öffentlichkeit. Europas Krisen und das Versagen der Medien, Blätter für deutsche und internationale Politik 1/2023, https://www.blaetter.de/ausgabe/2023/januar/kontinent-ohne-oeffentlichkeit



WP2 DE: Media and radical political voices dominate the social media sphere

Abstract

Social media in Germany are dominated by media outlets, with non-organisational actors, mostly common citizens, in second place and politicians in third. Media also gathered the largest number of followers on Twitter, Facebook and Youtube. The impression that social media are primarily the place for non-professional voices to speak and debate has to be corrected for Germany. In this sense, reality is more conservative than the constant hyping of revolutions and disruptions would make us believe.

In contrast, among political actors, those with radical positions utilize social media the most, particularly on Facebook where radical right-wing voices post three times as often as those from Communists and left. Also the impact of the radical right on the digital social sphere seems to be disproportionally larger than in the parliamentary arena, particularly on Facebook where 5 of the top 20 posts by Interactions are by the AfD. Also the highest ranked video on Youtube by view count is from AfD TV, the third most viewed video in our sample is by the Austrian anti-Covid measures party MFG.

Introduction

The goal of the empirical data analysis exercise of WP2 is to better understand the "Platformisation of News" and to gauge the degree of "Europeanisation" of the national and the European digital public sphere (Cardoso et al. 2021: 5). More specifically we look at information and debate on social media platforms, concretely on Facebook, Twitter and Youtube (for an overview of the subject field of platforms see Belli et al. 2021).

While traditional mass media constitute gatekeepers controlling who can speak publicly and what is spoken about, social media allow everyone with Internet access to address a potentially global audience. How much of that potential is realised depends to a large degree on the algorithms controlling the news feed (in case of FB & TW) and the recommendations (in case of YT). What is the actual mix of agents – media, politicians, public intellectuals, common citizens – posting on Social Media? What are they talking about? What relative impact do their posts have? Is the overall effect a choir harmoniously singing the unceasing hymn of public opinion forming? Or is it a cacophony of isolated individuals behind their screen trying to scream as hard as possible in the hope to be heard? Do we see a counter-factually rational discourse about the most good for the biggest possible number in solidarity and fairness, or a cesspool of hatred, populism, self-righteousness, me-first, disinformation, propaganda and porn? What does the state of the social digital public sphere tell us about the state of democracy in Europe?

Methodology

Following extensive training, two researchers independently coded 144 posts (20% of the total of 720) of month 1 (September 2021) for 55 variables with the purpose of measuring the inter-coder reliability coefficient (ICRC). Alas, the test resulted in too many variables Krippendorff's Alpha not meeting the threshold of acceptability of 0.80. The month 1 data for Germany had therefore to be discarded.

After evaluating the month 1 process for the entire project, the Portuguese work package leaders made some adaptations, including removing three variables from the codebook and provided additional clarification and training for both German coders. For the second month (October 2021) the test yielded a Krippendorff's alpha range for the 55 variables of 0.796 – 1.000, which is considered of adequate reliability (Krippendorff, 2004).

The dataset under analysis therefore contains posts from October and November 2021, 451 all together. It consists of 10 posts in the 3 Facebook user areas All Users, Groups and Media and for the 4 Dimensions Climate, Economy, Health and Europe, or a Facebook total of 240, 10 posts in the 2 Twitter user areas All Users and Media and for the 4 Dimensions, or a Twitter total of 160, and Youtube posts for the 4 Dimensions which, because of a lack of on-topic posts in the extracted datasets, do not add up to 80 but only to 51.

The German Media Landscape

For an in-depth overview of the state of journalistic-editorial media and media pluralism in Germany see Horz-Ishak & Thomass (2021). To gauge how relevant social media platforms are for public opinion forming it is important to know which proportion of the population uses them, how often, only passively or also actively.

According to Kemp, there were 78.02 million Internet users in Germany in January 2022. That is 93.0 percent of the total population. 5.87 million people in Germany or 7.0 percent of the

population remained offline. 72.60 million people or the equivalent to 86.5 percent of the total population used social media. Social media users in Germany increased by 6.6 million (+10.0 percent) between 2021 and 2022 (Kemp 2022).

According to Meta's advertising resources, **Facebook** had 25.75 million users in Germany in early 2022 or 35.0 percent of the "eligible" audience aged 13 and above (ibid.). Numbers published by **Twitter**'s advertising department indicate that the service had 7.75 million users in Germany in early 2022, equivalent to 10.5 percent of the population aged 13 and above (ibid.). Google's advertising resources indicate that **Youtube** had 72.60 million users in Germany in early 2022. That is equivalent to 86.5 percent of Germany's total population and 93.1 percent of Germany's total Internet user base (regardless of age) (ibid.).

In short, Youtube has by far the widest reach in Germany (93%) while Facebook is second (35%) and Twitter (10%) is the smallest and primarily inhabited by professional communicators from media, civil society and politics.

According to the Reuters Digital news report, online (86%) replaced TV (65) as main source of news for the first time in 2022 in Germany. Social media alone accounted for 32 percent of news (Hölig/Behre/Schulz 2022). Some studies find that media intermediaries play a central and increasing role for news consumption with nearly half of the German population consulting them on a daily basis, and three quarters of 14- bis 29-year olds doing so (Die Medienanstalten 2021).

Quite another matter is whether this social media news consumption actually makes users more politically knowledgeable. "A preregistered meta-analysis of 76 studies (N = 442,136) reveals no evidence of any political learning on social media in observational studies, and statistically significant but substantively small increases in knowledge in experiments. These small-to-nonexistent knowledge gains are observed across social media platforms, types of knowledge, countries, and periods. Our findings suggest that the contribution of social media toward a more politically informed citizenry is minimal." (Amsalem & Zoizner 2022)

The context of the research period

In the sample period – October and November 2021 –, our thematic dimensions played out intensely and interconnectedly in various ways on the three social media platforms we observed. Even only four dimensions open an ample space of possibilities for interactions, including conflicts of objectives like fighting the climate crisis and ensuring that energy prices remain affordable, and problems that provide ammunition to bad and disillusioned actors for criticising the established institutions of government, media, science – and Europe.

Specific to **Germany** was that the sample period was shortly after the federal elections on 26 September 2021 that topped of the "super election year 2021" with six of the Länder voting as well. In it the AfD reached an exceptionally high engagement on Facebook (Righetti et al. 2022: 14f.). During that time, the new coalition of Social-Democrats, Greens and Liberals were negotiating their essentials and red lines while the outgoing government was still in charge of daily business. The coalition treaty and the new cabinet were widely debated. After 16 years as German Chancellor, Angela Merkel was given a farewell in the political arena in Berlin and Brussels, in the press and, sometimes much less friendly, in the social arena.

Research findings

Format use

All posts on all platforms and in all dimensions contain **text**. Even on the video platform Youtube each item has at least a title identifying the content, but most of the time at least a few lines. Search is text-based, and this is, in fact, the way the research items have been extracted, based on key-words.

In more than two thirds of the cases the text includes **links** (68%), often to the poster's home-page or to platform-external sources. Twitter posts in our sample are most likely to contain a link (83%), followed by Facebook (62%), while only half of Youtube posts have links.

Also about two thirds of posts contain **images** (66%). Images are used more often on Facebook (81%) than on Twitter (65%) and not at all on Youtube.

Video is the format with the most limited use (17%). On Youtube, of course, every post is a video. Yet that most complex and difficult to produce format is found only in a small fraction of posts on Facebook (9%) and even less on Twitter (2.5%).

\ platforms				
formats	Facebook	Twitter	Youtube	Total
Text (n)	240	160	51	451
% of Total	53.21%	35.48%	11.31%	100.0%
% within Platform	100.0%	100.0%	100.0%	
Link (n)	148	133	28	309
% of Total	32.82%	29.5%	6.21%	68.51%
% within Platform	61.67%	83.12%	54.9%	
Image (n)	195	104	0	299
% of Total	43.24%	23.06%	0	66.3%
% within Platform	81.25%	65.0%	0	
Video (n)	22	4	51	77
% of Total	4.88%	0.89%	11.31%	17.07%
% within Platform	9.17%	2.5%	100.0%	
Total (N)	240	160	51	451
% of Total	53.21%	35.48	11.31	100,00 %

Table 1: Formats * Platforms

Who posts? - Publishing agents by kind and political position

The largest share of posts in our sample came from media (54%). Non-institutional agents (21%), i.e. mostly common citizens, and political agents (20%), i.e. mostly politicians, were head-to-head. **Other organisations** (5%) seem negligible. They contributed 22 of the 451 posts in our sample and included NGOs, a federal ministry, the party foundation of the Greens, a university, a lobbying organisation (Digitaleurope, a "trade association representing digitally transforming industries in Europe", <u>About</u>) and Europe Direct Strasbourg, a Youtube channel by the Centre d'Information sur les Institutions Européennes.

Media publishing agents

Among media posters, half were from print (50%), of which slightly more magazines (56%) than newspapers (44%). A little less than half of media posts were from broadcast media (44%), of which all from TV stations and not a single one from radio. Internet-only media contributed only six percent of media posts in the sample. Finally there was one post by a news agency (AFP) that did

not fit into the given categories. It is worth noting that media will often carry the same news of the day, indicating a stronger influence on news selection by news agencies than is visible in our data.

		% within dimension	% within Media	Total
Print				123
% of Total			E0 000/	27.27%
% within Media	N		50.20%	5 4
	Newspapers			54
	% of Total		00.040/	11.97%
	% within Media	40.000/	22.04%	
	% within Print	43.90%		00
	Magazines			69
	% of Total		00.400/	15.30%
	% within Media	50.400 /	28.16%	
	% within Print	56.10%		
Broadcast				108
% of Total				23.95%
% within Media			43.67%	
	Radio			0
	% of Total		0	
	% within Media		0	
	% within Broadcast	0		
	Television			108
	% of Total			23.95%
	% within Media		43.67%	
	% within Broadcast	100.0%		
Internet only				14
% of Total				3.10%
% within Media			5.71%	
[news agency] ⁷⁹				1
% of Total				0.22%
% within Media			0.41%	
media publishing				
agents Total (N)				245
% of Total				54.32%
all posts Total (N)				451
				100.0%

Table 2 media publishing agents

Comparing **Public Service Media** (PSM) and other broadcast media we find that out of 108 total posts by broadcasters, 91 are from PSM and 17 from commercial broadcasters. The posts from PSM are fairly evenly divided between the two main TV news programmes, Tagesschau and ZDF Heute, with occasional posts from Phoenix and DW. The most active commercial publisher is RTL (8 posts), followed by Euronews (4) and n-tv (3).

Among print media, Der Spiegel (41) is publishing most actively on social media, followed by Bild (23), Focus (16) and Welt (14). The others are: Zeit Online (6), Handelsblatt (5), FAZ (5), Tagesspiegel (2), SZ (2) and one post each by Stern, Roland Tichy, Merkur, Kreiszeitung, Heise, Guardian and Berliner Morgenpost.

The majority of media posts are from professional mass media and some party media (e.g. AfD Kompakt). Looking at the remainder in the media dataset and beyond, we find a number civil

⁷⁹ AFP (IX4RU8tFDno, in YT Europe 3).

society initiatives, some individual journalists, citizens' media and alternative media with a decreasing degree of professionalism:

Non-organisation publishing agents

The second largest group of publishing agents in our sample are individuals. Among them, common citizens (78%) dominate, followed by professional commentators (17%) who include journalists and television presenters, university professors, public intellectuals like former postmodern philosopher and former professor for media science, now aphorist of populism Norbert Bolz and experts in fields like renewable energy, forestry, stock trading or crypto-currency. Among them are Max Otte, economist and member of the CDU until he ran as the AfD candidate in the election of the German Federal President in 2022, after he was expelled from the CDU, and the "non-organisation" Extinction Rebellion. Finally, there was not a single influencer in our sample – unless you would stretch the definition to include the entire Presenter / Commentator category of "opinion leaders".

Political publishing agents

The clear majority of political agents are individual politicians (85%) or their social media staff, rather than political parties (14%). There were foundations of political parties (coded as other organisation) and party-affiliated media (e.g. AfD Kompakt, coded under political agent / party). In our sample, we found posts by MEPs but none by factions in the EU parliament. (For the power structures among the different party families in the EP and that of Germany which provides the largest number of MEPs, see EU-Matrix 2022.)

Looking at the political position of political posters, there is a striking dominance by far-right nationalists party AfD (strengthened by the two parties founded from the Corona-denier "Querdenken" movement: in Germany Die Basis, in Austria the MFG). They published 51% of all posts by political actors and 10% of all the posts in our sample. Alice Weidel is the most prominent figure on the far right. So is Sahra Wagenknecht on the far left (Die Linke), which (at 17%) constitutes the second largest political faction in our sample. Social Democrats (11%), Christian Democrats (9%) and Greens (7%) post significantly less while Liberals (5%) seem least inclined to address the digital social sphere.

The relative positions of radical right and radical left cannot be seen as support for the "horseshoe theory" which suggests that positions at both ends of the political spectrum will eventually meet. Weidel and Wagenknecht do meet on their positions against Covid measures and sanctions against Russia, but not on most other issues, and not even those agreements are shared by others in the Linke (Die Da Oben 2022).

		Total
Far-right nationalists	46	
% of Total	10.20%	
% within Dimension	51.11%	
Communists and left	15	
% of Total	3.32%	
% within Dimension	16.67%	
Socialists & Democrats	10	
% of Total	2.22%	
% within Dimension	11.11%	
Christian democrats and conservatives	8	

% of Total	1.77%	
% within Dimension	8.89%	
Greens and regionalists	6	
% of Total	1.33%	
% within Dimension	6.67%	
Liberals and centrists	5	
% of Total	1.11%	
% within Dimension	5.55%	
Eurosceptic conservatives	0	
Independents	0	
Non aligned	0	
Political Poster Total (N)	90	451
% of Total	19.95%	100.0%

Table 3 political position of political posters

Looking more closely, we can recognise elements of a right-wing echo chamber. Figure 1 shows a post on the Facebook page of AfD member magazine "AfD Kompakt" reposting a post by an AfD MEP which consists primarily of quotations for which the source is not given. The post is followed by three links to quality media Tagesschau and Handelsblatt and to Focus. The Focus link is to a guest article by Gabor Steingart, the publisher of "The Pioneer Briefing", former journalist for Der Spiegel, former editor in chief and then publisher of Handelsblatt before he was sacked in 2019. Infamous for his polarising steam hammer style of writing.

AfD Kompakt

15, November 2021 - 3

An important actor in this echo chamber used to be Kremlin propaganda channel RT, formerly Russia Today. It is infamous for reinforcing polarising messages and spreading FUD (fear, uncertainty and doubt) abroad. Metadata for posts by RT DE had been extracted for the entire sampling period but, since RT DE was banned from the platforms in March 2022 (Council of the EU 2022), the posts were no longer accessible at the time of coding. (For large coordinated networks on Facebook spreading antiestablishment narratives see Righetti et al. 2022: 16; Rau et al. 2022).

On what platforms? – Publishing agents * Platforms

Our data indicate that media posts dominate on all three platforms, the most pronounced on Twitter (68%) but just as clearly on Youtube (51%) and Facebook (46%). Place two on Facebook is held by non-institutional agents (30%), third by political agents (24%). These are reversed on Twitter where politicians (19%) are in second and common citizens (12%) in third place. Remarkably, on Youtube



Ursula von der Leyen und Christine Lagarde beißen sich an Realität nicht nur die Zähne

Bestes Beispiel: "Klimaschutz". Ein Thema, dass insbesondere Ursula von der Leven am

Allen voran China, das für rund 30 Prozent der weltweiten Emissionen verantwortlich ist: "Bislang hat Peking zugesagt, seine Emissionen etwa 2030 zu senken. Umkehrschluss: Bis dahin steigen sie weiter an. Wenn das so bleibt, gibt es keine Möglichkeit, das 1,5

"Der Anteil des besonders klimaschädlichen Kohlestroms am Energiemix liegt [in China] derzeit bei 60 Prozent. Der komplette Kohleausstieg ist erst ab 2050 vorgesehen."

aus. Sie sind seit Jahren gefangen in der Blase der Eurokraten, in der sie jeglichen

Herzen liegt. Zumindest wenn sie nicht gerade wieder im Privatjet unterwegs ist.

"Die gemeinsam verfolgten Klimaschutzziele von EU und EZB sind moralisch ehrenwert, aber politisch naiv und ökonomisch verhängnisvoll. Mit einseitigen Steuern, Auflagen und Zielquoten werden europäische Schlüsselindustrien gegenüber dem globalen Wettbewerb benachteilidt. Die Welt hat gerade erst beim Weltklimaginfel in Glasgow

gezeigt, dass sie nicht bereit ist, dem europäischen Vorbild zu folgen:

Realitätsbezug vollständig verloren haben.

Grad-Limit einzuhalten."

second place is occupied by other organisations (39%), while political and non-institutional agents are at a mere 6 percent.

	Facebook	Twitter	Youtube	Total
Media agent (n)	110	109	26	245
% of Total	24.39%	24.17%	5.76%	54.32%
% within Dimension	45.83%	68.12%	50.98%	
Non-institutional agent (n)	72	19	3	94
% of Total	15.96%	4.21%	0.66%	20.84%
% within Dimension	30.0%	11.87%	5.88%	
Political agent (n)	57	30	3	90
% of Total	12.64%	6.65%	0.66%	19.95%
% within Dimension	23.75%	18.75%	5.88%	
Other Organisation (n)	2	2	20	22
% of Total	0.44%	0.44%	4.43%	4.88%
% within Dimension	0.83%	1.25%	39.21%	
Publishing agent Total (N)	240	160	51	451
% of Total	53.21%	35.48%	11.31%	100.0%

Table 4: Publishing agents * Platforms

What are publishing agents talking about?

What are the Issues and topics that are most posted about on social media in Germany? How do the four dimensions (Europe, Health, Economy, Climate) play out? What are the main sub issues that are discussed within each dimension?

When reading the following numbers, it is important to remember that posting agent is exclusive, i.e. every post has one and only one publishing agent, whereas our other coding categories – format, subject matter and Europeaneity – are cumulative, i.e. a post can have text and link and image, and it can talk about several topics.

Publishing agents * Dimensions

Media agents, who publish half of all the most "relevant" posts on social media (54%), also dominate the debate on each of our four dimensions, most pronounced for Europe where sixty percent of posts within that dimension are from media, followed by Health (58%), Economy (52%), and Climate (12%). Second place in our sample is taken by Non-institutional Agents: Climate (23%), Health (22%) and Europe (21%), with one exception: In the Economy Dimension, common citizens and opinion-leaders contribute only nine percent, while political agents are the second most active posters after media. Other organisations only significantly contribute to the Climate debate, with twelve percent of posts in that Dimension.

/ Dimensions					
Publishing agents	Climate	Economy	Health	Europe	Total
Media agent (n)	56	55	62	72	245
% of Total	12.42%	12.19%	13.75%	15.96%	54.32%
% within Dimension	46.67%	52.38%	58.49%	60.0%	
Non-institutional agent (n)	28	19	23	25	94
% of Total	6.20%	4.21%	5.10%	5.54%	20.84%
% within Dimension	23.33%	8.57%	21.70%	20.83%	

Political agent (n)	22	30	17	21	90
% of Total	4.88%	6.65%	3.77%	4.66%	19.95%
% within Dimension	18.33%	28.57%	16.04%	17.5%	
Other Organisation (n)	14	1	4	5	22
% of Total	3.10%	0.22%	0.89%	1.11%	4.88%
% within Dimension	11.67%	0.95%	3.77%	4.17%	
Publishing agent Total (N)	120	105	106	120	451
% of Total	26.61%	23.28%	23.50%	26.61%	100.0%

Table 5: Publishing agents * Dimensions

What is being talked about within the four dimensions? - Subject Matter * Dimensions

In all dimensions posts also refer to "other organisations". The reason is likely that the national government, the European Commission or a ministry are in this category rather than being coded as political agents. Non-institutional agents are mostly referred to in the context of Health (83%) and Europe (63%), while Political Agents are addressed in posts on Economy (60%), Europe (57%) and Climate (55%), but less so on matters of Health (14%).

A big sub-set of Non-institutional Agents are "Common Citizens" who appear in our sample both as publishers (Q3d.1.3) and as subject matter being talked about (Q4d.3). Populists and politicians like to argue with the interests of "society", of the non-organised citizens in general and particular subgroups like the working poor, car-drivers, home-owners etc.

Media which are by far the most active publishers on social media are themselves barely the subject of conversation. On Facebook they are mentioned in 14 percent of posts, on Youtube (2%) and Twitter (0.6%) nearly not at all. This confirms the observation that the media are their own blind spot. We need them to see the world, but they only become the topic of public debate when there is a manifest scandal.

/ Dimensions					
Subject Matter	Climate	Economy	Health	Europe	Total
Political agent (n)	66	63	15	68	212
% of Total	14.63%	13.97%	3.32%	15.08%	47.01%
% within Dimension	55.0%	60.0%	14.15%	56.67%	
News Media (n)	5	6	12	12	35
% of Total	1.11%	1.33%	2.66%	2.66%	7.76%
% within Dimension	4.17%	5.71%	11.32%	10.0%	
Other Organisation (n)	105	102	99	110	416
% of Total	23.28%	22.62%	21.95%	24.39%	92.24%
% within Dimension	87.5%	97.14%	93.40%	91.67%	
Non-institutional agent (n)	63	57	88	76	284
% of Total	13.97%	12.64%	19.51%	16.85%	62.97%
% within Dimension	52.5%	54.29%	83.02%	63.33%	
Other (n)	3	0	1	0	4
% of Total	0.66%	0.0%	0.22%	0.0%	0.89%
% within Dimension	2.5%	0.0%	0.94%	0.0%	
Subject Matter Total (N)	120	105	106	120	451
% of Total	26.61%	23.28%	23.50%	26.61%	100,00 %

Table 6: Subject Matter * Dimensions

By which Publishing agents? - Subject Matter * Publishing agents

Looking at the subject matter that the different Publishing Agents address, we see again that Other Organisations are referred to in nearly all posts by all agents. Political Agents secondly post about Political Agents and about Non-institutional Agents (both 70%). For Non-institutional publishers and those from Other Organisations Non-institutional Agents are the second most important subject matter (Other Organisations 86%, Non-institutional Agents 71%, Media 55%) while Political Agents come in third place (Other Organisations 50%, Non-institutional Agents 48%, Media 38%).

Subject Matter	Political agent	Media agent	Non- institutional agent	Other organisation	Total
Political agent (n)	63	93	45	11	212
% of Total	13.97%	20.62%	9.98%	2.44%	47.01%
% within Dimension	70.0%	37.96%	47.87%	50.0%	
News Media (n)	7	14	13	1	35
% of Total	1.55%	3.10%	2.88%	0.22%	7.76%
% within Dimension	7.78%	5.71%	13.83%	4.54%	
Other Organisation (n)	86	227	81	22	416
% of Total	19.07%	50.33%	17.96%	4.88%	92.24%
% within Dimension	95.55%	92.65%	86.17%	100.0%	
Non-institutional agent (n)	63	135	67	19	284
% of Total	13.97%	29.93%	14.85%	4.21%	62.97%
% within Dimension	70.0%	55.10%	71.28%	86.36%	
Other (n)	0	1	2	1	4
% of Total	0.0%	0.22%	0.44%	0.22%	0.89%
% within Dimension	0.0%	0.41%	2.13%	4.54%	
Subject Matter Total (N)	90	245	94	22	451
% of Total	19.95%	54.32%	14.19%	4.88%	100.0%

Table 7: Subject Matter * Publishing agents

Media Publishing Agent PSM / Non-PSM * Dimension

When we compare Public Service Media (PSM) and all other primarily commercial media, both print and broadcast, we find that PSM are strong on Health and Europe (both 35%), to a lesser degree on Economy (20%) and not so much on Climate (10%). Non-PSM media are strongest on Climate (31%) and overall more evenly balanced (Europe 26%, Economy 24%, Health 20%).

	PSM	Non-PSM	Total
Climate	9	47	56
% within Dimension	9.80%	30.72%	22.86%
Economy	18	37	55
% within Dimension	19.78%	24.18%	22.45%
Health	32	30	62
% within Dimension	35.16%	19.61%	25.31%
Europe	32	40	72
% within Dimension	35.16%	26.14%	29.39%
Total	91	154	245

Table 8: Media Publishing Agent PSM / Non-PSM * Dimension

Aspects of Europeaneity

On social media in Germany, Europe is perceived predominantly through its institutions. 57 percent of all posts in the entire sample refer to one or more European institution (ranging from 53% in the Dimension Economy to 59% in Europe). These include legislative, executive and judiciary, mostly refer to the Commission, but the EP, the Council, the ECB, the CJEU, EMA and other agencies are mentioned as well. The share is even a bit higher for the variable "European law & governance" (Q5J; 59%; ranging from 56% in Health to 62% in Europe), because it includes measures and programmes like the Green Deal in posts that do not mention the EC or other institution behind them.

Measures taken by EU institutions mostly refer to Political aspects (50%, ranging from 20% in Health to 67% in Climate) and secondly to Economic aspects (30%, ranging from 5% in Health to 59% in Economy). Scientific aspects (9%) appear most often in Health (24%) and in Climate (7%). European Values (20%) feature in the debate about Europe (42%) and Climate (17%) and surprisingly least in Health (9%). European Industries (11%) are strongest in Climate (27%) and Economy (12%). European Territory (9%) refers to geographic references in posts including the shrinkage of the European territory through Brexit and challenges at its borders. This aspect of Europeaneity is found most often in posts on Europe (24%) and on Economy (8%).

European Social Movements (7%) are mentioned most often in posts on Climate (15%) and on Health (6%). Mentions of European Interactions (6%) and of European People (5%) are marginal. Remarkably, also the European Democratic Model(s) barely appears in the debate (5%), mostly in that on Europe (13%) and mostly in reference to the Polish infringement of the rule of law as one of the core values of the European democratic model.

There is no indication whether posts containing references to Europeaneity report facts in a neutral way or express pro- or anti-Europe attitude.

/ Dimension					
Europeaneity	Climate	Economy	Health	Europe	Total
European institutions (n)	67	56	62	71	256

% of Total 14.85% 12.42% 13.75% 15.74% 56.76% % within Dimension 55.83% 53.33% 58.49% 59.17% 268 % of Total 16.41% 13.30% 13.08% 16.63% 59.42% % within Dimension 61.67% 57.14% 55.66% 62.50% European industries (n) 32 13 1 5 51 % of Total 7.09% 2.88% 0.22% 1.11% 11.31% % of Total 7.09% 2.88% 0.22% 1.11% 11.31% % within Dimension 26.67% 12.33% 0.94% 4.17% European values (n) 20 10 10 51 91 % of Total 4.43% 2.22% 2.22% 11.31% 20.18% % within Dimension 16.67% 9.52% 9.43% 42.50% European Social Movements 18 4 6 4 32 % of Total 3.99% 0.89% 1.33% 0.89%
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% of Total 26.61% 23.28% 23.50% 26.61% 100.0%

Table 9: Aspects of Europeaneity * Dimensions

Impact: Followers and interactions

The three platforms provide different metrics for gauging the impact of posters and of posts on opinion forming in the digital social sphere.

The criteria for ranking posts for extraction were Interactions on Facebook, Reach on Twitter and Relevance on Youtube (Cardoso et al. 2021: 6). All of these are highly aggregated and proprietary indices (ibid.: 24) that are primarily motivated by the needs of the advertising industry and show a decreasing degree of transparency.

"According to **Facebook**, the **Interactions** metric corresponds to the sum of all reactions to a post (Like, Love, Care, Haha, Wow, Sad and Angry), all comments on that post and all shares made of it." (ibid.: 26).⁸⁰

On **Twitter**, **Reach** "corresponds to the number of people estimated to have seen a given post. This calculation takes into account metrics such as followers, engagement, page ranks and estimated views of a given piece of content" (ibid.).

On **Youtube**, our sample was extracted by the **Relevance** of an item: "The videos that the platform algorithm considers the most relevant towards a given search query. This means that our results will approximate those that a regular user would obtain when performing the same query on YouTube." (ibid.). It also means that this metric is not suitable to rank Youtube posts on a common scale. Instead we use **View Count**.

When looking at a top Reach of a tweet of 1.5 million, or the top most viewed Youtube video at 291,341, one may keep in mind that top TV programmes like PSM news regularly reach two to five million viewers in Germany (see DWDL.de. All-time top ratings are only achieved by international football competitions, e.g. the 2018 World Cup that reached 27.53 mio viewers in Germany or 36.4% of the population.)

In addition, we also look at Facebook **Followers** (for Pages, while for Groups which cannot be followed, the number of Group Likes is taken as equivalent in Table 10a), Twitter Followers and Youtube Subscribers. While the previous set of data referes to interactions with an individual post, subscriptions signal that users find publishers so interesting that they want to see more of their posts in the future. The first might be a singular interaction or part of an ongoing conversation, the second is a more long-term commitment and might for all practical purposes be permanent. Where our data show the dynamics of followers over the two-month period, it is always only growth. It seems people only ever follow but do not un-follow.

Facebook Followers and Interactions

Looking at the first twenty Page or Group accounts on Facebook ranked by number of followers, we note that all the first places are occupied by media. Faktastisch (3.2 mio followers) and Bild (2.5 mio) are leading the pack, followed by Tagesschau (2.2 mio), Spiegel (2.1 mio) and ZDF heute (1.5 mio). On place 6, we see the first commercial broadcaster RTL (1.4 mio), followed by Ntv (1.1 mio), and the news TV station of the Springer daily Welt (1 mio.). The first politicians are on places 13 (Sahra Wagenknecht, 613 k), 18 (Alice Weidel, 388 k) and 20 (Christian Lindner, 293 k).

Then we get a more diverse mix of media and politicians, including more AfD and fact checker Mimikama (81 k). Citizens' initiatives and NGOs are at the rear end of our sample where we also find Covid deniers and 'Querdenker' (Die Basis (35 k), "Ich misstraue der Regierung!" (15 k), "Fakten gegen Klimahysterie" (11 k) and "TEAM TRUTH – Fan-Club für ehrlichen Journalismus!" (3.7 k)).

The picture is different when we look at interactions on individual posts. While media still dominate (12 of 20 by interactions vs. 15 of 20 by subscribers), the first places here are occupied by politicians.

The most interactions in our sample were generated by a

To calculate its core metrics, the Facebo Reach, as analytics provider Metricool e which posts will be displayed on your far you can reach more people with your pofacebook-engagement/)



post by AfD MEP Christine Anderson (Fig. 3). She frames her 6-minute video by calling it an updated "from the EU Parliament, the biggest lunatic asylum in the world". In it she rants against the fact that the EP started requiring the QR code of the Digital Green Pass for everyone to enter.

Covid measures were also critiqued in the second most interacted post by Sahra Wagenknecht (Die Linke) and another one among the top ten, a report on the riots in Belgium and the Netherlands agains Covid measures by Welt TV (Springer).

The second most interacted issue was migration. Alice Weidel's post in place three implies that Merkel's opening in 2015 makes her the "Godmother of organised crime". Another one in the top-ten is a report on Poland's "refugee border wall" towards Belarus with the clickbaity title "Do we have to wall Europe in?" by Bild (Springer). A third one is the video of a speech in the Bundestag by Martin Hess, AfD MP: "Migrants are being used as weapons." A third issue which caused lots of interactions was e-mobility, particularly its possible compulsory introduction.

In the final post in our top-ten sample Faktastisch reports in form of a meme that "As of this Monday, cosmetics tested on animals may no longer be marketed in the EU." This triggered a stream of reactions ranging from 'about time' to ridicule about another example of EU regulatory over-reach.

Where there were several posts by a poster, the change in followers over the two month period is indicated. This allows for a rough estimate of the dynamics. In Media, Bild only gained 1,790 followers while for Tagesschau it was 8,396, ZDF heute 12,771 and Der Spiegel 14,022. On the political spectrum, Sahra Wagenknecht gained 17,363 followers whereas the AfD only 1,416 and Alice Weidel a mere 391. In case of interactions, the range does not indicate growth but the smallest and the highest number of interactions of that agent in our sample.

We can conclude that citizens invest long-term trust in media, while on a day-to-day basis they react to posts about divisive issues (like migration), to click-bait, populist simple answers, rhetorics of fear and blame, both on Facebook and Twitter. Among those, radical political positions, particularly the right-wing AfD, have a much higher impact in the digital social sphere than their parliamentary representation would lead us to expect.

Facebook followers		Facebook Interactio	ns
Followers / Group Likes	Page / Group Name	Interactions	Page / Group Name
3,168,541	Faktastisch	51,674	Christine Anderson
2,547,480 - 2,549,270	Bild	25,622 – 49,371	Sahra Wagenknecht
2,213,735 – 2,222,131	tagesschau	8,679 – 40,695	Alice Weidel
2,154,158 - 2,168,180	DER SPIEGEL	39,295	Merkur.de
1,479,997 - 1,492,768	ZDF heute	33,905	kreiszeitung.de
1,386,518	RTL	32,583	WELT Nachrichtensender
1,190,568 - 1,191,611	RTL Aktuell	29,616	FOCUS Online Auto
1,146,194 - 1,146,285	ntv Nachrichten	10,919 – 25,235	Bild
			AfD-Fraktion im Deutschen
1,110,607 - 1,115,228	WELT	9,446 – 22,473	Bundestag
1,007,399	WELT Nachrichtensender	18,596	Rainer Wendt
907,296 - 908,719	FOCUS Online	18,333	Monitor
	Campact e.V.	4,259 – 18,240	AfD
595,417 - 612,780	Sahra Wagenknecht	18,176	Faktastisch
	FAZ.NET - Frankfurter Allgemeine		
579,185	Zeitung	1,655 – 16,238	ZDF heute
542,845 – 544,261	AfD	14,955 – 15,360	Oskar Lafontaine
469,649 – 470,332	FOCUS Online Politik	2,804 – 15,044	Dr. Sylvia Limmer
	Politik und Zeitgeschehen	978 – 14,181	tagesschau
387,875 – 388,266	Alice Weidel	13,627	17:30 SAT.1 REGIONAL
312,994 – 313,403	Handelsblatt	10,433 – 13,000	WELT

medium AfD / right-wing Linke

Twitter Followers and Reach

On Twitter, again the first nine places in the top twenty by followers are occupied by media, with the first political actors from place ten. In terms of follower growth the winners were Tagesschau (+61,966) and Karl Lauterbach (+48,301), the then Federal Minister of Health in spe, followed by Spiegel (+26,205), Bild (+15,478) and ZDF Heute (+15,299).

As for reach, the first six posts are by individuals, with the first political party (the Greens) in place 7 and the first medium (Tagesschau) in place 8. On top of the list is a tweet by a CSU MP, i.e. a member of the outgoing government coalition who fearmongers against the incoming coalition: "The Ampel will be a left alliance light. We are in for a slide to the left: hidden tax increases, socio-political experiments, borderless migration and common European debts."

Five of the top ten of tweets with most reach addressed the migrant crisis at the Belarusian border and whether "Europe must not allow itself to be blackmailed" (Soeder, CSU) or whether this attitude was killing people (Fietzke, Die Linke). There was one tweet on EMA's approval of Covid vaccine for children from age five, one on Russian gas and the Greens trying to prevent Nord Stream 2, one by the Greens on an ambitious vision of a brand 'made in a climate-neutral Europe' which triggered a flood of sarcasm and one thread informing about the mandatory chat control that is discussed by the EU. Remarkably, among the twenty most widely viewed tweets in our sample there is not one from AfD or Querdenken.

Twitter followers		Twitter Reach	
Followers	Account	Reach	Account
3,099,728 - 3,161,694	tagesschau	1,573,4	177 smuellermdb (CSU)
2,807,386 - 2,833,591	derspiegel	226,595 - 1,557,9	973 Karl_Lauterbach (SPD)
2,362,048 - 2,378,328	zeitonline	178,844 – 1,542,4	155 Markus_Soeder (CSU)
1,792,895 – 1,808,373	BILD	814,381 – 1,471,0	096 georgrestle (Monitor)
1,735,457 – 1,739,178	SZ	1,242,6	678 Amira_M_Ali
1,506,459 – 1,513,342	welt	922,2	Maurice_Conrad (Ex- 219 Pirate)
1,341,656	stern.de	908,3	341 Die_Gruenen
781,386 – 796,685	ZDFheute	147,290 – 873,9	930 <mark>tagesschau O Sundermeyer</mark>
673,595 – 680,081	faznet	825,6	658 <mark>(rbb24)</mark>
608,749 – 657,050	Karl_Lauterbach	774,0	770 robert_fietzke
616,903	Die_Gruenen	704,9	950 n_roettgen (CDU)
509,651	c_lindner	240,717 – 699,5	548 <mark>BILD</mark>
509,333	SWagenknecht	139,638 – 693,8	392 ZDFheute
453,244 – 453,742	Tagesspiegel	429,534 - 642,5	538 <mark>welt</mark>
319,655 – 320,873	Markus_Soeder	518,9	ManfredWeber (CDU 947 EP)
291,099 – 291,406	RolandTichy	399,7	730 c_lindner (FDP)
282,812 – 283,224	BMG_Bund	394,0	083 EskenSaskia (SPD)
	jensspahn	·	690 oekofuzzi
209,504	OlafScholz	296,4	SWagenknecht

291,641 realTomBohn

medium AfD / right-wing Linke citizen

Youtube Subscribers and View Count

Youtube displays the number of subscribers of a channel on its UI, but does not allow to extract it through its API which is why it was not included in our datasets. The subscribers were therefore extracted manually a year after the original extraction. The first nine most often subscribed channels were all media. That the first one is British newspaper The Guardian (a nearly six hour long live stream from the Fridays for Future demonstration and speeches at COP26 in Glasgow) is likely due to the peculiar Relevance metric of Youtube. It is calculated quite obviously with only marginal attention to geo or language barriers. Our top-20 also include OE24.TV from Austria, whereas Facebook and Twitter show exclusively media and other actors from Germany.

The first in the subscriber ranking after media (>200k) is AfD TV (185k), followed by the EC (119k), DiEM25 (110k) and Extinction Rebellion (75k).

Also looking at View Count, one gets the impression that Youtube's algorithmic attention management is able to create a rather more diversified information mix than the other two platforms. The ranking is headed – with three times as many views as the next contender – by AfD TV and on place three there is the Austrian anti-Covid measures party MFG. But there is no other actor from the far right in the top 20. Eleven of the twenty most viewed on Youtube are media. Others include the Federal Printing Office, two NGOs, a health insurance fund and the study programme for Industrial Engineering and Management at a university.

Youtube Subscriber	rs	Youtube View Coun	t
Subscribers	Channel Title	View Count	Channel Title
2,880,000	Guardian News	291,341	AfD TV
1,480,000	WELT Nachrichtensender	100,052	Bundesdruckerei
1,270,000	tagesschau	43,520	MFG-Österreich
819,000	DW Deutsch	30,909 – 37,231	tagesschau
314,000	AFP Deutschland	5,285 - 37,048	DW Deutsch
310,000	phoenix	17,715	Guardian News
266,000	OE24.TV	13,016	WELT Nachrichtensender
228,000	euronews (deutsch)	1,178 – 11,325	faz
215,000	faz	6,332	KNAPPSCHAFT
185,000	AfD TV	5,441	Extinction Rebellion UK
119,000	European Commission	599 – 3,539	phoenix
110,000	DiEM25	3,296	AFP Deutschland
75,300	Extinction Rebellion UK	1,812	DiEM25
39,500	Ihr Programm	1,313	Wirtschaftsingenieurwesen u. Digital Technology
21,300	Heinrich-Böll-Stiftung	313 – 1,145	euronews (deutsch)
15,200	IIEA	734 – 984	Ihr Programm
14,600	MFG-Österreich	947	European Commission
4,200	KontextTV	872	OE24.TV
	Lichtspieler – Erklärvideo		
4,040	Manufaktur		Okzident Media
2,830	Cradle to Cradle NGO	304	DIGITALEUROPE

medium AfD / right-wing

Discussion and concluding remarks

Linke

Out of our data, a picture emerges of social media as the meeting ground of the people, who are informed by and in critical dialogue with journalistic-editorial media, and are being communicated to by individual politicians, more than in an institutional party-to-citizen way.

For the case of Germany, the conventional idea that social media are competitors of traditional mass media and even threaten their relevance must be corrected. Journalists from press, broadcasting and online-native formats are still very much the sensorium through which we perceive the world. The online public sphere consists of an open, often heated, sometimes hateful to the point of crossing the line to criminal debate about what things mean, but by and large of a general agreement about what things are, the factual information provided by professional media. While mass media publishers do embrace social media as significant outlets the platform environment remains problematic, particularly for PSM (Eichler 2022).

Whether the citizen-media and citizen-politician communication is two-way or one-way – essentially the traditional broadcast model in digital guise – was not within the scope of our research. It would require analysing comments and other additional interaction data.

Common citizens as publishers and even more so as commentators seem to be easily triggered into utterances of self-righteousness, aggressive verbal lapses, insults and hatred against politicians, other public figures and fellow citizens which none of them would dare voice in a face-to-face situation. The greatest challenge for designing humane social media is to close the cognitive gap that makes people not feel that there is a fellow human being on the other side of the keyboard.

On social media, they are systematically triggered by tabloids like Bild who knew all along that enragement translates into engagement. They are very well prepared for the social media environment that rewards populism. From our study it remains unclear how much of dysfunctional communications is due to traditional populist media which find increased spreadability and findability and thereby a powerful resonance on the platforms and how much can genuinely be attributed to social media and there algorithmic preferences. The data give some indication that Youtube's recommendation algorithm is doing a better job at providing diversity and serendipity and avoiding filter bubbles.

Politically, the strong presence of radical right-wing actors on social media is striking. Voices who see the mainstream media as "liars press" and at the same time claim that they do not get enough airspace in them, find their communication channels in social media, particularly in Facebook.

WP4 DE: Representation of Migration

Introduction

Migration and Gender are the topics of passionate, heated debates everywhere in Europe. The controversies play out in particular on social media, the arena where professional communicators – journalists, politicians, lobbyists, CSOs, creators etc. – and common citizens can speak and compete for attention.

Migration is the topic on which radical right wing parties emerged across Europe after 2015, and on which the AfD in Germany has grown to a fifth of voters' choice of Germans nationally, and nearly a quarter in the East German states.⁸¹ Gender, – canonically combined with 'ideology' or 'madness' –, came to be the second most important mobilising issue for the AfD.

The contestation over both issues crystallizes in the term "wokeness". Originally coined by black US activists in the 1930s, 'woke' means 'being awake': alert, mindful and sensitive to racial, sexist and other forms of discrimination, including those that are deeply ingrained into everyday culture and language. In the 2010s the term spread globally, implying progressive, anti-discriminatory politics. The zealous insistence of some on political correctness, the cancel culture and the critique of cultural appropriation sometimes took on a tone of moral rigour, of a self-righteousness of minority identity politics, which made 'wokeness' an easy target for right-wingers. They captured the term and reframed it to mean 'an intolerant and moralising ideology', a language police telling people how to speak and threatening an imaginary status quo before the arrival of migrants, gender and mindfulness towards minorities. Politicians all the way into the Christian Democratic parties use the criticism of Wokeness, migration and gender to stir up sentiment in their own camp, in the hope of winning back voters from the AfD.

In the German WP4 data from Facebook and Twitter, the term 'woke' appears twice, once each in migration and in gender. In the gender set, it is an angry report⁸² on the audio podcast Hallo-Meinung.de, about its publisher and editor-in-chief who was convicted at second instance for publishing misanthropic and transphobic remarks about a Bavarian Green member of parliament. The author lashes out against "the left-green character assassination journalism" and against the justice system which jumps "when a hip-woke trans-Green feels he or she has been put on the spot with contrived accusations" but is allegedly slow in dealing with the economic harms the podcast publisher has suffered.

In migration, the post⁸³ is by an AfD District MP in Hamburg and consists of an extensive citation from an interview with Alain Finkielkraut in the NZZ.⁸⁴ The French philosopher begins the

sonntagsfrage/#
Sonntagsfrage Thüringen 04.08.2022, https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/thueringen/sonntagsfrage/#

- 82 https://www.facebook.com/watch/?v=2974003306156213
- 83 <u>https://www.facebook.com/102153384550335/posts/628876778544657</u>
- Alain Finkielkraut: «Ich wurde viel häufiger beschuldigt, ein dreckiger Rassist zu sein als ein dreckiger Jude», NZZ, 01.11.2021, https://www.nzz.ch/feuilleton/alain-finkielkraut-spricht-ueber-antisemitismus-und-cancel-culture-ld.1648713

Sonntagsfrage Bundestagswahl, https://www.infratest-dimap.de/umfragen-analysen/bundesweit/sonntagsfrage/. "The Sunday poll measures current voting inclinations and not actual voting behaviour." Sonntagsfrage Mecklenburg-Vorpommern 19.10.2022,

https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/mecklenburg-vorpommern/sonntagsfrage/ Sonntagsfrage Brandenburg 26.04.2023,

https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/brandenburg/sonntagsfrage/
Sonntagsfrage Sachsen 24.02.2022, https://www.infratest-dimap.de/umfragen-analysen/bundeslaender/sachsen/

conversation by pointing out that for the progressives he is "a living scandal", his recent book À la première personne (Gallimard, Paris 2019; German translation: Ich schweige nicht, Langenmüller, München 2021) the work of an "old white man". He says that the banlieues have become no-go areas for him and that no French university would risk inviting him today. Finkielkraut has described the battle for the university, more precisely for cultural studies, as the "chronic world war of the 21st century". He calls Trump "the nemesis of political correctness." This radiates to the media: "Many younger journalists are themselves intolerant wokes who do not want contradictions in debates. For whom the political antagonist is not an opponent to be debated with, but a person to be eliminated. Politics is cultivated on the model of war, not on the model of conversation."

This is exactly one of the strategies of the far-right: marking the enemy rather than engaging in dialogue, demarcating us vs. them in a 'culture war', intimidating institutional actors to show the weakness of the state and destabilise the trust in the existing order (Heitmeyer (2018)). A threat alliance around the AfD from terror groups to mainstream conservative circles is waging a systematic 'culture war' which Laudenbach (2023) has meticulously documented for the period from 2016 to 2021 with on average at least one or two attacks against theatres, galleries, bookshops etc. each month.

Gender and migration have become battlegrounds on which the antagonists do not struggle for the best possible solution, but one side, the radical right, is out to delegitimise, defame and destroy the other, the ruling system, and with it democracy, media and science. In this situation, best practices of (media) representations regarding gender and migration are crucial for fighting stereotypes and discrimination, and for making our democratic societies resilient against anti-democratic contestation.

In Work Package 4, we looked at posts which have been published on German Facebook and Twitter in the period from September to including November 2021. Based on a jointly developed dictionary of words indicative of the topic Migration and of Europe, the Catalan team queried the APIs of the two platforms, generating two datasets: Germany-Migration-Europe and Germany-Migration-Not Europe. Out of each, the first 200 posts manually found to be on topic were then manually coded for mentioning or not one of six sub-topics considered important in the case of Migration – Law, People, Values, Territory, Institutions and Culture – and also whether the sentiment of a post is predominantly positive, neutral or negative. After Europe-related posts were found in the Not-Europe datasets, we were instructed in that dataset to additionally code for the presence of a European dimension: "The post is about Europe when it makes a reference to either the institutions of the EU, or any kind of interaction between at least two European countries" which refers to the 47 members of the Council of Europe at the end of 2021, i.e. before Russia was expelled in March 2022. We found that out of 316 on-topic Not-Europe posts, 116 are, in fact, about Europe (37%). Double-coding proved the necessary inter-personal robustness of the definitions of the variables (the Intercoder Reliability Test resulted in Krippendorff's Alphas between 0.797 and 0.983).

The 400 hand-coded Migration posts in the two Europe and Not-Europe datasets were then used by the Work Package leaders to train a neural network which then coded an additional 2,293 posts, bringing the total to 2,693 Migration posts. This mixed, manually and Al-coded corpus of posts forms the basis for the tables, figures and statistical analyses of the present report.

Our analysis of the Social Media Representations of Migration focusses on two dimensions: the effects of a post being about Europe or not and the effects of the publisher of a post being a professional media actor versus a political actor, civil society organisation, common citizen or other.

Background

Professional journalistic media, as we have shown in WP2, are important on social media, both in their own voices and by being referred to in posts of common citizens, politicians and other nonmedia actors. What we see in the media, we will also to a certain degree see on social media. Fengler & Kreutler (2020) report on a study of mass media coverage of migrants and refugees in 17 countries conducted by members of the European Journalism Observatory (EJO). Choosing a centre-left and a centre-right media outlet in each, they found differences between these, between countries and between times of observation. Migrants and refugees dominated media agendas in both European transit and destination countries since 2015. One of the few studies that also took coverage in African countries into account suggests that migrants and refugees as topics are far less salient in the origin countries. Fengler & Kreutler found a peak in coverage across countries in the 2015/16 period, which had dropped already by 2017/18. During the first six weeks of analysis, the average number of articles published per media outlet in the 17 countries was no more than 200, whereas in Hungary it was 1,500 articles and in Germany 1,000. They show that migrants and refugees are mostly covered as a large, anonymous group. Rarely are they identified as individuals, and rarely do they speak for themselves. The audiences learn very little about the context and origin countries of migrants. Articles often do not even make a clear distinction between refugees with protected status and migrants. With the exceptions of Germany, Italy and Greece, migration is reported as taking place abroad – not within national borders.

How transnational are the audiences of far right parties and movements on Twitter? That was the research question of Froio & Ganesh (2019). They used social network analysis to detect transnational links between far right organisations across countries based on retweets from audiences of far right Twitter users and a logistic regression to quantify the level to which specific issues and organisations enjoy high levels of attention across borders. They find that "only a few issues (anti-immigration and nativist interpretations of the economy) garner transnational far right audiences on Twitter. In addition, we find that more than movements, political parties play a prominent role in the construction of a transnational far right discourse."

With their growing electoral success, right-wing populist parties were eager to distance themselves from 'right-wing extremism'. Ahmed & Pisoiu (2021) analysed tweets from the Twitter accounts of the German AfD, Identitarian Movement and the Autonomous Nationalists by employing frame analysis. They conclude that the frames of far-right actors classified as extremist, New Right and populist in fact converge.

With the rise in populist and racist discourses, countries like Poland, Hungary and the Czech Republic refused to participate in the EU refugee relocation scheme. Kabata & Jacobs (2022) analyse how the Polish Law and Justice Party (PiS) constructed migrants as a security threat. "Through an in-depth discourse analysis of a wide range of texts, we argue that the PiS discourse enabled the securitisation of migration and the subsequent decision to refuse the EU relocation scheme."

While there are indications for the construction of a pan-European far-right echo chamber, are there signs in the literature for the emergence of a general European public sphere as well? The Maastricht Treaty of 1991 was a major step in the European integration. Barth & Bijsmans (2018) applied a qualitative frame analysis to media representations in Britain and Germany, two countries whose perspectives on Europe, given the outcome of the Brexit referendum in June 2016, could not be more different. Yet, they find that from 1991 onwards, in fact, media representations in the two countries converged: "Media in both countries increasingly discussed the same issues of equal relevance at the same time. The increasingly critical debate was accompanied by cross-national convergence and did not mean a complete rejection of European

integration, but rather more critical scrutiny of this process. ... This convergence of debates can be seen as representing a nascent transnational public sphere for the discussion of EU affairs."

The 2015 'refugee crisis' coincided with the Brexit referendum in 2016 and an EU referendum in Denmark in 2015. The Danish Maastricht Treaty referendum in June 1992 had failed. Denmark then negotiated four opt-outs from portions of the treaty, including from the Euro and Union Citizenship. The second referendum in May 1993 approved the treaty amended with the opt-outs. The referendum in 2015 was held to convert two of the opt-outs into opt-ins and rejected by the voters. Temizisler & Meyer & Shahin (2022) studied these in order to address the patterns of politicisation of migration and their implications for European integration. "Empirical results from the claims-making analysis demonstrated that migration issues were exceptionally politicised during the refugee crisis contributing to disintegration and opt-out outcomes in the UK and Denmark. Also, we observed that migration issues were mostly debated as an international conflict between domestic publics and 'others' with strong linkages to the EU."

Legislation

The Right to asylum of politically persecuted persons is enshrined in Article 16a of the German Constitution or Basic Law.⁸⁵ This was translated into ordinary law as a section of the German Foreigners Act (AuslG) which was first passed in 1965. The AuslG set rules for foreigners residing in Germany for professional, study, diplomatic, family etc. purposes and it implemented the cornerstone of the international legal regime for the protection of refugees, the Geneva Convention of 1951 relating to the Status of Refugees. It was accompanied by an implementing regulation (DVAuslG). Both expired on 31 December 2004.

The Immigration Act (effective from 1 January 2005⁸⁶) is a package of laws that restructured the wide range of laws on foreigners in Germany which had emerged in the meantime. It replaced the AuslG by the Residence Act (AufenthG⁸⁷) which transposes no less than eleven European legal acts. The AufenthG stipulates that foreigners require a residence title for entry and residence in the federal territory and that a foreigner who has applied for asylum may be granted a residence title before the asylum procedure has been finally concluded only in exceptional cases (§ 10 AufenthG). It constitutes unauthorised entry when a foreigner does not possess a required passport or passport replacement or a residence title (§ 14) or does not apply for asylum. The AufenthG sets rules on family reunion (§ 27 ff.), integration courses (§ 43 ff.), employment (§ 39 ff.), deportation (§ 53 ff.) and on penalties and fines (§ 95 ff) for unauthorised entry, violation of the obligation to cooperate, illegal employment and the smuggling of foreigners, particularly if done in a professional and gang-related manner.

The Immigration Act also amended some paragraphs in other laws, such as the Asylum Procedure Act⁸⁸ that was passed in 1982 in fear of being "overrun". From the mid-1970s onwards, the number of asylum seekers in West Germany rose steadily. For the asylum seekers, this meant long waiting times that the 1982 Act attempted to shorten.⁸⁹ This Asylum Procedure Act in 1992

https://www.gesetze-im-internet.de/gg/art_16a.html

Gesetz zur Steuerung und Begrenzung der Zuwanderung und zur Regelung des Aufenthalts und der Integration von Unionsbürgern und Ausländern (ZuwandungsG), 2004, last amended in 2008, https://www.buzer.de/s1.htm?g=ZuwandungsG&f=1

Gesetz über den Aufenthalt, die Erwerbstätigkeit und die Integration von Ausländern im Bundesgebiet (AufenthG), 2004, last amended in 2022, https://www.buzer.de/gesetz/4752/index.htm

was replaced by the Asylum Act (AsylG⁹⁰). The AsylG in its current version stipulates that a foreigner is a refugee within the meaning of the Geneva Convention if he or she, because of a well-founded "fear of persecution on account of his race, religion, nationality, political conviction or membership of a particular social group" is outside the country of origin, of which he or she is a national and for whose protection he or she is unable or, owing to such fear, unwilling to avail himself or herself; or in which he or she had his or her previous habitual residence as a stateless person and to which he or she cannot return or to which he or she does not wish to return because of this fear (§ 3 AsylG). § 3b details the grounds for persecution further, e.g. by stating that "persecution on account of membership of a particular social group may also be present if it is linked solely to sex or gender identity". When neither refugee protection nor an entitlement to asylum can be granted, but a person is threatened with serious harm such as torture or death sentence in the country of origin, then subsidiary protection might apply (§ 4 AsylG).

The Asylum Act then puts the Federal Office for Migration and Refugees⁹¹ under the Federal Ministry of the Interior and Community in charge of deciding on applications for asylum and lays out the rules for the asylum procedure, such as the securing, establishing and verifying of the identity of the applicant (§ 16 AsylG), including overriding the data collection ban in the GDPR (the highly sensitive datapoints such as political and sexual orientation are often the cause for persecution; § 7). It defines a duty to cooperate (§ 15) and says that a personal hearing should be conducted as soon as possible after application (§ 25). A foreigner who has entered the country without permission from a safe third country (§ 26a) may be returned there without prior referral to a reception centre (§ 19). Safe third countries are the member states of the EU and those listed in Annex 1 of the AsylG. It also defines the relations of federal and state authorities. The Länder are obliged to create and maintain the necessary reception facilities for the accommodation of asylum seekers (§ 44) in accordance with the reception quota that the Länder have agreed (§ 45).

Most foreigners have to apply for asylum at a branch office of the Federal Office and are obliged to live in the reception centre responsible for them until the decision, however, for a maximum of 18 months, or in case of minors and their parents or other legal guardians as well as their adult, unmarried siblings for a maximum of six months (§ 47 AsylG). After the conditions end, applicants are generally to be accommodated in shared accommodation (§53). The AsylG provides that applicants who are obligated to reside in a reception facility, may not engage in gainful employment, and the exceptions to this rule (§ 61). There are rules on deportation when the application was rejected (§ 34 ff.), and finally there are criminal penalties for the inducement to submit an abusive asylum application (§ 84).

Another law modified by the Immigration Act of 2004 is the Asylum Seekers' Benefits Act (AsylbLG⁹²), which since 1993 has regulated the benefits that asylum seekers, tolerated persons and foreigners who are compulsorily obliged to leave the country can claim in Germany. In its current version, the basic benefits cover the needs for food, accommodation, heating, clothing, health care and household necessities as well as personal needs of daily living. Needs for education and participation in social and cultural life in the community shall be taken into account separately for children, adolescents and young adults. These benefits are generally given in kind or in the form of vouchers, and only in case of accommodation outside reception facilities in the form

Migrationsgeschichten, Das Asylverfahrensgesetz von 1982, 16.07.2022, https://migrations-geschichten.de/das-asylverfahrensgesetz-von-1982/

Asylgesetz, (AsylG) 1992, last revised in 2022, https://www.gesetze-im-internet.de/asylvfg_1992/BJNR111260992.html

⁹¹ Bundesamt für Migration und Flüchtlinge (BAMF), https://www.bamf.de/

Asylbewerberleistungsgesetz (AsylbLG), 1993, as amended in 2022, https://www.gesetze-im-internet.de/asylblg/BJNR107410993.html

of cash (§ 3 AsylbLG). This includes medical benefits in case of sickness, pregnancy and childbirth (§ 4). Beneficiaries who are able to work and who are not employed and no longer of compulsory school age are obliged to take up a job opportunity made available by the reception facility, in particular for the maintenance and operation of the facility (§ 5) and to participate in integration courses (§ 5). Refugees with a residence permit who do not yet have an income or earn insufficiently to cover their living costs, are entitled to social benefits or a citizen's allowance. These include housing benefits and heating cost subsidy.⁹³

The Integration Act⁹⁴ of 2016 is a reaction to the refugee crisis of 2015. It attempts to improve access to vocational training assistance for recognised refugees with good integration achievements and good prospects of remaining. This includes a toleration permit valid for the entire duration of a training programme and for two additional years if employment is subsequently found that is adequate for the training programme ("3+2 rule") that might ultimately lead to a permanent settlement permit.

The Basic Law of the Federal Republic of Germany states in Article 3(3) that no one may be disadvantaged or favoured because of his or her sex, descent, "race", 95 language, homeland and origin, faith, religious or political views. The UN adopted the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD96) in 1965, which Germany ratified in 1969. It binds signatories "to pursue by all appropriate means and without delay a policy of eliminating racial discrimination in all its forms and promoting understanding among all races" (ibid.: Art. 2).

Many of the communications we now call hate crimes are punishable under the German Criminal Code (StGB⁹⁷). These include distributing propaganda material of unconstitutional and terrorist organisations or use of symbols of such organisations such as the swastika, incitement of the people, i.e. inciting hatred or violence against a national, racial, religious or ethnic group or section of the population or an individual, insult, defamation and slander.

After in November 2011 it became known, that the right-wing terrorist group "National Socialist Underground" (NSU) had murdered nine migrants and one police woman and committed other serious crimes over a period of almost fourteen years without being detected by the security authorities at the federal and state levels, an Investigation Committee of the German Bundestag concluded that corrections were urgently needed, among others in the area of criminal prosecution. In the Law on the Implementation of Recommendations of the NSU Investigation Committee of the German Bundestag, "racist, xenophobic or other inhuman" motives and goals were explicitly included in the catalogue of grounds for punishment in the Criminal Code (§46 Abs 2 Satz StGB).

E.g. BAMF, Accommodation for refugees from Ukraine, n.d., https://www.germany4ukraine.de/hilfeportal-en/accommodation-for-refugees-from-ukraine/state-assistance-for-housing-housing-benefit-certificate-of-eligibility-for-council-housing-wbs-and-heating-cost-subsidy-an-overview-of-government-assistance

Integrationsgesetz (InteG) 2016, last amended in 2019, http://www.buzer.de/gesetz/12155/index.htm

The use of "race" as a legal term has has met with criticism for some time, as the term can promote a belief in the existence of different human "races" – a notion that has long since been scientifically disproven. Therefore the current coalition government has agreed to replace the term "race" in the Art. 3 of the Basic Law (Intergrationsbeauftragte 2023: 16).

⁹⁶ https://www.ohchr.org/en/instruments-mechanisms/instruments/international-convention-elimination-all-forms-racial

Strafgesetzbuches (StGB) 1871, last amended in 2022, https://www.gesetze-im-internet.de/stgb/BJNR001270871.html

Gesetz zur Umsetzung von Empfehlungen des NSU-Untersuchungsausschusses des Deutschen Bundestages vom 12. Juni 2015, https://www.bmj.de/SharedDocs/Gesetzgebungsverfahren/Dokumente/BGBL_Umsetzung_NSU-Untersuchungsausschuss.pdf;jsessionid=93FD76B87269876E54A141E92F83D812.1_cid334? __blob=publicationFile&v=4

What is illegal offline, is also illegal online. Yet, enforcement on the Internet often proves difficult. In 2017, the Network Enforcement Act (NetzDG⁹⁹) was passed which obliges the operators of profit-oriented social networks to delete "obviously punishable content" within 24 hours of receiving a complaint. If this requirement is not met, companies face fines of up to 50 million euros.

Since 2006, the General Equal Treatment Act (AGG¹⁰⁰), which transposed four EU directives on anti-discrimination, has also provided protection. Its purpose is to prevent or eliminate discrimination on the grounds of "race" or ethnic origin, gender, religion or belief, disability, age or sexual identity in working life and in some areas of civil law (§ 1 AGG).

The National Action Plan against Racism¹⁰¹ in June 2017 started with a stocktaking of the manifestations of group-based misanthropy and ideologies of inequality (antisemitism, antiziganism, hatred against Muslims, Black People, homosexuals and trans-persons) in Germany, highlighting that refugees, women and LGBTQ persons are particularly vulnerable in terms of intersectional exclusion and discrimination. It then outlined the priorities for action by the Federal Government, including political education, improving diversity in working life, education and training and measures against hate on the Internet.

The latest ECRI Report on Germany¹⁰² in March 2020 regrettably found that a number of deficiencies persist and made recommendations. Two were highlighted as particularly urgent. This concerns, on the one hand, the establishment of a "coherent system of organisations" to support victims of discrimination by setting up independent anti-discrimination offices in all 16 Länder. Secondly, it calls for a study to be commissioned on racial profiling by the police in the Federation and the Länder. ECRI states that there is "strong evidence of the existence of pronounced racial profiling" in the work of the police authorities.

In the wake of the assassination of Kassel District President Walter Lübcke in June 2019 and the attack on a synagogue in Halle in October 2019, the Federal Government adopted a package of measures to combat right-wing extremism and hate crime which led to the Act on Combating Right-Wing Extremism and Hate Crime 30 March 2021. 103 It improves law enforcement on the Internet, tightens some criminal offences and amends the Protection of Minors Act.

"The party ban according to Article 21 (2) of the Basic Law is the sharpest and, moreover, double-edged weapon of the democratic constitutional state against its organised enemies." This is the first sentence of the ruling of the German Constitutional Court in January 2017 on the latest attempt to ban the National Democratic Party of Germany (NPD). It concludes that the NPD seeks to eliminate the free democratic basic order and replace it with an authoritarian 'nation state' oriented towards the ethnic 'Volksgemeinschaft'. "This political concept disregards the human dignity of all those who do not belong to the ethnic national community and is incompatible with the constitutional principle of democracy." The NPD furthermore works in a planned and qualified

Netzwerkdurchsetzungsgesetz (NetzDG) 2017, last amended in 2022, https://www.gesetze-im-internet.de/netzdg/BJNR335210017.html

Allgemeines Gleichbehandlungsgesetz (AGG) 2006, last amended in 2022, https://www.gesetze-im-internet.de/agg/BJNR189710006.html

Nationaler Aktionsplan gegen Rassismus, June 2017, https://www.bmi.bund.de/SharedDocs/downloads/DE/publikationen/themen/heimat-integration/nap.pdf? blob=publicationFile&v=6

⁽Sixth Round of Examination), 18.03.2020, https://www.bmj.de/SharedDocs/Archiv/Downloads/6_ECRI_Bericht_ueber_Deutschland.pdf? __blob=publicationFile&v=5

Gesetz zur Bekämpfung des Rechtsextremismus und der Hasskriminalität vom 30. März 2021, <a href="https://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&start=%2F%2F%2A%5B%40attr_id=%27bgbl121s0441.pdf%27%5D#_bgbl__%2F%2F*%5B%40attr_id%3D%27bgbl121s0441.pdf%27%5D__1680698861336

manner towards achieving its goals. "However, there is a lack of concrete indications of weight which make it appear at least possible that this action will lead to success." The court therefore ruled that a party ban is possible but unfounded in this case, because the NPD is irrelevant in public discourse.

The Basic Law protects freedom of religion in Germany. Article 4 states: "The undisturbed practice of religion is guaranteed." That is why also face veils such as the nikab and the burqa are not generally prohibited. However, in 2017, the German federal government banned the wearing of a face veil in certain areas of public life. Since then, it has been forbidden to veil or cover the face when driving a vehicle in road traffic. Women civil servants, soldiers and judges are also not allowed to cover their faces while on duty. Women wearing a veil have also been required to show their face in certain situations, e.g. when applying for identity papers, during identity checks or at the polling station. Violations are considered an administrative offence. In addition to the federal regulations, seven of the Länder prohibited public servants to wear face veils while teaching in schools, universities or kindergartens.

While asylum is a fundamental right, there is also the option to buy oneself into a country. "Citizenship-by-Investment" offers, with a few exceptions, have been abolished in Europe. ¹⁰⁶ EP and Commission have urged member states to end such schemes. ¹⁰⁷ Yet, like other countries, Germany still has a "Residency-by-Investment" programme. A person first has to apply for a visa for self-employment and set up a business in Germany. There is no minimum amount of investment required, but legal service providers advise to invest at least €360,000. ¹⁰⁸ After three years, the person will receive a permanent residence permit and after eight years can apply for naturalisation.

As for "digital nomads" or "perpetual travellers" – or, for clarity's sake, tax avoiders, – when searching for these in Germany, one is directed to the legal status quo: natural persons who have a domicile or habitual residence in Germany are subject to unlimited tax liability on their global income (§ 1 Abs. 1 EStG¹⁰⁹). This information is provided by tax consultants and law firms offering services to help their clients establish a domicile in a low tax country like Cyprus, Malta, Portugal, Ireland, Spain, Romania, the UK or Dubai and avoid anything that would establish "habitual residence" in any other country, particularly in Germany.¹¹⁰

Leitsätze zum Urteil des Zweiten Senats vom 17. Januar 2017 (2 BvB 1/13), https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/DE/2017/01/bs20170117 2bvb000113.html

Gesetz zu bereichsspezifischen Regelungen der Gesichtsverhüllung und zur Änderung weiterer dienstrechtlicher Vorschriften vom 8. Juni 2017, https://www.bgbl.de/xaver/bgbl/start.xav?start=//*%5b@attr_id%3D
<a href="https://www.bgbl.de/xaver/bgbl/start.xav?start=//*%5b@attr_id%3D
<a href="https://www.bgbl/start.xav?start=//*%5b@attr_id%3D
<a href="https://www.bgbl/s

According to the Guardian, Cyprus earned at least €4.8bn by giving citizenship to 1,685 "foreign investors" since 2008 (Guardian, EU citizenship for sale as Russian oligarch buys Cypriot passport, 02.03.2018, https://www.theguardian.com/world/2018/mar/02/eu-citizenship-for-sale-as-russian-oligarch-oleg-deripaska-buys-cypriot-passport)

PR, MEPs demand a ban on 'golden passports' and specific rules for 'golden visas', 09.03.2022, https://www.europarl.europa.eu/news/en/press-room/20220304IPR24787/meps-demand-a-ban-on-golden-passports-and-specific-rules-for-golden-visas; EC, Kommission drängt Mitgliedstaaten zum Handeln gegen "goldene Pässe" und "goldene Visa" sowie zu unmittelbaren Schritten im Zusammenhang mit der russischen Invasion der Ukraine, 31.03.2022, <a href="https://luxembourg.representation.ec.europa.eu/actualites-et-evenements/actualites/lacommission-invite-instamment-les-etats-membres-prendre-des-mesures-en-ce-qui-concerne-les-2022-03-31_de

Wohnsitz Ausland, n.d., https://www.wohnsitzausland.com/golden-visa

Income Tax Act, Einkommensteuergesetz (EStG, 1934, as last amended in 2022), https://www.gesetze-im-internet.de/estg/

National context

With only little exaggeration, one could argue that German history is nothing but a history of migration – from the Germanic tribes in the Roman age and the mass migration of peoples in the middle ages through the Napoleonic Wars, which for the first time triggered the idea of a German nation, to the recruitment agreements of the 1960s between West Germany and Italy, Spain, Greece, Turkey, Portugal and Yugoslavia and between East Germany and Poland, Hungary, Mozambique, Vietnam, Angola and other Socialist brother states. In the East, they were called "contract workers" in the West "Gastarbeiter" ("Guest workers"), an oxymoron in which the concept of inviting someone as a guest clashes with that of hiring someone to work for you. In both cases, it was assumed that residence would be granted only temporarily. These recruitments ended in the mid-1970s, when European states were faced with economic recession and rising unemployment. Also it had become clear that many of the Gastarbeiter were not going home again. Their children and grandchildren are now "citizens with a migration background".

For the far-right, the central narrative on migration, – the equivalent to the "gender ideology" in that debate, – is the "Great Replacement". The topos goes back at least to the 1916 book *The Passing of the Great Race* by US lawyer, zoologist, anthropologist, eugenicist and advocate of scientific racism, Madison Grant. More recently, this conspiracy theory of a plan to replace the native population with migrants from Muslim countries was developed further by French philosopher and father of the Nouvelle Droite movement Alain de Benoist and particularly by Renaud Camus in *Le Grand Remplacement* (2011).¹¹¹ In Germany, it was Thilo Sarrazin who in his book *Deutschland schafft sich ab* (*Germany Abolishes Itself*, 2010) popularised the narrative. From 2002 to April 2009, Sarrazin was Finance Senator in Berlin for the SPD and subsequently a member of the Executive Board of the Deutsche Bundesbank until the end of September 2010. After the critique on his racist book escalated, he resigned from Bundesbank under threat of being fired. It took the SPD until July 2020 to expel him from the party. His book had sold 1.5 million copies until early 2020.¹¹²

There is one sentence that marked out the German debate on migration and still resonates today: Angela Merkel's "We'll manage this" in 2015. This and the following year saw about two million refugees and migrants, many from Syria, coming into the EU, one million of them to Germany. In the context of the Single European Act (SEA) and the Schengen Agreement, all inner-European borders were to be abolished, establishing the freedom of movement for EU citizens. Concerning the EU's exterior borders, the Dublin Convention¹¹³ instituted common procedures in the handling of applications for political asylum. The Dublin rules state that asylum seekers are required to claim refuge in the first EU state they arrive in. In practice, this led to Greece and Italy being overwhelmed, while Hungary built a razor-wire fence to keep migrants out. In August 2015, the UN's refugee agency warned that the situation was deteriorating and called on Europe to establish a human-rights based, coherent and comprehensive migration policy. It was in this

E.g.: Wohnsitz Ausland, n.d., https://www.wohnsitzausland.com/digitale-nomaden; Easy Digit Tax, n.d., https://easydigitax.de/gewoehnlicher-aufenthalt/

A deadly ideology: how the 'great replacement theory' went mainstream, The Guardian, 08.06.2022, https://www.theguardian.com/world/2022/jun/08/a-deadly-ideology-how-the-great-replacement-theory-went-mainstream

Wie Sarrazin Millionär wurde, Handelsblatt, 21.05.2012, https://www.handelsblatt.com/unternehmen/it-medien/lukratives-buch-wie-sarrazin-millionaer-wurde/6647994.html

The Dublin Convention was signed in Dublin in June 1990 (https://eur-lex.europa.eu/legal-content/EN/TXT/? uri=CELEX:41997A0819(01)) and replaced first by Council Regulation No 343/2003 (Dublin II regulation; https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32003R0343) and then by Regulation (EU) No 604/2013; https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32013R0604.

situation that Merkel decided to suspend the Dublin rules for Syrians and stop returning asylum seekers to their first port of entry in the EU in a move that has been hailed as 'European solidarity'. 114 In this context, at a press conference on 31 August, she said "We have achieved so much – we can manage this!" 115

This sentence and its rejection has been a rallying point for the far-right ever since. In December 2018, the President of the Confederation of German Employers (BDA) summed up that Chancellor Merkel had been right. Surprisingly quickly, many refugees (namely about 400,000) in Germany had received a job or training place. After one year of instruction, most young migrants could speak German well enough to follow vocational school classes, and the vast majority of employed refugees were working in jobs subject to social security contributions. He followed was a years-long political quarrel in the EU about the course of its asylum policy and the fuelling of right-wing anti-migration forces, particularly the AfD. The early 1990s saw a number of riots, with violent anti-migrant mobs attacking residences for contract workers and for refugees (e.g. Hoyerswerda 1991, Rostock-Lichtenhagen 1992). These attacks increased in 2015 and are currently on the rise again. At the end of Merkel's 16-year term as Chancellor in 2021, journalists took stock and found that Germany had indeed managed to take the migrants in and essentially integrate them. Yet, what the country did not manage was to avoid a division of society, with the AfD now established in parliament.

And indeed, the same conflicts flared up again in our research period which was determined by the German federal elections and by the events in Belarus. Belarusian dictator Lukashenko had regained power in a rigged election in 2020, arrested tens of thousands of dissidents and in May 2021 forced a Ryanair passenger plane to land in Minsk in order to arrest a dissident journalist on board. When the EU began to impose economic sanctions against the regime, Lukashenko threatened to 'flood the EU with drugs and migrants'. Belarusian authorities and state-controlled tourist enterprises, together with some airlines operating in the Middle East, then started promoting tours to Belarus, increased the number of connections from the Middle East and provided Belarusian visas. Refugees from Kurdish Iraq, Syria, Afghanistan and other crisis regions saw their chance. Those who arrived in Minsk were then taken by bus or truck to the Polish border. By mid-November, about 9,000 of them had made it to Germany. About 10,000 to 15,000 were estimated to still be in Belarus, wanting to come to Europe. 120

The Polish PiS government interpreted the influx from Belarus as an act of "hybrid warfare" and responded with a merciless no admission policy. It rejected help from the EU border protection

Germany suspends 'Dublin rules' for Syrians, DW, 25.08.2015, https://www.dw.com/en/germany-suspends-dublin-rules-for-syrians/a-18671698

https://en.wikipedia.org/wiki/Wir schaffen das

Arbeitgeberpräsident Ingo Kramer: "Die Integration der Flüchtlinge läuft besser als erwartet", Der Spiegel, 14.12.2018, https://www.spiegel.de/wirtschaft/unternehmen/fluechtlinge-die-integration-laeuft-besser-als-erwartet-a-1243659.html

Bilanz für 2022 Mehr Angriffe auf Flüchtlingsunterkünfte, Tagesschau, 02.03.2023, https://www.tagesschau.de/inland/anschlaege-fluechtlingsunterkuenfte-anstieg-101.html

Merkel-Zitat im Rückblick: "Wir schaffen das" - Bilanz einer Botschaft, ZDF Heute, 28.09.2021, https://www.zdf.de/nachrichten/politik/merkel-wir-schaffen-das-100.html

Belarus dictator threatens to 'flood EU with drugs and migrants', The Week, 28.05.2021, https://www.theweek.co.uk/news/world-news/europe/952979/belarus-dictator-threatens-flood-eu-with-drugs-migrants-avoid-sanctions

Belarus-Konflikt spitzt sich zu – Fragen und Antworten, RND, 13.11.2021, https://www.rnd.de/politik/fluechtlinge-in-belarus-woher-kommen-die-migranten-und-warum-wollen-sie-nach-deutschland-QNIZSV2Z7VA3ZIUQ2ZTKYTZBF4.html

agency Frontex. Instead, it sealed itself off on its own by investing 330 million euros in a fence that is five-and-a-half-metres high and over 186 kilometres long. Publicly, the government is trying to portray the people at the border not as seeking protection, but as a threat to the security of the Polish population. One year later, in September 2022, Polish Defence Minister Mariusz Błaszczak explained that the refugees from Belarus had been the first attack from Moscow which Poland successfully repelled: "I am convinced that this attack was planned in the Kremlin and was only the initial phase for the attack on Ukraine. The rulers in the Kremlin certainly wanted to destabilise Poland. If they had succeeded, Poland would not be able to stand by Ukraine today." At the time of writing, the situation at the border persists, but reporting has all but ceased.

The other important event during our research period was the federal election on 26 September 2021, in which the topic of migration has hardly been addressed, as researchers in a joint project of several universities have found 123 – even though the issue has a relatively high priority from the voters' point of view. The reason likely is, that the situation is completely deadlocked at every political level, preventing any coordinated European response. In a post in our dataset, 124 Volt checked Ursula von der Leyen's State of the Union address 2021 and found that Afghanistan & migration had only made short-term waves. Ideas for a fair EU asylum and migration system were still missing. Of the EU's New Pact on Migration and Asylum, Volt says, it "cannot be the solution." The New Pact on Migration and Asylum 125 had been launched in September 2020 by the European Commission with the ambition to create a Union-wide framework to manage migration flows at the EU's borders before the current administration's term ends in spring 2024. The reform stalled owing to persistent disagreements among the Member States, 126 but seemed to be nearing some agreements at the end of 2022. 127

An AfD post quoting a PSM station¹²⁸ gives some comparative data to the situation in our research period. The number of asylum seekers in the EU has increased sharply. In Germany alone, by the end of September, 100,278 migrants are said to have submitted an initial application to the Federal Office for Migration and Refugees (BAMF). Thus, the Federal Republic of Germany remains by far the most important destination country in the EU for those seeking protection. It is followed by France with 54,105 asylum applications in the first three quarters of 2021, Spain (41,799), Italy (37,492) and Austria (22,928). Overall, 2021 is the ninth year in a row in which the value of first-time asylum applications in Germany exceeds the 100,000 mark.

Geflüchtete an der polnisch-belarussischen Grenze, Deutschlandfunk, 12.12.2022, https://www.deutschlandfunk.de/hintergrund-gefluechtete-an-der-polnisch-belarussischen-grenze-100.html

Migranten frieren immer noch im Wald, ZDF Heute, 17.12.2022, https://www.zdf.de/nachrichten/politik/polen-belarus-grenze-zaun-migration-fluechtlinge-100.html

Wahlkampf: Migration laut Wissenschaftlern kaum Thema – Flucht im Fokus, RND, 13.09.2021, https://www.rnd.de/politik/wahlkampf-afghanistan-fluechtlinge-fuer-waehler-ein-wichtiges-thema-fuer-parteien-jedoch-kaum-WXBZ5UEZZZ3NXWUTTFIRKZUIK4.html

¹²⁴ https://www.facebook.com/134209407129787/posts/952397321977654

https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/promoting-our-european-way-life/new-pact-migration-and-asylum_en

^{&#}x27;Major progress' as EU gives fresh push to stalled migration pact, Euronews, 10.06.2022, https://www.euronews.com/my-europe/2022/06/10/eu-hails-historic-agreement-as-it-gives-fresh-push-to-stalled-migration-pact

Momentum is here to approve EU migration pact, EPP president says, Euractiv, 22.11.2022, https://www.euractiv.com/section/justice-home-affairs/news/momentum-is-here-to-approve-eu-migration-pact-epp-president-says/

¹²⁸ https://www.facebook.com/1601372636839499/posts/2873460189630731

Quantitative analysis

Descriptive overview

We can see in Figure 1 that Institutions is the most frequently occurring Social Media Representation with 25% of the observations pertaining to it. Moreover, Values is the least occurring Social Media Representation. People and Territory are more frequent, but far from the extent of Institutions.

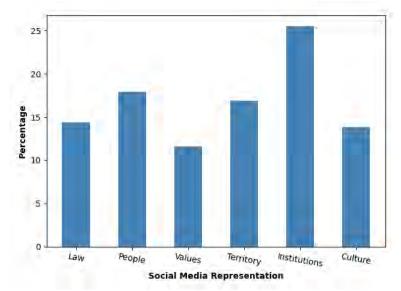


Figure 1. Social Media Representations Distribution among Social Media Representations

Notes: Created with data from Table 3 presented in Appendix A. N = 7748.

In Figures 2 and 3 we see a spike in Social Media Representations in week 45 of 2021 (08.-14. November) and a smaller one in week 42 (18-24 October). This is most pronounced for the variables Territory and Institutions, but smaller peaks are also visible for People, Law and Values. During week 45, the situation at the border between Belarus and Poland escalated, which we see documented in the posts of our sample: "Belarusian dictator Alexander Lukashenko escalates the crisis on the border with the EU. Hundreds of people are pushing towards Poland. Will there be more deaths now? The refugees shout 'Germany'." Migration via Belarus: Situation at Polish border comes to a head – [then still CSU Federal Minister of the Interior Horst] Seehofer calls for EU intervention." The situation at the Polish-Belarusian border is becoming more and more dramatic. The migrants have to stay out in the cold and are exposed to violence by the police of both countries. ... Stop pushbacks!" The typically anonymous stream of refugees got a face and a name, that of 14-year-old Redost Ahmad from Iraq. The photo of him standing at the Polish border, begging the border guards in English to let his family into the EU, went around the globe. The institutions In the West began to respond. "Minsk is cynically instrumentalising the migrants at the EU border, von der Leyen and the US president said in Washington. The UN Security Council

Der Spiegel, 08.11.2021, https://twitter.com/derspiegel/status/1457766886683250695

¹³⁰ Stern, 09.11.2021, https://twitter.com/sternde/status/1457953671703052295

Nationalismus ist keine Alternative, 09.11.2021, https://www.facebook.com/1507031122937735/posts/2778607232446778

¹³² Bild, 10.22.2021, https://twitter.com/BILD/status/1458374756407840769

meets on Thursday for an emergency session."¹³³ While at that time up to 4000 migrants were estimated to be at the border, Merkel spoke on the phone with Russian President Putin and told him" that the instrumentalisation of migrants is inhumane and unacceptable."¹³⁴ Meanwhile, Putin was adding fuel to the fire. "Putin is escalating the Belarus crisis, despite the EU's pleas. At the same time, the US is registering 'unusual activities by the Russian army' on the border with Ukraine. The mood at Nato headquarters is darkening."¹³⁵

In this dramatic situation, humanitarian groups such as Pro Asylum,¹³⁶ Bread for the World and the German Deaconry,¹³⁷ Pax Christi¹³⁸ and Amnesty International¹³⁹ demanded that border closure measures and illegal violent pushbacks must be stopped and access by the refugee to the asylum system must be ensured.

For the far right, these events were welcome fuel for their fear-mongering about an 'invasion' which the institutions do not prevent or even actively encourage, an opportunity to decry the hypocrisy of those who praise sea rescuers in the Mediterranean but do not praise Lukashenko for being a 'land rescuer': "Either there is global freedom of movement at the price of disintegrating systems of order or the right of asylum in its present form has had its day. It is hardly possible to openly demand the latter. Fear reigns." ¹⁴⁰

In week 45 two other events stand out. It started with reports about an incident on the weekend: A mentally ill Syrian migrant seriously injured three people in a knife attack on an ICE train. This was followed by the story of a Moroccan on a flight to Istanbul who faked a medical emergency in order to force the plane to land on Mallorca. It

These events can explain at least some of the peaks in week 45 in posts mentioning border-crossings into the EU (the criterion for coding Territory as 1) peak, as well as those referring to the Institutions dealing with the crisis.

Figure 2. Social Media Representations – Relative importance over time

FAZ, 11.11.2021, https://twitter.com/faznet/status/1458608872319598597

RND, 10.11.2021, https://twitter.com/RND_de/status/1458394001502089218

¹³⁵ RND, 12.11.2021, https://twitter.com/RND_de/status/1459045041092104193

¹³⁶ Integrationshilfe Passau e.V., 10.11.2021, https://www.facebook.com/1962854730614215/posts/3143798229186520

¹³⁷ Diakonie Deutschland, 11.11.2021, https://www.facebook.com/41509493347/posts/10158618071288348

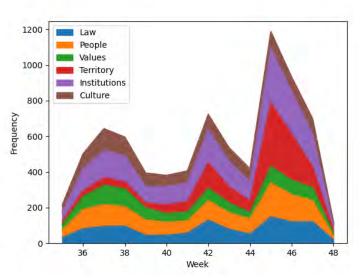
¹³⁸ pax christi Germany, 11.11.2021, https://www.facebook.com/103935866334074/posts/4689739354420346

¹³⁹ TRT Deutsch, 13.11.2021, https://www.facebook.com/268397135558/posts/10161244375070559

Frank-Christian Hansel, citing an unsourced text "found on the Internet", 10.11.2021, https://www.facebook.com/1440291012931352/posts/2695523430741431

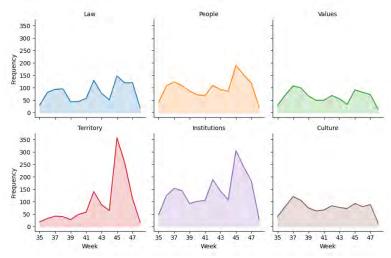
Deutschland Kurier, 08.11.2021, https://www.facebook.com/watch/?v=197861205740470; s.a.Niklas Lotz (neverforgetniki) on Hallo Meinung, 13.11.2021, https://www.facebook.com/watch/?v=2952949901611114

¹⁴² Sven Granert, 14.11.2021, https://www.facebook.com/290385074475223/posts/1913325818847799



Notes: Created with data from Table 4 presented in Appendix A. N = 7748.

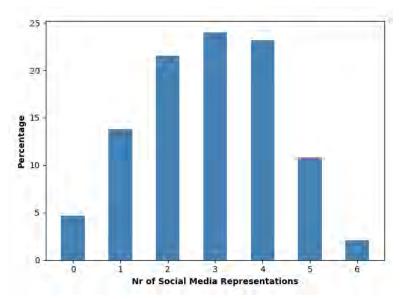
Figure 3. Social Media Representations – Evolution over time



Notes: Created with data from Table 4 presented in Appendix A. N = 7748.

From Figure 4 we can see that at least one Social Media Representation occurs in all posts. Posts containing three Representations of Migration are the most common, making up nearly 25% of the posts.

Figure 4. Number of Social Media Representations – Distribution among all posts



Notes: Created with data from Table 5 presented in Appendix A. N = 2693.

Figure 5 shows the sentiments of the posts. It should be noted that the sentiment describes the sentiment of the post, not the sentiment towards the topic Migration. More than 80% of the posts have a neutral sentiment. About 15% of them contain negative or positive sentiments. Among those, there are more negative sentiments than positive, which is the opposite from the findings in our Gender dataset.

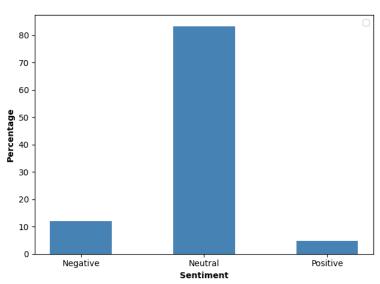


Figure 5. Sentiments – Distribution among all posts

Notes: Created with data from Table 6 presented in Appendix A. N = 2693.

Comparisons between Europe and Not Europe

Posts about Europe (1,697) are much more frequent than posts not about Europe (996) (see Tables 9 and 10 that show total number of posts at the bottom). This is the reverse of the findings in the DE Report Gender.

The Not EUR set contains posts about Denmark requiring migrants to work,¹⁴³ about Afghan refugees at the US airbase Ramstein who were supposed to apply for asylum in the US but did so in Germany¹⁴⁴ or about Europol on the trail of Syrian smuggling network in Germany,¹⁴⁵ but the majority of the posts are about Germany, at the national, regional or local level. For this dataset, we were asked to manually code posts which are, in fact, about Europe. These turned out to be 115 of 316 on-topic posts (36%).

In the EUR set, Europe and EU member states are mentioned in many of the posts, but a significant number are about Germany at the national, regional or local level. E.g., claiming that most of the suspected looters after the flood disaster in July 2021 had been foreigners, ¹⁴⁶ the CSU election programme, ¹⁴⁷ several post that draw up a balance sheet of the Merkel Era, ¹⁴⁸ or post about three local sports clubs awarded for their outstanding commitment to crime prevention. ¹⁴⁹

As shown in Figure 6, chi-squared tests conclude that there are statistically significant differences for all the variables when comparing posts about Europe and not about Europe (p = 0.0). Law, Territory and Institutions occur more often in Europe posts. As we have seen, our research period was determined by the events at the Belarusian border, with thousands of refugees crossing into the EU, the EU institutions being worried and those in Poland taking action, including border guards and military, which in turn raises questions about the legality of certain measures as well as calls for stricter laws.

People, Values and Culture occur more often in Non-Europe posts. In People we expect the rare cases where migrants speak in their own voice about their experience, journeys or profession. In fact, we find 26 of the 131 posts in the not-Europe dataset which were manually coded as not Europe to be in this category, i.e. an astonishing 20 percent. Here we find stories of successful integration, e.g. of Fadi Issa, a refugee from Syria now working at the employment office in Bremen: "I have experienced myself what the clients go through." Or Bahar Haghanipour, who was nominated as Vice-President of the Berlin House of Representatives by the Greens, 151 Dr. Elif Duygu Cindik, psychiatrist and expert on the mental health of migrants and a portrait of the junior female footballers from Afghanistan who received asylum from the Taliban in Portugal.

Values are often brought up by local and national politicians and party sections, CSOs and common citizens and they include the right to asylum, ¹⁵⁴ participation, ¹⁵⁵ feminism and gender neutrality, ¹⁵⁶ integration of migrants ¹⁵⁷ and democracy. ¹⁵⁸

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<sup>143</sup> https://www.facebook.com/1500066363627018/posts/2669992459967730
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https://twitter.com/twitter/status/1435246270621396996

¹⁴⁵ https://twitter.com/twitter/status/1460131716211822594

¹⁴⁶ https://www.facebook.com/1500066363627018/posts/2665423837091259

¹⁴⁷ https://www.facebook.com/324182380975861/posts/4398971873496871

https://www.facebook.com/1509344156054331/posts/3035376880117710

https://www.facebook.com/426898347332370/posts/4447646355257529

https://twitter.com/BremenJobcenter/status/1460519710181797889

¹⁵¹ https://twitter.com/Tagesspiegel/status/1453635160843427843

https://twitter.com/DrElifCindik/status/1465420051859841027

¹⁵³ https://twitter.com/sternde/status/1440618226002456576

¹⁵⁴ <u>https://twitter.com/tnevermind/status/1463069933357654017</u>

^{155 &}lt;u>https://www.facebook.com/484950398505596/posts/1598560770477881</u>

https://www.facebook.com/34894868995/posts/10159477167808996

¹⁵⁷ https://www.facebook.com/334509466941496/posts/1570708229988274

https://www.facebook.com/107969381083059/posts/361691179044210

Culture is triggered by mention of the church, ¹⁵⁹ marriage regulations, ¹⁶⁰ the power of language, ¹⁶¹ media critique, ¹⁶² "Archive of Flight", an exhibition in the House of World Culture in Berlin presenting 42 interviews with people from 28 different countries of origin, ¹⁶³ and again it is quite expectable that Culture indicators appear more often in local or national posts rather than than in those of a European scope.

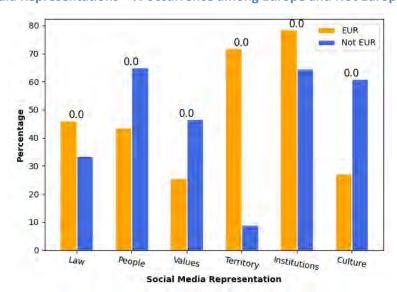


Figure 6. Social Media Representations – % occurrence among Europe and Not Europe posts respectively

Notes: Created with data from Table 7 and Table 8 presented in Appendix B. P value from chisquared test of equal proportions between Europe and Not Europe in variable above each pair of bars. N = 2693 in each pair of comparison.

The majority of Europe posts contain between 1 and 3 Representations. Not Europe post contain 4 or 5 Representations or none at all. This can be seen in Figure 7.

Figure 7. Number of Social Media Representations – % occurrence among Europe and Not Europe posts respectively

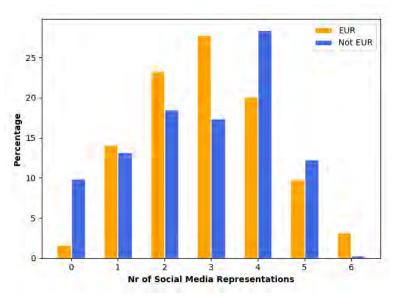
https://twitter.com/Pallinchen/status/1449743932104003593

https://twitter.com/Sabotta4/status/1446261702329241600

https://twitter.com/tazgezwitscher/status/1448971921274642465

https://www.facebook.com/264691680187/posts/10165720416335188

¹⁶³ https://twitter.com/morgenpost/status/1443469253261336578



Notes: Created with data from Table 9 and Table 10 presented in Appendix B. N = 2693.

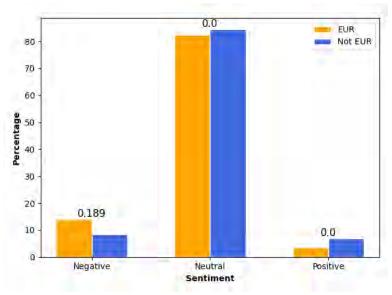
In Table 1, we can see that there are on average more Social Media Representations among Europe posts than Not Europe posts. The mean values for the Europe and Not Europe posts are 2.92 and 2.79 respectively and a t-test confirms that the difference in means is statistically significant (p = 0.0205).

Table 1. Number of Social Media Representations by Europe and Not Europe – Mean, standard deviation (SD) and results from t-test of difference in means

	Europe	Not Europe	Significance	P value
Mean	2.9258	2.7942	**	0.0205
SD	(1.349)	(1.54)		

Chi-squared tests show that there are no statistically significant differences in the proportions of the Negative Sentiment when comparing posts about Europe and not about Europe (p = 0.189), but there are significant differences for the Neutral and the Positive Sentiment (both p = 0.0).

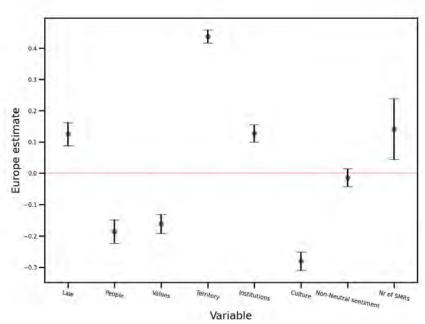
Figure 8. Sentiment – % occurrence among Europe and Not Europe posts respectively



Notes: Created with data from Table 11 and Table 12 presented in Appendix B. P value from chisquared test of equal proportions between Europe and Not Europe in variable above pair of bars. N = 2693.

The coefficient estimates in Figure 9 show that there are several differences between Europe and Not Europe posts also when controlling for additional variables. Results from Logit regressions confirm that Law, Territory and Institutions are more likely to occur among Europe posts than Not Europe posts. The effects are around 12, 44 and 13 percentage points respectively (Tables 13, 16 and 17). At the same time, People, Values and Culture are more likely to be observed in Not Europe posts, with effect sizes of around -18, -16 and -28 percentage points respectively (Tables 14, 15 and 18). There are no statistically significant differences in the occurrence of Non-Neutral sentiments (Positive and Negative sentiments together) between Europe and Not Europe posts. Finally, results from an OLS regression show that there are more Social Media Representations present in the Europe posts than the Not Europe posts (Table 20).

Figure 9. Coefficient estimates Europe



Notes: Coefficient estimates and their 95 % confidence intervals of Europe variable from Model 3 of Table 13, Table 14, Table 15, Table 16, Table 17, Table 18, Table 19, Table 20 presented in Appendix B. N = 2693 in each estimation.

Comparisons between Media and Not Media

Posts by Media (573 or 21.28%) are less common than posts by Non-Media (2,120) (See Table 23 and Table 24). In the subset of 400 manually coded on-topic posts, 207 or 52% are coded 1 in is newsmedia.

In addition to the extracted variable "is_newsmedia", the likewise extracted values of the variable "category" are also indicative of media. All the posts marked 1 in the is_newsmedia column, in the category column have Media, News Site or TV Channel. Posts marked 0 in the is_newsmedia column, do contain occasional media posts, such as by a political correspondent of Tagesspiegel in category no-media¹⁶⁴ and by right-wing alternative medium Hallo Meinung in category Person,¹⁶⁵ but overall, posts in this set are by non-media actors.

Chi-squared tests conclude that there are statistically significant differences in the proportions of all our Social Media Representations when comparing posts about Media and not about Media (p = 0.0 in all cases). All occur more often in Not Media posts, except for Territory which occurs in more than 70 percent of Media posts.

When we compare these overall results with our manually coded set of 207 media and 193 not-media posts, we find them roughly confirmed for Territory (in 56% of media, 34% of not-media). As we have seen, the crossing of the border between Belarus and Poland border was the dominant issue in Germany during our research period. This was reported by media, together with the reactions of the national and European Institutions, where the difference in the hand-coded posts is much less clear (in 87% of media, 88% of not-media vs. less than 50% and 80% in Fig. 10).

Manual coding also confirms the overall results for Law (in 41% of media, 72% of not-media vs. about 25% and about 45% in Fig. 10) and for Values (in 20% of media, 36% of not-media vs.

¹⁶⁴ https://twitter.com/cziedler/status/1447887732949323781

https://www.facebook.com/watch/?v=2952949901611114

about 5% and 40% in Fig. 10). This seems to reflect the failure of the EU, or rather its member states, to establish common policies and practices at the EU's external borders and in relation to refugees and other beneficiaries of protection. Since the situation at the Belarusian border was determined by lawlessness and panic-driven, militaristic, ad hoc measure taken by the Polish government, media had little to report in this respect. Whereas, political and civil society actors mobilise fundamental rights and freedoms, primarily the right of asylum, to call for urgent humanitarian and other help.

The differences in manual coding are much less clear for People (in 14% of media, 15% of not-media vs. about 30% and nearly 60% in Fig. 10) and for Culture (in 20% of media, 24% of not-media vs. about 10% and nearly 50% in Fig. 10). Here we find human interest stories reported by the press, e.g. of 14-year-old refugee Redost Ahmad from Iraq. 166 And we find several posts by the award-winning Migazin, 167 a magazine which is dedicated to the People perspective: "There is a lot of talk about migrants and migration in Germany. Especially by Germans. But in the chorus of the many, those of the migrants are usually missing. And it is precisely this gap that MiGAZIN fills with high-quality texts and comprehensible reporting." On the other hand, we do see many posts, as we would expect, by CSOs reporting on the background and motivations of migrants, e.g. from the Kurdish region in northern Iraq 169 or from Algeria. 170

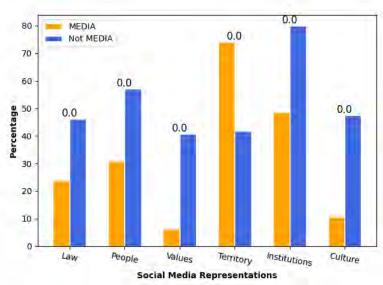


Figure 10. Social Media Representations – % occurrence among Media and Not Media posts respectively

Notes: Created with data from Table 21 and Table 22 presented in Appendix C. P value from chisquared test of equal proportions between Media and Not Media in variable above each pair of bars. N = 2693 in each pair of comparison.

There are more Media posts with 0 to 2 Social Media Representations and more Not Media posts with 3 Representations or more. This can be seen in Figure 11.

¹⁶⁶ <u>https://twitter.com/BILD/status/1458374756407840769</u>

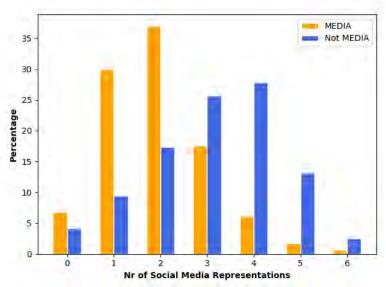
¹⁶⁷ https://www.facebook.com/264691680187/posts/10165720416335188

https://www.migazin.de/category/migblog/

¹⁶⁹ https://www.facebook.com/251767884962851/posts/2286005548205731

¹⁷⁰ https://twitter.com/BerlinHirak/status/1447145244961775617

Figure 11. Number of Social Media Representations – % occurrence among Media and Not Media posts respectively



Notes: Created with data from Table 23 and Table 24 presented in Appendix C. N = 2693.

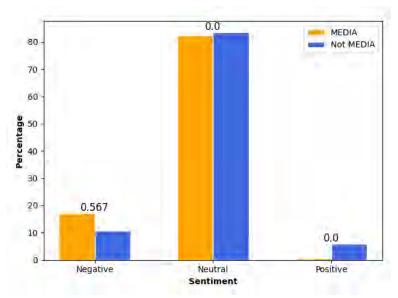
From the information in Table 2, we can see that there are on average more Social Media Representations in Not Media posts than in Media posts. The mean values for the Not Media is 3.13 and for Media it is 1.94, and a t-test confirms that the difference in means is statistically significant (p = 0).

Table 2. Number of Social Media Representations by Media and not Media – Mean, standard deviation (SD) and results from t-test of difference in means

	Media	Not Media	Significance	P value
Mean	1.9424	3.1297	***	0
SD	(1.123)	(1.391)		

Chi-squared tests conclude that there are statistically significant differences in the proportions of Neutral and Positive Sentiments (both p = 0.0) when comparing posts about Media and not about Media, while there are no statistically significant differences between Media and Not Media with respect to Negative Sentiments (p = 0.567).

Figure 12. Sentiment – % occurrence among Media and Not Media posts respectively



Notes: Created with data from Table 25 and Table 26 presented in Appendix C. P value from chisquared test of equal proportions between Media and Not Media in variable above pair of bars. N = 2693.

The coefficient estimates in Figure 13 show that there are several differences between Media and Not Media posts also when controlling for additional variables. Results from Logit regressions confirm that Territory occurs more often among the Media posts as compared to the Not Media posts. The effect is around 22 percentage points (Table 30). They also confirm that all other variables (Law, People, Values, Institutions and Culture) are more frequent in Not Media posts, with an effect of -6, -17, -25, -5 and -26 percentage points respectively (Tables 27 till 29, 31 and 32). Finally, results from an OLS regression show that there are more Social Media Representations present in the Not Media posts than in the Media posts.

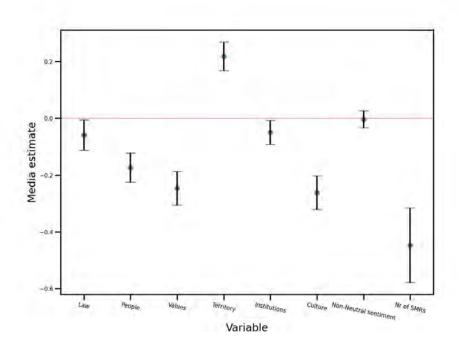


Figure 13. Coefficient estimates Media

Notes: Coefficient estimates and their 95 % confidence intervals of Media variable from Model 3 of Table 27, Table 28, Table 29, Table 30, Table 31, Table 32, Table 33, Table 34. presented in Appendix C. N = 2693 in each estimation.

Illustrative examples

Figure 14 shows a post from the German EUR Migration dataset, which is exemplary of the posts containing the Social Media Representation with the largest coefficient estimate of Europe: Territory (Figure 9).

As we have seen, the spike in Social Media Representations in week 45 of 2021 was mostly caused by the escalating situation at the Belarusian-Polish border. Choosing the single post which represents all the different perspectives on the dramatic and complex events remains arbitrary. Migration is the 'brand core' of the AfD. The party was swept to 10 to 20 percent at the polls by the 'migrant wave' of 2015. Therefore, the post in Figure 14 arguably expresses the most immediate effect of the Belarusian crisis and of the failed common European migration policy as a whole: it drives yet more people into the arms of the far-right.

The post¹⁷¹ is by the Spokesperson of the AfD in the Hesse State Parliament. It links to a comment in the Swiss Neue Züricher Zeitung which partly blames German "welcome culture" for the chaos at the Polish border. The title of the post reads: "Polish border: Thousands of migrants chant 'German! German!'" Paraphrasing the NZZ article, the post then argues that Lukashenko "may be fuelling migration" – but the German Government is worse for having sent the completely wrong signals and raised the migrants' erroneous expectations of Germany. In reference to the famous Merkel quote, it concludes that Germany has not managed to integrate the 1.4 million new arrivals in Germany since 2015. As proof, the post points to the crime figures and the increase in the potential for Islamist threats. The author does not present the full narrative up to the 'Great Replacement', but many of his readers will fill in the gap. The post ends with a call to all who feel attracted to a "Bourgeois Conservative Politics" to become member of the AfD and the link to the membership form on the AfD website.

¹⁷¹ https://www.facebook.com/331622844197016/posts/860761144616514

Figure 14. Illustrative example from Facebook

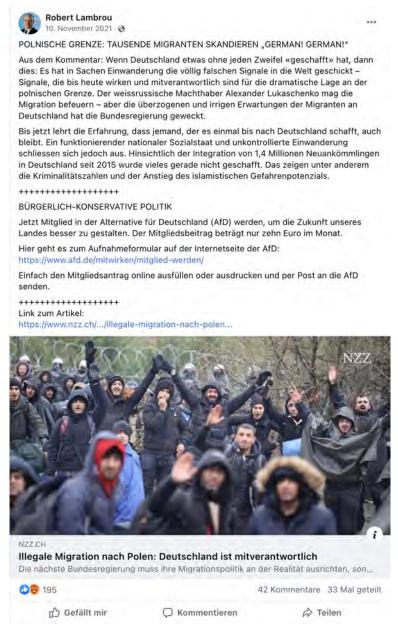


Figure 15 shows a post from the German Not_EUR Migration dataset which is exemplary of the posts containing the Social Media Representation with the smallest coefficient estimate of Europe: Culture (Figure 9). Our exemplary post¹⁷² is on the lighter side of migration. It was posted by a talkshow on the private TV station Pro7 announcing the guest of the upcoming show. On the occasion of the 60th anniversary of the German-Turkish Recruitment Agreement they invited Rapper Eko Fresh, who is the child of a Turkish immigrant family who form largest immigrant group in Germany with almost 3 million today. The rapper often addresses migration and racism in his songs and recently, the lyrics to his song "Der Gastarbeiter" have even become school reading. The quote on the photograph reads: "I do feel that you have to prove yourself twice if you have a migration history."

Figure 15. Illustrative example from Facebook

¹⁷² https://www.facebook.com/105205171835668/posts/150057790683739



Figure 16 shows a post posted by media from the German Not_EUR Migration dataset which is exemplary of the posts containing the Social Media Representation with the largest coefficient estimate of Media: Territory (Figure 13). Numerically, another post on Belarus would be most typical of this set, but that would make us overlook other borders that are being crossed into Europe. Therefore, we chose one that is indicative of the posts on the route across the Mediterranean Sea. The post in Figure 16¹⁷³ is by Deutsche Stimme (German Voice), which claims to contribute to a more balanced formation of opinion by providing news and commentaries from a patriotic point of view, non-conformist with the disinformation and opinion-making by the established mass media. The post links to another medium, Kanarenmarkt, a German-language online magazine for the Canary Islands. And it paraphrases the content of the linked article: While the world is watching Afghanistan as if spellbound, the influx of illegal immigrants to the Canary Islands continues almost unnoticed. In the first eight months of the year (2021), 9,154 economic refugees, mostly from Africa, reached the islands, more than twice as many as in the same period

¹⁷³ https://www.facebook.com/1582752065305561/posts/3000064900240930

last year. This migration has been further promoted since a court allowed them to continue their journey to the Spanish mainland."



Figure 16. Illustrative example from Facebook

Figure 17 shows a post posted by not media from the German EUR Migration dataset which is exemplary of the posts containing the Social Media Representation with the smallest coefficient estimate of Media: Culture (Figure 13). In our manually coded data, this set contains 22 posts. These are a mixed lot, including many AfD posts. Again it would be difficult to say what is typical about them. The church would have been an option, 174 sports 175 another, or panel discussions, such as the one on LGBTIQ+ refugees organised by the Queer European Asylum Network (QUEAN) 176. Given several artistic and media related posts, we decided to chose a post about an artistic intervention in public space by the sea rescuers from the luventa. 177 The ship had been seized in summer 2017. The crew, who saved more than 14,000 lives at sea, in January 2021 after a nearly five year-long investigation by the prosecutors in Sicily, were accused of collusion in human smuggling, 178 facing 20 years in prison. At the time of the post by the luventa crew, 24 other members were facing another trial on Lesbos, Greece, including Sean Binder and Sarah Mardini. 179 To protest the indictment, they organised a mock trial at the Brandenburg Gate in Berlin.

https://www.facebook.com/41509493347/posts/10158618071288348; https://www.facebook.com/103935866334074/posts/4689739354420346

¹⁷⁵ https://www.facebook.com/426898347332370/posts/4447646355257529

¹⁷⁶ https://www.facebook.com/264139910322880/posts/6295128917223919

https://www.facebook.com/132889717426594/posts/879001962815362

Amnesty International, Italy – A Slippery Slope for Human Rights: The Iuventa Case, August 2021, https://www.amnesty.de/sites/default/files/2021-08/Amnesty-Statement-Italien-Asyl-Seenotrettung-Iuventa-Kriminalisierung-Anklage-August-2021.pdf; see also Iuventa Crew, The Case, n.d., https://iuventa-crew.org/en/case

Human Rights Watch, Greece: Life-Saving on Trial, 11.11.2021, https://www.hrw.org/news/2021/11/11/greece-life-saving-trial

In fact, the Greek trial was adjourned on the same day, 180 only to restart again in January 2023. 181 Meanwhile, the luventa had been completely abandoned, plundered and largely demolished while in Italian custody. 182 Therefore, this post exemplifies again the failure of the EU member states to establish common human rights based policies and practices at the EU's external borders, instead criminalising migrants and humanitarian rescuers and showing a deadly un-culture unworthy of European values.

luventa-crew *EN: Together with borderline europe - Menschenrechte ohne Grenzen e.V., we were today at Brandenburg Gate in Berlin where a mock trial took place in solidarity with Sarah, Seán, Nassos and 21 more #FreeHumanitarians who are facing a real trial today in Lesvos, Greece, for rescuing people on the move in need. The trial over there however is even more surreal and absurd than the fake one here. From Berlin to Lesvos, to everywhere: criminalisation of migration and solidarity is the real mockery, where humanity is really on trial! While people on the move are being violently repressed and are dying every minute that passes by at our borders and inside, solidarity is NOT a crime and will never be. We demand that Greece drops the charges now! *DE: Zusammen mit Borderline Europe waren wir heute Brandenburger Tor in Berlin, wo ein Scheinprozess in Solidarität mit Sara Seán, Nassos und 21 weiteren #FreeHumanitarian stattfindet, denen heute zeitgleich ein echter Prozess in Lesbos, Griechenland, gemacht wird, weil sie Menschen in Not Not geholfen un Leben gerettet haben. Der eigentliche Prozess dort ist allerdings noch surrealer und absurder als der Scheinprozess hier. Egal ob Berlin, Lesvos oder sonstwo: Wenn Migration oder Solidarität in politischen Showprozessen vor Gericht stehen, geht es eigentlich um Menschlichkeit. Während Menschen auf der Flucht brutalst gestoppt werden und täglich vor Europas Mauern - aber auch in Europa - sterben, Solidarität ist kein Verbrechen und wird auch nie eins sein. Wir fordern Griechenland auf die Anklage fallen zu lassen. We stand with Free Humanitarians!

Figure 17. Illustrative example from Facebook



Best Practices on Migration

The current contestation over migration started in 2015/16. Two million refugees and migrants, many from Syria, came to the EU, one million of them to Germany. This led to opposing reactions. On the one hand, there was strong solidarity, an active welcoming culture in large parts of the German population. To this day, much of the weight of receiving and integrating those in need is born by volunteers. This attitude was expressed in Chancellor Merkel's famous "We can do it!" (see Schlott 2020).

On the other hand, the rejection of this sentence became a rallying point for the far-right ever since. They frame migration as the "Great Replacement", an alleged conspiracy of elites who want to replace the native population with migrants from Muslim countries. ¹⁸³ The alleged threat to one's own identity and 'civilisation' is used to justify verbal and physical attacks against migrants as 'self-defence'. This kind of perpetrator-victim reversal is then utilised by mainstream conservative politicians who call the right of asylum into question because migrants cause "growing tensions and frustration" in Germany. ¹⁸⁴

Words lead to actions. In a situation which is often life-threatening for the victims of antifeminist, gender and LGBTQ+ and anti-migrant actions clear and decisive actions are needed. The best practices which stand out from our dataset concern media representations of migrants. Yet the first practice we would like to highlight is the **honorary integration work**, the "welcoming culture" of common citizens who in CSOs, churches, unions etc. support migrants on a daily basis. Many of the posts in our dataset concern volunteer work. These include municipalities¹⁸⁵ organising weeks of engagement and integration, providing opportunities for encounters and getting a taste of the different initiatives and activities, as well as churches¹⁸⁶ and CSOs.¹⁸⁷ Most of these empower common citizens to support migrants with learning German and dealing with bureaucracy and other adversities of life. One of them stands out in that it is directed at refugees and migrants themselves and their political and social participation. The bilingual post announces the course "Get active":¹⁸⁸

"The umbrella association of Saxon migrant organizations (Dachverband sächsischer Migrantenorganisationen e.V.) is offering a free further training series on intercultural political education for refugees and migrants in Leipzig, starting September 11, 2021. The eight-module

The topos goes back at least to the 1916 book *The Passing of the Great Race* by US lawyer, zoologist, anthropologist, eugenicist and advocate of scientific racism, Madison Grant. More recently, the narrative was developed further by French philosopher and father of the Nouvelle Droite movement Alain de Benoist and particularly by Renaud Camus in *Le Grand Remplacement* (2011), an anti-Muslim, anti-immigration conspiracy theory. In Germany, Thilo Sarrazin popularised the narrative in his book *Deutschland schafft sich ab* (Germany Abolishes Itself, 2010). S. A deadly ideology: how the 'great replacement theory' went mainstream, The Guardian, 08.06.2022, https://www.theguardian.com/world/2022/jun/08/a-deadly-ideology-how-the-great-replacement-theory-went-mainstream.

E.g. Saxony's Prime Minister Michael Kretschmer: "Höchste Zeit für beherzte Entscheidungen": Kretschmer stellt Asylrecht im Grundgesetz infrage, Tagesspiegel, 29.05.2023, https://www.tagesspiegel.de/politik/zu-grosse-zahl-an-menschen-die-nach-deutschland-kommen-kretschmer-stellt-asylrecht-im-grundgesetz-infrage-9895679.html

E.g. Bremerhaven: https://www.facebook.com/1660217180866839/posts/2975859969302547, Weilheim: https://www.facebook.com/145479767172/posts/10159534059862173

E.g. Archdiocese Munich and Freising, https://www.facebook.com/453038181572436/posts/1790045844538323

E.g. PRO ASYL, terre des hommes, Jugendliche ohne Grenzen etc., https://www.facebook.com/1075001115919947/posts/4406965529390139

¹⁸⁸ https://www.facebook.com/1464334400557679/posts/3087846528206450

advanced training course aims to win and empower people with refugee or migration experience for political participation and social engagement. ...

Building on the previous knowledge from the integration courses, the participants in the project have the opportunity to develop a broad understanding of society in Germany through inputs, excursions and exchange. In addition, they can reflect on their own role and their opportunities to participate in German society without having to deny their origins, the experiences they have brought with them and their knowledge."¹⁸⁹

The willingness of common citizens, both locals and migrants and refugees to work together is a great asset in the strive for a successful integration and should be nurtured and promoted in any possible way.

Our second best practice is Media Service Integration, a project by the Council for Migration (Rat für Migration, RfM¹⁹⁰). The RfM is a nationwide association of around 190 academics from various disciplines who conduct research on migration and integration issues. It was founded in 1998, based on a manifesto by 60 scientists who critically examined the migration and integration policy in the Federal Republic at the time and its consequences, which included rampant racism and related acts of violence, and called for an active and concept-oriented German immigration and integration policy (Bade (ed.) 1994). Its main task is to critically and scientifically accompany political decisions and public debates on migration, integration and asylum. This involves a range of opinions, publications and an annual conference. Most recently, the Council urged the German government to stop the reform of the Common European Asylum System (CEAS).¹⁹¹ And it involves the project Media Service Integration.¹⁹² This is an information platform for journalists on the topics of flight, migration and discrimination, offering facts and figures, background reports and fact checks. The service organises regular information events for journalists with experts, arranges contacts to experts who report in media and it has set up an elearning platform offering free-of-charge online courses to journalists and other interested parties. Since 2018, the project has also been coordinating the European network for knowledge sharing on migration 193 which connects organisations from all over Europe that work at the intersection of media and migration. The project is funded by several foundations, the Federal Ministry of the Interior and the European Commission.

While the RfM's media service improves the migration competence of journalist, the problem remains: "There is a lot of talk about migrants and migration in Germany. Especially by Germans. But in the chorus of the many, those of the migrants are usually missing." This is the gap that our third best practice is filling with high-quality texts and comprehensible reporting. **MiGAZIN**¹⁹⁴ was founded in 2009 by Ekrem Şenol who was born in 1975 in Gummersbach. In 2012, the magazine won the Grimme Online Award for concept and editing. The jury found that

"The editorial team, consisting mainly of migrants, creates new insights into an emotional topic with their points of view, without themselves succumbing to the temptation to slip into extremes. One focus of MiGAZIN is the positive portrayal of migrants in positions of social responsibility (police officers, lawyers) who serve as role models. It helps to break down clichés. These

The umbrella association of Saxon migrant organizations (DSD) was founded in 2017 and has 63 member associations, https://dsm-sachsen.de/

https://rat-fuer-migration.de/

Better no reform than this: Why the Federal Government should stop the CEAS reform, Statement of the Council for Migration, 07.06.2023, https://rat-fuer-migration.de/wp-content/uploads/2023/06/RfM-Stellungnahme.-Geplante-Reform-GEAS-en-GB.pdf

https://mediendienst-integration.de/

https://mediendienst-integration.de/artikel/european-network-for-knowledge-sharing-on-migration.html

https://www.migazin.de/

migrants are representative of many others and of their quiet and successful integration in Germany."¹⁹⁵

During the first years, national integration issues dominated the magazine. Now it reports more often on events from abroad that can trigger migration movements directly or indirectly, such as climate change, poverty, wars and human rights violations. Since 2010, it has been financed by advertising revenue and donations.

Also in 2010, the editors launched MiGMACHEN¹⁹⁶ to give interested people the chance to contribute to the magazine and help shape the discourse on integration and migration. Since then, more than 500 professional journalists and beginners became involved with MiGAZIN, gaining experience and sharpening their perspective. Today, many of them hold responsible positions, sit in the Bundestag and in state parliaments, are successful authors of books or work in large media companies. The post in our dataset that alerted us to MiGAZIN¹⁹⁷ was a report on a new study showing that migrant-perceived people are hardly seen on TV in election reporting. And when they do get a chance to speak, it is often in the context of migration and flight.

There are certainly positive examples of media production. To shine a spotlight on them is the goal of CIVIS.¹⁹⁸ The media prize for migration, integration, cultural diversity and social cohesion in Europe did not show up in our dataset, yet still deserves mention. It "honours programme achievements in radio, television and the Internet which promote peaceful coexistence in the European immigration society." In addition, the CIVIS Media Foundation organises annual media conferences and supports the networking of media professionals who deal with the diverse issues of the European immigration society.

Conclusions

The present paper analyses the Migration debate on German Facebook and Twitter in the period from September to including November 2021. This debate was dominated by the escalation of the refugee crisis at the Belarusian-Polish border and by the national elections in Germany on 26 September 2021, in which all parties avoided the subject, while the AfD used every single bit of migration-related news to fuel fear and anger and expand its membership.

We have discussed the connection of Migration/Islam and Gender already in the Gender Report. The intersection also becomes evident in our Migration data. In the set of 400 manually coded posts on topic for Migration, a search for keywords indicative of Gender shows that about half the posts in that set refer to migrants in a supportive, solidary way (an announcement by ifa galleries of the exhibition "Mis(s)placed Women?" in the Culture Centre Belgrade, ¹⁹⁹ an announcement by an institute for feminism and gender democracy of a panel discussion on how the EU Dublin III-return system risks jeopardizing the transfer safeguards for LGBTIQ+ refugees and asylum seekers within the EU, ²⁰⁰ and party programmes that discuss gender and migration among other issues, e.g. by the Greens²⁰¹ and the Liberals²⁰²) while the other half of the posts is

Grimme Online Award 2012: MiGAZIN, https://www.grimme-online-award.de/archiv/2012/preistraeger/p/d/migazin/

¹⁹⁶ https://www.migazin.de/migmachen/

¹⁹⁷ https://www.facebook.com/264691680187/posts/10165720416335188

https://www.civismedia.eu/

https://www.facebook.com/150436811705115/posts/4338034316278656

²⁰⁰ https://www.facebook.com/264139910322880/posts/6295128917223919

²⁰¹ https://www.facebook.com/179895928691877/posts/5195855717095848

²⁰² https://www.facebook.com/143504445664134/posts/5296987213649139

from AfD, often criticising the new government's plans as more migration and more "gender insanity" or "gender theatre". 204

But we also find a number of expressions of the Great Replacement narrative, which at its core talks about a strategy of 'weaponising' sexual reproduction. The speaker on the topics of internal security, migration and asylum of the AfD in the Bundestag, in a lengthy post²⁰⁵ rants about how Germany "has been cleared by the naturalisation of an illegally imported army of foreigners numbering in the millions", who have "strikingly different demographic reproduction rates" from those of 'native' Germans. The supposed goal is "the cold disenfranchisement of the German voter through right-breaking restructuring of voter demographics." Another AfD MP calls the EU Pact for Migration and Asylum "nothing other than the resettlement of culturally alien persons in the still predominantly homogeneous Europe of peoples and nations." The new German government "opens the floodgates and pursues the abolition of Germany." Another post quotes the UN Genocide Convention that defines genocide as acts "committed with the intent to destroy, in whole or in part, a national, ethnic, racial or religious group as such", implies an ongoing 'Genocide of Germans' in that sense and hopes that those aiding and abetting it will "one day end up in court". And not the least: "Do you want total immigration?" 209

The spikes in Social Media Representations in week 45 of 2021 (Figures 2 and 3) which are most pronounced for the variables Territory and Institutions, but also visible for People, Law and Values, can largely be explained by the escalation of the situation at the border between Belarus and Poland and the replies of the institutions In the West.

When looking at the effects of a Migration post being about Europe or not, we find statistically significant differences for all the variables. Law, Territory and Institutions occur more often in Europe posts. As we have seen, our research period was determined by the events at the Belarusian border, with thousands of refugees crossing into the EU, the EU institutions being worried and those in Poland taking action, including border guards and military, which in turn raises questions about the legality of certain measures as well as calls for stricter laws.

People, Values and Culture occur more often in Non-Europe posts. In People we would expect the rare cases where migrants speak in their own voice about their experience, journeys or profession. While in Gender, women and queer people are part of the debate, we would expect this barely to be the case for migrants. Typically, the migrant is the other who is being talked about not with. And indeed, very few posts coded positive for "Interactions & Dialogue", a variable that was later dropped. Yet, when we look at the 131 posts in the not-Europe dataset which were manually coded as not-Europe, we find 26 in the category People, i.e. an astonishing 20 percent. Here we find stories of successful integration of migrants who are now professionals or politicians.

Values are often brought up by local and national politicians and party sections, CSOs and common citizens. Democratic voices in the Migration debate regularly refer to fundamental values like the right to asylum, participation, feminism and gender neutrality, integration of migrants and democracy. An example is a post by Pax Christi Germany, the international Catholic peace movement, who called on the German government to release the refugees at the Polish-Belarusian border from their plight and take them to Germany. The Chairwoman of the organisation pointed

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<sup>203</sup> https://www.facebook.com/100044385937879/posts/403387851150743
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²⁰⁴ https://www.facebook.com/336677843601760/posts/921921285077410

²⁰⁵ https://www.facebook.com/265344823886953/posts/1299423043812454

²⁰⁶ https://www.facebook.com/1586388241380355/posts/4961649897187489

²⁰⁷ https://www.facebook.com/1162229030454420/posts/4951508084859810

²⁰⁸ https://www.facebook.com/661864174144910/posts/1669004490097535

²⁰⁹ https://www.facebook.com/221093898469074/posts/970968116814978

out that the Interior Minister Seehofer (CSU) instead of a humanitarian solution has advocated the construction of a Polish border fence. "It is bitter that this is happening just as we Germans are commemorating the fall of the Berlin Wall." Germany can put an end to the plight of the refugees who are trapped in a no-man's land between Poland and Belarus, of whom at least five have died and children are freezing and starving. "This is also a way for Germany to make it clear that we will not be forced to betray our Christian values and human rights," Pax Christi stressed. "The humanitarian, rule of law and moral crisis at the Polish-Belarusian border demonstrates once again the failure of EU cooperation on migration."

In the Gender Report, we have noted that this is in striking contrast to far-right posts, e.g. from the AfD, where we find no explicitly expressed values, not even general ones like 'fairness' or 'justice'. The right are very clear and aggressive about what they do not like, and who to blame for it: the municipality,²¹¹ the social security system which creates a pull effect,²¹² the Red-Red-Green Senate in Berlin²¹³ who does not deport even those who do not get asylum²¹⁴ etc. Sometimes "our values and way of living" are mobilised generically, as just another element in the Us-vs-Them narrative,²¹⁵ in the "clash of civilisations", as another AfD MP writes, between us and a "parallel society of Muslims", where "Islam as an exclusionary and imperialistic religion of war cannot be reconciled with the basic principles of the European value system."²¹⁶

Here we also find the juxtaposition of values- and interests-driven policies actually expressed: by Prof. Werner Patzelt on Hallo-meinung.de.²¹⁷ Referring to Lukashenko, he writes: "In any case, our do-gooders now also realise that we are being criminally blackmailed. They also feel that this blackmail hits our weakest point. That is where we want to be guided exclusively by *values* – and not at any price by *interests*. But what happens when *value*-led politics contradicts important *interests* in the long term? And what if such a contradiction is not about an individual who can certainly decide for himself whether he wants to put his own *interests* aside? But when it is about governing many people who see it as an important part of their freedom to define their own *interests* and then treat them as a priority? And what if they then also associate democracy with the idea that a government should take the majority *interests* of its people seriously?"

Culture is triggered by mention of the church, marriage regulations, the power of language, media critique, an exhibition, and again, it is quite expectable that Culture indicators appear more often in local or national posts rather than in those of a European scope.

In WP2, we had found that professional media are important voices in the chorus on social media in Germany. When looking at the effects of a Migration post being published by a professional media actor or not, we again find statistically significant differences in the proportions of all our Social Media Representations. All occur more often in Not Media posts, except for Territory which occurs in more than 70 percent of Media posts. As we have seen, the crossing of the border between Belarus and Poland was the dominant issue in Germany during our research period. This was reported by media, together with the reactions of the national and European Institutions.

²¹⁰ https://www.facebook.com/103935866334074/posts/4689739354420346

²¹¹ https://www.facebook.com/114038463301316/posts/652028072835683

²¹² https://www.facebook.com/953370261352295/posts/4664225460266738

https://www.bz-berlin.de/meinung/kolumne/kolumne-mein-aerger/der-groesste-magnet-fuer-migranten-ist-das-rot-rot-gruene-berlin

²¹⁴ https://www.facebook.com/185133101584946/posts/4335498063215075

^{215 &}lt;u>https://www.facebook.com/watch/?v=986343638885091</u>

²¹⁶ https://www.facebook.com/1695216187437098/posts/2832036297088409

²¹⁷ https://www.facebook.com/watch/?v=1496783054036014

That Law and Values appear significantly less in media posts, might reflect the failure of the EU, or rather its member states, to establish common policies and practices at the EU's external borders and in relation to refugees and other beneficiaries of protection. Since the situation at the Belarusian border was determined by lawlessness and panic-driven, militaristic, ad hoc measure taken by the Polish government, media had little to report in this respect. Whereas, political and civil society actors mobilise fundamental rights and freedoms, primarily the right of asylum, to call for urgent humanitarian and other help.

When looking at the sentiments of the posts in our sample, we find that 85% of them are written in a neutral tone. About ten percent of the others are negative and less than five percent are positive. This is the opposite of our findings in the Gender Report. Of those who express a strong attitude at all, the majority in case of Migration express a Negative Sentiment, yet that difference is not statistically significant for either Europe or Media.

To end on a forward-looking note, we would like to refer to another discovery in our data. The post²¹⁸ is by Mediendienst Integration, a project by the Council for Migration (RfM), "a nationwide association of around 190 academics from various disciplines who conduct research on migration and integration issues. The Council sees its central task in critically accompanying political decisions and public debates on migration, integration and asylum."²¹⁹ Media Service Integration²²⁰ describes itself as is "a service platform for journalists. On our website we offer facts, figures and background reports on migration, integration and asylum in Germany. We work closely with researchers and provide experts for reporting." This could be one of our best-practice examples on how academics can contribute to the public sphere their expertise on Migration, or on Gender or any other subject that requires expert knowledge.

²¹⁸ https://www.facebook.com/206938726107574/posts/2433389043462520

^{219 &}lt;u>https://rat-fuer-migration.de/ueber-uns/</u>

https://mediendienst-integration.de/

WP4 DE: Representation of Gender

Introduction

Gender and migration are the topics of passionate, heated debates everywhere in Europe. The controversies play out in particular on social media, the arena where professional communicators – journalists, politicians, lobbyists, CSOs, creators etc. – and common citizens can speak and compete for attention.

In Work Package 4, directed by the Catalan EUMEPLAT team, we looked at posts which have been published on German Facebook and Twitter in the period from September to including November 2021. Based on a jointly developed dictionary of words indicative of the topic Gender and of Europe, the Catalan team queried the APIs of the two platforms, generating two datasets: Germany–Gender–Europe which contains 867 posts of which hand-coding found 759 to be off topic and only 108 on topic (12%). In order to reach the required number of 200 on-topic posts, the missing 92 posts were coded in the second dataset: Germany–Gender–Not-Europe, giving us a total of 475 posts of which 183 were off topic and, as required, 292 on topic (61%).

The task of the German team was to manually code whether or not a post mentions one of six sub-topics considered important in the case of Gender – Law, People, Culture, Values, Identity and New Social Movements – and also whether the sentiment of a post is predominantly positive, neutral or negative. After Europe-related posts were found in the Not-Europe datasets, we were instructed in Gender–Not-Europe to additionally code for the presence of a European dimension: "The post is about Europe when it makes a reference to either the institutions of the EU, or any kind of interaction between at least two European countries" which refers to the 47 members of the Council of Europe at the end of 2021, i.e. before Russia was expelled in March 2022. We found that out of 292 Not-Europe posts, 4 are, in fact, about Europe (1.37%). Double-coding proved the necessary inter-personal robustness of the definitions of the variables (the Intercoder Reliability Test resulted in Krippendorff's Alphas between 0.797 and 0.983).

The 400 hand-coded Gender posts, 108 in the Europe and 292 non-Europe datasets, were then used by the Work Package leaders at Universitat Oberta de Catalunya to train a neural network which then coded an additional 1,393 posts, bringing the total to 1.793 Gender posts. This mixed, manually and Al-coded corpus of posts forms the basis for the tables, figures and statistical analyses of the present report.

Our analysis of the Social Media Representations of Gender focusses on two dimensions: the effects of a post being about Europe or not and the effects of the publisher of a post being a professional media actor versus a political actor, civil society organisation, common citizen or other.

Background

We have to keep in mind, that social media use itself is gendered. As Messias et al. (2017) have shown, users identified as white and male tend to attain higher positions in Twitter.

Drüeke & Zobl (2016) studied the German-language hashtag #aufschrei of 2013 – similar to but four years before #MeToo, which started in 2017 in the wake of the Weinstein scandal. They use a layered theory of the public sphere and quantitative and qualitative content analysis of #aufschrei tweets and of feminist blogs. They argue that Twitter adopts the function of a simple public, where values and norms are negotiated at an everyday level, which is increasingly

infiltrated by anti-feminist and sexist messages. Feminist blogs create an intermediate public, in that they generalize experiences and are oriented towards networking.

There has been progress in women's rights and gender equality in Europe, to the point where researchers find these the fundamental values to create a European polity. Galpin & Trenz (2019) argue that the 2019 European Parliament (EP) election was about the EU's fundamental values, with respect to multiculturalism and to gender equality and LGBTQ rights and therefore can be considered a 'first-order polity' election. Earlier EP elections had been described as 'second-order national elections' in which campaigns are fought by national parties on national issues. The debate in 2019 was driven in large parts by traditional news and social media platforms, which, the authors conclude, failed in fulfilling the function of holding MEPs and European party groupings adequately to account.

At the same time, the progress in gender issues has become the target of a backlash by "anti-gender" activists and right-wing populists across EU member states, particularly on social media. To what extent are the debates about gender equality on Twitter similar in three European countries, Germany, Italy, and Poland? Wallaschek et al. (2022) examined this question by collecting Twitter data around the 2021 International Women's Day and found that the debate remains nationally segmented. There is limited political engagement of citizens on Twitter across Europe. The authors also discuss the strengths and weaknesses of a cross-country social media comparison.

Berg (2019) has reconstructed the far-right narrative of the "gender ideology" that supposedly threatens the 'traditional family' and leads to the abolition of 'one's own people'. She finds that issues of gender and women's rights came to be linked to the topics of migration and Islam, especially after the sexual assaults on New Year's Eve 2015/16 in Cologne, and that for pushing these linked narratives platforms such as Twitter, Facebook and Youtube have been used. "In leading this push, the AfD has demonstrated a sophisticated awareness of how to combine online tools with its offline political practices in a way that is publicly effective." Berg calls for a deconstruction of the acculturation of racist images linked to gender, "dismantling both the image of the 'oppressed woman wearing headscarves' as well as the 'migrant perpetrator of violence'." The intersection of gender and migration is also the issue of Simpson (2020), who looks at different Islamophobic narratives employed by Identitarian East and West Germans, showing how portrayals of Muslim masculinity and femininity are used to create a sense of imminent threat to the public and private sphere and to German gender identity. She finds that mainstreaming Islamophobias "empowers local and regional politics to engage in 'moralizing borders', exacerbating anxieties about the nation, the region, and the body."

Legislation

A legally recognized union of same-sex couples was first introduced in Germany by the Civil Partnership Act (Lebenspartnerschaftsgesetz²²¹), in force since 01.08.2001. At first, civil partners had the same obligations as married couples, but hardly any rights. This changed over the years, mainly due to several decisions by the Federal Constitutional Court. The registered civil partnership became equal to marriage in social law, in tax law, in the law on foreigners and citizenship and with regard to social insurance, in all areas of law, with the exception of the law of parentage and joint adoption.²²² These last difference were removed by the "Law on the Introduction of the Right to Marriage for Persons of the Same Sex" (Marriage Opening Act,

^{221 &}lt;a href="https://www.gesetze-im-internet.de/lpartg/BJNR026610001.html">https://www.gesetze-im-internet.de/lpartg/BJNR026610001.html

Source: LSVD, Öffnung der Ehe für gleichgeschlechtliche Paare: Fragen und Antworten, https://www.lsvd.de/de/ct/1340-Oeffnung-der-Ehe-fuer-gleichgeschlechtliche-Paare-Fragen-und-Antworten#eheoeffnungsgesetz

Eheöffnungsgesetz²²³) came into force on 01.10.2017. The law is based on a draft bill of the Bundesrat of 11.11.2015, which the Bundestag passed unchanged almost two years later on 30 June 2017. There are no referenda at the federal level in Germany.

The Act on Civil Law Protection against Acts of Violence and Stalking (Gewaltschutzgesetz²²⁴) was enacted in 2001 and last revised in 2021. The Council of Europe Convention on preventing and combating violence against women and domestic violence, or Istanbul Convention for short,²²⁵ came into force in 2014, and in Germany in 2018. As part of its obligations, in November 2022 the independent reporting unit on gender-based violence started its work at the German Institute for Human Rights (DIMR). The reporting body is to contribute to creating a broad and reliable data basis in order to make developments and trends in relation to gender-based violence in Germany visible. In this way, gender-specific violence is to be prevented and combated in a more targeted manner. It is to formulate recommendations to politics and administration in order to effectively design measures and programmes against gender-based violence and to improve the human rights situation of those affected. In addition, the reporting body is to inform the public and raise awareness.²²⁶

The Scientific Service of the German Bundestag, in 2007 compiled the most important legal measures on gender equality from 1977 to 2007, including the Parental Leave Act (2001), the General Equal Treatment Act (2006) and the Parental Benefits Act (2007). With the UN 2030 Agenda, a comprehensive goal for gender equality was agreed for the first time by the international community in 2015 as one of 17 global Sustainable Development Goals (SDGs) and as a crosscutting issue. The Law on Equality between Women and Men in the Federal Administration and in the Federal Courts (Bundesgleichstellungsgesetz²²⁹) was passed in April 2015 and last revised in August 2021.

The Transsexual Act (Transsexuellengesetz, TSG, 1980²³⁰) introduced the right to change one's first name or also one's civil status from male to female or vice versa. Only these two gender options were provided for. The change of gender entry originally required for the person concerned to be sterilised and not married. It was not until 2011 and 2008 that the Federal Constitutional Court overturned these requirements. The procedure now has three prerequisites. Materially, it requires a sense of belonging to the other sex, whereby the TSG still assumes a purely dichotomous gender order. Secondly, this sense of belonging must have existed for at least three years and thirdly, it must be permanent. Formally, the procedure requires that these three conditions are confirmed by two independent psychiatric or sexual medical reports. Only then, a court may grant an application for change of civil status. In 2017, the Federal Constitutional Court, following the complaint of an inter*person, had ruled that in addition to leaving the gender entry open and the entries "male" and "female", there must also be another positive gender entry in Germany as long as the state obliges its citizens to register their gender. As a result, the legislator created the registration option "diverse" in an amendment of the Civil Status Act

https://www.bgbl.de/xaver/bgbl/start.xav#__bgbl__%2F%2F*%5B%40attr_id%3D%27bgbl117s2787.pdf %27%5D__1679499097505

https://www.gesetze-im-internet.de/gewschg/BJNR351310001.html

https://www.coe.int/en/web/istanbul-convention

Deutschland setzt Verpflichtungen aus der Istanbul-Konvention um, https://www.bmfsfj.de/bmfsfj/aktuelles/alle-meldungen/deutschland-setzt-verpflichtungen-aus-der-istanbul-konvention-um-205292

Deutscher Bundestag, Wissenschaftlicher Dienst, Gleichstellung von Männern und Frauen in Deutschland, 2007, https://www.bundestag.de/resource/blob/412138/3770ffe54a7609ea3873ab824e571664/WD-9-085-07-pdf-data.pdf

https://www.bundesregierung.de/breg-de/themen/nachhaltigkeitspolitik/rechtliche-gleichstellung-841120

http://www.gesetze-im-internet.de/bgleig_2015/BJNR064300015.html

https://www.gesetze-im-internet.de/tsg/BJNR016540980.html

(Personenstandsgesetz, PStG²³¹) which came into force in December 2018. The procedure under the PStG is not conducted before a court but by the registry office. Applicants only have to submit a medical certificate issued by any treating doctor stating that they have a "variant of gender development".

Replacing the largely defunct TSG with a Self-Determination Act (Selbstbestimmungsgesetz) was a priority project of the current German government (in office since December 2021). A draft law²³² had been issued by the then-opposition Greens under the previous government in 2020. The current Federal Ministries for Family Affairs and for Justice so far have only published their Cornerstones of the Self-Determination Act²³³ in June 2022 and an FAQ²³⁴ in December 2022. Passage of the Act then was expected at the end of 2022 and is currently announced for summer 2023. The decision over gender reassignment surgery is and, according to the Cornerstone paper, will remain to be taken by those affected and their doctors.

Implementing four EU Equal Treatment Directives, the General Equal Treatment Act (Allgemeine Gleichbehandlungsgesetz, AGG²³⁵) came into force in August 2006 and was last amended in 2022. It aims to prevent or eliminate discrimination on grounds of racial or ethnic origin, gender, religion or belief, disability, age or sexual identity. Protection against discrimination in employment and occupation is the main focus of the AGG. In addition to a prohibition of discrimination under labour law and its exceptions, measures and obligations of the employer to protect against discrimination as well as rights of employees (right to complain, right to refuse performance) and their claims in the event of violations (compensation, damages) are regulated. The AGG also contains provisions on protection against discrimination in civil law transactions. In addition to a prohibition of discrimination under civil law on grounds of race or ethnic origin, a gender-specific prohibition of discrimination is also enshrined. However, in accordance with European law, this only applies to mass transactions and insurance under private law. The AGG also established the Federal Anti-Discrimination Agency as an independent contact point for people who are affected by discrimination.²³⁶ In addition, the Act to Promote Pay Transparency between Women and Men (Entgelttransparenzgesetz, EntgTranspG, 2017, last amended in 2021²³⁷) aims to address the persistent gender pay gap.

National context

Our research period pivots around the German national elections on 26 September 2021. Before, the public sphere was full of campaigning and afterwards it was dominated by the formation of the tripartite coalition (Social Democrats, Greens and Liberals) and negotiating the coalition treaty. Gender was an issue. All the democratic parties had formulated a positive agenda for advancing gender rights, strengthening measures against gender-based violence and for equal pay and the

^{§ 45}b, https://www.gesetze-im-internet.de/pstg/BJNR012210007.html

Entwurf eines Gesetzes zur Aufhebung des Transsexuellengesetzes und Einführung des Selbstbestimmungsgesetzes (SelbstBestG), BT Drucksache 19/19755, 10.06.2020, https://dserver.bundestag.de/btd/19/197/1919755.pdf

Eckpunkte des Bundesministeriums für Familie, Senioren, Frauen und Jugend und des Bundesministeriums der Justiz zum Selbstbestimmungsgesetz, 30.062022, https://www.bmfsfj.de/bmfsfj/aktuelles/alle-meldungen/eckpunkte-fuer-das-selbstbestimmungsgesetz-vorgestellt-199378

²³⁴ BMFSFJ, Fragen und Antworten zum Selbstbestimmungsgesetz, 29.12.2022, https://www.bmfsfj.de/bmfsfj/themen/gleichstellung/gleichgeschlechtliche-lebensweisen-geschlechtsidentitaet/fragenund-antworten-zum-selbstbestimmungsgesetz-199332

Allgemeines Gleichbehandlungsgesetz (AGG), https://www.gesetze-im-internet.de/agg/BJNR189710006.html#BJNR189710006BJNG000100000

²³⁶ Antidiskriminierungsstelle des Bundes, https://www.antidiskriminierungsstelle.de/DE/startseite/startseite-node.html

²³⁷ Entgelttransparenzgesetz, https://www.gesetze-im-internet.de/entgtranspa/BJNR215210017.html

long-overdue replacement of the 1980 Transsexual Act by a Self-Determination Act. LGBTQ organisations checked the party programmes to give election advice to their communities. Queer Bild²³⁸ showed up quite frequently in the coding process, which is a section on the Bild.de portal that was set up in 2017. The Springer press has not been known to be queer-friendly. Therefore, even though Queer Bild is as boulevardesque as Springer's main daily, Bild, it still seems counterintuitive. It shows how mainstream the gender diversity discourse has become that Springer, of all, launched a product for this lucrative market.²³⁹

For the radical right, gender and migration are the two core issues of their narratives. In WP2, we have found already that the radical right party AfD is particularly active on social media in Germany. Here we find this confirmed. Without looking for political leaning at all, the issues of gender and migration proved to be strong predictors of AfD and like-minded actors in the debate on Facebook and Twitter.

Instructions said that grammatical gender should be considered off-topic. In the German-speaking countries the debate about 'gendering', i.e. the use of gender-respecting nouns and pronouns, is at the polemical centre of the struggle for gender equality. For most, it is a way to signal sensitivity and empathy for and in language, to avoid discrimination and be more inclusive. For the right, it is an example of the "mainstream" culture imposing patronising language rules, of "political correctness", "cancel culture", "green-leftist wokeism". Framing something as "leftist", in rightist circles is damning enough, no further evidence needed (e.g. calling for people from the age of 14 to be able to decide their gender is "leftist"²⁴⁰).

Gender "ideology" is the central theme of the radical right in Germany. They assume that gender is "natural", if not "god-given" (AfD: "Gender is a biological fact"²⁴¹) rather than socially constructed. They want to protect children from the encroaching influence of this "ideology" ("No gender experiments in day-care centres and schools"²⁴²).

Identity politics is discussed as an issue between the generations. Die Zeit, in an interview with three Elder Statesmen from SPD, Linke and Greens: "A similar debate is taking place in all three left-wing German parties. Everywhere there is a group, mostly younger politicians, who want to emphasise identity-political demands more strongly and one, more established, who opposes this. And a third group that says: You're overdoing it with the argument."²⁴³

Traditional family values and a traditional role of women is what unites nationalists, religious fundamentalists of any kind, anti-multi-culturalists, white suprematists in Germany, Russia and in Islamic nations.²⁴⁴

Quantitative analysis

Descriptive overview

We can see in Figure 1 that People is the most frequently occurring Social Media Representation with over 30% of the observations pertaining to it. Moreover, Identity is the least occurring Social Media Representation. Values and Culture are more frequent, but far from the extent of People.

²³⁸ https://www.bild.de/lgbt/startseite/

For a critique, see "Queer" BILD und der vermeintlich tolerante Heterosexismus, Stopbildsexism, 28.03.2017, https://www.stopbildsexism.com/2017/03/28/queer-bild-und-der-vermeintlich-tolerante-heterosexismus/

²⁴⁰ <u>https://twitter.com/BILD/status/1450532628399075334</u>

²⁴¹ https://www.facebook.com/345598788891061/posts/4230799233704311

²⁴² https://www.facebook.com/706758859393635/posts/4365338760202275

²⁴³ https://twitter.com/zeitonline/status/1438919444819025922

²⁴⁴ See ARTE Re: Der Feind ist schwul, 01.02.23, https://www.arte.tv/de/videos/107194-100-A/re-der-feind-ist-schwul/

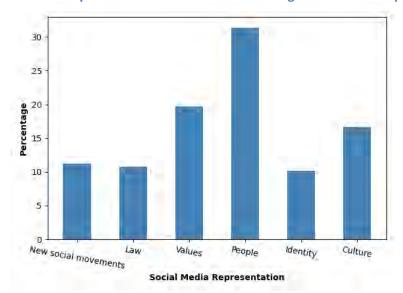


Figure 1. Social Media Representations – Distribution among Social Media Representations

Notes: Created with data from Table 3 presented in Appendix D. N = 5635.

In Figure 2 we see a spike in Social Media Representations in week 47, which is 22.-28. November 2021. People and Values are the most frequently occurring Social Media Representations during this week, as well as during any other week of the analysed period. The striking peak in week 47 in all dimensions but Identity might at least partially be explained by two events.

25 November was the International Day for the Elimination of Violence against Women, which was not limited to one day. UN Secretary-General Ban Ki-Moon launched the global campaign "The 16 Days of Activism Against Gender Violence" from 25 November to 10 December. The events and actions highlighted the Istanbul Convention, they involved public administrations, unions, all branches of the feminist movement, like the Soroptimist International and they featured "Orange your World", a campaign to wear orange clothing and to light public buildings in that colour. City-wide orange illumination was seen in Cologne Hunich, Heal men are respectful". To this end, the Department for Equal Opportunity in the Municipal Professional Fire Department gained male allies, eight of whom showed face with the message: "what makes a 'real man' has nothing to do with violence or dominance, but with respect." Also several studies were timed to be published on the occasion. One, by the Wismar University of Applied Sciences and the University of Rostock, concluded that the portrayal of gender-based violence in fictional entertainment but also in news on German television is a problem because it sensationalises, instrumentalises or trivialises it, thus reinforcing stereotypes in our society. On 23. November,

https://www.un.org/en/observances/ending-violence-against-women-day

²⁴⁶ SI Germany, 26.11.2021, https://www.facebook.com/1762024983827241/posts/5111962568833449

²⁴⁷ KHM says NO to violence against women!, 22.11.2021, https://www.facebook.com/100063767703263/posts/282084457260476

²⁴⁸ Gruppe ArbeiterInnenmacht, 29.11.2021, https://www.facebook.com/159758154114746/posts/4646925815397935

²⁴⁹ BZ, 25.11.2021, https://www.facebook.com/57187632436/posts/10161336178247437

²⁵⁰ Salzgitter Infos, 26.11.2021, https://www.facebook.com/312238148824731/posts/4561303300584840

²⁵¹ Zeit Online, TV: Eine tote Frau – noch effektiver: eine tote vergewaltigte Frau – bewegt viele Menschen zum Einschalten, 24.11.2021, https://twitter.com/zeitonline/status/1463585126798012424

then-Minister of Justice and Consumer Protection Christine Lambrecht presented the appalling figures from the Violence in Partnerships Survey 2020: "Every hour, an average of 13 women in Germany become victims of violence in partnerships. Every three days, a woman dies as a result of violence committed by her partner or ex-partner." 252

On 24 November 2021, the incoming government of social democrats, greens and liberals published its Coalition Treaty, ²⁵³ before the new German government under Olaf Scholz (SPD) was sworn in on 8 December. The Treaty was intensely studied and critically appraised from all sides. Gender activists such as CSD Berlin, ²⁵⁴ Equal Pay Day²⁵⁵ and Partei Mut²⁵⁶ were cautiously optimistic. Travestie für Deutschland wrote: "An entire generation grew up under the identity politics of a conservative prohibitionist party – and is rubbing its eyes after 16 years: What do you mean, Germany can also be queer?"²⁵⁷ At the other end of the spectrum, the AfD found all its fears confirmed. Particularly zeroing in on the concept of a "feminist foreign policy", it finds the Treaty "a purely ideological pamphlet", the reading of which "makes one fearful and anxious" and which "will massively accelerate Germany's decline". ²⁵⁸ In very much the same line of argument, the Federal Chairman of the German police union issued a highly sarcastic and astonishingly aggressive comment, ridiculing the government's plans on gender issues, migration and on prohibiting police surveillance. ²⁵⁹ The business world expected "more bureaucracy"

These two events might explain at least some of the peak in the social media debate on Gender in Germany in week 47. The plans of the incoming government involve Law projects which are based on Values. The UN Days Against Gender Violence are motivated by people's own experience and by a general experience based on gender, which is the definition of the variable People, and they are closely connected to the different branches of of the feminist Social Movement. Symbolic actions such as lighting a city orange, are cultural expressions and productions, which might cause the spike in Culture. Identity is the only of the six dimensions which does not peak in week 47. Maybe, this indicates that the gender debate is beyond the need for definitions (of man, woman, non-binary etc.) and has moved on to practically strengthening rights and ensuring their enforcement.

Figure 2. Social Media Representations – Relative importance over time

²⁵² Christine Lambrecht, 23.11.2021, https://www.facebook.com/176599482452270/posts/4333445206767656

²⁵³ Grüne Wunstorf, 24.11.2021, https://www.facebook.com/578746385902624/posts/1298750897235499

²⁵⁴ CSD Berlin, 25.11.2021, https://www.facebook.com/336189604596/posts/10159424801874597

²⁵⁵ Equal Pay Day, 26.11.2021, https://www.facebook.com/205054432839975/posts/4919109568101081

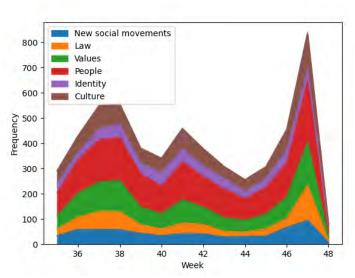
²⁵⁶ Partei Mut, 27.11.2021, https://www.facebook.com/209284042886132/posts/1265339957280530

²⁵⁷ Travestie für Deutschland, 25.11.2021, https://www.facebook.com/1088218057982118/posts/2376846592452585

²⁵⁸ Bernhard Zimniok, AfD MEP, 24.11.2021, https://www.facebook.com/100232087997794/posts/630662658288065

DPolG Bundespolizeigewerkschaft, 25.11.2021, https://www.facebook.com/173415666027913/posts/4550256851677084

²⁶⁰ Handelsblatt, 26.11.2021, https://www.facebook.com/104709558232/posts/10158653265708233



Notes: Created with data from Table 4 presented in Appendix D. N = 5635.

Figure 3 shows that there is a spike in all Social Media Representations in week 47 of 2021 except identity. The trends of each Social Media Representation are fairly stable over time when considering the other weeks.

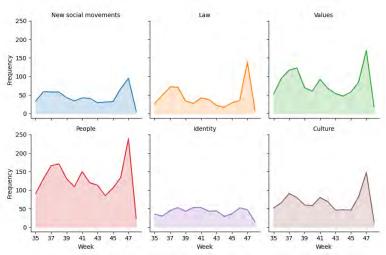
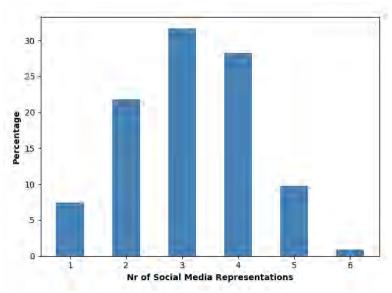


Figure 3. Social Media Representations – Evolution over time

Notes: Created with data from Table 4 presented in Appendix D. N = 5635.

From Figure 4 we can see that at least one Social Media Representation occurs in all posts. Posts containing three Representations are the most common, making up more than 30% of the posts.

Figure 4. Number of Social Media Representations – Distribution among all posts



Notes: Created with data from Table 5 presented in Appendix D. N = 1793.

Figure 5 shows the sentiments of the posts. It should be noted that the sentiment describes the sentiment of the post, not the sentiment towards the topic Gender. More than 80% of the posts have a neutral sentiment. About 15% of them contain negative or positive sentiments. Among those, there are more positive sentiments than negative, which is the opposite from the findings in our Migration dataset.

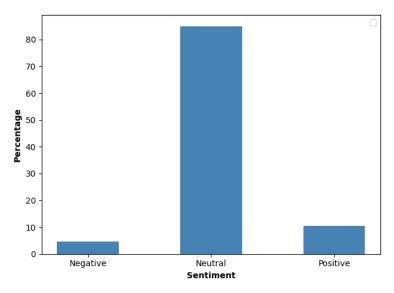


Figure 5. Sentiments – Distribution among all posts

Notes: Created with data from Table 6 presented in Appendix D. N = 1793.

Comparisons between Europe and Not Europe

Posts not about Europe (1,427) are much more frequent than posts about Europe (366) (see Tables 9 and 10 that show total number of posts at the bottom). This is the reverse of the findings in the DE Report Migration.

The Not EUR set contains posts about metoo in the Icelandic national football team, a new anti-abortion law in Texas, the state of women's rights in Afghanistan, Switzerland's Yes to

marriage for all etc., but the majority of the posts are about Germany, at the national, regional or local level. For this dataset, we were asked to manually code posts which are, in fact, about Europe. These turned out to be 4 of 292 posts (1.37%).

In the EUR set, Europe and EU member states are mentioned in many of the posts, but a significant number are about Germany at the national, regional or local level. E.g., at the end of her 16-year chancellorship (i.e. at the beginning of our research period), Angela Merkel declared herself to be a feminist, in the sense "that women and men should participate equally in social life", which was quoted and commented quite a bit.²⁶¹ Or a post about the share of women in the newly elected Bundestag (one third).²⁶² Or several posts on the false claim of the CDU candidate for chancellor that he had supported marriage for all in 2017.²⁶³ For this dataset, we were not asked to identify posts which actually lack a European dimension.

As shown in Figure 6, chi-squared tests conclude that there are statistically significant differences for the variables People, Identity, Culture and Values when comparing posts about Europe and not about Europe (p = 0.0). Values occurs more often in Europe posts.

The variable Values is coded 1, when a post is about Ideas and beliefs on equality, balance, neutrality, nondiscrimination, tolerance, dignity, diversity, freedom related to gender. It has to be a typical European value and needs to be explicitly stated, e.g. equality between men and women. We find Values in law making and in civil society actions as underlying legitimising rationale of the actors. Values are mentioned in the context of international days of commemoration: International Day for Tolerance (16 November), Equality Week of the European Parliament (28 October), International Day for the Elimination of Violence against Women (25 November). They are expressed in award ceremonies for achieving steps towards more fully realising fundamental values.²⁶⁴ But also the opposite brings up Values, e.g. criminal statistics showing to what degree Gender values are trampled underfoot²⁶⁵ or the ongoing Metoo movement.²⁶⁶ Also the continuing Gender pay gap raises calls for economic equality.²⁶⁷ In short, democratic voices in the gender debate regularly refer to fundamental values like non-discrimination, self-determination and equality. In striking contrast, when we look at far-right post, e.g. from the AfD, we will find there are no explicitly expressed values, not even general ones like 'fairness' or 'justice'.

Identity occurs more often in Not Europe posts. For the variable Identity to be coded 1, the post has to contain a definition of man, woman, non-binary, LGBTQ or (self-) identify someone as belonging to a particular gender. Here we find posts about the International Coming Out Day (11. October)²⁶⁸, WorldMen'sDay (19 November), which in 2021 in Germany focussed on men in caring professions,²⁶⁹ the Transgender Day of Remembrance (20 November)²⁷⁰ as well as first-person

²⁶¹ E.g. Très Click, 09.09.2021, https://www.facebook.com/1401721360094276/posts/2982296885370041

²⁶² Süddeutsche Zeitung, 26.10.2021, https://www.facebook.com/215982125159841/posts/4722033797887962

²⁶³ LSVD, 10.10.2021, https://www.facebook.com/102165153185143/posts/4284515964950020

Quidproquo Wuppertal e.V., Die Wuppertaler Uni ist für ihre Bemühung um Gleichstellung von M\u00e4nnern und Frauen ausgezeichnet worden, 25.10.2021, https://www.facebook.com/1328181263934419/posts/4520279101391270

²⁶⁵ CDU Nordrhein-Westfalen, #wirgegengewalt, 22.11.2021, https://www.facebook.com/108185017409/posts/10159491394817410

²⁶⁶ 37 Grad, 03.11.2021, https://www.facebook.com/119687041414803/posts/4696587803724681

^{267 &}quot;The gender pay gap in Europe is about two months' salary." Der Spiegel, 08.11.2021, https://www.facebook.com/38246844868/posts/10160329973864869

²⁶⁸ NRWSPDqueer, 11.10.2021, https://www.facebook.com/212067208907165/posts/4275362029244309

²⁶⁹ Klinikum Siegen, 19.11.2021, https://www.facebook.com/180162945331889/posts/5118104414871026

²⁷⁰ Queer Bild, 20.11.2021, https://www.facebook.com/611525722371273/posts/1787320438125123

accounts of a person's gender identity,²⁷¹ but also reports on state persecution of trans identities in the Near-East²⁷² and hundreds of trans-persons killed globally every year.²⁷³ Here we do find farright posts, e.g. ridiculing 'lifestyle feminsm'²⁷⁴ or an exhibition asking whether god is male, female or divers²⁷⁵ as well as a British professor arguing that gender is biological.²⁷⁶

People and Culture occur roughly at the same percentage in both Europe and Not-Europe sets. Yet the chi-squared tests claim that there are statistically significant differences.

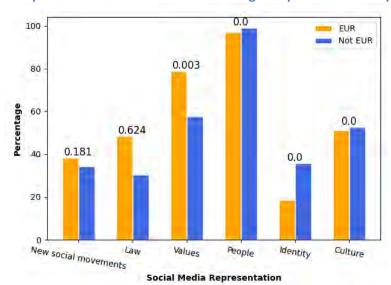


Figure 6. Social Media Representations – % occurrence among Europe and Not Europe posts respectively

Notes: Created with data from Table 7 and Table 8 presented in Appendix E. P value from chi–squared test of equal proportions between Europe and Not Europe in variable above each pair of bars. N = 1793 in each pair of comparison.

There are more Europe posts with 3 or more Social Media Representations and more Not Europe posts with 1 or less Social Media Representations. This can be seen in Figure 7.

Figure 7. Number of Social Media Representations – % occurrence among Europe and Not Europe posts respectively

Taz, Nora Eckert und ihr Leben als Transfrau, 12.10.2021, https://www.facebook.com/watch/live/?ref=watch_permalink&v=913065405967137

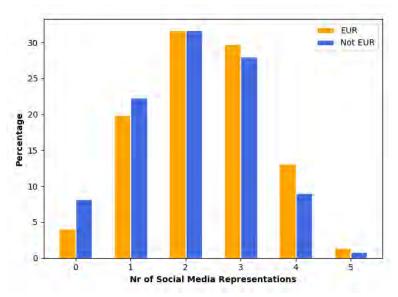
Der Spiegel, Transsexuelle leben in Kuwait besonders gefährlich, 14.10.2021, https://twitter.com/derspiegel/status/1448648536057319424

²⁷³ Queer Bild, 20.11.2021, https://www.facebook.com/611525722371273/posts/1787320438125123

²⁷⁴ Bild, "Mich widert der Lifestyle Feminismus an.", 26.10.2021, https://twitter.com/BILD/status/1453113089881149445

²⁷⁵ AfD-Fraktion im Hessischen Landtag, Gender mania is taking on ever more absurd forms, 16.10.2021, https://www.facebook.com/572530603230497/posts/1212710929212458

²⁷⁶ Taz, 01.11.2021, https://twitter.com/tazgezwitscher/status/1455241984961097729



Notes: Created with data from Table 9 and Table 10 presented in Appendix E. N = 1793.

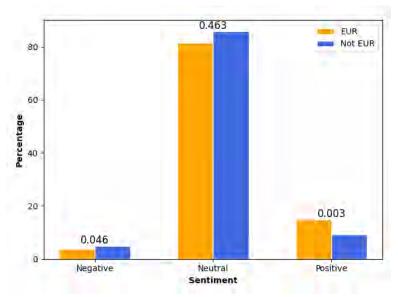
In Table 1, we can see that there are on average more Social Media Representations among Europe posts than Not Europe posts. The mean values for the Europe and Not Europe posts are 3.32 and 3.10 respectively and a t-test confirms that the difference in means is statistically significant (p = 0.0).

Table 1. Number of Social Media Representations by Europe and Not Europe – Mean, standard deviation (SD) and results from t-test of difference in means

	Europe	Not Europe	Significance	P value
Mean	3.3197	3.0974	****	0.0007
SD	(1.1)	(1.121)		

Chi-squared tests show that there are no statistically significant differences in the proportions of the Neutral Sentiment when comparing posts about Europe and not about Europe (p = 0.463), but there are significant differences for the Negative (p = 0.046) and the Positive (p = 0.003) Sentiment.

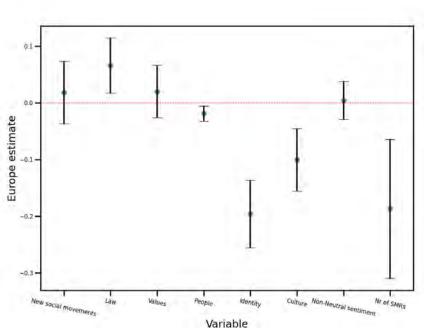
Figure 8. Sentiment – % occurrence among Europe and Not Europe posts respectively



Notes: Created with data from Table 11 and Table 12 presented in Appendix E. P value from chisquared test of equal proportions between Europe and Not Europe in variable above pair of bars. N = 1793.

The coefficient estimates in Figure 9 show that there are several differences between Europe and Not Europe posts also when controlling for additional variables. Results from Logit regressions show that Law is more likely to occur among Europe posts than Not Europe posts. The effect is around 7 percentage points (Table 14), but based on the chi-squared test not statistically significant. At the same time, Identity, Culture and People are more likely to be observed in Not Europe posts, with effect sizes of around -20, -10 and -2 percentage points respectively (Tables 17, 18 and 16). However, there are no statistically significant differences in the occurrence of Social movements, Values (which contradicts the chi-squard test) and Non-Neutral sentiments (Positive and Negative sentiments together) between Europe and Not Europe posts. Finally, results from an OLS regression show that there are more Social Media Representations present in the Not Europe posts than in the Europe posts (Table 20).

Figure 9. Coefficient estimates Europe



Notes: Coefficient estimates and their 95 % confidence intervals of Europe variable from Model 3 of Table 13, Table 14, Table 15, Table 16, Table 17, Table 18, Table 19, Table 20 presented in Appendix E. N = 1793 in each estimation.

Comparisons between Media and Not Media

Posts by Media (246 or 14%) are less common than posts by Not-Media (1,547) (See Table 23 and Table 24). In the subset of 400 manually coded on-topic posts, 156 or 39% are by Media. In addition to the extracted variable "is_newsmedia", the likewise extracted values of the variable "category" are also indicative of media. All the posts marked 1 in the is_newsmedia column, in the category column have Media, News Site or TV Channel.

Posts marked 0 in the is_newsmedia column, in the category column show, as we would expect, a colourful mix of blogger, NGOs, politicians, government organisation, museum, labour union, university etc. 38 posts are in the category "No-Media", among which we find many apparent common citizens. Some of whom also publish links to media content.²⁷⁷ The supposed Not Media set also contains two posts categorised as "Broadcasting Media Production", including the PSM HR3,²⁷⁸ one as "journalist" which is actually a regional Onlinemagazin²⁷⁹, two "magazines", including the lesbian L-MAG,²⁸⁰ two "Topic Newspapers", including Handelsblatt²⁸¹ and five posts marked as "TV Show", four of which from two PSM stations, including the ZDF's 37 Grad.²⁸² It also contains a number of media which are mis-categorised, e.g. Sinsheim TV as "Activity General",²⁸³ the right-wing alternative medium Hallo Meinung as "Person",²⁸⁴ the journalist

https://twitter.com/DrGrandMal/status/1439302769542844416

²⁷⁸ https://www.facebook.com/6025824653/posts/10159402699439654

²⁷⁹ https://www.facebook.com/100064854331435/posts/221363026702174

²⁸⁰ https://www.facebook.com/408025735709/posts/10165740572635710

²⁸¹ https://www.facebook.com/104709558232/posts/10158653265708233

²⁸² https://www.facebook.com/119687041414803/posts/4696587803724681

https://www.facebook.com/329666987211525/posts/2030041210507419

²⁸⁴ https://www.facebook.com/watch/?v=2974003306156213

Fleischhauer on Servus TV as "Author" and Queerspiegel, the LGBTI section of Tagesspiegel, as "No Media".

In short, we are comparing a Media set in which all posts have is_newsmedia = 1, which is confirmed by category, with a Not-Media set in which, indicated by category and manually coded, 22 of 245 (9%) are, in fact, media. Therefore, we have to keep in mind that the actual differences between Media and Not-Media appear smaller than they actually are. We are under-stating the true effect of the differences.

Chi-squared tests conclude that there are statistically significant differences in the proportions of the Social Media Representations Social movements, Law, Values and Culture when comparing posts about Media and not about Media (p = 0.0 in all cases except for Law p = 0.042 and Culture p = 0.001).

Social movements and Culture occur more often in Media posts, in our hand-coded sample with a difference of 10 and 7 percentage points respectively. The variable Social movements was coded 1, when a post is about gender-related activities by the self-organised citizenry, including grass-roots social movements and NGOs, i.e. when it mentions "feminism", "Metoo" or "LGBTQ". The variable Culture is defined rather broadly, including artistic expression and cultural production with reference to gender, but also cultural habits and practices (including daily life); cultural institutions, including education, the media, science, and the Church; lifestyle, when related to gender. Here we find posts reporting on Hollywood stars protesting the new anti-abortion laws in the US, on Christian fundamentalism, on Metoo cases in sports, theatre, broadcasting, modelling, the life of a transsexual in Kuwait, a study on gender stereotypes in TV crime series, interviews with gender activists, reviews of books, both factual and fictional, cultural events on the International Day for the Elimination of Violence against Women.

Media, of course, report about social movements and cultural events, but why they would be talking about them significantly more often than Non-Media on social media in Germany is not clear.

Law and Values are more frequent among Non-Media posts, in our hand-coded sample with a difference of 27 and 30 percentage points respectively.

Civil society and certainly political actors, of course, speak about gender-related laws and their enforcement as well as their value foundations. But why they should do so significantly more than media, whose task it is to critically accompany legislation and check it against fundamental values, is unclear.

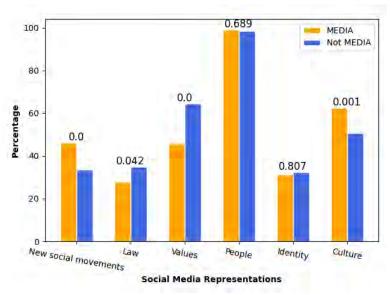
Intuitively we would expect that Social movements, People and Culture are more frequent in Not-Media posts, whereas Law and Values appear more frequently in Media posts. Also a closer analyses of individual posts in the respective sets did not reveal why in the German dataset the findings are the reverse of the expected.

Finally, there seem to be no statistically significant differences in People (p = 0.689) and in Identity (p = 0.807).

Figure 10. Social Media Representations – % occurrence among Media and Not Media posts respectively

²⁸⁵ https://www.facebook.com/watch/?v=284611786819248

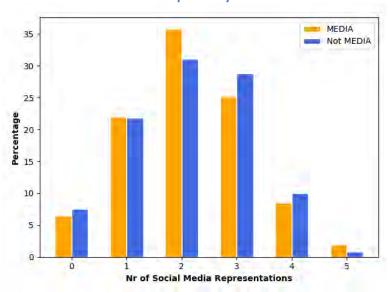
https://twitter.com/Queerspiegel/status/1450524696483610626



Notes: Created with data from Table 21 and Table 22 presented in Appendix F. P value from chisquared test of equal proportions between Media and Not Media in variable above each pair of bars. N = 1793 in each pair of comparison.

There are more Media posts with 1 or 2 Social Media Representations and more Not Media posts with 3 or 4 Representations. This can be seen in Figure 11.

Figure 11. Number of Social Media Representations – % occurrence among Media and Not Media posts respectively



Notes: Created with data from Table 23 and Table 24 presented in Appendix F. N = 1793.

From the information in Table 2, we can see that there are on average about the same number of Social Media Representations in Media posts and in Not Media posts. The mean values for the Media and Not Media posts are 3.13 and 3.14 respectively and a t-test confirms that the difference in means is not statistically significant (p = 0.896).

Table 2. Number of Social Media Representations by Media and not Media – Mean, standard deviation (SD) and results from t-test of difference in means

	Media	Not Media	Significance	P value
Mean	3.1341	3.1441		0.8965
SD	(1.115)	(1.121)		

Chi-squared tests conclude that there are statistically significant differences in the proportions of Negative (p = 0.003) and Positive Sentiments (p = 0.0) when comparing posts about Media and not about Media, while there are no statistically significant differences between Media and Not Media with respect to Neutral Sentiments (p = 0.106).

0.106

MEDIA
Not MEDIA
Not MEDIA

0.0

Negative

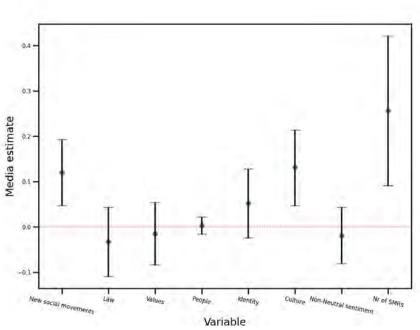
Neutral
Positive

Figure 12. Sentiment – % occurrence among Media and Not Media posts respectively

Notes: Created with data from Table 25 and Table 26 presented in Appendix F. P value from chisquared test of equal proportions between Media and Not Media in variable above pair of bars. N = 1793.

The coefficient estimates in Figure 13 show that there are several differences between Media and Not Media posts also when controlling for additional variables. Results from Logit regressions confirm that Social Movements and Culture occur more often among the Media posts as compared to the Not Media posts. The effects are around 12 and 13 percentage points respectively (Tables 27 and 32). There are no statistically significant differences in the occurrence of the other variables between Media and Not Media posts. Finally, results from an OLS regression show that there are more Social Media Representations present in the Europe posts than the Not Europe posts.

Figure 13. Coefficient estimates Media



Notes: Coefficient estimates and their 95 % confidence intervals of Media variable from Model 3 of Table 27, Table 28, Table 29, Table 30, Table 31, Table 32, Table 33, Table 34. presented in Appendix F. N = 1793 in each estimation.

Illustrative examples

Figure 14 shows a post from the German EUR Gender dataset, which is exemplary of the posts containing the Social Media Representation with the largest coefficient estimate of Europe: Law. The post is by Katapult, a "magazine for cartography and social sciences", which specialises in data visualisations, particularly in the forms of maps. In this post from 16. September 2021, and thus before the national elections in Germany, the journalists show the positions of the political parties on the Transsexual Act (TSG), arguably the single most broken piece of gender-related legislation in Germany that everyone, at least in the gender movements, agrees needs urgent fixing. After a brief text summarising the legal status quo as described in the Legislation section above, the post presents three positions towards the TSG and the parties which subscribe to them: "abolishing because it is discriminatory": Greens, Liberals, Left; "reforming because it is discriminatory": Social Democrats and "keeping it as it is": the two Christian Union parties and the AfD.

Figure 14. Illustrative example from Facebook

^{287 &}lt;u>https://katapult-magazin.de/</u>

²⁸⁸ https://www.facebook.com/1511448562405225/posts/2881014922115242



Figure 15 shows a post from the German Not_EUR Gender dataset which is exemplary of the posts containing the Social Media Representation with the smallest coefficient estimate of Europe: Identity. While there are posts which actually define, e.g. bisexuality²⁸⁹ as the Codebook requires, more 'typical' are gender representations which question gender identity. The present post by the weekly Zeit Online is about the new album by pop musician Drangsal. "Finally", writes the reviewer, "there are new love songs about queerness, sex and self torment." Almost every track is about breaking down his previous Drangal (i.e. tribulation) identity. "Everything is meant to become beautifully ambiguous: his music and his relationship states, his desire and his gender." Title of the article and one of the songs: "Girls are the most beautiful boys."²⁹⁰

Figure 15. Illustrative example from Twitter

Uni Hamburg: https://www.facebook.com/195350913920671/posts/4127914637330926

²⁹⁰ https://twitter.com/zeitonline/status/1436681465769639946



Figure 16 shows a post posted by media from the German Not_EUR Gender dataset which is exemplary of the posts containing the Social Media Representation with the largest coefficient estimate of Media: Culture. Metoo, the movement which was triggered in 2017 by US film producer Harvey Weinstein's sexual abuses, was still very much an issue in Germany at the end of 2021 with new and ongoing cases in fashion, sports, theatre, broadcasting and other sectors of the creative industries. Next to Weinstein, the present post by the newspaper Taz²91 mentions two of the most prominent cases in Germany: the former editor in chief of the boulevard paper Bild and a comedian and TV presenter. The post announced a podcast in which journalists reflect on the question of how to research these difficult cases of sexual abuse in movies, newspapers and TV. Ordered chronologically, Metoo is present in the first and the last post and throughout the entire period and can therefore been seen as typical of the set.

Figure 16. Illustrative example from Twitter

https://twitter.com/tazgezwitscher/status/1457756053286834184



Figure 17 shows a post posted by not media from the German EUR Gender dataset which is exemplary of the posts containing the Social Media Representation with the smallest coefficient estimate of Media: Law. In this Facebook post, CSD Berlin in a bi-lingual Germ and English text, of which here only the English version is shown, summarises the queer political plans of the new three-party German government.²⁹² The Transgender Act alone is mentioned in 14.5% of the posts in the German EUR Gender Not-Media set. After the new government had published its Coalition Treaty on 24 November 2021, about half of the posts in our set, just like Figure 17, discuss the plans for gender legislation.

Figure 17. Illustrative example from Facebook

²⁹² https://www.facebook.com/336189604596/posts/10159424801874597



ENGL: The new german government coalition of SPD, FDP and Bündnis90/DieGrünen has big queer political plans, as expressed in their coalition agreement:

- 1. The equal treatment article of the Basic Law (Article 3, Paragraph 3 of the Basic Law) is to be expanded to include a ban on discrimination based on sexual identity.
- 2. A "National Action Plan for Acceptance and Protection of Sexual and Gender Diversity" is to be drawn up.
- Family law is to be modernized. Means, for example: "If a child is born into the marriage of two women, both are automatically legal mothers of the child, unless otherwise agreed."
- 4. There will be more government programs for older queer people.
- 5. In Section 46, Paragraph 2 of the Criminal Code, gender-specific and homophobic motives are to be expressly included and hate crime based on gender and against queer people is to be recorded separately by the federal and state police forces.
- The old and discriminatory "transsexual law" is being replaced by a self-determination law.
- 7. "We will set up a compensation fund for trans and inter-people who have suffered physical injuries or forced divorces due to previous legislation."
- Asylum procedures for queer refugees are being reviewed.
- 9. The partial blood donation ban for gay and bisexual men as well as trans * will be completely abolished.
- A ban on so-called conversion or reparation therapies in adults is being examined.
 The government wants to work to ensure that all same-sex marriages and civil
- 11. The government wants to work to ensure that all same-sex marriages and civil partnerships are recognized in all member states of the EU.

We are happy and wish our new government every success with the implementation!



Best Practices on Gender

Our dataset contains many examples of practices which are able to improve both media representations and the actual lives of minority groups. These include regular events such as the Pride Week, the Black History Week, the International Day against Violence against Women or the European Gender Week in the European Parliament which are occasions for celebrating diversity and the successes that have been achieved and jointly devising ways to address issues that remain. A participation format was tested by the EU for the first time during our research period: the Citizens' Forums of the Conference on the Future of Europe.²⁹³ A Facebook post by the European Commission²⁹⁴ announced the Forum on 12 November 2021, asking for suggestions "on how we could fight racism and religious discrimination even more in the EU? How equality between men and women should be promoted more strongly? What should be done to further strengthen the rights of LGBTIQ+ and of people with disabilities?" and announcing the address where citizens could participate online in the process.

Much of the effort to improve the situation of those suffering from gender discrimination, just as in the case of migration, is born by volunteers. Among the different feminisms showing up in our data, we would like to mention several projects run by countrywomen. One is the counselling centre "Country Graces" in Lauenburg, Schleswig-Holstein: the model project of women helping women affected by violence received funding from Aktion Mensch.²⁹⁵ Another one concerns the Saxon Rural Women's Association which unites women who stand up for the interests of women and their families in rural areas. The post is a job advertisement for a staff member for coordination and administration for which the women's association has applied for funding at the Saxon State Ministry of Justice and for Democracy, Europe and Equality.²⁹⁶

Among the data on gender extracted from Twitter and Facebook, three projects stand out. The **MaLisa Foundation**²⁹⁷ goes back to Maria Furtwängler, physician, television actress and former wife of billionaire publisher Hubert Burda, and her daughter, musician and art historian Elisabeth Furtwängler, who in 2011 established Malisa Home²⁹⁸ in the Philippines, a safe house for girls who had become victims of prostitution and human trafficking. In 2016, the two of them established the MaLisa Foundation which aims to create a free, equal society, to end violence against women and girls and to empower them to live a self-determined life. The foundation now runs Malisa Home and it initiates research into audiovisual diversity, gender representations in the media and their social impact. Together with partner organisations (GEMA, UFA GmbH, Keychange, public and commercial broadcasters etc.) the foundation initiates studies which are conducted by different universities. Main research areas are gender in music (*Gender in Music – Charts, Works and Festival Stages* (2021),²⁹⁹ *Gender Justice in the Music Business* (2021),³⁰⁰ in film (*Diversity in German Film* (2022)³⁰¹ about representations in German cinema), in TV (*Portrayal of Gender-Based Violence on German TV* (2021)³⁰²), in both film and TV (*Progress Study on*

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<sup>293</sup> https://futureu.europa.eu/en/
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²⁹⁴ https://www.facebook.com/123332714357231/posts/4827897980567324

²⁹⁵ https://www.facebook.com/1476144382621338/posts/3064102257158868

²⁹⁶ https://www.facebook.com/550027598481230/posts/2119567728193868

²⁹⁷ https://malisastiftung.org/en/

²⁹⁸ https://www.malisa-home.org/en/

²⁹⁹ <u>https://malisastiftung.org/en/gender-in-music/</u>

³⁰⁰ https://malisastiftung.org/en/gender-justice-in-music-business/

https://malisastiftung.org/en/diversity-in-german-film/

https://malisastiftung.org/en/study_gender-based-violence-german-tv/

Audiovisual Diversity (2021),³⁰³ Audiovisual Diversity? Gender Representation in Film and TV (2017)³⁰⁴) and online (*So Multi-Colored and Diverse – Really? Gender Representations and Diversity in Streaming and SVOD Series* (2020),³⁰⁵ Female (*Self-*) Representation in Social Networks (2019)³⁰⁶). In addition, they conducted a special study on the Covid-19 crisis (*Who Explains the Crisis? Gender Distribution in Corona Reporting* (2020)³⁰⁷).

All these studies help shed light in areas where the anecdotal evidence gives the impression of persisting gender inequality, yet actual methodically collected figures would not exist otherwise. The foundation actively promotes its works so that the results are distributed by media and activists. In the German WP4 datasets, a Twitter post by a PSM station (RBB) reported on MaLisa's Progress Study on Audiovisual Diversity which had been published shortly before.³⁰⁸

Our second best practice is **Wahltraut.de**.³⁰⁹ In our dataset it is being referenced in several posts. One by an educational CSO³¹⁰ asks its readers: 'Concerning the Bundestag elections on 26 September 2021, are you still undecided?' and then suggests a number of services which help them find out about the different election programmes and positions of the parties. The original Wahl-O-Mat,³¹¹ launched by the Federal Agency for Civic Education (Bundeszentrale für politische Bildung/bpb) in 2002, is first on the list. It presents the user with a quiz containing 38 theses with proposals from different policy areas which he or she can agree, not agree or be neutral on. The user can then mark those proposals she or he finds the most important. All the parties participating in the given election had answered the theses as well, so that the Wahl-O-Mat in the end presents the party whose programme most closely matches the preferences of the user. She can ask for the rationale for the recommendation, compare parties and retrieve additional information, helping voters to orientate themselves in the political landscape.

The Wahl-O-Mat has since become a fixture in all elections in Germany, and it has spawned a number of similar services which focus on particular policy areas. The second one listed in our post is directed at climate policy. The third one is Wahltraut which allows users to match their positions on equality, LGBTQ+ rights, anti-racism and inclusion against those of the different parties. Just as MaLisa, Wahltraut does not directly improve gender inequality, but both help citizens to make better informed decisions.

Informing citizens is the task of the media. Knowing how media content is made, enables citizens to critically appreciate it. It also allows them to actively express themselves in media. Therefore, we have chosen media literacy training as our third example. Again, there are several mentions in our data. Our best practice is **Alex Berlin**,³¹³ a facility of the Media Authority, Medienanstalt Berlin-Brandenburg (mabb). It is one of the non-commercial citizens' and educational channels which were established in the course of the nationwide introduction of cable television in 1985 and are financed by broadcasting fees. Our post is entitled "Feminism Worldwide. Activism from different perspectives".³¹⁴ It is a one-hour talkshow format in which moderator Nyima Jadama talks with women from diverse cultures on feminism, female

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303 <u>https://malisastiftung.org/en/progress-study-audiovisual-diversity-tv-germany/</u>
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https://malisastiftung.org/en/audiovisualdiversity/

³⁰⁵ https://malisastiftung.org/en/gender-representations-and-diversity-in-streaming-and-svod-series/

https://malisastiftung.org/en/female-self-representation-in-social-networks/

³⁰⁷ https://malisastiftung.org/en/who-explains-the-crisis/

^{308 &}lt;u>https://twitter.com/rbb24/status/1445407146519187468</u>

³⁰⁹ https://wahltraut.de/

³¹⁰ https://www.facebook.com/120508577977637/posts/4955499377811842

https://www.bpb.de/themen/wahl-o-mat/

^{312 &}lt;a href="https://klimawahlcheck.org/">https://klimawahlcheck.org/

³¹³ https://www.alex-berlin.de/

³¹⁴ https://www.facebook.com/watch/?v=573607230546221

empowerment and activism. It provides a space for those involved in the struggle against gender inequality to speak in their own voice and share their experiences in solidarity. Empowering women and members of the LGBTQ+ community to represent themselves in media is a crucial practice for improving their biased media representations which MaLisa are documenting but also their political representation so that decisions about them are not made over their heads, but they are active participants on an equal footing.

Conclusions

The present paper analyses the Gender debate on German Facebook and Twitter in the period from September to including November 2021. This debate was dominated by the national elections in Germany on 26 September 2021: before, by the candidate's promises on Gender politics and after, by the plans of the newly elected government announced in the Coalition Treaty published on 24 November. This widely discussed announcement as well as the International Day for the Elimination of Violence against Women on 25 November with its numerous events across Germany contributed to a spike in social media activity in general and in all of our Social Media Representations except for one in week 47.

For the radical right, gender and migration are the two core issues of their narratives. In WP2, we have found already that the far-right party AfD is particularly active on social media in Germany. Here we find this confirmed. Without looking for political leaning at all, the issues of gender and migration proved to be strong predictors of AfD and like-minded actors in the debate on Facebook and Twitter. "Gender ideology" is one of their central phrases. It assumes that Gender is a biological fact, whereas the Left-Green 'ideology' claims that it is socially constructed. The topos reproduces stereotypes of traditional Christian family values and a traditional role of women which are then framed as under threat from two sides: the women's and LGBTQ movements with their 'socialist egalitarianism' who want to exert their encroaching influence even on little children, and stereotypes of a migrant other.

This connection of Gender and Migration/Islam dates back at least to the sexual assaults on New Year's Eve 2015/16 in Cologne, where the culprits were identified as North-African, Muslim, young migrant men.³¹⁵ It was escalated to top priority by AfD MP Alice Weidel's infamous speech in the Bundestag on 16.05.2018 in which she ranted about "Burqas, headscarf girls and alimented knife men".³¹⁶ This creates a simplistic, yet highly toxic dualism: On the one side, there is the 'bio-German' man who claims his nativist right over his soil and his women. On the other, there are waves of young Muslim migrant men flooding Germany and its social security system, groupraping German women, reproducing like rabbits, with the ultimate goal of "The Great Replacement".³¹⁷ A German version of this was published by then SPD politician and member of the Executive Board of Deutsche Bundesbank Thilo Sarrazin in his book *Germany Abolishes Itself* (2010).

DW, Fünf Jahre danach: Lehren aus der Kölner Silvesternacht, 31.12.2020, https://www.dw.com/de/f%C3%BCnf-jahre-danach-lehren-aus-der-k%C3%B6lner-silvesternacht/a-55980209

Bundestag, Weidel-Einspruch gegen Ordnungsruf mit 549 Stimmen abgelehnt, 17.05.2018, https://www.bundestag.de/dokumente/textarchiv/2018/kw20-de-einspruch-ordnungsruf-555494

For a history of the topos, see The Guardian, A deadly ideology: how the 'great replacement theory' went mainstream, 08.06.2022, https://www.theguardian.com/world/2022/jun/08/a-deadly-ideology-how-the-great-replacement-theory-went-mainstream. It starts from the 1916 book The Passing of the Great Race by US lawyer, zoologist, anthropologist, eugenicist and advocate of scientific racism, Madison Grant, mentions French philosopher Alain de Benoist's Nouvelle Droite movement and leads to to French philosopher Renaud Camus' book Le Grand Remplacement (2011), an anti-Muslim, anti-immigration conspiracy theory.

The intersection of gender and migration becomes evident in our data. In the set of 400 manually coded posts on topic for Gender, a search for keywords indicative of migration shows that about half the posts in that set refer to migrants in a supportive, solidary way (a CSO who tries to motivate eligible voters with a migration background to use their right to vote, ³¹⁸ a CSO which supports women who have experienced violence addressing migrant women in particular, ³¹⁹ a critique on Die Linke for leaving unmentioned such topics as equality, anti-racism and migration in a strategy paper ³²⁰ and similar) while about half the posts are from AfD manifesting the linkage of the Gender topic with Migration. ³²¹ The latter primarily address the new government's Coalition Treaty: "Imagine the Merkel government, only with even more immigration, gender and climate delusions. This is the programme of the coalition government." ³²² They call the Treaty a "list of ideological insanities", ridiculing the concept of a "feminist foreign policy" and predicting a massive acceleration of Germany's decline: "Germany is facing dark times."

When looking at the effects of a Gender post being about Europe or not, we find statistically significant differences for four of our Social Media Representations. The variable Values proved to be particularly expressive. It appears more often in Europe posts. This might be an indication that Gender legislation to a certain degree has moved to the Union level. Values are mentioned to legitimise law making and civil society actions by linking them to fundamental rights and freedoms. They are expressed positively in award ceremonies for achieving steps towards realising values and in the context of international days of commemoration. Values are also brought up where they are trampled underfoot, in the ongoing Metoo movement, in statistics on gender-related crimes, in reports about the continuing Gender pay gap.

In short, values are called up in the Gender debate in order to measure reality against them and to mobilise political will for legislation and other measures to improve reality where it is lacking. In this sense, democratic voices in the gender debate regularly refer to fundamental values like non-discrimination, self-determination and equality. In striking contrast, when we look at far-right post, e.g. from the AfD, we will find there are no explicitly expressed values, not even general ones like 'fairness' or 'justice'. The right are very clear and aggressive about what they do not like, but do not offer any positive value alternatives. The AfD party slogan is: "Germany, but normal". This "normality" is not a value, but the longing for an imaginary status quo ante, before the arrival of migrants and before the sexual confusion caused by the women's and the LGBTQ movements.

The variable "Values" therefore proved to be a good indicator of two kinds of policy frameworks: Democratic actors base their policy narratives on values and principles, at the highest level expressed in the Constitution and the Declaration of Human Rights, which are thought of as universal and as entailing the obligation to positively make these values a reality everywhere, regardless of one's own conflicting interests or those of others. The other framework is promoting purely interest-based policies. "Germany First" is an expression of group egotism at national level. This goes along with identity-based expression which demands the monopolisation of privileges

³¹⁸ https://www.facebook.com/120508577977637/posts/4955499377811842

³¹⁹ https://www.facebook.com/264688680239475/posts/6375496449158637

^{320 &}lt;u>https://twitter.com/tomfelicious/status/1454027642844352517</u>

https://www.facebook.com/105196990914241/posts/565182851582317, https://www.facebook.com/319006178685355/posts/968105463775420, https://www.facebook.com/459077044164282/posts/6621052127966712, https://www.facebook.com/105196990914241/posts/565182851582317, https://www.facebook.com/827542717585199/posts/1637835483222581, https://www.facebook.com/173415666027913/posts/4550256851677084.

³²² https://www.facebook.com/1162229030454420/posts/4944283395582279

³²³ https://www.facebook.com/100232087997794/posts/630662658288065

and power by 'Bio-Germans'. Where Thatcher's statement that "there is no such thing as society" has sunk in, there is no space anymore where values can be agreed and agreed values can guide policies. What remains then is resistance against change and the idealisation of a "normality" projected back to various periods of history (Reichsbürger!) 'when a man was still a man and woman still woman'.

Identity occurs more often in Not-Europe posts. This seems to indicate a more local or national perspective. On the positive side, here we find posts about the International Coming Out Day, WorldMen'sDay and the Transgender Day of Remembrance as well as first-person accounts of a person's gender identity. On the negative side, we see reports on thousands of women and hundreds of trans-persons killed globally every year and about state persecution of trans identities in the Near-East. And again, we find far-right posts, e.g. ridiculing 'lifestyle feminism' or an exhibition asking whether god is male, female or divers as well as a British professor arguing that gender is biological.

While the chi-squared tests claim that there are statistically significant differences for People and Culture as well, they occur roughly at the same percentage in both Europe and Not-Europe sets

In WP2, we had found already that professional (news) media are important voices in the chorus on social media in Germany. When looking at the effects of a Gender post being published by a professional media actor or not, we again find statistically significant differences for four of our six Social Media Representations. The variables Social movements and Culture occur more often in Media posts, in our hand-coded sample with a difference of 10 and 7 percentage points respectively. Media, of course, report about social movements and cultural events, but why they would be talking about them significantly more often on social media than civil society, politicians and common citizens is not clear.

Law and Values are more frequent among Non-Media posts, in our hand-coded sample with a difference of 27 and 30 percentage points respectively. Civil society and certainly political actors, of course, speak about gender-related laws and their enforcement as well as their value foundations. But why they should do so significantly more than media, whose task it is to critically accompany legislation and check it against fundamental values, is again unclear. Intuitively we would expect the opposite: Social movements and Culture are more frequent in Not-Media posts, whereas Law and Values appear more frequently in Media posts, yet even a closer analysis of individual posts in the respective sets did not reveal why in the findings in the German dataset are such.

When looking at the sentiments of the posts in our sample, we find that 85% of them are written in a neutral tone. Ten percent of the others are positive. That leaves only five percent of posts expressing a negative sentiment. This is in contrast to the impression often conveyed in public discussion of social media leading to a brutalization of the debate, to constant boundary crossings, trolling and hate speech. The latter, we can confirm, is not present in our sample. Since we can safely assume that Gender is an issue prone for triggering hate speech, we must conclude that Facebook and Twitter did a good job in detecting and removing it. Considering that the majority of posts in our sample are not by media actors, who we might assume to be guided by professional ethics to separate reporting and opinion, we can conclude that the debate we find is quite civilised and considerate. The impression that social media are dominated by excited, hateful, toxic communications seems to be caused by a small minority. In both cases, comparing for

³²⁴ Margaret Thatcher, Interview for Woman's Own, 23.09.1987, https://www.margaretthatcher.org/document/106689

While this seems to be case for our research period, it might no longer be so, since Elon Musk took over Twitter.

Europe and for Media, the differences for Negative and Positive Sentiment are statistically significant.

The question, whether there are similar debates about gender across Europe and whether these are interconnected across borders into something like a European public sphere, cannot be answered based on the present national dataset but only by overviewing all of the country reports.

WP3: Patterns in Platform Video Provision and Consumption

Introduction: Video on the Internet

The EUMEPLAT research so far has shown a shift of audiovisual culture from linear broadcast television and DVDs to the Internet. In WP3, we are focussing on this provision and consumption of audiovisual productions on the Internet.

Video streaming platforms come in three forms. One is the synchronous re-transmission of linear or "live" broadcast programmes along a broadcast schedule. It has its roots in the cable TV islands of the 1970s, to which TV and radio signals were relayed by cable or satellite. Video transmission over TCP/IP networks became technically possible in the late 1990s. It was based on advances in video compression (e.g. the MPEG and H.26x video coding standards). Realnetworks pioneered a protocol for the real-time transmission aka streaming of media data in 1994, Real Audio that was complemented by Real Video in 1997. Competitors in the early days were Apple's QuickTime (1990), Windows Media (1991) by Microsoft and Adobe Flash (1996). These allowed to provide television online – through cable, satellite, an IPTV tunnel or Over the Top (OTT) of the Internet. Like cable TV providers, now websites offer packages of TV signals of different stations which they are streaming "live" OTT (e.g. the Swiss company Zattoo, which MAVISE lists as SVoD service). There is also a new generation of live-streaming sites without any connection to broadcasting, most strongly from gaming with "live streamers" doing endless sessions of Let's Plays with parallel text chats of the viewers (e.g. Twitch, Bigo.tv, Younow).

These are outside the scope of our study. So are peer-to-peer download services and file hosters which are used to a certain degree for downloading and streaming movies and series without consent of copyright holders. Video podcasts, video conferencing (Skype, Zoom, Jitsi etc.) as well as the immersive 3D environments of VR and AR are other forms of video on the Internet which will not be covered by our study.

Instead, we focus on the other two kinds of streaming service: Video Sharing Platforms (VSP) where anyone can make an account and upload video files, and Video on Demand (VoD) platforms where the provider licenses or produces and markets various kinds of contents.

Video on Demand (VoD) platforms started in the 2000s and have a number of roots. One is in video rental stores, first for VHS tapes, then for DVDs and Blu-rays. Netflix, in fact, started 1997 as a mail-order DVD-rental service in California and in 2007 opened its VoD service. Amazon started as online bookseller, moved to video rental and from there to VoD (2006).

Contemporaneously, TV stations started to provide "seven-day-catch-up" services to allow their viewers to watch recent broadcasts that they have missed. In Germany, ZDF launched its "Mediathek" in 2001, ARD followed in 2007, when also the BBC released the first version of its Iplayer. Because in contrast to all other VoD business models, PSM are funded by the citizens, these ad-free and freely accessible platforms are called BVoDs (Broadcaster Video on Demand).

Commercial broadcasters, including cable and satellite TV providers followed. Available in Germany and Austria, Maxdome (2006) goes back to the rights catalogue of the Kirch Group, was acquired by ProSiebenSat.1 and was split into the TVoD service Maxdome Store and the newly established SVoD service Joyn (2019) by ProSiebenSat.1 Media and Discovery. RTL launched its portal RTLnow in 2007, renamed it to NowTV, to TVNow and in late 2021 to RTL+ with content from the different RTL stations, originally produced material and since the beginning of 2022 has content from HBO Max, which is not available in Germany. Sky Germany GmbH goes back to the pay-TV provider Premiere, opened its first OTT VoD named Sky Go in 2011, was acquired by

Comcast in 2018 and re-organised into the TVoD Sky Store (2020) and the SVoD Wow (2022). Meanwhile, in the US News Corporation and NBC Universal started the SVoD service Hulu (2010), which was later acquired by Disney.

The tech industry also came to the party. Google launched its Google Play store (initially as 'Android Market') in 2008 which includes TVoD access for purchase or rental to a large catalogue of movies and TV programmes. Apple was early in selling online music but missed out on video until Apple TV+ (2019). Also Netflix and Amazon, both founded after the rise of the WWW, have to be considered tech companies.

Copper-, cable- and mobile-based telecom carriers also entered the VoD market. From the mid-2000s they offered 'triple-play' bundles: telephony, Internet access and TV as as a selection of live channels and on-demand access to libraries of films and TV programmes. E.g. Deutsche Telekom launched its first VoD named Entertain in 2008 with 2,000 titles from ProSiebenSat.1.³²⁶

In the early days, Internet bandwidths did not permit streaming of high-quality video. Therefore the file of a video had to be downloaded before it could be viewed. Because this entails the risk of the file being shared with others, DRM (Digital Rights Management) is applied to prevent unauthorised copying.

Copyrights are the core business of DVD-rentals, of cable and satellite TV providers and packagers. They were already dealing with the same rightsholders, even though for separate rights for different forms of distribution. With both coming to the VoD market, they are now competing for the online rights of the same archive and stream of new productions of movies and series.

Finally, the studios producing the content everyone is competing for, realised that they could cut out the middlemen and market their own content on their own VoD platforms. Direct-to-consumer distribution of exclusive content from the studios and networks is the latest trend in the VoD market. Most spectacularly, Disney's decided to pull its entire catalogue from Netflix and open Disney+ (2019). Paramount+ (2014) was even earlier. AT&T-owned WarnerMedia launched HBO Max (2020). Peacock (2020) was started by NBCUniversal, a subsidiary of Comcast, and thus TV, movies and telco rolled in one with both the content and the pipes for VoD. 327

VoD services are primarily entertainment providers which license or produce movies and TV series and offer ever-changing catalogues of those to their customers. The business model is based on advertising (AVoD), subscriptions (SVoD), pay per view or download, i.e. per transaction (TVoD) or a combination of those. Video streaming hardware and traffic are costly. Therefore, there is no such thing as an unpaid VoD service. AVoD is paid for by the customers of the advertised goods and services. Community infrastructure such as the Internet Archive³²⁸ or Wikimedia Commons³²⁹ are paid for by donations.

Actually, both VSP and VoD provide their content 'on demand', which copyright law refers to as the 1996 newly invented exclusive right of authors of "making available to the public of their works in such a way that members of the public may access them from a place and at a time individually chosen by them". This is in contrast to communication "by wire or wireless means" in a linear broadcast format that does not give members of the public this choice but requires them to tune in when the show is "on air".

³²⁶ IFA: T-Home erweitert Radio- und Video-on-Demand-Angebot, Digitalfernsehen, 28.08.2008, https://www.digitalfernsehen.de/news/inhalte/streaming/ifa-t-home-erweitert-radio-und-video-on-demand-angebot-367529/

³²⁷ HBO Max, Paramount+, Hulu and Peacock are not available in Germany.

https://archive.org/

https://commons.wikimedia.org/

Right of communication to the public, Art. 3 No. 1, Infosoc Directive 2001/29/EC, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32001L0029

The difference then is that a provider of a VSP service allows its users to upload the content of its platform while the provider of a VoD service choses the content it offers. VoD providers come in different genres. Two of the most lucrative ones – sports (e.g. Dazn) and pornography (e.g. Onlyfans) – are outside the scope of our research. We look primarily at services that offer fictional content, movies and series, and to some degree other forms of entertainment (game shows, reality TV, true crime etc.) and documentaries. Online news, which were the subject matter in WP2, are also not in the focus of WP3.

In contrast, **Video Sharing Platforms (VSP)** do not have precursors in the analogue age. Super-8, VHS and other tape- or disc-based physical video cameras were the first to empower common citizens to explore audiovisual expression, including its use in political activism. Smartphones, which experienced their breakthrough with the Apple Iphone in 2007, made digital cameras omnipresent and even came with their own mobile transmission channel attached. In fact, until this time even the stationary Internet bandwidth of private users did not allow up- and downloading of video files, let alone streaming them in realtime.

There were first video hosting sites in the late 1990s (e.g. ShareYourWorld.com. founded in 1997) but these pioneers were struggling with bandwidth and business model. Video streaming sites followed in the 2000s. In China, the pioneers of video streaming were Youku (2003) and Todou (2005).³³¹ Vimeo was launched in November 2004 and in 2015 was the VSP with the third largest reach among Germans (4%), behind Youtube (47%) and Dailymotion (5%) (Statista 2015). Youtube followed in February 2005 and was acquired by Google in October 2006.

While the videos on VSPs are also provided on demand, the actual difference is that VSPs allow any user, whether common citizen, professional creator, media outlet, government institution, teacher, CSO or social movement, to upload content and make it available, any kind of content imaginable, within the limits of the law and the platform's terms of service.

Professionals and institutional actors had their means of communicating to society even before the Internet. The decisive new dimension it opens up, is for common citizens to participate in this global communication sphere. When the Internet started to pervade society in the 1990s, this has been optimistically hailed as a revolution in the power structure of public sphere and democracy.

And indeed, if the 'social' in 'social media' means that humans like to find like-mindeds, hang out and share ideas, then the Internet has been a social medium from its start, from the invention of e-mail in 1971, the Usenet Newsgroups of the 1980s, the Free Software movement to the Blogosphere and the Peer-to-peer networks and Wikipedia of the 2000s. At the end of the 1980s, Tim Berners-Lee had invented the graphical user interface to the Internet, the WorldWideWeb. On it emerged weblogs, whose number grew rapidly and at the turn of the century evolved into a distributed, yet highly interconnected communication space: the Blogosphere. It included search across the entire decentralised corpus, analytics, trending topics, ad networks. "It is hard to estimate how big the global Blogosphere was at its peak in the late 2010s. Technorati had indexed about 112.8 million blogs and 2 billion links in 2008." (Grassmuck 2021).

The peak of the Blogosphere coincided with the rise of the centralised global platforms for being social: Facebook (2004), Twitter (2006), and also Google Search (1998) is 'social' because it does not create content but harvests the linking decisions of the entire Internet community and processes them into 'relevance'. Youtube (2005, acquired by Google in 2006) became the central social site for sharing video. VSP video has its roots in the amateurish, casual footage of the first video ever uploaded to Youtube: "Me at the zoo" by Youtube cofounder Jawed Karim in front of the Elephant enclosure at San Diego Zoo, a shaky 19 seconds affair in which Karim remarks that

Video Streaming App Revenue and Usage Statistics (2023), BusinessofApps, 09.01.2023, https://www.businessofapps.com/data/video-streaming-app-market/

elephants have long trunks.³³² Where under different circumstances one might imagine a celebrity-studded launch event for what was to become the major VSP on the Internet, this opener sent a very different message: 'TV and its stars was yesterday. Now public video is for everybody.' Youtube's slogan for the first years – "Broadcast Yourself" – signifies this straddle between still thinking in TV channels and opening them up to all.

To capture the seemingly new participatory dimension in the early days of 'social media' or 'Web 2.0', new terms were invented like "Prosumer", coined by futurologist Alvin Toffler in his book The Third Wave (1980), "Produsage", coined by German-Australian media scholar Axel Bruns in his his book Blogs, Wikipedia, Second Life and Beyond: From Production to Produsage (2008), the derogative "user generated content" and "Commons-based peer production" by Harvard Law School professor Yochai Benkler in his book The Wealth of Networks (2006). Chris Anderson, former editor of Wired magazine, now head of TED, in 2010 highlighted particularly the power of web video to empower global education and "crowd-accelerated innovation". And indeed, many of the social media stars of today are self-taught on video tutorials on selfies, lighting, editing etc.

Legally, the platforms used to argue that they are not media providers but technology companies providing the tools and the webspace that enable their users to express themselves. Since not they but their users decide what they upload, platform companies rejected the responsibility for the content on their servers. This has been clarified by the DSM Directive of 2019³³⁴ which declares that the platforms do make the content of their users available and therefore have to comply with measure to prevent copyright infringements, including upload filters.

When Youtube started to share some of its advertising revenues with the creators whose videos generated the attention for the advertising in the first place, it created an entire new industry, with professional training in Youtube's bootcamps and, of course, video tutorials, with publishers called 'MCNs' for 'Multi-Channel Network', with festival and awards and with top earners like Justin Bieber who is estimated to have made US\$ 31 million in 2021 on his 25.5 billion Youtube views alone. The dream job an adolescent in the 2010s aspired to was Youtuber. It created a new form of celebrity – influencers, streamers, beautiful young boys and girls, modelling for fashion, beauty and lifestyle products, fusing with brands from sports and automobile into an industry of its own – stars with millions of followers on Youtube, Instagram, Tiktok and Twitch who are entirely unknown to people above the age of twenty five.

"Video Sharing Platform" is often conflated with the concept of "user generated video", implying a lesser, secondary form of creativity, like mashups and memes which only use the creative works of others and therefore deserve a lesser degree of copyright protection or should even be prohibited altogether. Also this issue has been settled by the 2019 DSMD: What used to be exceptions for quotation, criticism, review, caricature, parody and pastiche, optional for member states to implement, now have been made mandatory across the EU and turned into enforceable rights.³³⁶

There is the idea that the majority of communications on social media is from common citizens, unorganised individuals wishing to express themselves, untrained, unequipped, unprofessional amateurs. Nothing can be further from the truth. All the top ranking channels in our study are monetised, according to Youtubers.me's list of "The Highest-Paid YouTubers of 2021" about the top 50 of which at a level of US\$ 10 million or more.³³⁷ Also in WP2 we have shown that,

Me at the zoo, 24.04.2005, https://www.youtube.com/watch?v=jNQXAC9IVRw

Chris Anderson, How web video powers global innovation, TEDGlobal 2010, https://www.ted.com/talks/chris_anderson_how_web_video_powers_global_innovation

³³⁴ Copyright in the Digital Single Market Directive (2019/790), https://eur-lex.europa.eu/eli/dir/2019/790/oj

https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

³³⁶ Arts. 7 and 9, DSMD, op. cit.; see also: Kreutzer 2022.

https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

while common citizens are present in the debate on social media, this debate is dominated by professional journalistic media and by political actors.³³⁸

Recently, we see a trend towards the short form. Vine and Tiktok started, Youtube Shorts, Facebook Video and Instagram Reels followed. This endless chain of videos, each telling a story in an instance, of pranks, "fails" or the opposite: "boss" videos showing "respect" for a job well done, visual puns, funny faces of humans, cats and dogs to swipe through, is highly addictive.

Seeing the success of Youtube, text-based social media platforms like Facebook and Twitter in 2014 added the capability to not only embed videos from Youtube in posts but to upload videos to these sites and serve them as native video, including the possibility to live-stream. This led to a number of killings being live-streamed on Facebook as the attack unfolded, including the Christchurch mosque shootings in New Zealand in March 2019. Facebook Watch³⁴⁰ is a VoD service for user videos, live video streams and shows, series and documentaries launched in August 2017. In 2018 Facebook had planned to spend up to US\$ 1 billion on original shows. Also this part of the 'social' VSP online video universe is outside the scope of our study.

The videoscape can therefore be described along three axes: streaming vs. downloads, on demand vs. linear ("live" broadcast or streaming) and all can upload (VSP) vs. a curated catalogue (VoD). Our present study covers four VSPs for on-demand streaming, while the commercial VSPs do not provide the means – and prohibit in their ToS – the downloading of videos, ³⁴² and four VoD platforms that allow customers to "rent" or "buy" videos, i.e. to buy the DRM-controlled right to stream it on demand for a limited time period or to buy – at a higher price – the right to download a file to keep, on which DRM prevents copying or distribution.

The German Platformscape

The research period from the end of 2021 to early 2022 was very much overshadowed by the Covid-19 pandemic which put a halt to public life in physical spaces and lead to a boom in online communications and entertainment.³⁴³ "Video is and remains ubiquitous. The past few years under the influence of the Corona pandemic have produced new highs in terms of usage frequency and volume. The main reason for this surge is the use of moving images on the Internet, accompanied by high, albeit declining, linear usage." (Rhody 2022: 487)

Audiovisual services which are provided inside the EU single market fall under the Audiovisual Media Services Directive 2018/1808 and need to register in their country of settlement within the EU. The national audiovisual regulatory authorities then notify the European Commission about the services under its jurisdiction, which publishes this information in the MAVISE database.³⁴⁴ The database is managed by the European Audiovisual Observatory, which in turn is

^{##} WP2 stable link. S. a. Medienhäuser dominieren auf YouTube, Netzpolitik.org, 02.03.2023, https://netzpolitik.org/2023/politische-suchbegriffe-medienhaeuser-dominieren-auf-youtube/

Censor bans 'manifesto' of Christchurch mosque shooter, The Guardian, 24.03.2019,
 https://www.facebook.com/watch

Facebook plans to spend up to \$1B on original shows in 2018, Techcrunch, 08.09.2017, https://techcrunch.com/2017/09/08/facebook-plans-to-spend-up-to-1b-on-original-shows-in-2018/

³⁴² A range of download helper applications allow users to circumvent this download blocking.

To the point even where the EU had asked Netflix and Youtube to throttle picture quality in Europe for fear of overloading the European Internet (Auch YouTube drosselt Bildqualität in Europa, RP, 20.03.2020, https://rp-online.de/panorama/coronavirus/coronavirus-auch-youtube-drosselt-bildqualitaet-in-europa_aid-49660333)

http://mavise.obs.coe.int/

operated by the Council of Europe and supported by the EU's Creative Europe programme. MAVISE covers audiovisual services in 41 European countries and Morocco.

Searching MAVISE for "Germany", results in 649 services [searching for "Country of AVMSD Jurisdiction: Germany" gives 606]. Of these, 540 [534] are TV Channels. 23 [15] are what is called "Free on-Demand (FOD)". These include AVoD (Amazon Freevee, Netzkino, Joyn, Pluto TV etc.) and PSM (ARD Mediathek, Funk, ZDF). 29 [14] are TVoD service (Amazon Prime Video Store, Anime on Demand, Maxdome, PŸUR advance TV, Sooner, Videobuster, i-concerts, Sky, Sport1, Videoload (Telekom), Vodafone Videothek etc.), nearly all of which are in the category "Film and TV fiction" and one each in "Music", "Entertainment" and "Sport". Finally, there are 57 [43] SVoD services (the same as in TVoD plus Amazon Prime for each of 29 European countries, Fix&Foxi, Kividoo, Kixi, Realeyz etc.), where the categories include "Documentary" with two entries: Geo Wild (RTL/Bertelsmann) and Spektrum TV. There is a separate "VoD N/A" category with no entry in Germany nor is there one for VSPs. 345

Table S0.1. German Services in MAVISE

Type of Service	Country DE	Country of AVMSD Jurisdiction DE
TV Channels	540	534
Free on-Demand (FOD)	23	15
TVoD	29	14
SVoD	57	43
VoD N/A	0	0
VSP	0	0
N	649	606

When we look at the reach of services in Germany,³⁴⁶ it is striking that Youtube is in a category of its own. With three billion visits in three months registered on Similarweb, Google's site is way ahead of the next video site Instagram with 415 million visits. Amazon does not provide its video services under a separate URL. Therefore traffic analysis cannot distinguish between video and shopping or other activity on Amazon.de. Likewise, itunes.apple.com has too little data for Similarweb to calculate a German traffic rank but does register 1.8 million visits in the three-month period, which would put it on the low end of the table. But that site is likely only the point of discovery for people who are not already inside the app Apple TV. This traffic cannot be seen by Similarweb.

Also the PSM services are difficult to put on a common scale. Simply adding up the visits of Tagesschau, ZDF and ARD (630.6 million) would put them ahead of all other services except Youtube, including ahead of the first commercial broadcaster, n-tv.

In this list we notice a group of four VSPs that under the claim of radical freedom of expression host far-right expressions, conspiracy theories and hate speech. They are

Remarkably, MAVISE does not contain a single online service in the category "adult" with country of origin Germany. It does have two TV stations (including Beate-Uhse TV). In the entire EU, there are 10 adult SVoDs based in France, UK, Finland and Slovenia and 22 adult VSPs based in Luxembourg, UK, Austria and Cyprus. Juniper Research (2021) estimated the global digital adult content market in 2021 to be worth US\$ 44.9 billion. This compares to the entire global VoD market which was estimated at US\$ 69.55 billion (Fortune, VoD Market Size, March 2022, https://www.fortunebusinessinsights.com/industry-reports/video-on-demand-market-100140).

Website traffic by Country rank Germany from Similarweb (23.1.2023), https://www.similarweb.com/de/top-websites/germany/

the Canadian **Rumble** (2013), the British **Bitchute** (2017), **Dlive.tv** (2017), like Bitchute based on the Bittorrent P2P protocol, and the most recent one, **Odysee.com** (2020), also a decentralised VSP based on a blockchain and Bittorrent.

With the exception of PSM and Itunes, we see the hierarchy of the sites in our present study: For VSPs, Youtube is way ahead of Instagram and Tiktok, and Dailmotion is far behind. For VoD platforms, traffic data cannot decide the front-runner between Netflix, which is only VoD traffic, and Amazon, which is includes all sorts of VoD-unrelated traffic. Dailymotion is last and Itunes as well as Apple TV+ are off the grid.

Table S0.2. Websites by Similarweb Country rank Germany (23.1.2023)

				Total visits Oct 2022 – Dec
				2022
rank DE	platform	country of origin	kind of service	from Germany
2	Youtube	US	VSP	3.068B
4	Amazon.de	US	VoD	1.174B
9	Instagram.com	US	VSP	415.3M
10	Pornhub.com	Canada	VSP	318.2M
20	n-tv.de	Germany	VoD	346.8M
21	Tiktok.com	China	VSP	179.0M
22	Tagesschau.de (PSM)	Germany	VoD	324.3M
25	Twitch.tv	US	live-streaming	223.3M
26	Netflix.com	US	VoD	220.5M
35	ZDF.de (PSM)	Germany	VoD	183.5M
50	ARDmediathek.de (PSM)	Germany	VoD	122.8M
136	Disneyplus.com	US	VoD	47.54M
172	tvnow.de (RTL+)	Germany	VoD	36.98M
358	bbc.com	UK	VoD	27.64M
379	joyn.de	Germany	VoD	21.07M
		France &		
416	arte.tv (PSM)	Germany	VoD	16.57M
433	archive.org	US	VSP	9.033M
839	Dailymotion.com	France	VSP	7.854M
882	zattoo.com	Switzerland	TV-streaming	6.485M
918	vimeo.com	US	VSP	6.838M
1,144	prosieben.de	Germany	VoD	7.276M
1,242	rumble.com	Canada	VSP	5.329M
1,254	3sat.de	CH & AT & DE	VoD	6.171M
1,341	odysee.com	US	VSP	5.316M
1,674	euronews.com	France	VoD	5.774M
2,522	bitchute.com	UK	VSP	3.347M
3,634	dlive.tv	US	VSP	2.401M
6,182	thepiratebay.org	Sweden	VSP	808,708
60,036	vbox7.com	Bulgaria	VSP	156,477

Germany has the second-largest population (84.3 million) among the EUMEPLAT countries, slightly behind Turkey (84.7 mil.). It is followed by Italy (60 mil.) and Spain (47.4 mil.) while five

consortium countries have around ten million citizens (Belgium 11.6, Czechia 10.5, Sweden 10.4, Portugal 10.3 and Greece 10.3) with Bulgaria trailing at 6.5 million (source: Wikipedia). This is important to keep in mind when comparing absolute numbers, e.g. of followers or views, between countries.

According to the 2022 ARD/ZDF Online Study (Beisch/Koch 2022), 95 percent of Germans used the Internet at least occasionally, 80 percent or 57 million people on a daily basis. Among 14-19-year-olds daily use was 100%, among 20-29-year-olds 99% and even more than half (51%) of those 70 years or older use the Internet on a daily basis. 3.6 million Germans are offline. Most of them are aged 70 years or older and around 60 percent of them are female (Beisch/Koch 2022).

72% of what Germans did online on a daily basis was media use (97% among 14-29-year-olds) as compared to individual communications (email, chat) and other activities like banking or gaming. 16 percent were reading or posting on social media (39% in the youngest group). Media use included audiovisual content, incl. live TV, which 51 percent of Germans watched daily in 2022 (88% of the youngest). Looking at time spent on the Internet, media eclipse all other. Germans spent 160 minutes per day on media (284 min. the young ones), compared to 59 minutes for individual communications (100) and only 16 minutes for social media (39) (Beisch/Koch 2022).

The 2022 ARD/ZDF Online Study distinguishes between "streaming portals" and "social media as video platforms", and focusses on the former, particular PSM and other TV VoD platforms. **Youtube** is called the "leader of the video market" which "towers above all as an aggregator", including of PSM and other TV content (Rhody 2022: 492). This seems to be the reason why the Study discusses Youtube as a VoD platform rather than as a video sharing, i.e. social media site. Under that heading, it mentions **Tiktok** which, at eight percent daily use, would be ahead even of **Amazon Prime**, and Twitch, which now reaches 13 percent of the German population aged 14 and over and would therefore share a place with Dazn. The leading medium for sports and that for e-sports side by side is another striking symbolic image of changing times. Alas, we do not see it here because Rhody argues that "videos in social media and in 'classic' streaming providers and media libraries are not comparable in terms of content" (ibid.), even though they compete for the recipient's media time budgets. Therefore, "Instagram, Facebook and Twitter are deliberately excluded from this analysis because they do not primarily distribute video content, even though the trend is clearly moving in this direction." (ibid.)

Germans on audiovisual social media

According to the 2022 ARD/ZDF Online Study, as we have seen, 72% of what Germans did online on a daily basis was media use (97% among 14-29-year-olds). This includes Youtube, while other social video such as on Tiktok or Instagram is included in the 16 percent devoted to reading or posting on social media (39% in the youngest group; ibid.).

We will not follow this rationale, because also other platforms are aggregators, including of TV, commercial and political videos, and technically, legally and by use Youtube is undoubtedly a video sharing platform. What follows are short portraits of the four VSPs in our study: Youtube, Instagram, Tiktok and Dailymotion.

Youtube

was founded in February 2005 by three former Paypal employees and acquired by Google, now Alphabet, in October 2006 for US\$ 1.65 billion.³⁴⁷ Youtube pioneered many elements of the culture, the interactions, technologies and business models of online video, both of the creators who use it as a market place and for the platform itself.

In 2007, Youtube started an annual competition to promote talent on the platform, awarding promotion budgets and a professional YouTube channel as prizes. The same year, after initial reluctance, Youtube began showing advertisements on videos of selected partners with whom they share some of the advertising revenue generated by their views. To be invited to become a partner, users have to regularly upload videos they have created themselves and their clips have to have high numbers of views. In June 2008, Google Germany announced that the affiliate programme was now also available in France and Germany.³⁴⁸ Alternatively, a creator can join a Multi-Channel-Network (MCN), a kind of publisher for Youtubers, supporting them in production, rights management, marketing and promotion. The first MCN was Maker Studios, founded in 2009 in the US. Large German MCNs include Mediakraft Networks (2011-2021), Studio71 by ProSiebenSat.1 Media SE and We Are Era. The latter was founded in 2012, is based in Berlin and since December 2018 wholly owned by RTL Group. With around 1,500 partners and four billion monthly video views, We Are Era runs Europe's largest influencer network.349 The number one channel by total video views in our German Youtube sample is the Tsuriki Show, a sitcom of a couple playing pranks on each other, without words. With more than eleven million subscribers and 18 billion views, the couple is estimated to earn between half a million and three million euros per month. 350

On the interaction side, Youtube introduced video queues and playlists, video overlays, e.g. speech bubbles, and endcards with links to other videos. At the end of 2009, the creation of subtitles through automatic speech recognition in English was introduced. At the end of 2012, this was extended to six European languages. Viewers were also able to submit subtitle suggestions, but this option for was removed in September 2020 because of spam and abuse.³⁵¹ Google also continuously developed Youtube's search engine. In fact, Youtube is often called the second largest search engine after Google Search.³⁵²

The "like" button was introduced by Facebook in 2009 and soon spread to all other social media. This single interaction feature made our lives "uniquely stupid", writes Jonathan Haidt, social psychologist at New York University. The publicly visible popularity metrics replaced authentic interactions by performative interactions designed to attract the most likes, the most shares and ideally go viral (Haidt/Rose-Stockwell 2019, s.a. Grosser 2014). Youtube originally allowed users to award one to five stars to a video. These were replace by a "like" and a "dislike" button in April 2010. Since November 2021, the number of dislikes is no longer publicly visible.

How did Google become the world's most valuable company?, BBC News, 01.02.2016, https://www.bbc.com/news/business-35460398

Press release, 26.06.2008, archived:
https://web.archive.org/web/20100620114650/http://www.lifepr.de/pressemeldungen/google-germany-gmbh/boxid-51790.html

Aus Divimove wird We Are Era, Meedia, 08.06.2021, https://www.meedia.de/marken/aus-divimove-wird-we-are-era-d4f241cb24540d77b1c53460a8c2514f

https://at.youtubers.me/tsuriki-show/youtuber-statistiken#search=Tsuriki%20Show

Youtube, Community Contributions deprecation & improving captions on YouTube, 28.09.2020, https://support.google.com/youtube/thread/73769191/community-contributions-deprecation-improving-captions-on-youtube?hl=en

That might be a myth or certainly more complex, but it does seem to be true that it is the #1 search engine for teenagers. (Matthias Funk, YouTube 2nd Biggest Search Engine – The Myth That Just Won't Die, Tubics, 07.02.2020, https://www.tubics.com/blog/youtube-2nd-biggest-search-engine)

This led to a controversy whether the function leads to organised abuse or is necessary to quickly identify fraudulent, dangerous or discriminatory materials.³⁵³

Since VSPs technically allow their users to upload anything, they have to make sure that they do not make available infringing or illegal material. For this purpose they are legally required to allow their users, government agencies and rightsholders to report possibly problematic material, which is then assessed by moderators and, if found infringing, removed. Platforms are also legally required to publish reports on content removal for reasons of copyright or criminal law. According to Youtube's Transparency Report in Q3 2022, 5.8 million channels and 5.6 million videos globally and 135,571 videos in Germany had been removed for violating Youtube's Community Guidelines. Youtube also pioneered automatic content recognition technology in order to implement upload filters. In the debate over mandating upload filters for all content sharing platforms in the most recent EU Copyright Directive (DSMD 2019/790), Youtube's "Content ID" system functioned as model.

Youtube remains a VSP, but it also expanded into the VoD market. Youtube Movies, offering professional feature films and documentaries, was launched in Germany in August 2012. As a TVoD it allows users to rent or buy movies and series. This was complemented by the SVoD service YouTube Premium which was launched in Germany in June 2018 and which includes access to Youtube Originals. In the same month, also the music streaming service Youtube Music was launched in Germany.

According to Kemp, Google's advertising resources indicate that Youtube had 72.60 million users in Germany in early 2022, equivalent to 86.5 percent of Germany's total population and 93.1 percent of Germany's total Internet population. Therefore, Youtube is far ahead of Facebook (35% of DE Internet population) and Twitter (10%) (Kemp 2022).

After Youtube had shown the way of video, several VSPs were founded in Germany to participate in the boom but had to close soon after. These include Clipfish from RTL Interactive (2006–2013), MyVideo founded by the brothers Samwer and acquired by ProSiebenSat.1 Media SE (2006–2017) and the Startup Sevenload (2006–2014).³⁵⁸

Instagram

is a social network focussing on the sharing of fotos and videos. It was launched in 2010 and acquired by Facebook, now Meta, in 2012. The platforms Facebook and Instagram were integrated by means of the Open Graph. The business model in both cases is advertising. Instagram has been criticised for surveilling its users and for its copyright strategy, as it tried to grant itself in its Terms of Service (TOS) comprehensive rights of use and exploitation of the images uploaded by its users.³⁵⁹

One main focus of attention in public debate and in research is the beauty cult celebrated by influencers who become role models whose glamorous lifestyle of photo-shoots and parties and

E.g.: YouTube co-founder predicts 'decline' of the platform following removal of dislikes, The Verge, 17.11.2021, archived: https://www.theverge.com/2021/11/17/22787080/youtube-dislikes-criticism-cofounder-jawed-karim-first-video-description-zoo

https://transparencyreport.google.com/youtube-policy/removals

https://www.youtube.com/feed/storefront

YouTube Premium: Videos ohne Werbung schauen, Heise Online, 19.06.2018, https://www.heise.de/newsticker/meldung/YouTube-Premium-Videos-ohne-Werbung-schauen-4084789.html

Musik-Streaming: YouTube Music startet in Deutschland, Heise Online, 18.06.2018, https://www.heise.de/newsticker/meldung/Musik-Streaming-YouTube-Music-startet-in-Deutschland-4084187.html

https://de.wikipedia.org/wiki/Videoportal#Ehemalige_Portale

Instagram fühlt sich missverstanden, streicht umstrittene AGB-Passage, T3n, 19.12.2012, archived: https://web.archive.org/web/20121222043535/http://t3n.de/news/instagram-streicht-umstrittene-433373/

whose regularly surgically modified faces and bodies a generation of boys and girls aspires to. These larger-than-life bench-marks are not for everyone, but everyone in "Generation Z" (born between 1997 and 2012) is effected by the 'Instagramisation' of identity construction, beauty, gender, nature. Since barely anyone can live up to these artificially boosted standards, the platform has been found to create stress, depression, anxiety, eating disorders, addiction, self-harm and suicide³⁶⁰ (Faelens et al. 2021, Åberg et al. 2020). From 2020, Instagram also became used for social movements, such as Black Lives Matter.

Meta provides a range of more or less comprehensive Transparency Reports on its enforcement of community standards, copyright and national content laws, covering both Facebook and Instagram.³⁶¹ For Instagram, the company provides Transparency Reports on two national laws, the German Network Enforcement Act (NetzDG),³⁶² on the enforcement of criminal law provisions on the Internet, and the Austrian equivalent, the Communication Platforms Act (KoPI-G).³⁶³ The NetzDG Report for Q4 of 2021, which covers most of our research period, shows that the highest number of cases of deletion or blocking was for distribution, acquisition, and possession of child pornography (2,433), followed by insult, incitement to hatred and defamation of religions.³⁶⁴

According to the ARD/ZDF Online Study 2022, Instagram is the most used social network (excluding Youtube) among young people in Germany. 74 percent of 14-29-year-olds use it at least once a week, followed by Tiktok (44%) and Facebook (42%).³⁶⁵

According to Kemp, numbers published in Meta's advertising tools indicate that Instagram had 29.85 million users in Germany in early 2022, which is 35.6 percent of the total population and 38.3 percent Internet users (Kemp 2022).

Tiktok

has its roots in two mobile apps. One is musical.ly, released in 2014, which allowed its users to record themselves lip-synching and dancing to playback songs, edit the videos with filters and effects and publish them on the platform. It was developed by Louis Yang und Alex Zhu in Shanghai whose company was headquartered in Los Angeles and Shanghai. In summer 2016, musical.ly had 140 million user globally and four million in Germany.³⁶⁶

The other is a short-form video hosting service in China named Douyin (抖音) launched by ByteDance in Beijing in September 2016. Within one year it gained 100 million users and more

Facebook Grilled by Senators Over Its Effect on Children, NYT, 30.09.2021, archived: https://ghostarchive.org/archive/n5Bln

https://transparency.fb.com/data/

³⁶² https://help.instagram.com/704881976636188/

^{363 &}lt;u>https://help.instagram.com/220743479787834/</u>

Instragram NetzDG Transparency Report, January 2022, https://l.instagram.com/?u=https://3A%2F%2Fscontent-muc2-1.xx.fbcdn.net%2Fv%2Ft39.8562-6%2F272814281_3023807534497610_4081255354630337561_n.pdf
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https://www.ard-zdf-onlinestudie.de/files/2022/Kacheln/16zu9/ARD-ZDF-Onlinestudie_2022_Infografik_1200x675Px-06.jpg

Musical-App aus Schanghai macht jeden zum Star, FAZ, 26.08.2016, https://www.faz.net/aktuell/wirtschaft/unternehmen/musical-app-aus-schanghai-macht-jeden-zum-star-14402443.html

than one billion video views per day.³⁶⁷ TikTok is an entirely separate, internationalised version of Douyin, which was released in the Chinese market in September 2016 and in most markets outside of mainland China in 2017. Also in November 2017, ByteDance acquired musical.ly and its young user base in the US for nearly US\$ 1 billion. In August 2018, both the code base and the subscriber accounts of musical.ly and Tiktok were merged under the name Tiktok. Since then, Douyin continuous to serve as China-only platform separate from the global platform Tiktok. They have almost the same user interface and features but no access to each other's content (Lin 2021).

The app gained notoriety when then-U.S. President Donald Trump over spying allegations demanded that Tiktok be bought by Microsoft or another "very American" company. Concerns over privacy and 'indecent' content let to bans of the app in India, Pakistan, Armenia, Indonesia, Syria and other countries. In February 2023, the European Commission banned Tiktok from staff work devices, citing data protection concerns.

Security researchers found Tiktok to violate the GDPR (General Data Protection Regulation) in various ways (e.g. Eberl 2019). As for censorship of user posts, certain themes were found to be censored by Tiktok including world leaders, politics, protests, LGBTIQ issues, and Xinjiang. However, suspicions of the app exfiltrating unusual data could not be confirmed. Research scrutinising Tiktok's code base found "a product that largely follows international industry norms, as we have not found any undesirable features like the ones in Douyin, nor strong deviations of privacy, security and censorship practices when compared to TikTok's competitors, like Facebook" (Lin 2021).

Tiktok's Transparency Reports for the first quarter of 2022 show that in enforcing its Community Guidelines, the platform removed 102 million videos and nearly 45 million accounts globally, mostly because suspected to be under the age of 13 or fake. In Germany in that three-month period, 995,566 videos had been removed,³⁷⁰ there were 16,662 successful copyright take-down reports,³⁷¹ and there were 2,713 government requests to remove or restrict content or accounts globally and 167 in Germany, 99 of which were actioned by Tiktok.³⁷²

In September 2021, TikTok reported that it had reached 1 billion users globally.³⁷³ In 2021, TikTok earned US\$ 4 billion in advertising revenue, according to estimated by The Economist.³⁷⁴ Tiktok is the top global app by consumer spend in Q1 2022, according to Forbes. The journalist explains: "TikTok has rolled out in-app badges and gifts that people can buy to support their favourite creators, which has proved tremendously successful. Other top apps by spend include dating apps like Tinder and the streaming video apps that take up six of the top 10 apps by spend". This compares to Tiktok's second place by downloads, behind Instagram, and fifth place by monthly active users behind Instagram on three and before Amazon (6) and Netflix (10) (Koetsier 2022).

How Douyin became China's top short-video App in 500 days, Walkthechat, 20.07.2018, https://walkthechat.com/douyin-became-chinas-top-short-video-app-500-days/

Trump threatens that TikTok will 'close down' on September 15th unless an American company buys it, The Verge, 03.08.2020, https://www.theverge.com/2020/8/3/21352878/trump-us-ban-tiktok-microsoft-acquisition-treasury-interview-deadline

European Commission bans TikTok from staff work devices, DW, 23.02.2023, https://www.dw.com/en/european-commission-bans-tiktok-from-staff-work-devices/a-64795525

https://www.tiktok.com/transparency/en/community-guidelines-enforcement-2022-1/

https://www.tiktok.com/transparency/en/intellectual-property-removal-requests-2021-1/

https://www.tiktok.com/transparency/en/government-removal-requests-2022-1/

TikTok says it has passed 1 billion users, The Verge, 27.09.2021, https://www.theverge.com/2021/9/27/22696281/tiktok-1-billion-users

The all-conquering quaver, The Economist, 09,07.2022, https://www.economist.com/interactive/briefing/2022/07/09/the-all-conquering-quaver

According to the ARD/ZDF Online Study 2022, Tiktok is used by 44 percent of 14-29-year-olds in Germany. ³⁷⁵ Figures published in ByteDance's advertising resources indicate that TikTok had 16.99 million users aged 18 and above in Germany in early 2022 or 24.4 percent of German adults or 21.8 percent of German Internet users (Kemp 2022).

Dailymotion

is the only European video platform in our study. The VSP was founded in Paris in February 2005. In July 2007, it had over 37 million unique visitors and 1.2 billion page views. Alexa ranked it the 50th most popular site globally, making it the leading independent video entertainment site of the day. In 2008, Dailymotion was one of the first platforms to support videos in HD 720p resolution. In 2008, Dailymotion was one of the first platforms to support videos in HD 720p resolution.

By 2009, the startup had raise € 40 million in venture capital. In 2011, Orange acquired 49 per cent of the company for 60 million euros, and in early 2013, the remaining 51% for another 60 million euros.³⁷⁸

Attempts by Yahoo to acquire Dailymotion for around US\$ 300 million in spring 2013, as well as by PCCW, were shot down by the French government, with the desire to keep the video platform in Europe.³⁷⁹ Finally, in June 2015, French media group Vivendi bought Dailymotion for around €217 million with an 80% stake. One month later, Vivendi increased its stake to 90%.³⁸⁰

Once creators have reached 1,000 views on their channel, Dailymotion invites them to become a partner and monetise their content.³⁸¹ Dailymotion allows to 'like' a video, but different from Youtube, it does not publicly display the number of likes or the number of views. A creator can decide to allow comments on her channel, but this feature is available only for users based in France.³⁸²

The platform is offered in 35 localised versions, with local home page and local premium publisher content, including the German portal <u>Dailymotion.com/de</u>. It has more than 2,000 content partners globally. E.g. in September 2020, Dailymotion partnered with Mi Video, the global video app developed by Xiaomi.³⁸³ Its news partners include Deutsche Welle and Spot on news AG ("the independent and leading news agency for entertainment and lifestyle in Germany"). In April 2022, Hurriyet became news parter as well.³⁸⁴

https://www.ard-zdf-onlinestudie.de/files/2022/Kacheln/16zu9/ARD-ZDF-Onlinestudie_2022_Infografik_1200x675Px-06.jpg

Dailymotion Raises \$34 Million in Second Round of Financing, PRWeb, 04.09.2007, https://www.prweb.com/releases/2007/09/prweb550792.htm

DailyMotion Goes High-Def, Unveils New Player, Podcastingnews, 18.02.2008, https://www.podcastingnews.com/content/2008/02/18/high-definition-video-dailymotion/

Orange Acquired Dailymotion For \$168 Million By Buying Out Remaining 51% Stake, Techcrunch, 22.02.2013, https://techcrunch.com/2013/02/22/orange-acquired-dailymotion-for-168-million-by-buying-out-the-remaining-51-stake/

Veto gegen Dailymotion-Übernahme: Französischer Minister lästert über Yahoo, Süddeutsche Zeitung, 02.05.2013, https://www.sueddeutsche.de/digital/veto-gegen-dailymotion-uebernahme-franzoesischer-minister-laestert-ueber-yahoo-1.1663976

Vivendi raises its stake in Dailymotion, Dailymotion PR, 30.06.2015, archived https://web.archive.org/web/20150905105016/http://press.dailymotion.com/?p=1307

Dailymotion Support, Earn revenue from video monetization, updated 17.02.2023, https://faq.dailymotion.com/hc/en-us/articles/207338747-Earn-revenue-from-video-monetization

Dailymotion Support, Manage your comment settings, updated 18.01.2023, https://faq.dailymotion.com/hc/en-us/articles/6072054945682-Manage-your-comment-settings

Dailymotion to launch on Xiaomi's Mi Video app, Digital TV Europe, 02.09.2020 https://www.digitaltveurope.com/2020/09/02/dailymotion-to-launch-on-xiaomis-mi-video-app/

https://about.dailymotion.com/en/news/publishers-news/dailymotion-partners-hurriyet/

Dailymotion declares that it is "resolutely committed to transparency", but publishes Transparency Reports only for Turkey.³⁸⁵

Data from the Statista Research Department from 2015 show that by reach among all Germans, Dailymotion (5%) was in second place behind Youtube (47%) and before Vimeo (4%). In France, Dailymotion had an active reach of 23 percent (Statista 2015). In 2021, Dailymotion was among the top VSPs in Germany with more than 270 million unique viewers per month and three billion video views (Goldbach Media Data 2021).

Others

There is a range of audiovisual expressions such as podcasts but also VSPs which we do not cover in our study. These include **Vimeo**,³⁸⁶ founded in 2004 for college humour videos, acquired by IAC in 2006, it is headquartered in New York City. To differentiate itself from Youtube, design decisions (e.g. in October 2007, Vimeo was one of the first VSPs to introduce high-definition streaming) and content policies (e.g. blocking video game-related videos) attracted filmmakers and created a site for professional content of artistic nature. In 2015, Vimeo's reach in Germany put it in third place behind Youtube and Dailymotion (Statista 2015).

Snapchat,³⁸⁷ founded in 2011 in California, is an instant messaging app allowing to share photos that disappear after viewing. It includes effects filters called "lenses" and since 2017 location-based services like Snap Map and Snap AR. In December 2012, Snapchat added a video function, and in 2014 a video chat. 'Snapchat Spotlight' is a feed for vertical videos by creators and brands. According to Snapchat's Q3 2022 report, the app had 363 million people daily users globally, 88 million in Europe and 13.7 million in Germany, growing faster than Facebook and Twitter. More than five billion snaps are sent every day.³⁸⁸

Nebula³⁸⁹ was founded in 2019 by creators and is creator-owned. It has thoughtful videos and explainers on history, music, technology, science & engineering and on video making, podcasts, and classes, with exclusive originals and bonus content and no ads. The subscription based VSP is intended to complement creators' other distribution channels on YouTube and on podcast platforms.

Media.ccc.de is the Chaos Computer Club's site for live-streaming events of the CCC, like the annual Chaos Communcation Congress, and of neighbouring initiatives and for hosting the recordings for on-demand access. In January 2023, the server declared that it contained "7,952 hours of content in 62,417 files of 11,089 recordings at 314 events". 390

Peertube is a decentralized, ActivityPub-federated, free software video platform powered by WebTorrent, that uses peer-to-peer technology to reduce load on individual servers when viewing videos. It was started in 2017 and is now supported by the French tech CSO Framasoft. The Peertube network claims to consist of 1,000 platforms hosting 600,000 Videos in January 2023.³⁹¹ This includes a great range of independent yet interconnected nodes such as one run by the Dutch

https://legal.dailymotion.com/en/transparency/

^{386 &}lt;u>https://vimeo.com/</u>

https://www.snapchat.com/

Snapchat Statistiken für 2022: Nutzerzahlen, Snapchat Spotlight, Nutzungsdauer & Snap Map, Future Biz, 26.10.2022, https://www.futurebiz.de/artikel/snapchat-statistiken-nutzerzahlen/

^{389 &}lt;u>https://nebula.tv/</u>

https://media.ccc.de/ operated by the CCC Video Operation Center: https://c3voc.de/

https://joinpeertube.org/

national media archive³⁹², one around the 3D creation software Blender³⁹³ and one by Extinction Rebellion.³⁹⁴

The entire universe of **Citizen's Media** is also outside our scope. This includes Civic and Educational Channels in all German cities, e.g. Alex Berlin³⁹⁵ and Tide in Hamburg³⁹⁶. These are organised in two national associations³⁹⁷ and supported by the state media authorities. In 2017, there were more than 180 community media in Germany, which broadcast around 1,500 hours of programming for around 1.5 million daily listeners and viewers nationwide (Förster 2017).

The localisation of Video on Demand (VoD) streaming platforms

What Youtube was for VSPs, Netflix was for VoD. Rhody (2022) remarks pointedly: "With a view to this market driver, a new phase in the 'streaming age' that has just begun is emerging." (p. 487)

The VoD revenues in the EU 27 had increased from € 3.5 billion in 2017 to € 11.6 billion in 2021, where SVoD, which focuses on TV series, was responsible for the highest growth and TVoD focusses on movies (Grece 2022). More than a third of all SVOD and TVOD services in Europe belong to a US company (Schneeberger 2023).

"Localisation" of VoD platforms sounds positive and customer-oriented, like "customisation" on an individual level, only on a national-cultural level: 'Giving the locals what the locals want.' Mostly, as we shall see, this involves licensing a suitable catalogue of rights for that country out of a mostly US-American pool of globally attractive movies and series, dubbing or subtitling the products into the local language – where a limited number of qualified translators and voice actors meets a growing demand³⁹⁸ – and putting a local-language interface to that part of the global platform. It does include some local productions. **Netflix** seems to be particularly successful in tapping into local audiovisual resources – talent, locations, funding – to create globally appealing productions, such as "Money Heist" (Original title: "La casa de papel") from Spain and "Squid Game" from South Korea. The practice of bringing the aboriginals the audiovisual glass pearls and alcohol and Christianity of our day continues the original sin of the fist colonisation, by spreading US-American cultural hegemony or 'soft power' even through local cultural productions.

A recent EAO analysis shows that the total investments in original European content sharply increased with the entry of the global streamers in the European market. This included private broadcasters, "while public broadcasters faced budget constraints." In 2021, Netflix accounted for about half of these global streamers' investments in Europe (Fontaine 2022).

Looking at the top 100 revenues in the period from 2016 to 2020, Ene/Schneeberger (2022) found a consolidation in the VoD market. The private European AV sector tends however to be less concentrated than the US one. The top five private European AV players account for 53% of top 20 revenues as opposed to 62% for players on the US market. Traditional telco players kept their share stable (around 16%) over the four years, while traditional broadcasters lost 5% in

³⁹² https://peertube.beeldengeluid.nl/

^{393 &}lt;a href="https://video.blender.org/videos/local?s=1">https://video.blender.org/videos/local?s=1

https://tube.rebellion.global/videos/local?s=1

https://www.alex-berlin.de/

³⁹⁶ https://www.tidenet.de/

Bundesverband Bürgermedien (https://www.bvbm.eu/) and Bundesverband Bürger- und Ausbildungsmedien (https://bvbam.de/). See also Bürgermedien aktuell, the newsletter for both (https://www.buergermedien-aktuell.de/). See also the Cultural Broadcasting Archive in Vienna (https://cba.fro.at/) which archives community media from Austria and Germany.

With different national preferences for either (see The International Content Boom Has Made Subtitlers and Dubbers the Lifeblood of Streaming, Morning Consult, 25.04.2022, https://morningconsult.com/2022/04/25/subtitles-dubbing-streaming/).

weight (down to 77% at the end of 2020), among them PSM (down by 3% to 31%). By contrast, pure SVOD players namely Netflix, Amazon and Dazn, accounted cumulatively for more than 75% of the revenue growth over the four-year period (ibid.: 5).

SVOD and pay TV stand out as the most concentrated audiovisual market segments in Europe. A total of 94% of SVOD subscriptions are cumulatively signed off to top 20 OTT platforms, while 72% of pay-TV subscriptions are cumulated by top 20 pay-TV operators. The weight of US interests in top 100 revenues has increased (by +3% up to 30% in 2020) due to the rise of the pure SVOD players. Here the share of US interests is by far the highest, with around four in five subscriptions signed off by a US-backed OTT platform. By contrast, pay TV remains largely a European-driven business (US-backed companies account for only 16% of subscriptions) (ibid.: 6).

The EAO Yearbook 2021/2022 finds evidence for a Europeanisation in the VoD space, as European non-national content accounts for by far the biggest share of EU27 content release both in cinemas and on VOD, and that, on average, a European citizen has access in his or her country to close to 7,000 different European non-national theatrical films. US interests in European audiovisual services stood at 31% in 2020, with two thirds owned by Sky, Netflix, Amazon and Dazn. The Yearbook also sheds light on the changing funding structure and the changes by Covid and Brexit. The UK lost more than half of its TV channels. A third migrated to the Netherlands (18%) and Spain (14%) (EAO 2022).

In Germany in 2020, the total number of OTT SVoD subscribers was 33.3 million. The three top VoD services were Amazon (44% of total SVOD subscribers), Netflix (32%) and Disney+ (6%). These top 3 have a market share of 82%, meaning, that there is some space for others. This is in contrast to the markets e.g. in Greece, Hungary and Ireland where the top 3 have 100% of the market (Grece 2021).

The ARD/ZDF Online Study 2022 found increases in monthly usage by an average of +5 percentage points over the previous year for all the 19 A-, T- and SVoD services active in Germany which they analysed. Growth was highest for Amazon Prime Video (+12%), Netflix (+7%) and Youtube (+7%), which is the only VSP among the "streaming portals" under study. This creates a field that is clearly led by Youtube which 59 percent of Germans use at least monthly. Number 2 is Netflix (45%), followed by Amazon (40%) and Disney (20%), while Apple TV/Itunes (8%) is in place 10, doubling its use over the previous year. Among the 14-29-year-olds both reach and growth are more pronounced, where 95 percent regularly use Youtube, compared to Netflix (84%), Amazon (70%) and Disney (44%) (Rhody 2022: 489 f.).

In a ranking by usage frequency across all VoD providers, whether PSM or commercial TV, telecom or tech company, Youtube again clearly leads the pack (70%), followed by ARD and ZDF (52% each), Netflix (49%), Amazon (47%), Disney (25%) and Apple (12%). These are the numbers for at least occasional use, including less than monthly. Looking at daily use, we get Youtube (19%), Netflix (12%), Amazon (6%) and Telekom Magenta TV (5%), while ARD, ZDF and Disney are each used by two percent of Germans on a daily basis. "Prime Video shows the biggest growth in the entire ranking and is preparing to replace Netflix as the industry leader." (Rhody 2022: 491 ff.).

As to the content of VOD catalogues, a 2020 EAO analysis found that on TVOD, EU27 content represented 22% when films and TV seasons were counted, 21% if films and TV episodes were considered. On SVOD, the share of EU27 content was 17% when considering films and TV seasons but fell to 12% when counting films and TV episodes: European TV series are shorter in episodes than other origins series (Grece/Pumares 2020: 8). EU27 content circulated in less countries than content from all other regions (ibid.: 10). The most exported EU27 film titles on TVOD were French, followed by Germany, Italy and Spain, while almost half of the exported TV content offer on TVOD was German, followed by France, Sweden and Austria. On SVOD, the most

exported titles, for both films and TV seasons, were French (around 25%), followed by German, Spanish and Italian titles (ibid.: 13). For both business models, over 70% of the works available are offered by tech and pure VOD players while service operated by incumbent TV and telecom players made up 30% of the content offer on SVOD and 15% on TVOD (ibid.: 11). Werstreamt.es or Justwatch are services for finding out where a certain title is currently available.

The German consumer organisation Stiftung Warentest (Foundation for the Testing of Goods) in January 2020 published test reports on eleven video streaming services in Germany. Testing for a range of factors (catalogue, usability, technical quality, data protection and security and TOS), they found none of the services to better than 'satisfactory'. Of the 200 currently most popular titles, none of the platforms had more than 58 available. Among the five SVoD services, Netflix scores best, followed by Amazon Prime Video, while Apple TV+ is last. ³⁹⁹ Among the TVoD services, Amazon Shop Prime Video is first, followed by Maxdome Store, now Joyn Plus, and Telekom Videoload, while Apple iTunes is fourth. ⁴⁰⁰

What follows are short portraits of the four VoD platforms in our study: Netflix, Amazon, Disney and Itunes.

Netflix

was founded in 1997 in California as a mail-order DVD-rental service. It started to offer VoD in 2007. 2012 the company expanded to Europe, in the UK, Ireland and Scandinavia first. Since September 2014 it is available in Germany.

In 2020, Netflix added 36.5 million new subscribers due to the change in lifestyle during the Corona crisis, and by the end of the year, the company recorded over 200 million paying customers for the first time.⁴⁰¹ By the end of June 2021, the company had 209.18 million users, including 73.95 million in the US and Canada and 68.70 million in EMEA.⁴⁰²

Key to the success of a platform is the way it recommends content that users would want to consume. Netflix developed a personalized video recommendation system called Cinematch based on a user's viewing behaviour as well as ratings from other users. In October 2006, the company issued a challenge to programmers to improved its recommendation algorithm, awarding a US\$ 1 million prize.⁴⁰³

With growing competition and studio blockbusters available on many platforms, the exclusive content of a provider is increasingly important for deciding where to subscribe. Furthermore, series allow platforms to retain customers in the long term, leading to a series boom. In March 2011, Netflix announced that it would start producing its own movies and series. Among the first of these Originals was David Fincher's political drama "House of Cards" (2013) that won 33 Emmys. Netflix's amortized content spending was US\$ 10.81 billion in 2020 of which 37.8% went into Originals.⁴⁰⁴

Stiftung Warentest, 5 Videostreaming-Dienste per Abo, 01/2020, https://www.test.de/Streaming-Die-besten-Anbieter-fuer-Filme-und-Serien-4817574-5554463/

Stiftung Warentest, 6 Videostreaming-Dienste per Einzelabruf, 01/2020, https://www.test.de/Streaming-Die-besten-Anbieter-fuer-Filme-und-Serien-4817574-5554464/

Netflix hat über 200 Millionen Nutzer und stoppt das Geldverbrennen, Heise Online, 20.01.2021, https://www.heise.de/news/Netflix-hat-ueber-200-Millionen-Nutzer-und-stoppt-das-Geldverbrennen-5030127.html

Netflix, Letter to Shareholders, 20.07.2021, https://s22.q4cdn.com/959853165/files/doc_financials/2021/q2/FINAL-Q2-21-Shareholder-Letter.pdf

Netflix Prize Website, archived from the original in Dezember 2006, https://web.archive.org/web/20061210022309/http://netflixprize.com/

Netflix's Amortized Content Spending to Rise 26% to \$13.6 Billion in 2021, Analysts Project, Variety, 23.09.2021, https://variety.com/2021/digital/news/netflix-content-spending-2021-amortized-1235072612/

Another key to success in the international market is localisation. Netflix found that dubbed versions of its shows are significantly more popular than their subtitled ones in many cultures. Its subsequent growing investment and addition of languages has been driving a worldwide growth in the dubbing industry.⁴⁰⁵

Amazon

was founded in in 1994 as online bookstore. It went public in May 1997 and began selling music and DVDs in 1998. The same year, it began international operations by acquiring online book sellers in the UK and Germany. Amazon Marketplace was introduced in Germany in October 1998. The following year, it began selling video games, consumer electronics, home improvement items, software, games and toys and eventually diversified to become a general retailer and market place and offering logistics and cloud services.

Amazon started an online DVD rental service in the UK and extended it to Germany in 2005. 406 In September 2006 in the US, it launched its VoD service for downloading purchased movies in DVD quality. In September 2008, it added streaming and announced that it now offered over 40,000 licensed movies and TV shows. 407 The subscription shopping service Amazon Prime was introduced in Germany in November 2007, which from 2014 included access to Prime Video. 408

Meanwhile, Lovefilm was founded in London in 2003 through mergers and acquisition of several online DVD rental services. In 2006, it expanded its services to Germany. The company had offered a download service alongside postal delivery but this ceased in February 2009.⁴⁰⁹ It also started a 'watch online' streaming service which offered over 4,700 films available as part of a DVD rental subscription or as a streaming-only subscription.

In 2008, Lovefilm took over Amazon's DVD rental in the UK and Germany. At the same time, Amazon acquired a majority stake in the company⁴¹⁰ and bought it entirely in 2011.⁴¹¹ In November 2013, Lovefilm announced to have two million subscribers in Europe and to offer a catalogue of more than 45,000 titles in Germany.⁴¹² Also in 2011, Amazon rebranded its streaming service to Amazon Instant Video, which became available in Germany in February 2014. In the same year, Amazon merged Lovefilm's rental and streaming rights catalogue into its own VoD platform⁴¹³ and continued to acquire rights to movies and TV shows. In 2013, Amazon started to produce its first

Netflix's Global Reach Sparks Dubbing Revolution: "The Public Demands It, The Hollywood Reporter, 13.08.2019, https://www.hollywoodreporter.com/tv/tv-news/netflix-s-global-reach-sparks-dubbing-revolution-public-demands-it-1229761/

⁴⁰⁶ Amazon startet DVD-Verleih, Manager Magazin, 23.06.2005, https://www.manager-magazin.de/digitales/it/a-361806.html

⁴⁰⁷ Amazon PR, Amazon Customers Can Now Instantly Watch Ad-Free Movies and TV Shows on Macs, PCs and Compatible Sony BRAVIA Televisions Starting Today on Amazon Video On Demand, 03.09.2008, https://press.aboutamazon.com/2008/9/amazon-customers-can-now-instantly-watch-ad-free-movies-and-tv-shows-on-macs-pcs-and-compatible-sony-bravia-televisions-starting-today-on-amazon-video-on-demand

Amazon Prime wird 20 Euro teurer, Vodmag.de, 09.11.2016, https://vodmag.de/amazon-prime-wird-20-euto-teurer/

Lovefilm Help Centre, LOVEFiLM Download Service now offline, no date, archived: https://web.archive.org/web/20120708035059/http://www.lovefilm.com/help/dyn_faqs.html?editorial_id=9148

Lovefilm übernimmt Amazons DVD-Verleihservice, Golem, 04.02.2008, archived: https://web.archive.org/web/20151006201203/https://www.golem.de/0802/57461.html

⁴¹¹ Amazon kauft Lovefilm, 10.01.2011, https://www.n-tv.de/technik/Amazon-kauft-Lovefilm-article2409816.html

Lovefilm mit zwei Millionen Nutzern, Focus, 19.11.2013, https://www.focus.de/digital/computer/lovefilm-mit-zwei-millionen-nutzern-film_id_2389303.html

⁴¹³ Aus Lovefilm wird Amazon Instant Video, Vodmag.de, 26.02.2014, https://vodmag.de/aus-lovefilm-wird-amazon-instant-video/

own Originals, the comedy series Alpha House and Betas, to be shown exclusively on Prime Instant Video.⁴¹⁴

Amazon ended downloading of videos in August 2014 and the DVD rental by Mail in October 2017, citing a "decreasing demand" for discs. Subsequently, Amazon fused its different offers of movies, series, TV channels, available to Amazon accounts, Prime subscribers or per view, to buy or to rent, and since 2018 markets all its video content under the name "Prime Video". 416

In August 2014, Amazon acquired the gaming video live streaming platform Twitch for US\$ 970 million.⁴¹⁷ Amazon had acquired the film database IMDb back in 1998.⁴¹⁸ In January 2019, it released 'IMDb Freedive' as free, ad-supported VoD service, offering movies, shows, Freevee Originals and live TV channels under the original address IMDb.com.⁴¹⁹ The service was renamed to IMDb Freedive and in April 2022 to 'Amazon Freevee'. It was launched in Germany in August 2022.⁴²⁰

In December 2020, Amazon and Sky entered into a partnership leading to integrating each others services on each others platforms.⁴²¹ In May 2021, Amazon announced that it would acquire Metro-Goldwyn-Mayer (MGM) and thereby the largest film catalogue of all Hollywood studios with approximately 4,000 films for US\$ 8.45 billion.⁴²²

Disney+

The Walt Disney Company is the only non-Internet-native among our four VoD platforms. It was founded in 1923 in Hollywood as animation film studio. The company expanded into film studios, TV channels, including the US sports channel ESPN, musicals and theme parks.

Disney's path to digital started in the late 1980s with a cooperation with Pixar Animation Studios, spun off from Lucasfilm in 1986. Based on Pixar's hard- and software, Disney built its Computer Animation Production System (CAPS) to automate the colouring and multiplane assembly of scanned-in artwork. The company's, and in fact the world's, first fully digitally animated feature film using CAPS was "The Rescuers Down Under" (1990). Deep Canvas for blending 3D CGI effects and characters with hand-drawn animation and the photorealistic 3D rendering

⁴¹⁴ Amazon's Original Series "Alpha House" Debuts Friday, The Motley Fool, 12.11.2013, https://www.fool.com/investing/general/2013/11/12/amazons-original-series-alpha-house-debuts-friday.aspx

Lovefilm By Post DVD rental service to close, BBC, 14.08.2017, https://www.bbc.com/news/technology-40925062

Umbenennung: "Prime Video" umschreibt jetzt alle Video-Inhalte von Amazon, Ifun.de, 05.02.2018, https://www.ifun.de/umbenennung-prime-video-umschreibt-jetzt-alle-video-inhalte-von-amazon-118434/

Amazon, not Google, is buying Twitch for \$970 million, The Verge, 25.08.2014, https://www.theverge.com/2014/8/25/6066295/amazon-reportedly-buying-twitch-for-over-1-billion

Internet Bookseller Amazon.com announces acquisition of UK company The Internet Movie Database Ltd., ca. 1998, archived: https://web.archive.org/web/20120603182852/http://www.prnewswire.co.uk/cgi/news/release?id=37602

Amazon's IMDb launches a free streaming service, Freedive, Techcrunch, 10.01.2019, https://techcrunch.com/2019/01/10/amazons-imdb-launches-a-free-streaming-service-freedive/

⁴²⁰ Amazon launches Freevee in Germany, Digital TV Europe, 04.08.2022, https://www.digitaltveurope.com/2022/08/04/amazon-launches-freevee-in-germany/

Amazon PR, Amazon und Sky verkünden Partnerschaft und bringen pünktlich zu Weihnachten beste Unterhaltung an einem Ort zusammen, 14.12.2020, https://amazon-presse.de/Top-Navi/RSS/Pressedetail/amazon/de/Digitales/Amazon-Prime-Video/Amazon-und-Sky/

Amazon kauft berühmtes Hollywoodstudio MGM, Spiegel, 26.05.2021, https://www.spiegel.de/wirtschaft/soziales/amazon-kauft-mgm-fuer-rund-8-5-milliarden-dollar-a-da345a9a-3b60-401e-bbc8-68a2c9cc4d53

The Rescuers Down Under': The Untold Story of How the Sequel Changed Disney Forever, Collider, 16.12.2020, https://collider.com/disney-rescuers-down-under-history-explained/

software Renderman, used e.g. for the memorable liquid-metal menace in Terminator 2,⁴²⁴ are more of Pixar's digital production tools that Disney acquired when it purchased the studio in January 2006 at a valuation of US\$ 7.4 billion.⁴²⁵

In 1988 Walt Disney Computer Software, Inc. was established for publishing computer and video games. In 1996 it was reorganized as Disney Interactive. ⁴²⁶ Around 2003 the company was re-branded as Buena Vista Games, Inc. and in 2007 to Disney Interactive Studios. ⁴²⁷ It was closed in 2016, ending Disney's original production of games. ⁴²⁸

In August 1995, Disney Interactive formed Disney Online which in November 1996 launched the Disney Store on the Internet. During the following years, it bought or founded a multitude of websites, such as the Disney Daily Blast in 1997, dig.com in 1998 or Kaboose in 2009. In 1998, Disney bought a 43% stake of Internet search engine Infoseek, including Starwave, a producer of news, entertainment and sports sites. Disney and Infoseek jointly launched the web portal Go.com in January 1999 and later that year Disney acquired the rest of Infoseek.

Disney had licensed movies to Starz, a US-American cable and satellite television network owned by Lions Gate Entertainment, for linear and online use. In 2008, Netflix struck an output deal with Starz in which it sub-licensed these online rights, including for much of the catalogues of Sony and Disney – from Starz rather than from the studios directly.⁴³² Disney threatened not to renew its agreement with Starz unless it paid Disney a licensing fee for digital streaming rights to its films and Starz had demanded a price that Netflix refused to pay when their licensing agreement expired. The partnership ended early 2012.⁴³³ By December, Netflix announced a licensing agreement with Disney directly that made it the exclusive US subscription service for firstrun films from Disney, Walt Disney Animation, Marvel and Pixar.⁴³⁴ The agreement went into effect starting with theatrical releases in 2016, and made Disney-released titles available on Netflix during the same release window in which movies come to pay-television channels.⁴³⁵

In a move to start its own streaming service, Disney had bought 33% of the stock in Major League Baseball technology company BAMtech for US\$ 1 billion in August 2016. 436 One year later

Disney and Pixar's Top 5 Most Innovative Animation Technologies, Explained, Collider, 23.01.2022, https://collider.com/disney-pixar-animation-technologies-explained/

Walt Disney announces \$7.4 billion purchase of Pixar, History, 24.01.2006, https://www.history.com/this-day-in-history/walt-disney-announces-7-4-billion-purchase-of-pixar

Moby Games, Walt Disney Computer Software, Inc. https://www.mobygames.com/company/101/walt-disney-computer-software-inc/

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Disney Cancels Infinity, No Longer Self-Publishing Games, 02.05.2017, https://www.ign.com/articles/2016/05/10/disney-cancels-infinity-no-longer-self-publishing-games; Why Disney's In-House Video Game Business Failed, Collider, 24.09.2022, https://collider.com/disney-in-house-video-game-business-failed-explained/

⁴²⁹ Moby Games, Disney Online, https://www.mobygames.com/company/8981/disney-online/

⁴³⁰ Disney Buys into Infoseek, Wired, 18.06.1998, https://www.wired.com/1998/06/disney-buys-into-infoseek/

Disney Abandons InfoSeek Brand, Forbes, 01.12.2000, https://www.forbes.com/2000/12/01/1201infoseek.html?sh=420b660778c7

Netflix, Starz strike streaming deal, Variety, 01.10.2008, https://variety.com/2008/digital/news/netflix-starz-strike-streaming-deal-1117993139/

⁴³³ Most Starz Play content to be removed from Netflix by the 29th of February, The Verge, 27.02.2012, https://www.theverge.com/2012/2/27/2828352/netflix-startz-play-content-pulled

Netflix to stream newer Disney movies, USA Today, 04.12.2012, https://eu.usatoday.com/story/tech/2012/12/04/netflix-outbids-pay-tv-for-rights-to-disney-movies/1746037/

Netflix wraps up rights for new Disney, Marvel, and Pixar films starting in 2016, The Verge, 04.12.2012, https://www.theverge.com/2012/12/4/3727688/netflix-streaming-rights-new-disney-marvel-pixar-movies

Disney will pull its movies from Netflix and start its own streaming services, CNBC, 08.08.2016, https://www.cnbc.com/2017/08/08/disney-will-pull-its-movies-from-netflix-and-start-its-own-streaming-services.html

in August 2017, Disney announced that it will launch its own streaming service in 2019 and end its distribution deal with Netflix.⁴³⁷

In 2019, not only Disney, but also Apple and a year later the AT&T-owned WarnerMedia launched their streaming services and took their content down from Netflix. The industry at this point saw the future not in generalist VoD platforms buying all available rights, like Netflix and Amazon, but in direct-to-consumer distribution of exclusive content from the studios.⁴³⁸

In 2014, Disney acquired the Multi-Channel Network Maker Studios for US\$ 500 million, which at the time had 380 million subscribers and 5.5 billion monthly views. ⁴³⁹ In February 2017, the roster of Youtube channels was reduced from 60,000 to 1,000 and in May, Maker Studios was merged with the newly formed 'Disney Digital Network' and more closely aligned with Disney's family-safe brand. ⁴⁴⁰

In the biggest acquisition in Disney's history, it bought 21st Century Fox for US\$ 71.3 billion from Rupert Murdoch in March 2019. This included National Geographic Partners, Fox Networks Group, Star India, the streaming services Star+ and Hotstar, and a 30% stake in Hulu, bringing Disney's ownership of Hulu to 60%.⁴⁴¹

In November 2019, the company launched the OTT SVoD service Disney+ with 500 movies and 7,500 series episodes from Disney, Pixar, Marvel, Star Wars, National Geographic and other brands in the United States, Canada and the Netherlands. Within the first day, the streaming platform had over 10 million subscriptions. Since March 2020, Disney+ is available in Germany. Sermany.

In April 2021, Sony decided to move the licenses of the VoD premiere rights to its releases from 2022 to 2026 from Starz to Netflix, giving it an exclusive window of typically 18 months. After this period, Sony's films and a significant number of its library titles will become available to televise or stream on Disney+, as the two companies announced a few days after the Netflix deal.⁴⁴⁴

At the end of 2022, Disney+ had an estimated 161.8 million subscribers globally, and 5 million in Germany. A comparison of the libraries available on Disney+ across countries and time shows that in Germany Germany 1,064 titles were available on 6 January 2021, 1,981 on 18 January 2022 and 2,256 on 16 July 2022.

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Disney Says Disney Plus Has Over 10 Million Sign-Ups After Launch Day, Variety, 13.11.2019, https://variety.com/2019/digital/news/disney-says-disney-plus-has-over-10-million-signups-1203403515/

Disney Plus ist endlich in Deutschland erhältlich und hier erfahrt ihr, was ihr über Disneys neuen Streamingdienst wissen solltet, Business Insider, 18.06.2020, https://www.businessinsider.de/insider-picks/disney-plus-deutschland/

Disney Signs Licensing Deal for Sony Films, The Wrap, 21.04.2021, https://www.thewrap.com/disney-cuts-licensing-deal-for-sony-films/

⁴⁴⁵ Flixpatrol, Disney+ Subscribers, https://flixpatrol.com/streaming-service/disney/subscribers/

Which Country Does Disney+ Have The Most Movies & TV Shows On?, What's on Disney Plus, 15.07.2022, https://whatsondisneyplus.com/which-country-does-disney-have-the-most-movies-tv-shows-on/

Itunes and Apple TV+

Founded in 1976 in the proverbial Californian garage, the computer hard- and software maker Apple was a pioneer in selling content online, namely music, but a latecomer in the VoD business.

Apple released its media player and management programme Itunes (based on the MP3 player SoundJam MP, which Apple had acquired together with its publisher) in 2001.⁴⁴⁷ It controls content by means of the proprietary FairPlay DRM, which seems to have been an initial compromise to get the major labels onboard, because in 2007 Apple CEO Steve Jobs strongly called on the industry to drop DRM⁴⁴⁸ and launched Itunes Plus, offering its entire music catalogue in DRM-free 256 Kbit/s AAC encoding at three slightly higher price points set by the labels, even offering to convert all a user's existing music into the new DRM-free high-quality format at € 0.30 per song.⁴⁴⁹

In October 2001 the first Ipod followed which integrated Itunes. Itunes 4, released in April 2003, provided access to the Itunes Music Store, which originally only offered music in the US. Together with version 6, released in October 2005, the store introduced music videos, a few TV series and some short films from Pixar. Itunes 7, September 2006, introduced Cover Flow, and the store now offered 75 movies from studios like Disney, Pixar, Touchstone and Miramax. In January 2007, Apple introduced the set-top box Apple TV und the Iphone, both with Itunes on board. Version 8, in September 2008, introduced Genius playlists, Apple's algorithm for generating playlists based on a single song, where the selected songs were supposed to 'go great together.' The store now included TV series in HD. For Itunes 9, released in September 2009, the store added support for the rental of HD movies. In April 2008, the iTunes Store was the largest music vendor in the United States, and in February 2010, when its sold its 10 billionth song, the largest music vendor in the world.

The Itunes Store became available in Germany in June 2004 for music and came to include music videos, short films and TV series in 2005 and TV series from April 2008, starting with 35 series for download including by ProSieben, Sat.1, ZDF und Brainpool. 453 Movies became available on the German Itunes Store in April 2009 with more than 500 titles for streaming to the Apple TV app or for DRM-controlled download to rent, but at first not yet to to buy. 454

The first generation of the set-top box Apple TV in 2007 required a separate computer running Itunes on the same network to sync or stream content to it which had been purchased from

iTunes: A look at Apple's media app and its influence on an industry, Macworld, 08.01.2016, https://www.macworld.com/article/227143/15-years-of-itunes-a-look-at-apples-media-app-and-its-influence-on-an-industry.html

⁴⁴⁸ Apple CEO Steve Jobs' posts rare open letter: 'Thoughts on Music' – calls for DRM-free music, Macdailynews, 06.02.2007,

https://macdailynews.com/2007/02/06/apple_ceo_steve_jobs_posts_rare_open_letter_thoughts_on_music/ Entwicklungen im iTunes Store, Apple PR, 06.01.2009, https://www.apple.com/de/newsroom/2009/01/06Changes-

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iTunes through the ages, Ars Technica, 23.11.2012, https://arstechnica.com/gadgets/2012/11/itunes-through-the-ages/

iTunes Store Top Music Retailer in the US, Apple PR, 03.04.2008, archived: https://web.archive.org/web/20080906080056/http://www.apple.com/pr/library/2008/04/03itunes.html

iTunes Store Tops 10 Billion Songs Sold, Apple PR, 25.02.2010, archived: https://web.archive.org/web/20110519040721/http://www.apple.com/pr/library/2010/02/25itunes.html

iTunes nun mit Serien-Downloads auch in Deutschland, PC Welt, 02.04.2008, archived: https://web.archive.org/web/20130921172256/http://www.pcwelt.de/news/Apple-iTunes-nun-mit-Serien-Downloads-auch-in-Deutschland-81935.html

Apple iTunes Deutschland nun mit HD-Filmen zum Ausleihen, HDTV Total, 16.04.2009, archived: https://archive.ph/20130103034532/http://www.hdtvtotal.com/module-pagesetter-viewpub-tid-1-pid-1319.html#selection-771.0-771.56

the Itunes Store. A software update in January 2008 removed that requirement and allowed to access. Youtube and to rent or purchase content from services such as Itunes Store, Mobileme and Flickr directly on the Apple TV. The fourth generation Apple TV announced in September 2015 featured a new operating system, tvOS, with its own app store, allowing third-party developers to release their own apps for video, audio, games and other content on the platform. E.g., in December 2017, the Amazon Video app became available for Apple TV. Apple TV 4K in September 2017 opened a new line of set-top boxes for displaying ultra HD resolution and HDR content.

In October 2019, with the release of MacOS Catalina, Apple after 18 years ceased Itunes and split its functions into three separate apps: Apple Music, Apple TV and Apple Podcasts. Apple's storefront for movies and series moved inside the TV app. 459

While continuing to provide a hardware and software market place for others to market their audiovisual content and after the success of Netflix and Amazon, Apple wanted its own share of the VoD streaming market. When Apple TV+ was announced at an event in March 2019, the company signalled that it would focus on Apple Originals, presenting a roster of celebrities involved in the first projects, including Jennifer Aniston, Oprah Winfrey and Steven Spielberg. Apple was expected to spend US\$ 2 billion that year on original content. When Apple TV+ launched in November 2019 in the US, it offered eight original series and one documentary movie, all ad-free and exclusive to the platform. The initial price was US\$ 5 per month, but customers who bought a new Apple device were offered the first year for free. The service is available on the Apple TV settop box and most other Apple hardware but also on some non-Apple hardware and in the web browser (tv.apple.com). In November 2019, the TV+ service was launched in 106 countries at the same time, including Germany.

In 2019, Apple produced 13 Originals, in 2020 there were 35, in 2021 54 and in 2022 there were 67 Originals, all of which originating in the US, except for four from the UK and one each from Spain, Israel and Canada. The revised AVMS Directive of 2018 provides that VoD services offered in Europe shall provide at least a 30% share of European works in their catalogues. This also applies to Apple TV+. This might have been an incentive to produce more Originals in European national markets. It might also have been behind the decision in January 2022 to hire award-winning producer Dr. Franziska An der Gassen as a creative executive for Apple TV+ Germany.

Apple TV: About Apple TV software updates, 19.11.2008, archived: https://web.archive.org/web/20081205100216/http://support.apple.com/kb/HT3187

⁴⁵⁶ Apple TV review, The Verge, 29.10.2015, https://www.theverge.com/2015/10/28/9630952/new-apple-tv-4-review

⁴⁵⁷ Amazon Prime Video app rolling out to Apple TV App Store, 9to5mac, 06.12.2017, https://9to5mac.com/2017/12/06/amazon-prime-video-app-available-apple-tv/

Apple TV 4K brings home the magic of cinema with 4K and HDR, Apple PR, 12.09.2017, https://www.apple.com/newsroom/2017/09/apple-tv-4k-brings-home-the-magic-of-cinema-with-4k-and-hdr/

Apple to Replace iTunes With 3 Media Apps, The Hollywood Reporter, 03.06.2019, https://www.hollywoodreporter.com/news/general-news/apple-end-itunes-1215257/

Apple Reveals New TV Streaming Service, Variety, 25.03.2019, https://variety.com/2019/tv/news/apple-tv-streaming-service-1203171335/

Apple TV+ has arrived: Here are the details, Techhive, 07.11.2019, https://www.techhive.com/article/584122/apple-tv-plus-details-and-fine-print.html

What countries is Apple TV+ available in?, Finder, 01.11.2019, archived: https://web.archive.org/web/20191106220709/https://www.finder.com.au/list-countries-apple-tv-plus

⁴⁶³ Flixpatrol, Apple TV Originals by year: https://flixpatrol.com/streaming-service/apple-tv/originals/

⁴⁶⁴ Audiovisual Media Services Directive (EU) 2018/1808, Art. 13, https://eur-lex.europa.eu/eli/dir/2018/1808/oj

Apple could be required to offer 30% local content to Apple TV+ subscribers in Europe, 9to5mac, 09.12.2020, https://9to5mac.com/2020/12/09/apple-could-be-required-to-offer-30-local-content-to-apple-tv-subscribers-in-europe/

Apple does not release the number of subscribers to any of its individual services, it did, however, at the beginning of 2021 announce that the company surpassed 660 million paid subscriptions across all of its services. According to market research, in Q3 2022 Apple TV+ accounted for 7% of streaming service subscribers in the US, putting it in place 6 behind No.1 Netflix (21%), No. 2 Amazon Prime Video (19%) and No. 3 Disney+ (15%). Globally, in March 2022 Apple TV was estimated to have 25 million paid subscribers and 50 million with access via promotions for buying an Apple device. According to analysts, Apple TV+ generated between US\$ 1 billion and US\$ 2 billion in revenue in 2022, while spending more than \$3 billion on producing content and buying sports broadcasting rights.

German response to platformisation

In Germany, Public Service Media (PSM) were early to venture onto the Internet. They launched their first websites ARD.de and ZDF.de in 1996.⁴⁷¹ In the 2000s, both public and commercial TV stations started to provide "seven-day-catch-up" on-demand services to allow their viewers to watch recent broadcasts that they have missed.

ZDF launched its "Mediathek" in 2001. ARD followed in 2007, when also the BBC released the first version of its Iplayer. Commercial broadcasters, including cable and satellite TV providers, followed. ProSiebenSat.1 launched its VoD service Maxdome in Germany and Austria in 2006. RTL followed with RTLnow in 2007 and Sky Germany opened its first OTT VoD named Sky Go in 2011. Also the telcos wanted to join the lucrative online video and TV market. Deutsche Telekom launched its portal T-Online in 1995, which in 2003 came to include a VoD service with movies licenced from Dreamworks, Metro-Goldwyn-Mayer, Universal and the German Constantin Film, 472 which is now called Videoload. Live-TV followed with the set-top box-based IPTV service Entertain (2006), now MagentaTV.473 And also the press publishers in the 2000s started to offer videos alongside the articles on their portals.

A 2009 study found that the majority of "the major European television channels, whether private or public, provide a catch-up TV service. We have identified 241 such services that were operational at the end of December 2008, making up more than a third of all on-demand services in Europe." (EAO 2009, p. 220 ff.).

⁴⁶⁶ 'The Placebo Effect' Producer Franziska An der Gassen Joins Apple TV Plus as Creative Executive for Germany, Variety, 11.01.2022, https://variety.com/2022/streaming/global/franziska-an-der-gassen-apple-tv-plus-germany-1235150987/

⁴⁶⁷ Apple TV Plus has reportedly surpassed more than 40 million subscribers, iMore, 12.05.2021, https://www.imore.com/apple-tv-plus-has-reportedly-surpassed-more-40-million-subscribers

Apple TV+ gets closer to Hulu in the US while Amazon Prime Video lost subscribers, 9to5mac, 13.10.2022, https://9to5mac.com/2022/10/13/apple-tv-gets-closer-to-hulu-in-the-us/

Estimated number of Apple TV Plus users worldwide as of March 2022, Wedbush Securities, as of March 2022, https://www.statista.com/statistics/1136261/number-of-apple-tv-plus-subscribers-us/

⁴⁷⁰ Is Apple TV+ Losing \$1B to \$2B Annually?, Tipranks, 28.06.2022, https://www.tipranks.com/news/apple-tv-losing-1b-to-2b-annually-analyst

https://web.archive.org/web/20121025013611/http://www.ard.de/intern/abc/-/id=1643802/nid=1643802/did=1657276/faur3a/index.html#abcListItem_1657276 and https://www.zdf.de/zdfunternehmen/geschichte-des-zdf-100.html

⁴⁷² T-Online startet Online-Film-Angebot, Heise Online, 05.11.2003, https://www.heise.de/newsticker/meldung/T-Online-startet-Online-Film-Angebot-87997.html

Deutsche Telekom: Mit EntertainTV die nächste Generation des Fernsehens erleben, Telekom 28.04.2016, https://www.telekom.com/de/medien/medieninformationen/detail/deutsche-telekom-mit-entertaintv-die-naechste-generation-des-fernsehens-erleben--351594

Catch-up VoD platforms were narrowly conceived as extensions of broadcast TV. The time-limited act of making available was considered to be included in the licence for broadcasting, therefore not requiring additional remuneration for rightsholders (which has been disputed by the producers' side ever since (AG Dok 2015).

Yet even so, these narrow on-demand windows and anything online beyond them were challenged from the start. Market actors complained that their chances were diminished by PSM and demanded that the PSM's remit be limited to public service information in the narrow sense. In particular, the new opportunities offered by the Internet should be left to the market to exploit. From 2000, commercial broadcasters and press publishers in Germany launched a series of complaints to the European Commission against PSM for alleged abuse of state aide.

The EU in the Amsterdam Protocol on Public Broadcasting (1997) had recognised that PSB is "directly related to the democratic, social and cultural needs of each society and to the need to preserve media pluralism", 474 and that member states may provide the otherwise prohibited state aid to fund its operation. Also the Council of Europe in a number of Recommendations had stressed the importance of PSM for the functioning of a democratic society and of their ability to utilise new technologies in order to keep fulfilling its remit.

Between 1999 and 2019, the European Commission has taken 40 decisions on cases of state aid to public service broadcasting.⁴⁷⁵ The investigations against Germany led to the Commission Decision on Financing of public service broadcasters in Germany (ARD/ZDF)⁴⁷⁶ of 2007. It addressed a number of complaints over alleged subsidisation of the commercial production companies of the PSBs, unfair competition in sports rights, PSM's presence in the advertising market, but most importantly new online services which the complainants claimed were not covered by the public service remit (ibid.: pts. 67 ff.).

And – at the end of this lengthy process, discussed in more detail in EUMEPLAT Deliverable 1.4^{477} – the Decision introduced a solution to PSM's legitimacy problem in the online realm. While the seven-day-catch-up model continued, for anything beyond that, a Three-Step Test, also known as Amsterdam Test, was established. This shall clarify for each offer that it 1.) is covered by the public service remit and therefore serves the democratic, social and cultural needs of society, 2.) contributes in a qualitative way to "editorial competition" with commercial providers and that 3.) the PSB specify the financial impact of such offers.

The 2007 EC Decision was implemented in German broadcast law in the Inter-State Treaty of December 2008, which had been renamed into "Treaty on Broadcasting and Telemedia" to mark the inclusion of public service Internet activities into broadcast law. The general remit ("to educate, inform, advise and entertain", § 11) is supplemented by one for telemedia (§ 11d), according to which initially only programmes and programme-accompanying materials may be made available on demand and only up to seven days after their broadcast. A longer or unlimited online 'dwell time' as well as new or non-programme-related telemedia offerings must pass the three-step test (§ 11f(4)). Third parties must be given the opportunity to comment on the planned

Protocol (No 29) on the system of public broadcasting in the Member States to the Treaty on the Functioning of the European Union, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12012E%2FPRO%2F29

See the Commission's Competition Policy database: https://ec.europa.eu/competition/elojade/isef/index.cfm

⁴⁷⁶ (C(2007) 1761 final, 24.04.2007 https://ec.europa.eu/competition/state_aid/cases/198395/198395_678609_35_1.pdf

⁴⁷⁷ 3.3 Public Service Media: Amsterdam Protocol (1997) in: Deliverable 1.4 European Media Legislation: Overview [##stable link]

Staatsvertrag für Rundfunk und Telemedien, zuletzt geändert durch den Zwölften Rundfunkänderungsstaatsvertrag vom 18. Dezember 2008, https://www.urheberrecht.org/law/normen/rstv/RStV-12/text/

offer. The market impact test (step 2) shall be carried out by an external consultant (§ 11f(5)). Not permitted in telemedia are non-broadcast-related press-like offerings, advertising, purchased feature films and television series, local reporting as well as a whole range of offerings listed in the appendix. A German specialty not present in European broadcast law is the ban on 'press-like' services (§ 11d(2)(3)) that had been lobbied for by the mighty German Springer Group.

Particularly due to this German provision, the new law had a dramatic effect: ZDF alone had to 'depublish' more than 100,000 articles and 4,000 videos. This corresponded to more than eighty per cent of ZDF's online content of the time (Dörr in Donders/Moe 2011: 79).

Yet, as media law scholar Wolfgang Schulz commented, the procedural solution of the Three-Step-Test gives PSB "for the first time a genuine online mandate ... in accordance with the development guarantee" (Schulz 2008: 27). Since then there is a legitimised procedure by which PSM can propose to society new online services they deem necessary and suitable for fulfilling their remit in the Internet.

Until the end of 2019, 54 Three-Step-Tests for new or revised 'Telemedia' have been conducted in Germany. The UK had conducted five of what they called 'Public Value Tests' from 2007 to 2015, then stopped. Some form of ex ante scrutiny has been exercised by at least eight EU member states (Austria, Denmark, Finland, Germany, Ireland, Netherlands, Sweden and the UK), one EEA state (Norway) and one devolved regional government (Flanders) (Biggam in: Donders/Moe 2011: 46). But it seems that all but Germany have stopped them.

And arguably the most consequential decision – Funk, the online-only format of ARD and ZDF for young audiences – was not three-step-tested along this procedure but underwent an equivalent test before it was assigned in the law itself. Funk was launched in 2016 (cf. Grassmuck 2015) as a network of at any time about 60 individual channels which are plaid out on third-party platforms such as YouTube, Instagram, Facebook, Snapchat and TikTok as well as in its own web and mobile app and since October 2020 also on the ARD and ZDF VoD platforms. In total, more than 200 formats have been realized since the launch of Funk and just under 140 of them have been terminated. ZDF reported at the end of 2022, that 86 percent of 14- to 29-year-olds know Funk or at least one of its formats. Since 2016, Funk formats have cumulated 26 million subscriptions and around 6.6 billion views. There were 4.9 million subscriptions on TikTok, almost seven million on Instagram and around 1.4 million on Snapchat.⁴⁸⁰

Sven Stollfuß (2021) in his case study of two Funk formats shows how storytelling develops within a social media environment, fully joined with its operational mode of platformisation. He concludes: "To reach younger media users with relevant public service content, ARD and ZDF have launched the content network 'funk' to create and distribute content, primarily on third-party platforms. In this respect, the 'funk' network constitutes a shift in the PSB system. As van Es and Poell have argued, 'public service broadcasters and policy makers are thoroughly aware of the challenges posed by platformization'. In Germany, the 'funk' network stands for a new organisational direction with regard to content production and distribution beyond traditional structures. On the institutional level, PSB's media policy has changed in order to provide content that fits the operational mode of platformisation. German PSB is becoming more flexible, more participatory and more audience-oriented." (Stollfuß 2021)

In hindsight it seems astonishing how many documents it took from many European institutions to argue the obvious: The media landscape is becoming digital and if PSM are not to

Wikipedia: Liste der deutschen Dreistufentests, https://de.wikipedia.org/wiki/Liste_der_deutschen_Dreistufentests

Content-Netzwerk funk von ARD und ZDF überzeugt 14- bis 29-Jährige, ZDF PR, 09.12.2022, https://presseportal.zdf.de/pressemitteilung/content-netzwerk-funk-von-ard-und-zdf-ueberzeugt-14-bis-29-jaehrige

become irrelevant they have to go digital as well. The effort needed is evidence of the immense lobbying by commercial media to prohibit exactly that.

Looking at PSM in the period from 2016 to 2020, Ene/Schneeberger (2022) find their weight in revenues diminish (down by 3% to 31%). Even though they are not part of the consolidation in the industry and they were not too strongly affected by Covid-19, PSM revenues decreased over the same period by 0.4% in real terms (ibid.: 5).

Considering their extent, PSM have an astonishing impact. Ene/Schneeberger find that PSM represent only 9% of TV channels and 3% of VoD services, while almost all of the European PSM offered at least one on-demand service at the end of 2020. Yet they accounted for 16% of the total number of TV fiction titles produced in Europe – with ARD producing the largest number of titles of all (ibid.: 23) – and one third of global viewing consumption on VoD in Europe (ibid.: 10).

In 2022, André Rhody, reporting on the results of the 2022 ARD/ZDF Online Study, notes that "meanwhile, the boundaries between 'classic' Mediatheken and streaming portals are becoming increasingly blurred, both in terms of content and technology." (Rhody 2022: 487).

According to the 2022 data, PSM VoDs are being used more than ever before. 57 percent of Germans used the opportunity to 'watch TV shows or videos in media libraries' at least once a month, 3 percentage points more than in the previous year. This increase is supported by all age groups, but is disproportionately high among 14- to 29-year-olds, which was up by 12 percentage points to now 69 percent. The 30- to 49-year age group remained at 67 percent. "This means that the (monthly) reach of media libraries in the two younger age groups is now almost on a par with linear TV programming (72% and 79%)." (ibid.: 487)

In 2022, 39 percent of the population above the age of 14 used the ARD VoD at least once a month and 40 percent used that of ZDF. This compares to the use of the platforms of Arte (20%) and 3sat (14%) and those of RTL+ (12%) and Joyn (10%) (ibid.: 488).

Top channels on four Video Sharing Platforms (VSP)

For the first part of our analysis, data on the 100 top channels/accounts on Youtube, Tiktok and Instagram in Germany were extracted centrally for all EUMEPLAT consortium partners, on 30 June 2022. Following the data gathering guidelines, we added Dailymotion as the fourth-most relevant platform in Germany based on diffusion. The data for this French platform were extracted on the same day. Data extraction is a three-step process:

- 0.) selection of a data source,
- 1.) selection of a country-related sample from the total channels on a platform, and
- 2.) ranking of the channels in that sample based on some impact metric (subscribers, views etc.).

Data source for Youtube and Dailymotion was the social media marketing company Socialblade. "YouTubers/Dailymotionists in Germany" was the selected dataset which was then ranked by Video Views into a list of top 100.⁴⁸¹ "YouTubers in Germany", we would intuitively expect to mean that it refers to the place of origin of the channel providers. The company explained upon request: "You would only get channels that have assigned themselves (channel owners) as a country from their youtube/Dailymotion apps. We then look at their channel page and gather the country data from there. So their audience does not come into play."

https://socialblade.com/youtube/top/country/de/mostviewed

Data source for Tiktok and Instagram was Hypeauditor. In this case, there was no selection by country of origin and then a ranking by views, but the extraction was done of a dataset called "Top 1000 Influencers in Germany". Here the analytics company does give some, if rather unintelligible explanation on its site, which is different for Instagram, that seems to imply that they rank influencers globally by a combination of the numbers of their followers and interactions, and then allow to display subsets by content category or by country. A high Country Rank for Germany therefore says that a channel is popular with German audiences, while it may be located in Brazil or in the US.

Upon request, the company gave us this information: "Here is the information on how we calculate the Top Rankings: We analyzed a vast number of Instagram users [i.e. influencers] and ranked them by the number of real followers and authentic engagement (number of likes and comments that come from real people and influencers). All the users take part in several country rankings. If the majority of users' audience come from Germany, France or UK, then they would participate in the following countries' rankings respectively."

And they added a link with information on their Country Rankings⁴⁸⁶ that is no less unclear, but confirms that it is an opaque composite metric, based on followers and interactions of a channel rather than its place of origin. And indeed, in case of Tiktok only 83% of the accounts in our sample had their country of origin in Germany, while for Instagram it is only 19 percent: the majority originate in the US (51%).

In other words, the two sets of data – Youtube and Dailymotion based on Socialblade and Tiktok and Instagram based on Hypeauditor – are not comparable to each other.

In both cases, additional demographics information on the audiences from Hypeauditor was added to the channels manually. These include Number of Subscribers, Engagement Rate, Average Engagement per Video, Average views per video, Views in last 30 Days, Worldwide Rank, Country Rank in Germany, Top Audience Countries, Audience Languages and Sex and Age of Audience.⁴⁸⁷ Cross-platform activities of creators were not taken into consideration.

Youtube

Data for Youtube were taken from Socialblade. "YouTubers in Germany" was the selected dataset which was then ranked by Video Views into a list of top 100.⁴⁸⁸ The resulting channels are nearly all based in Germany. Outliers are one channel whose info page gives an imprint with an address in the US ("Craftronix" who produce Minecraft animations) and three channels without location

https://hypeauditor.com/top-tiktok-germany/

⁴⁸³ "Find the top TikTok accounts in Germany on HypeAuditor, the most integrity TikTok influencers ranking. Find out who is the #1 TikTok influencer in Germany in 2023 and get a list of the most popular TikTok accounts. ... How we calculate: Find top TikTok influencers to work with by the number of average views per video, average likes, comments, and shares" (ibid.)

[&]quot;How do we calculate ranks? We pull data from different open sources. Then we process and group data into clusters. Our Al only considers real audience members and authentic engagement. We track who's rising and falling. Then we update the rankings accordingly." (https://hypeauditor.com/top-instagram-all-germany/)

On how the company detects location, it explains: "We detect influencer's audience location by the analysis of active and engaged audience (those who put likes and write comments)."

(https://help.hypeauditor.com/en/articles/3433448-how-do-you-detect-instagram-audience-location). And more on location detection of the influencers themselves: https://help.hypeauditor.com/en/articles/3433068-how-do-you-detect-instagram-users-location.

https://help.hypeauditor.com/en/articles/2385922-how-does-country-ranking-work

Also extracted but not used in this report: Ethnicity of Audience, Comments per 1000 views, Comments per 100 likes, Percentage of Positive, Negative and Neutral Sentiments of Audience.

https://socialblade.com/youtube/top/country/de/mostviewed

information.⁴⁸⁹ We assume that these are also internally marked by Youtube as located in Germany and Socialblade is reading this information.

The most popular Youtube channel in our sample, with twice as many total views as the next contender, is the "Tsuriki Show", a sitcom format without words, a couple playing pranks on each other. In Youtubers.me's list of "The Highest-Paid YouTubers of 2021", the Tsuriki Show is on place 35 globally, with an estimated income of US\$ 13.5 million.⁴⁹⁰

Youtube is, as traffic data indicate, the largest video site in Germany. Only three of the top 100 channels have less than 250.000 subscribers. Six of the top 100 have ten million or more in a population of 84 million. The largest group of channels (36%) has between two and four million subscribers, while the second-largest group (27%) has between four and ten million subscribers.

Table S1_2: Frequency of the number of subscribers (YT, DE)

_	-	
	n	%
less than 250k	3	3.03
250k+-500k	1	1.01
500k+-1M	3	3.03
1M-2M	24	24.24
2M-4M	36	36.36
4M-10M	27	27.27
10M+	6	6.06
N	99	100

The number of subscribers from Germany are available only for a part of the sample (39%). In this subset, there are no channels with less than 500,000 subscribers. The largest group (46%) again has more than two million subscribers.

Table S1_3: Frequency of the number of subscribers from Germany (YT)

	-	
	n	%
less than 500k	0	0
500k-1M	7	17.95
1M-2M	14	35.90
2M+	18	46.15
N	39	100

Looking at reception, we see that eight of the top 100 channels have more than one million views per video on average. Only eleven of the top 100 channels have less than 10.000 views.

Table S1_4: Frequency of average views per video (YT, DE)

	n	%
Less than 10k	11	11.83
10k+-50k	24	25.81
50k+-100k	8	8.60
100k+1M	42	45.16
1M+	8	8.60

⁴⁸⁹ "Ameer Bros", an Arabic-speaking food channel with its largest audience in Iraq, "Marioverehrer", piano tutorials with their largest audience in the US, and "U N D E R D O G S.", who put anime footage to music.

https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

N	93	93

An analysis of the total views of a channel shows high levels of usage of the top 100 channels. None of the top 100 channels have a total number of views below one billion. 17 of them reach three billion or more.

Table S1_5: Frequency of total views of the channel (YT, DE)

	n	%
Less than 1B	0	0
1B-1.5B	35	35.00
1.5B-2B	21	21.00
2B-3B	27	27.00
3B+	17	17.00
N	100	100

The tables so far are based on attributes for which each channel has one value. The language of the video and/or its description brings us to the group of variables which can have more than one value per channel. On the top 100 channels in Germany, we found 111 languages.

50% of the top 100 channels based in Germany use the German language. Another 39% use English in at least some of their videos. Spanish (3%), French and Turkish (2% each) are other languages that can be heard on top Youtube channels based in Germany.

Table S1_6: Frequency of languages (YT, DE)

_ , , , , ,		
	n	%
German	55	49.55
English	43	38.74
Spanish	3	2.70
French	2	1.80
Turkish	2	1.80
Albanian	1	0.90
Arabic	1	0.90
ASMR	1	0.90
Dutch	1	0.90
Italian	1	0.90
Russian	1	0.90
N (total languages mentioned)	111	100

Among the manually coded content categories of the Youtube channels, "music" is the largest (24%). This includes a wide range of genres from electronic dance via Turkish pop, Rammstein, Tiktok music and hard rock (Scorpions) to children's songs as well as "the largest Albanian music channel on YouTube", ArkivaShqip ("Albanian Archives"), whose social media presence according to its Facebook page is run by a media agency in Hamburg. The second largest category, "Creative practices and performances" (22%) includes all fictional work like Turkish soap operas and movie trailers, but also a well-crafted 3D-printing tutorial and other productions that do not fit any other category but are without doubt creative. Unsurprisingly, "Parodies and Funny Videos" (16%) and "Games" (12%) are also popular categories.

On the other end of the scale, surprisingly, "Travel and Nature" (0%), "Fashion, Beauty and Make-up" (1.5%), "Self and Private Life", "Sports" and "Food" (3% each) are represented among the top 100 to a much lesser degree than one would expect. "News and Political Content" on Youtube top 100 is at seven percent.

Table S1_7: Frequency of content categories (YT, DE)

	n coded "yes"	%
Self and Private Life	4	3.05
Challenge, Experiments and Tricks	10	7.63
Parodies and Funny Videos	21	16.03
Food	4	3.05
Fashion, Beauty and Make-up	2	1.53
Sports	4	3.05
Creative practices and performances	29	22.14
Travel and Nature	0	0.0
News and Political Content	9	6.87
Music	32	24.43
Games	16	12.21
Total coded	131	100

Tiktok

Data for Tiktok were taken from Hypeauditor's dataset called "Top 1000 Influencers in Germany". ⁴⁹¹ This resulted in 83% of the channels originating from Germany, based on the company's location data. These seem to be based on the influencers' own information and are therefore unreliable. E.g., one channel which claims to be based in Somalia, is from its content clearly located in Germany. ⁴⁹² The same with a German-language comedy channel which Hypeauditor claims to be in Iran. ⁴⁹³

If we assume that some of the others are also mislabelled, we find that we are looking at a dataset of channels that in their majority originate in Germany. And this is even though the original dataset was selected based on Hypeauditor's Country Rank which is based on the place of origin of the audience, not that of the channel provider. This is quite different, as we shall see, from the results for Instagram.

Table S1_8: Frequency of countries of origin (TT, DE)

	n	%
Germany	83	83.0
US	3	3.0
France	2	2.0
Croatia	1	1.0
Dubai	1	1.0
Iran	1	1.0
Japan	1	1.0
Malawi	1	1.0

^{491 &}lt;a href="https://hypeauditor.com/top-tiktok-germany/">https://hypeauditor.com/top-tiktok-germany/

⁴⁹² https://www.tiktok.com/@katjakrasavice

^{493 &}lt;a href="https://www.tiktok.com/@jamal.jamael">https://www.tiktok.com/@jamal.jamael

Malta	1	1.0
Qatar	1	1.0
Somalia (!)	1	1.0
Spain	1	1.0
Syria	1	1.0
Turkey	1	1.0
n.a.	1	1.0
N	100	100

Tiktok in Germany is already on a par with Youtube with respect to the number of followers of the top channels. Six of the top 100 channels have less than 250.000 subscribers (YT: 3). Eight of the top 100 channels have ten million or more followers (YT: 6). As in case of Youtube, the largest group of channels (32%, YT: 36%) has between two and four million followers. Data on followers from Germany are not available from Hypeauditor.

Table S1_9: Frequency of the number of followers (TT, DE)

	n	%
less than 250k	6	6.00
250k+-500k	6	6.00
500k+-1M	9	9.00
1M-2M	22	22.00
2M-4M	32	32.00
4M-10M	17	17.00
10M+	8	8.00
N	100	100

Hypeauditor does not provide the total number of views of channel, but looking at average views per video, Tiktok has already far outrun Youtube in Germany. None of the top 100 channels have less than 500,000 views per video (YT: 69%). Fifty percent have more than one million (YT: 9%).

Table S1_10: Frequency of the number of average views per video (TT, DE)

	n	%
less than 500k	0	0
500k-1M	50	50.00
1M-2M	33	33.00
2M+	17	17.00
N	100	100

German is the dominant language on the Top 100 Tiktok channels based in Germany (52%), followed by English (40%). Arabic (3%) and Turkish (2%) are the only other languages of significance.

Table S1_11: Frequency of languages (TT, DE)

	5	
	n	%
German	57	51.82
English	44	40.00
Arabic	3	2.73

Turkish	2	1.82
Japanese	1	0.91
Spanish	1	0.91
ASMR	1	0.91
Romanian	1	0.91
N (total languages mentioned)	110	100

On Tiktok, "Creative practices and performances" is the largest category (22%) which includes the platform's original breakthrough application, lip-synching and dancing to music. "Parodies and Funny Videos" (18%), "Self and Private Life" (15%), "Fashion, Beauty and Make-up" and "Music" (14% each) are also popular categories. "Games" are nearly absent on Tiktok (0.7%; YT: 12%). So are "News and Political Content" (1%).

Table S1_12: Frequency of content categories (TT, DE)

•	•
n coded "yes"	%
45	15.20
27	9.12
52	17.57
9	3.04
41	13.85
10	3.38
64	21.62
2	0.67
3	1.01
41	13.85
2	0.67
296	100
	45 27 52 9 41 10 64 2 3 41 2

Instagram

Data for Instagram were selected based on Hypeauditor's Country Rank: "Top Instagram Influencers in Germany". ⁴⁹⁴ The result is a sample of channels which is strikingly different from that of the other platforms. While in case of Youtube and Tiktok, quasi 100% of channels have Germany as country of origin, on Instagram it is only 19 percent, while the majority originate in the US (51%).

Table S1_13: Frequency of countries of origin (Insta, DE)

	n	%
US	51	51.0
Germany	19	19.0
UK	9	9.0
Brazil	2	2.0
China	2	2.0
Hong Kong	2	2.0
Canada	1	1.0

494 https://hypeauditor.com/top-instagram-all-germany/

France	1	1.0
Norway	1	1.0
Poland	1	1.0
Saudi Arabia	1	1.0
South Africa	1	1.0
Switzerland	1	1.0
n.a.	8	1.0
N	100	100

By number of followers, Instagram in Germany seems to start where Youtube and Tiktok end. None of the Top 100 channels has less than five million followers. The largest group (28%) has ten to fifteen million, the top group (15%) has thirty million followers or more.

But then, these top accounts, like Nike (225.6 million), Brazilian comedian Whindersson Nunes (58.5M) or Michelle (50.3M) and Barack Obama (35.4M), are not based in Germany. We would be comparing national champions on one platform with global champions on another. The highest-ranking German channels in our sample are Mercedes-Benz (2.9M) and Toni Kroos (4.9M), followed by more automobile (BMW, Porsche) and football (FC Bayern, Borussia Dortmund) channels.

Table S1_14: Frequency of the number of global followers (Insta, DE)

	n	%
less than 5M	0	0
5M-10M	21	21.0
10M-15M	28	28.0
15M-20M	19	19.0
20M-30M	17	17.0
30M+	15	15.0
N	100	100

Looking only at the number of followers from Germany, the largest group of channels (54%) is in the 500,000 to 1,000,000 range. Given the sample, it is not surprising that German followers make up only a fraction of the total number of global followers of these channels.

Table S1_15: Frequency of number of followers from Germany (Insta)

_	•	
	n	%
less than 500k	0	0
500k-1M	54	54.0
1M-2M	23	23.0
2M+	23	23.0
N	100	100

For Instagram, Hypeauditor also provides a measure for "average engagement", i.e. the number of likes and comments a post on this channel receives on average. The largest group of channels (40%) is in the range of 100,000 to 1,000,000 engagements.

Table S1_16: Frequency of average engagement (Insta, DE)

n	%	

Less than 10k	9	9.0
10k-50k	27	27.0
50k-100k	19	19.0
100k-1M	40	40.0
1M+	5	5.0
N	100	100

Given that the sample from Instagram was not extracted based on the provider of a channel being based in Germany, it is little surprise that German is a minority language (8%), while English dominates (85%).

Table S1_17: Frequency of languages (Insta, DE)

	n	%
German	9	8.03
English	95	84.82
Arabic	2	1.78
Portuguese	2	1.78
Turkish	1	0.89
French	1	0.89
Spanish	1	0.89
Polish	1	0.89
N (total languages mentioned)	112	100

On Instagram the largest manually coded content category is "Self and Private Life" (22%; vs. YT music: 24%; TT: "Creative practices and performances": 22%). The private life of influencers in Dubai, Madeira and other fancy places is highly stylised, as indicated by the next largest and overlapping categories "Fashion, Beauty and Make-up" and "Creative practices and performances" (20% each). The next largest category – "Sports" (13%), "Music" (7%) "Travel and Nature" (6%) – underlines the point: Instagram is about serious business, not about "Games" (1%) and barely about "Parodies and Funny Videos" (5%). "News and Political Content" is at 1.6 percent (YT: 7%, TT: 1%)

Table S1_18: Frequency of content categories (Insta, DE)

	n coded	
	"yes"	%
Self and Private Life	56	22.49
Challenge, Experiments and Tricks	3	1.2
Parodies and Funny Videos	13	5.22
Food	1	0.4
Fashion, Beauty and Make-up	51	20.48
Sports	33	13.25
Creative practices and performances	51	20.48
Travel and Nature	16	6.42
News and Political Content	4	1.61
Music	18	7.23
Games	3	1.2
Total coded	249	100

Dailymotion

Data for Dailymotion on channels in Germany ranked by Video Views were extracted from Socialblade. 495 As a result, all channels in our sample are based in Germany.

The French platform Dailymotion is the smallest among our four VSPs. The largest group, 44 of the Top 100, have less than 1000 followers. Only nine channels have one million followers or more. The numbers of followers from Germany are not available. Neither are data on average engagement.

Table S1_20: Frequency of the number of followers (DM, DE)

	n	%
Less than 1k	44	44.0
1k-3k	32	32.0
3k-1M	15	15.0
1M+	9	9.0
N	100	100

An analysis of the total video views of the top 100 channels shows that none of them have below one million views. The majority have between one and five million views. 12 of them reach twenty million or more.

Table S1_21: Frequency of total views of the channel (DM, DE)

_	1	
	n	%
Less than 1M	0	0
1M-5M	50	54.95
5M-10M	20	21.98
10M-20M	9	9.90
20M+	12	13.19
N	91	100
n.a.	9	

Even though all the channels in our sample are based in Germany, only sixteen percent use the German language in their videos and descriptions. The largest group of channels (18%) uses English, at least also. Arabic is used on one more channel (17%) than those using German. Turkish (13%) is the fourth two-digit percentage language heard on the top Dailymotion channels based in Germany. This is followed by Italian (4 channels, 3%) and four languages with two channels each.

Table S1_23: Frequency of languages (DM, DE)

%
16.03
18.32
16.79
12.98
3.05
_

https://socialblade.com/dailymotion/top/country/de/mostviewed

Hindi	2	1.53
Farsi	2	1.53
French	2	1.53
Spanish	2	1.53
Portuguese	1	0.76
Polish	1	0.76
Albanian	1	0.76
Bosnian	1	0.76
Russian	1	0.76
Hungarian	1	0.76
Greek	1	0.76
Japanese	1	0.76
n.a.	27	20.61
N (total languages mentioned)	131	100

On Germany-based Dailymotion, "Creative practices and performances" (49%) is the largest content category, with a much larger lead than on the other three VSPs (YT and TT: 22% each, Insta: 20%). Other popular genres are "Sports" (14%), "Music" (11%) and "Games" (6%). "Parodies and Funny Videos" is nearly as low (6%) as on Instagram (YT: 16%, TT:18%, Insta: 5%).

On the other end of the scale, "Self and Private Life" (0%) does not exist on German Dailymotion (YT: 3%, TT: 15%, Insta: 22%), "Fashion, Beauty and Make-up" (1%) barely exists (YT: 1.5%, TT: 14%, Insta: 20%).

Dailymotion has the highest share of "News and Political Content" (10%) in its German top 100 (YT: 7%, TT: 1%, Insta: 1.6%).

Table S1_24: Frequency of content categories (DM, DE)

	n coded	
	"yes"	%
Self and Private Life	0	0
Challenge, Experiments and Tricks	1	1.06
Parodies and Funny Videos	6	6.38
Food	1	1.06
Fashion, Beauty and Make-up	1	1.06
Sports	13	13.83
Creative practices and		
performances	46	48.94
Travel and Nature	1	1.06
News and Political Content	9	9.57
Music	10	10.64
Games	6	6.38
Total coded	94	100

Audience demographics of top channels on three VSPs

For three of the VSPs in the previous section, Youtube, Tiktok and Instagram, we will now look at some demographics information on their audiences. The same selection and ranking of top 100

channels/accounts as in Section 1 form the basis for the tables in this one. For each of the channels on each platform, a report was purchased from Hypeauditor and information on the audiences' countries, languages, sex, age etc. were extracted manually and added to the German datasets.⁴⁹⁶

Youtube

Hypeauditor reports list the five countries (plus "Other") from which the largest audiences access the respective channel. Table S2_1 gives the top audience country for the top 100 Youtube channels in Germany. Bear in mind that the largest audience in, let's say Germany, might represent a relative share of between 12.9% and 91.5% of the total audience of that channel.

The largest audience for the top 100 Germany-based Youtube channels is in Germany (61%), followed by the US (32%).

Table S2_1: Frequency of top audience countries

	n	%
Germany	43	60.56
US	23	32.39
India	2	2.82
Iraq	1	1.41
Mexico	1	1.41
UK	1	1.41
N	71	100
n.a.	29	

Gender complexities aside, if we simplistically assume a 50:50 ratio of males and females in the general population, we would expect as default for each channel a Gaussian bell curve with the tip in the middle (41-60%) and slopes towards more M and more F. Youtube, as Table S2_2 shows, is fairly balanced with a tilt towards male audiences.

Table S2_2: Frequency of sexes (M/F)

	Male A	udience	Female	Audience
	n	%	n	%
0-20%	3	4.54	1	1.51
21-40%	11	16.67	28	42.42
41-60%	25	37.88	26	39.39
61-80%	26	39.39	11	16.67
81-100%	1	1.51	0	0
N	66	100	66	100

The core-group of users of Youtube are between 18 and 34 years old. Those above 55 do not use it.

Table S2 3: Frequency of age groups of audience

		-				٠, -		٠.		a		٠,	
%1	3-17	%	18-24	% 2	25-34	% 3	85-44	% 4	15-54	% 5	5-64	%	65+
n	%	n	%	n	%	n	%	n	%	n	%	n	%

Also extracted but not used in this report: Ethnicity of Audience, Comments per 1000 views, Comments per 100 likes, Percentage of Positive, Negative and Neutral Sentiments of Audience.

0-10%	22	33.33	1	1.51	0	0	32	48.48	61	92.42	66	100	66	100
11-20%	24	36.36	6	9.09	2	3.03	29	43.94	4	6.06	0	0	0	0
21-30%	20	30.30	18	27.27	28	42.42	5	7.57	1	1.51	0	0	0	0
31-40%	0	0	29	43,94	22	33.33	0	0	0	0	0	0	0	0
41-50%	0	0	12	18.18	14	21.21	0	0	0	0	0	0	0	0
51-60%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N	66	100	66	100	66	100	66	100	66	100	66	100	66	100

Tiktok

In case of Tiktok, the largest audience for the top 100 Germany-based channels is Germany (67%), followed by the US (13%).

Table S2_4: Frequency of top audience countries

	n	%
Germany	65	67.01
US	13	13.40
UK	3	3.09
Iraq	3	3.09
Philippines	3	3.09
Turkey	2	2.06
Pakistan	2	2.06
Brazil	2	2.06
Mexico	1	1.03
Bangladesh	1	1.03
Indonesia	1	1.03
Romania	1	1.03
N	97	100

Tiktok's audience is clearly tilted towards women, with a large number (14) of essentially female-only channels.

Table S2_5: Frequency of sexes (M/F)

_	Male A	udience	Female	Audience
	n	%	n	%
0-20%	21	21.65	4	4.12
21-40%	42	43.30	13	13.40
41-60%	18	18.56	21	21.65
61-80%	15	15.46	45	46.39
81-100%	1	1.03	14	14.43
N	97	100	97	100

The core-group of users of Tiktok are between 13 and 24 years old. Those above 45 do not use it.

Table S2_6: Frequency of age groups of audience

%1	3-17	% 1	8-24	% 2	25-34	% 3	35-44	% 4	5-54	% 5	5-64	%	65+
n	%	n	%	n	%	n	%	n	%	n	%	n	%

0-10%	2	2.06	0	0	1	1.03	91	93.81	97	100	97	100	97	100
11-20%	15	15.46	0	0	38	39.17	6	6.18	0	0	0	0	0	0
21-30%	34	35.05	14	14.43	41	42.27	0	0	0	0	0	0	0	0
31-40%	35	36.08	44	45.36	15	15.46	0	0	0	0	0	0	0	0
41-50%	10	10.31	35	36.08	2	2.06	0	0	0	0	0	0	0	0
51-60%	1	1.03	4	4.12	0	0	0	0	0	0	0	0	0	0
N	97	100	97	100	97	100	97	100	97	100	97	100	97	100

Instagram

When looking at the Instagram data, we have to keep in mind that the dataset was selected differently from that for Youtube. Only 19 percent of these channels originate in Germany, while the majority are located in the US (51%). Therefore it is little surprise that also the largest audience in our Instagram dataset is based the US (60%), followed by Germany (16%).

The range of audience countries might indicate a globalisation of reception and tastes. Another hypothesis is that creators who buy interactions find the click workers who provide such services in countries like India, Iran or Indonesia.

Table S2_7: Frequency of top audience countries

	n	%
US	58	60.42
Germany	15	15.62
Brazil	8	8.33
India	3	3.12
Iran	3	3.12
UK	2	2.08
Italy	2	2.08
Indonesia	1	1.04
Albania	1	1.04
Poland	1	1.04
Saudi Arabia	1	1.04
Turkey	1	1.04
N	96	100

Our Instagram data are even more balanced with respect to gender than Youtube with a slight tilt towards female audiences.

Table S2_8: Frequency of audience sexes (M/F)

	Male A	udience	Female	Audience
	n	%	n	%
0-20%	5	5.05	13	13.13
21-40%	29	29.29	24	24.24
41-60%	28	28.28	29	29.29
61-80%	24	24.24	30	30.30
81-100%	13	13.13	3	3.03
N	99	100	99	100

The core-group of users in our Instagram dataset are between 18 and 34 years old. Those above 45 do not use it.

Table S2 9: Free	quency of age	groups of audience
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	%	13-17	%	18-24	%	25-34	%	35-44	% 4	5-54	% 5	5-64	%	65+
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-10%	63	63.64	0	0	0	0	53	53.53	99	100	99	100	99	100
11-20%	29	29.28	6	6.06	2	2.02	43	43.43	0	0	0	0	0	0
21-30%	7	7.07	23	23.23	9	9.09	3	3.03	0	0	0	0	0	0
31-40%	0	0	44	44.44	41	41.41	0	0	0	0	0	0	0	0
41-50%	0	0	26	26.26	42	42.42	0	0	0	0	0	0	0	0
51-60%	0	0	0	0	5	5.05	0	0	0	0	0	0	0	0
N	99	100	99	100	99	100	99	100	99	100	99	100	99	100

Instagram is the only platform for which Hypeauditor provides income data.⁴⁹⁷ We can see in our sample that there is a group of Instagram channels which have an audience with a very low income and a larger group with a high income above US\$ 100,000, but most channels have audience members in the 10k-50k range.

Table S2_10: Frequency of audience income

	0	k-5k	5k	k-10k	10	k-25k	25	k-50k	50	k-75k	75k	k-100k	1	00k+
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0-10%	41	41.41	43	43.43	8	8.08	15	15.15	33	33.33	78	78.78	21	21.21
11-20%	33	33.33	45	45.45	66	66.66	60	60.60	66	66.66	21	21.21	50	50.50
21-30%	16	16.16	8	8.08	23	23.23	24	24.24	0	0	0	0	26	26.26
31-40%	5	5.05	3	3.03	2	2.02	0	0	0	0	0	0	2	2.02
41-50%	2	2.02	0	0	0	0	0	0	0	0	0	0	0	0
51-60%	2	2.02	0	0	0	0	0	0	0	0	0	0	0	0
N	99	100	99	100	99	100	99	100	99	100	99	100	99	100

Top movies on three VoD Platforms

In Section 3, we shift our attention from Video Sharing Platforms (VSP) to Video on Demand (VoD) platforms. The basis of our analysis are the weekly top 10 of most watched movies from Flixpatrol on three VoD platforms: Netflix, Amazon Prime Video and Apple's Itunes.⁴⁹⁸ Flixpatrol does not provide data for Apple TV+, therefore we have to limit our analysis to Apples TVoD service

Data were gathered for 17 weeks: the period from 1 November 2021 to 28 February 2022. Since movies appear in the top 10 over several weeks, for the analysis, we removed all doubles, leaving a corpus of 83 movies made available on Netflix, 54 on Amazon and 72 on Itunes.

For additional data about these movies, the Internet Movie Database (IMDb⁴⁹⁹) was used. The largest open access resource on movies and TV productions emerged in 1990 from the Newsgroup rec.arts.movies and was acquired by Amazon in 1998. From the IMDb we added

The service explains: "In order to evaluate household income, we use AI algorithms based on publicly available income data and the account's audience location, gender, and age. This metric is calculated in US dollars." (https://help.hypeauditor.com/en/articles/4399381-what-is-audience-yearly-household-income)

https://flixpatrol.com/top10/streaming/germany/2021-044/

⁴⁹⁹ https://www.imdb.com/

information on the year of release, countries of origin, whether it is a platform's own production, original languages and genre of a movie. 500

Netflix

Nearly half of the movies in our German Netflix sample had been freshly released during the last two years (48%), 14 of them even during the first nine weeks of 2022. All of them were published after 2000. The only outlier is the Austrian classic "Sissi" (1955). There are only two German productions in our sample, "Nightlife" (2020) and "The Privilege" (2022), and two German-US coproductions, "Army of Thieves" (2021) and "Die Hochzeit" (2020).

Table S3_1: Top movies on Netflix, Germany11/2021 - 02/2022 (n=83)

14 Peaks: Nothing Is	Fighting with My	Love Tactics	Texas Chainsaw
Impossible (2021)	Family (2019)	(2022)	Massacre (2022)
A California Christmas: City	Fistful of Vengeance	More the Merrier	The Claus Family
Lights (2021)	(2022)	(2021)	(2020)
A Castle For Christmas	Gone Girl (2014)	Mother/Android	The Equalizer 2
(2021)		(2021)	(2018)
Army of the Dead (2021)	Harry Potter and the	Munich – The	The Harder They Fall
	Chamber of Secrets	Edge of War	(2021)
	(2002)	(2022)	
Army of Thieves (2021)	Harry Potter and the	My Best Friend	The Hustle (2019)
	Deathly Hallows: Part	Anne Frank	
	1 (2010)	(2021)	
Back to the Outback (2021)	Harry Potter and the	Night Teeth	The Meg (2018)
	Goblet of Fire (2005)	(2021)	
Bad Boys for Life (2020)	Harry Potter and the	Nightlife (2020)	The Night Before
	Half-Blood Prince		(2015)
	(2009)		
Bigbug (2022)	Harry Potter and the	Nobody Sleeps	The Power of the
	Order of the Phoenix	in the Woods	Dog (2021)
	(2007)	Tonight 2 (2021)	
Bloodshot (2020)	Harry Potter and the	Only Mine	The Princess Switch
	Prisoner of Azkaban	(2019)	3: Romancing the
	(2004)		Star
Bordertown: Mural Murders	Harry Potter and the	Perfect Stranger	The Privilege (2022)
(2021)	Sorcerer's Stone*	(2007)	
	(2001)		
Brazen (2022)	Home Team (2022)	Primal (2019)	The Purge: Election
			Year (2016)
Bruised (2020)	Hotel Transylvania 3:	Red Notice	The Royal Treatment
	Summer Vacation	(2021)	(2022)
	(2018)		
Bullet to the Head (2012)	How the Grinch Stole	Restless (2022)	The Tinder Swindler
	Christmas (2000)		(2022)

IMDb rating, awards and description were also extracted manually from IMDb as well as Google's users' rating from Google Search which were not used in this report.

Central Intelligence (2016)	Hustlers (2019)	Scary Movie	The Unforgivable
		(2000)	(2021)
Colombiana (2011)	Hypnotic (2021)	Seeking Justice	The Witches (2020)
		(2011)	
Copshop (2021)	I Am Mother (2019)	Single All The	Through My Window
		Way (2021)	(2022)
Daddy's Home (2015)	Jason Bourne (2016)	Sissi (1955)	Valentine's Day
			(2010)
David and the Elves (2021)	John Wick: Chapter 3	Sniper: Ghost	Venom (2018)
	– Parabellum (2019)	Shooter (2016)	
Die Hochzeit (2020)	Jumanji: The Next	Spider-Man:	Vicky and Her
	Level (2019)	Homecoming	Mystery (2021)
		(2017)	
Don't Look Up (2021)	Little Women (2019)	Stuck Together	Yara (2021)
		(2021)	
Downfall: The Case Against	Love Hard (2021)	Tall Girl 2 (2022)	
Boeing (2022)			

^{*} UK orig.: Philosopher's Stone

Table S3_1a: Distribution of years of production (Netflix Mov DE)

	n	%
2022	14	16.87
2021	26	31.33
2020	7	8.43
2019	9	10.84
2018	4	4.82
2017	1	1.2
2010-2016	12	14.46
2000-2010	9	10.84
<2000	1	1.2
N	83	100

Slightly more than half of the movies on German Netflix were produced or at least coproduced by the US (54%), followed by the UK (14%). Germany (6%), France (5%) and China (3%) emerge as a second group, and the sample is trailed by 13 single production countries. Most of the coproductions involved two countries (24), three had three partners and one each had four and five countries involved.

Out of our sample of 21 production countries, nine are in the European Union. Of the 83 movies in our Netflix sample, 20 have at least one of their countries of origin in the EU (24%).

Table S3_2: Frequency of countries of origin (Netflix Mov DE)

	n	%	EU
US	65	54.17	0
UK	17	14.17	0
Germany	7	5.83	1
France	6	5.0	1

China	4	3.33	0
Australia	3	2.5	0
Spain	3	2.5	1
Poland	2	1.67	1
Turkey	1	0.83	0
Italy	1	0.83	1
Austria	1	0.83	1
South Korea	1	0.83	0
Belgium	1	0.83	1
Finland	1	0.83	1
India	1	0.83	0
Netherlands	1	0.83	1
New Zealand	1	0.83	0
Canada	1	0.83	0
Switzerland	1	0.83	0
Japan	1	0.83	0
Mexico	1	0.83	0
N (total countries mentioned)	120	100	9 (20)

36 out of the 83 movies in our sample are Netflix Originals. The majority of those has the US at least as one of the countries of origin. Nine of the 25 US Netflix Originals are coproductions, among them UK/US documentary "14 Peaks: Nothing Is Impossible", about Nepali mountaineer Nirmal Purja on his quest to summit all 14 of the world's 8,000-meter peaks in seven months. Germany has its own Netflix Original, "The Privilege", and two coproductions "Army of Thieves" (US, DE) and "The Unforgivable" (UK, DE, US).

Table S3 2a: Netflix Originals by countries of origin (Netflix Mov DE)

country of origin	n	%
US	25	52.1
UK	8	16.67
Australia	3	6.25
Germany	3	6.25
France	3	6.25
Poland	2	4.17
Belgium	1	2.08
Spain	1	2.08
Turkey	1	2.08
New Zealand	1	2.08
N	48	100

Data on the languages of movies are taken from the IMDb, which explains that this refers to the languages of the original release. It does not include dubbing languages for foreign releases or DVD subtitle options,⁵⁰¹ i.e. these are the languages originally recorded during the shooting of the movie. E.g. the aforementioned "14 Peaks" has English and Nepali as languages.

The German Netflix sample of 83 movies contains 131 languages. The most common one by far is English (53%). In the next largest group of eight movies each, German, Spanish and Latin

⁵⁰¹ IMDb Help Center: Languages, https://help.imdb.com/article/contribution/titles/languages/GSCRBZYEH5NX5SXL

(6%) is spoken, the latter primarily due to the Harry Potter movies.

German is spoken in films dealing with German history, like the Dutch drama "My Best Friend Anne Frank" and the UK/US history drama in the run-up to World War II "Munich – The Edge of War". Also in the 1955 Austrian classic "Sissi" about princess Elisabeth "Sissi" of Austria. But also in "Jason Bourne", the four-country coproduced (US, China, Spain, Japan, Germany) CIA action thriller.

In light of the foreseeable aftermath of the Russian invasion in Ukraine, it would be interesting to take a closer look at the Russian-speaking actors and the stereotype of Russians they embody in US crime and action movies like "Hustlers", "The Purge", "Red Notice" and "John Wick".

Table S3_3: Frequency of languages of movies (Netflix Mov DE)

	n	%
English	70	53.43
Latin	8	6.11
Spanish	8	6.11
German	8	6.11
French	7	5.34
Russian	7	5.34
Italian	4	3.05
Japanese	3	2.29
Polish	2	1.53
Dutch	2	1.53
Turkish	2	1.53
Hungarian	2	1.53
Arabic	2	1.53
Hebrew	1	0.76
Greek	1	0.76
Nepali	1	0.76
Afrikaans	1	0.76
Ukrainian	1	0.76
Persian	1	0.76
N (total languages mentioned)	131	100

When the focus is on the English and German language, we get a group of 78 movies of which ninety percent use English and ten percent German.

Table S3_4: Frequency of English and the national language German (Netflix Mov DE)

	n	% mentioned
English	70	89.74
German	8	10.26
Total	78	100

The genres of the movies are taken from the IMDb. Again, they allow for any possible combination (e.g. Action-Comedy-Thriller or Documentary-Adventure-Sport: the aforementioned "14 Peaks") which gives us a total of 250 genres for 83 movies.

The range and weight of genres of Netflix movies is to be expected for such an entertainment service. Non-fictional elements (Documentary, potentially Biography and History) are marginal.

Table S3_5: Frequency of genres (from IMDb) (Netflix Mov DE)

	•	, ,
	n	%
Comedy	34	13.6
Thriller	29	11.6
Drama	29	11.6
Action	23	9.2
Crime	20	8.0
Family	19	7.6
Adventure	16	6.4
Fantasy	15	6.0
Mystery	15	6.0
Romance	15	6.0
Sci-Fi	10	4.0
Horror	9	3.6
Sport	4	1.67
Documentary	3	1.2
Animation	2	0.8
Biography	2	0.8
History	2	0.8
Western	2	0.8
Revenge	1	0.4
N	250	100
n.a.	1	

Amazon

Amazon did not have 2022 releases in its VoD catalogue in Germany. The majority of the movies were from 2021 (69%). Four of them were published before 2000, including holiday season classics "Dinner for One" (DE 1963), "Little Lord Fauntleroy" (UK 1980) and "Home Alone" (US 1990).

Table S3_6: Top movies on Amazon, 11/2021 – 02/2022 (n=54) (n.a. = 4)

A Quiet Place (2018)	F9 (2021)	Look Away (2018)	The Ice Road (2021)
After We Fell (2021)	Fack ju Göhte 3 (2017)	Malignant (2021)	The King's Man (2021)
Another Round	Ghostbusters: Afterlife	Monster Hunter (2020)	The Little Things
(2020)	(2021)		(2021)
Black Widow (2021)	Godzilla vs. Kong (2021)	No Time to Die (2021)	The Misfits (2021)
Catweazle (2021)	Halloween (2018)	Nobody (2021)	The Protégé (2021)
Chaos Walking	Halloween Kills (2021)	Old (2021)	The Suicide Squad
(2021)			(2021)
City of Lies (2018)	Harry Potter and the	PAW Patrol: The Movie	Those Who Wish Me
	Philosopher's Stone*	(2021)	Dead (2021)
	(2021)		

Clifford the Big Red	Hitman's Wife's	Space Jam: A New	Till Death (2021)
Dog (2021)	Bodyguard (2021)	Legacy (2021)	
Dangerous (2021)	Home Alone (1990)	Spider-Man: Far from Home (2019)	Venom (2018)
Dinner for One	Home Alone 2: Lost in	Spiral: From the Book of	Venom: Let There Be
(1963)	New York (1992)	Saw (2021)	Carnage (2021)
Don't Breathe 2	House of Gucci (2021)	The Conjuring: The Devil	Wrath of Man (2021)
(2021)		Made Me Do It (2021)	
Dune (2021)	It Chapter Two (2019)	The Dry (2020)	Zack Snyder's Justice
			League (2021)
Escape Room:	Kaiserschmarrndrama	The Father (2020)	
Tournament of	(2021)		
Champions (2021)			
Eternals (2021)	Little Lord Fauntleroy	The Forever Purge (2021)	
	(1980)		

^{*} US: Sorcerer's Stone

Table S3_6a: Distribution of years of production (Amazon Mov DE)

	n	%
2022	0	0
2021	37	68.52
2020	4	7.41
2019	2	3.7
2018	5	9.26
2017	1	1.85
2010-2016	0	0
2000-2010	1	1.85
<2000	4	7.41
N	54	100

Slightly less than half of the movies on German Amazon were produced or at least coproduced by the US (48%), followed by Canada (11%), the UK (10%) and China (6%). Germany (5%) and Japan (3%) emerge as a second group, and the sample is trailed by seven single production countries. Most of the coproductions involved two countries (22), five had three partners and one each had four, five and six countries involved. The largest partnership (Germany, US, Japan, China, South Africa and Canada) was the video-game-based Sci-Fi monster movie "Monster Hunter" (2020).

Out of our sample of 17 production countries, eight are in the EU. Of the 54 movies in our Amazon sample, ten have at least one of their countries of origin in the EU (18.5%).

While Amazon does have original movies,⁵⁰² these do not appear in the IMDb information on our sample. We do see one movie each by Netflix ("The Ice Road"), Disney+ ("Black Widow") and HBO Max ("Zack Snyder's Justice League").

Table S3_7: Frequency of countries of origin (Amazon Mov DE)

		_	
	n	%	EU
US	46	47.92	0

https://press.amazonstudios.com/de/de/all-original-movies

Canada	11	11.46	0
UK	10	10.42	0
China	6	6.25	0
(West) Germany	5	5.21	1
Japan	3	3.12	0
France	2	2.08	1
Bulgaria	2	2.08	1
South Africa	2	2.08	0
Sweden	2	2.08	1
Australia	1	1.04	0
Hong Kong	1	1.04	0
Luxembourg	1	1.04	1
Finland	1	1.04	1
Netherlands	1	1.04	1
Switzerland	1	1.04	0
Denmark	1	1.04	1
N (total countries mentioned)	96	100	8 (10)

The German Amazon sample of 54 movies contains 110 languages. The most common one by far is English (45%), followed by Spanish (9%). The next group of about five percent each is made up of German, Russian, French and – again Harry Potter-owed – Latin.

German is spoken in three comedies produced in Germany ("Fack ju Göhte 3", "Catweazle" and "Kaiserschmarrndrama", which are digging deep into local German culture (of Berlin Neukölln and Bavaria respectively)), but also in the 2021 James Bond "No Time to Die".

Table S3_8: Frequency of languages of the movies (Amazon Mov DE)

	n	%
English	50	45.45
Spanish	10	9.09
German	6	5.45
Russian	6	5.45
Latin	5	4.54
French	5	4.54
Italian	3	2.72
American Sign Language	3	2.72
Chinese/Mandarin	3	2.72
Japanese	2	1.81
Arabic	2	1.81
Ukrainian	2	1.81
Hungarian	1	0.90
Danish	1	0.90
Swedish	1	0.90
Marathi	1	0.90
Sumerian	1	0.90
Greek Ancient (to 1453)	1	0.90
Icelandic	1	0.90
Czech	1	0.90

Malay	1	0.90
North American Indian	1	0.90
Norwegian	1	0.90
Macedonian	1	0.90
Finnish	1	0.90
N (total languages mentioned)	110	100

When the focus is on the English and German language, we get a group of 56 movies of which 89 percent use English and eleven percent German.

Table S3_9: Frequency of English and the national language German (Amazon Mov DE)

	n	% mentioned
English	50	89.28
German	6	10.71
Total	56	100

Data on the genres of Amazon movies were taken from Flixpatrol.⁵⁰³ Different from IMDb the system here is hierarchical: <genre, subgenre> (e.g "Horror, Slasher", "Horror, Serial killer", "Superhero, Marvel", "Superhero, DC" etc.). This hierarchy has been flattened for Table S3_10, which has 102 genres for the 54 movies in our sample. In its upper part it shows a profile to be expected for such an entertainment VoD platform. The lower part gives some additional flavour. Non-fictional elements are absent.

Table S3_10: Frequency of genres (based on Flixpatrol) (Amazon Mov DE)

Horror 13 12.74 Action 9 8.82 Comedy 8 7.84 Superhero 6 5.88 Sci-Fi 5 4.90 Marvel 4 3.92 Thriller 3 2.94 Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98 Romance 1 0.98		n	%
Comedy 8 7.84 Superhero 6 5.88 Sci-Fi 5 4.90 Marvel 4 3.92 Thriller 3 2.94 Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Horror	13	12.74
Superhero 6 5.88 Sci-Fi 5 4.90 Marvel 4 3.92 Thriller 3 2.94 Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Action	9	8.82
Sci-Fi 5 4.90 Marvel 4 3.92 Thriller 3 2.94 Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Comedy	8	7.84
Marvel 4 3.92 Thriller 3 2.94 Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Superhero	6	5.88
Thriller 3 2.94 Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Sci-Fi	5	4.90
Drama 3 2.94 Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Marvel	4	3.92
Crime 3 2.94 Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Thriller	3	2.94
Family 3 2.94 Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Drama	3	2.94
Adventure 3 2.94 Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Crime	3	2.94
Murder 3 2.94 Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Family	3	2.94
Slasher 3 2.94 Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Adventure	3	2.94
Mystery 2 1.96 Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Murder	3	2.94
Revenge 2 1.96 Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Slasher	3	2.94
Hitman 2 1.96 Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Mystery	2	1.96
Spies 2 1.96 Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Revenge	2	1.96
Demons 2 1.96 Monster 2 1.96 Fantasy 1 0.98	Hitman	2	1.96
Monster 2 1.96 Fantasy 1 0.98	Spies	2	1.96
Fantasy 1 0.98	Demons	2	1.96
	Monster	2	1.96
Romance 1 0.98	Fantasy	1	0.98
	Romance	1	0.98

https://flixpatrol.com/top10/streaming/germany/2021-044/.

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Basketball	1	0.98
Western	1	0.98
Cars	1	0.98
Gangsters	1	0.98
Heist	1	0.98
Dogs	1	0.98
Animated	1	0.98
for babies	1	0.98
Biopic	1	0.98
Fashion	1	0.98
Christmas	1	0.98
Teens	1	0.98
Serial killer	1	0.98
Alcohol	1	0.98
Alien Invasion	1	0.98
Psychological	1	0.98
Splatter	1	0.98
Trap	1	0.98
Cry movie	1	0.98
Space opera	1	0.98
DC	1	0.98
Disaster	1	0.98
N	102	100

Itunes

Flixpatrol does not provide data for Apple TV+ which focusses on Apple Originals. Therefore we have to limit our analysis to Apple's TVoD service Itunes.

Itunes had one 2022 releases in our sample from its VoD catalogue in Germany (the Chinese-US Action Spy movie "The 355"). The majority of the movies were from 2021 (57%). Six of them were published before 2000, including US lawyer drama "12 Angry Men" (US 1957), the New Year's classic "Dinner for One" (Germany 1963), "Flash Gordon" (US 1980) and "Reservoir Dogs" (US 1992).

Table S3_11: Top movies on Itunes, 11/2021 – 02/2022, DE (n=72)

12 Angry Men (1957)	Honest Thief (2020)	Reservoir Dogs	The Little Things
		(1992)	(2021)
A Quiet Place Part II	House of Gucci	Riders of Justice	The Marksman
(2020)	(2021)	(2020)	(2021)
Another Round	I'm Your Man	Shang-Chi and the	The Mauritanian
(2020)	(2021)	Legend of the Ten	(2021)
		Rings (2021)	
Apollo 11 (2019)	Jim Button and the	Snake Eyes: G.I.	The Misfits (2021)
	Wild 13 (2020)	Joe Origins (2021)	
Black Box (2021)	Jumper (2008)	Spider-Man: Far	The Secrets We
		from Home (2019)	Keep (2020)
Black Widow (2021)	Jungle Cruise	Stillwater (2021)	The Suicide Squad

	(2021)		(2021)
Blade Runner 2049	Kaiserschmarrndra	Tenet (2020)	The Witches (2020)
(2017)	ma (2021)		
Boss Level (2020)	Knives Out (2019)	The 355 (2022)	Those Who Wish
			Me Dead (2021)
Chaos Walking	Lansky (2021)	The Boss Baby:	Tides (2021)
(2021)		Family Business	
		(2021)	
City of Lies (2018)	Little Lord	The Comeback	Tom & Jerry (2021)
	Fauntleroy (1980)	Trail (2020)	
Dinner for One (1963)	Midnight in the	The Core (2003)	Trigger Point
	Switchgrass (2021)		(2021)
Donnie Darko (2001)	No Sudden Move	The Courier (2020)	Venom: Let There
	(2021)		Be Carnage (2021)
Dune (2021)	No Time to Die	The Dry (2020)	Wander (2020)
	(2021)		
Eternals (2021)	Nobody (2021)	The Father (2020)	Witness (1985)
F9 (2021)	Old (2021)	The Green Knight	Wrath of Man
		(2021)	(2021)
Flash Gordon (1980)	PAW Patrol: The	The Hitchhiker's	
	Movie (2021)	Guide to the Galaxy	
		(2005)	
Ghostbusters:	Peter Rabbit 2: The	The Ice Road	
Afterlife (2021)	Runaway (2021)	(2021)	
Halloween Kills	Promising Young	The King's Man	
(2021)	Woman (2020)	(2021)	
Hitman's Wife's	Reminiscence	The Last Duel	
Bodyguard (2021)	(2021)	(2021)	

Table S3_11a: Distribution of years of production (Itunes Mov DE)

	n	%
2022	1	1.39
2021	41	56.94
2020	15	20.83
2019	3	4.17
2018	1	1.39
2017	1	1.39
2010-2016	0	0
2000-2010	4	5.55
<2000	6	8.33
N	72	100

Slightly less than half of the movies on German Itunes were produced or at least coproduced by the US (47%), followed by the UK (14%) and Canada (9%). Germany (5%), France (4%) and China (3%) emerge as a second group, and the sample is trailed by five single production countries.

Most of the coproductions involved two countries (26), eight had three partners, three had four and one each had five and six countries involved. The largest partnership (UK, France, Italy, Germany, Canada and US) was the Sci-Fi Disaster movie "The Core" (2003).

Out of our sample of 21 production countries, twelve are in the European Union. Of the 72 movies in our Itunes sample, 16 have at least one of their countries of origin in the EU (22%). Therefore, the rate of origins in the EU is highest on Netflix: (24%), followed by Itunes (22%) and Amazon (18.5%).

Also Apple has original films⁵⁰⁴ distributed by Apple Studios but the company keeps them exclusive to Apple TV+, on which we do not have data. In Itunes' German catalogue, we do see three movies by Disney, two by HBO and one by Netflix ("The Ice Road", 2021).

Table S3_12: Frequency of countries of origin (Itunes Mov DE)

	- 5 (
n	%	EU
62	46.97	0
19	14.39	0
12	9.09	0
7	5.30	1
5	3.79	1
4	3.03	0
3	2.27	1
2	1.51	0
2	1.51	1
2	1.51	1
2	1.51	0
2	1.51	0
2	1.51	1
1	0.76	1
1	0.76	1
1	0.76	1
1	0.76	1
1	0.76	0
1	0.76	1
1	0.76	1
1	0.76	0
132	100	12 (16)
	62 19 12 7 5 4 3 2 2 2 2 2 2 1 1 1 1 1 1	n % 62 46.97 19 14.39 12 9.09 7 5.30 5 3.79 4 3.03 3 2.27 2 1.51 2 1.51 2 1.51 2 1.51 2 1.51 2 1.51 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76 1 0.76

The German Itunes sample of 72 movies contains 166 languages. The most common one by far is English (40%), followed by Spanish (8%), German (8%) and French (6%). The sample is trailed by 12 single production countries.

German is spoken exclusively in the three purely German productions in our sample ("Jim Button and the Wild 13", "I'm Your Man" and "Kaiserschmarrndrama"). It is spoken among other languages in eleven coproductions, including in the terrorism drama "The Mauritanian" (UK/US 2021) based on the memoir "Guantánamo Diary" by Mohamedou Ould Slahi who had been imprisoned without charge by the U.S. government for years.

Table S3_13: Frequency of languages of the movies (Itunes Mov DE)

https://trailers.apple.com/trailers/apple/

	n	%
English	67	40.36
Spanish	14	8.43
German	14	8.43
French	10	6.02
Russian	9	5.42
Arabic	5	3.01
Latin	5	3.01
Italian	5	3.01
Japanese	5	3.01
Chinese/Mandarin	5	3.01
Hindi	3	1.81
Hungarian	2	1.20
Danish	2	1.20
Estonian	2	1.20
American Sign Language	2	1.20
Finnish	2	1.20
Norwegian	2	1.20
Hebrew	1	0.6
Ukrainian	1	0.6
Swedish	1	0.6
Marathi	1	0.6
Sumerian	1	0.6
Greek Ancient (to 1453)	1	0.6
Somali	1	0.6
Korean	1	0.6
Tupi	1	0.6
Portuguese	1	0.6
Czech	1	0.6
Macedonian	1	0.6
N (total languages mentioned)	166	100

When the focus is on the English and German language, we get a group of 81 movies of which 83 percent use English and 17 percent German.

Table S3_14: Frequency of English and the national language German (Itunes Mov DE)

	n	% mentioned
English	67	82.72
German	14	17.28
Total	81	100

Data on the genres of Itunes movies were taken from Flixpatrol⁵⁰⁵ with in hierarchical form: <genre, subgenre>. This hierarchy has been flattened for Table S3_15, which has 107 genres for the 72 movies in our sample. The range and weight of genres of on Itunes is to be expected for such an entertainment service. Non-fictional elements are absent.

https://flixpatrol.com/top10/streaming/germany/2021-044/.

Table S3_15: Frequency of genres (based on Flixpatrol) (Itunes Mov DE)

	n	%
Action	14	13.08
Sci-Fi	10	9.34
Crime	9	8.41
Thriller	8	7.48
Drama	8	7.48
Comedy	7	6.54
Superhero	6	5.61
Spies	5	4.67
Murder	5	4.67
Adventure	3	2.8
Animated	3	2.8
Mystery	3	2.8
Fantasy	2	1.87
Horror	2	1.87
Revenge	2	1.87
Gangsters	2	1.87
Terrorism	2	1.87
Biopic	2	1.87
Serial killer	2	1.87
Family	2	1.87
History	1	0.93
Western	1	0.93
Documentary	1	0.93
Action Heroes	1	0.93
Cars	1	0.93
Drug Cartel	1	0.93
Heist	1	0.93
Hitman	1	0.93
Time loop	1	0.93
Fashion	1	0.93
N	107	100

Top TV series on three VoD platforms

Just as in Section 3, the data on the weekly top 10 in this section are taken from Flixpatrol⁵⁰⁶, only this time referring to TV series. The data gathering period (17 weeks, from 1 November 2021 to 28 February 2022) is the same. Also two of the platforms, Netflix and Itunes, are the same. Since Flixpatrol does not provide data on series on Amazon, Disney+ was taken as third platform. Also here, for additional data, IMDb was used. For the analysis, again, all doubles were removed, creating a corpus of 53 TV series on Netflix, of 21 on Disney and 61 on Itunes.

https://flixpatrol.com/top10/streaming/germany/2021-044/.

Netflix

The Series in our Netflix Germany sample at first glance look a bit less fresh than Netflix Movies, but remember that the years given are those of the start of a series. I.e. that in our late 2021 to early 2022 research window likely the most recent seasons were available on the platform, but also a re-run from 2005 is possible. Up to three different seasons of a series might show up in the weekly top 10 during our sample period.

Netflix Series has six 2022 and fifteen 2021 releases (Netflix movies 2022: 14 / 2021: 26). The oldest series in our sample is the mockumentary "The Office" (US 2005). There are only two German productions in our sample, "Das Haus Anubis" (2009) and "Kitz" (2021) – both Netflix Originals – and the German-Danish coproduction "Sløborn" (2020).

In total, 40 of the 53 Series are Netflix Originals (vs. 36 of the 83 Netflix Movies). These include non-US titles like "Money Heist" (original title: "La casa de papel" 2017) from Spain and "Squid Game" (2021) from South Korea.

Table S4_1: Top series on Netflix, 11/2021 - 02/2022, DE (n=53)

All of Us Are Dead (2022)	Elves (2021)	Narcos: Mexico (2018)	The Sinner (2017)
Arcane (2021)	Emily in Paris (2020)	Ozark (2017)	The Witcher (2019)
Archive 81 (2022)	Hellbound (2021)	PAW Patrol (2013)	The Woman in the House Across the Street from the Girl in the Window (2022)
Betty en NY (2019)	I Am Georgina (2022)	Raising Dion (2019)	Titans (2018)
Big Mouth (2017)	In From the Cold (2022)	Rick and Morty (2013)	Too Hot to Handle (2020)
Boruto (2017)	Inside Job (2021)	S.W.A.T. (2017)	Toy Boy (2019)
Brooklyn Nine- Nine (2013)	Inventing Anna (2022)	Selling Sunset (2019)	True Story (2021)
Christmas Flow (2021)	Kitz (2021)	Sløborn (2020)	Undercover (2019)
Cobra Kai (2018)	Locke & Key (2020)	Squid Game (2021)	Vikings (2013)
Cowboy Bebop (2021)	Lost in Space (2018)	Stay Close (2021)	You (2018)
Dark Desire (2020)	Love Is Blind (2020)	Sweet Magnolias (2020)	Young Wallander (2020)
Das Haus Anubis (2019)	Maid (2021)	The Girl from Oslo (2021)	
Demon Slayer: Kimetsu no Yaiba (2021)	Money Heist (2017)	The Office (U.S.) (2005)	
Dynasty (2017)	My Name (2021)	The Silent Sea (2021)	

Table S4_1a: Distribution of years of production (Netflix Ser DE)

	n	%
2022	6	11.32
2021	15	28.3
2020	8	15.09
2019	6	11.32
2018	5	9.43
2017	7	13.21
2010-2016	4	7.55
2000-2010	2	3.77
<2000	0	0
N	53	100

Slightly more than half of the titles on German Netflix Series were produced or at least coproduced by the US (52%), followed by South Korea (8%). With three series each (5%), Germany, UK, Canada and Japan emerge as a second group, and the sample is trailed by 7 single production countries. Most of the coproductions involved two countries (8), one had three partners involved ("The Witcher", Poland, US, Hungary 2019).

Out of our sample of 16 production countries, eight are in the European Union. Of the 53 series in our Netflix sample, eleven have at least one of their countries of origin in the EU (21%).

Table S4_2: Frequency of countries of origin (Netflix Ser DE)

	n	%	EU
US	33	52.38	0
South Korea	5	7.94	0
UK	3	4.76	0
Germany	3	4.76	1
Canada	3	4.76	0
Japan	3	4.76	0
France	2	3.17	1
Spain	2	3.17	1
Denmark	2	3.17	1
Poland	1	1.59	1
Belgium	1	1.59	1
Mexico	1	1.59	0
Ireland	1	1.59	1
Norway	1	1.59	0
Israel	1	1.59	0
Hungary	1	1.59	1
N (total countries mentioned)	63	100	8 (11)

In total, 40 of the 53 Series are Netflix Originals (compared to 36 of the 83 Netflix movies in our sample). The majority of them are produced in the US (58%). This is followed by five titles (12%) from South Korea, including "Squid Game" (2021).

There are two German Netflix Originals productions in our sample, "Das Haus Anubis" (2009) and "Kitz" (2021). Spain has two titles as well, including "Money Heist" (original title: "La casa de papel" 2017).

Table S4_2a: Netflix Originals by countries of origin (Netflix Ser DE)

Country of Origin	n	%
US	25	58.14
South Korea	5	11.63
UK	3	6.98
Germany	2	4.65
France	2	4.65
Spain	2	4.65
Poland	1	2.32
Belgium	1	2.32
Canada	1	2.32
Denmark	1	2.32
Mexico	1	2.32
Hungary	1	2.32
Japan	1	2.32
N	43	100

The German Netflix Series sample of 53 titles contains 75 original languages. The most common one by far is English (53%). In the next largest group of five movies each (7%), Spanish and Korean is spoken, followed by French (5%) and German (4%).

German is spoken only in the two already mentioned German productions ("Das Haus Anubis" (2009) and "Kitz" (2021)) and the German-Danish coproduction "Sløborn" (2020).

Table S4_3: Frequency of languages of series (Netflix Ser DE)

	n	%
English	40	53.33
Spanish	5	6.67
Korean	5	6.67
French	4	5.33
German	3	4.0
Russian	2	2.67
Japanese	2	2.67
Arabic	2	2.67
Danish	2	2.67
Dutch / Flemish	1	1.33
Hebrew	1	1.33
Greek Ancient (to 1453)	1	1.33
Hindi	1	1.33
Old English	1	1.33
Norse	1	1.33
Chinese	1	1.33
Norwegian	1	1.33
Urdu	1	1.33

Serbian	1	1.33
Latin	1	1.33
N (total languages mentioned)	75	100

When the focus is on the English and German language, we get a group of 43 movies of which ninety three percent use English and seven percent German.

Table S4_4: Frequency of English and the national language German (Netflix Ser DE)

	n	% mentioned
English	40	93.02
German	3	6.98
Total	43	100

The genres of the Netflix Series are taken from Flixpatrol. Their combinations give us a total of 198 genres for 53 movies. The range and weight of genres of Netflix Series is to be expected for such an entertainment service. Non-fictional elements are missing.

Table S4_5: Frequency of genres (as self-reported by Netflix) (Netflix Ser DE)

	n	%
Drama	40	20.20
Thriller	25	12.62
Mystery	18	9.09
Crime	17	8.58
Action	15	7.57
Adventure	14	7.07
Comedy	13	6.56
Sci-Fi	12	6.06
Fantasy	10	5.05
Romance	8	4.04
Animation	7	3.53
Horror	5	2.52
Reality-TV	4	2.02
Family	3	1.51
Game-Show	2	1.01
Sport	1	0.5
History	1	0.5
War	1	0.5
Buddies	1	0.5
Music	1	0.5
N	198	100

Disney

At 21 titles, Disney has the smallest series catalogue of our three VoD platforms. Age-wise, it has one 2022 release and strong groups from 2021 (38%) and from the 2010s (33%), keeping in mind

that what we would have seen on the platform during the sampling period might have been a rerun from 2010 or the most current season of the day of a series that started in 2010.

Our Disney sample did not include productions from Germany. Aside from one UK-New Zealand-US coproduction (the Disney Original documentary "The Beatles: Get Back" 2021), all series on Disney's platform were US productions. Seven of them (33%) were Disney Originals, four licensed from Hulu and one from Fox.

Table S4_6: Top series on Disney, 11/2021 - 02/2022, DE (n=21)

American Dad!	How I Met Your	Pam & Tommy (2022)	
(2005)	Mother (2005)		
Desperate	Loki (2021)	Scrubs (2001)	The Simpsons (1989)
Housewives (2004)			
Dopesick (2021)	Marvel's Agents of	Star Wars (2008)	The Walking Dead
	S.H.I.E.L.D. (2013)		(2010)
Family Guy (1999)	Marvel's Hit-Monkey	The Beatles: Get	Y: The Last Man
	(2021)	Back (2021)	(2021)
Grey's Anatomy	Modern Family	The Book of Boba	
(2005)	(2009)	Fett (2021)	
Hawkeye (2021)	Olaf Presents (2021)	The Mandalorian	
		(2019)	

Table S4_6a: Distribution of years of production (Disney Ser DE)

_	-	
	n	%
2022	1	4.76
2021	8	38.09
2020	0	0
2019	1	4.76
2018	0	0
2017	0	0
2010-2016	2	9.52
2000-2010	7	33.33
<2000	2	9.52
N	21	100

Table S4_7: Frequency of countries of origin (Disney Ser DE)

	n	%
US	21	91.30
UK	1	4.35
New Zealand	1	4.35
N (total countries mentioned)	23	100

The German Disney Series sample of 21 titles contains 32 original languages. The most common one by far is English (65%) followed by Spanish (10%). German is spoken only in the hospital comedy "Scrubs" (US 2001).

Table S4_8: Frequency of languages of series (Disney Ser DE)

i and i a i _ a i i a quadrich a i i ami guidge		(
	n	%	

English	20	64.52
Spanish	3	9.68
American Sign Language	2	6.45
Persian	2	6.45
Chinese	2	6.45
Italian	1	3.22
German	1	3.22
N (total languages mentioned)	31	100

When the focus is on the English and German language, we get a group of 21 series of which ninety-five percent use English and five percent German.

Table S4_9: Frequency of English and the national language German (Disney Ser DE)

	n	% mentioned
English	20	95.24
German	1	4.76
Total	21	100

The genres of the Disney Series, taken from Flixpatrol, give us a total of 40 genres for 21 series. The range and weight of genres of Disney Series is to be expected for such an entertainment service. There is one non-fictional mini-series, the documentary "The Beatles: Get Back" (2021).

Table S4_10: Frequency of genres (based on Flixpatrol) (Disney Ser DE)

	n	%
Animation	6	15.0
Drama	4	10.0
Superhero	4	10.0
Comedy	3	7.5
Adult	3	7.5
Space opera	3	7.5
Marvel	3	7.5
Sci-Fi	2	5.0
Doctors	2	5.0
Sitcom	2	5.0
Crime	1	2.5
Horror	1	2.5
For girls	1	2.5
Documentary	1	2.5
Musicians	1	2.5
Drugs	1	2.5
Sex	1	2.5
Zombies	1	2.5
Postapocalypse	1	2.5
N	40	100

Itunes

The Itunes Series catalogue contains 61 titles. It has no series starting in 2022 and seven from 2021. The largest group (31%), like in Disney' VoD Series, dates from the 2010s, and the second largest group (21%) from the 2000s. The third largest group (13%) goes back before 2000. The longest-running is "Doctor Who" which was started by the BBC in 1963. The original series was cancelled in 1989 and revived in 2005 which, we assume, are the seasons we are seeing in our sample.

Table S4_11: Top series on Itunes, 11/2021 - 02/2022, DE (n=61)

A Discovery of	Emil i Lönneberga	Monk (2002)	The Blacklist (2013)
Witches (2018)	(1975)		
American Horror	Endeavour (2012)	Mr. Robot (2015)	The Event: Inside
Story (2011)			Wolfgang Puck
			Catering (2021)
And Just Like	Euphoria (2019)	NCIS (2003)	The Flintstones
That (2021)			(1960)
Around the World in	Eureka (2006)	New Amsterdam	The Good Doctor
80 Days (1989)		(2018)	(2017)
Band of Brothers	Family Guy (1999)	Nikita (2010)	The Pembrokeshire
(2001)			Murders (2021)
Battlestar Galactica	Father Christmas	Pennyworth: The	The Pillars of the
(2004)	(1991)	Origin of Batman's	Earth (2010)
		Butler (2019)	
Billions (2016)	Frank Herbert's	Psych (2006)	The Rookie (2018)
	Children of Dune		
	(2003)		
Boardwalk Empire	Frank Herbert's	Queen of the South	The Sopranos
(2010)	Dune (2000)	(2016)	(1999)
Brooklyn Nine-Nine	Game of Thrones	Rome (2005)	This Is Us (2016)
(2013)	(2011)		
Candice Renoir	Grey's Anatomy	Sharp Objects	Vigil (2021)
(2013)	(2005)	(2018)	
Chernobyl (2019)	Grimm (2011)	Sisi (2021)	Yellowstone (2018)
Chicago Fire (2012)	Hotel Adlon (2013)	Star Trek /	Your Honor (2020)
		Discovery (2017)	
DC's Legends of	LEGO Ninjago /	Succession (2018)	Zwei
Tomorrow (2016)	Masters of Spinjitzu		Weihnachtsmänner
	(2012)		(2008)
Dead Mountain /	Lucifer (2016)	Superman & Lois	
The Dyatlov Pass		(2021)	
Incident (2020)			
Dexter: New Blood	Magnum P.I. (2018)	The A-Team (1983)	
(2021)			
Doctor Who (2005)	Midsomer Murders	The Big Bang	
	(1997)	Theory (2007)	

Table S4_11a: Distribution of years of production (Itunes Ser DE)

	n	%
2022	0	0
2021	7	11.47
2020	2	3.28
2019	3	4.92
2018	7	11.47
2017	2	3.28
2010-2016	19	31.15
2000-2010	13	21.31
<2000	8	13.11
N	61	100

More than half of the Series on German Itunes were produced or at least coproduced by the US (58%), followed by the UK (17%). Germany (9%) and Canada (3%) form the second group before the tail of 11 single production countries. Most of the coproductions involve two countries (8), and then there are three with four partners each ("Around the World in 80 Days", Italy, West Germany, Yugoslavia, US 1989, the drug trade drama "Queen of the South", US, Mexico, Spain, Malta 2016 and "The Pillars of the Earth", a war drama, thriller and romance set in 12th century England, Germany, Canada, UK, Hungary 2010)

Out of our sample of 15 production countries, ten are in the European Union. Of the 61 series in our Netflix sample, ten have at least one of their countries of origin in the EU (16.4%).

Table S4_12: Frequency of countries of origin (Itunes Ser DE)

	n	%	EU
US	45	57.69	0
UK	13	16.67	0
(West-) Germany	7	8.97	1
Canada	2	2.56	0
France	1	1.28	1
Spain	1	1.28	1
Denmark	1	1.28	1
Mexico	1	1.28	0
Hungary	1	1.28	1
Austria	1	1.28	1
Italy	1	1.28	1
Yugoslavia	1	1.28	1
Russia	1	1.28	0
Sweden	1	1.28	1
Malta	1	1.28	1
N (total countries mentioned)	78	100	10 (16)

Like the other platforms, Apple produces its own Originals,⁵⁰⁷ but like its original movies keeps them exclusive to Apple TV+. The German Itunes catalogue does contain series licensed from HBO (12), CBS (3), Showtime (3) and one each from ABC, CWTV, Fox, FX / Hulu, Netflix and Sky, as well as from PSM stations BBC (2) and one each from Channel 5 and PBS.

https://www.apple.com/tv-pr/originals/series/

The 61 Series in our German Itunes sample contain 94 original languages. The most common by far is English (60%). In the next group, German (6%), French (5%) and Russian (5%) is spoken.

German is spoken exclusively or predominantly in three (mini-) series: "Sisi", Germany, Austria 2021, the comedy "Zwei Weihnachtsmänner", Germany 2008 and the history drama "Hotel Adlon", Germany 2013.

Table S4_13: Frequency of languages of series (Itunes Ser DE)

	n	%
English	56	59.57
German	6	6.38
French	5	5.32
Russian	5	5.32
Arabic	2	2.13
Danish	2	2.13
Italian	2	2.13
Chinese / Mandarin	2	2.13
Klingon	2	2.13
Swedish	2	2.13
Japanese	1	1.06
Dutch	1	1.06
Spanish	1	1.06
Hindi	1	1.06
Latin	1	1.06
Lithuanian	1	1.06
Egyptian (Ancient)	1	1.06
Ukrainian	1	1.06
Persian	1	1.06
Samoan	1	1.06
N (total languages mentioned)	94	100

When the focus is on the English and German language, we get a group of 62 movies of which ninety percent use English and ten percent German.

Table S4_14: Frequency of English and the national language German (Itunes Ser DE)

	n	% mentioned
English	56	90.32
German	6	9.68
Total	62	100

The combinations of genres from Flixpatrol of the Series on German Itunes give us a total of 109 genres for 61 movies. The range and weight of genres is to be expected for such an entertainment service. As single non-fictional element there is the food documentary "The Event: Inside Wolfgang Puck Catering" (US 2021).

Table S4_15: Frequency of genres (based on Flixpatrol) (Itunes Ser DE)

n	21.1

Drama	23	13.76
Crime	15	6.42
Comedy	7	5.5
Sci-Fi	6	3.67
Action	4	3.67
Animation	4	3.67
History	4	3.67
Case of the week	4	3.67
Space opera	4	3.67
Superhero	3	2.75
Business	3	2.75
Doctors	3	2.75
Mystery	2	1.83
Fantasy	2	1.83
Family	2	1.83
War	2	1.83
Gangsters	2	1.83
Thriller	1	0.92
Adventure	1	0.92
Romance	1	0.92
Horror	1	0.92
Buddies	1	0.92
Adult	1	0.92
For boys	1	0.92
For older kids	1	0.92
Fashion	1	0.92
Sitcom	1	0.92
Murder	1	0.92
Serial killer	1	0.92
Submarines	1	0.92
Documentary	1	0.92
Food	1	0.92
Disaster	1	0.92
Drugs	1	0.92
Firefighters	1	0.92
Teens	1	0.92
N	109	100

Public Service Media Platforms

German public service media encompasses ARD, ZDF, Deutschlandfunk (DLF) with three radio channels and the international TV and radio service Deutsche Welle (DW).

ARD ("Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland", "Working group of public broadcasters of the Federal Republic of Germany") is based on the federal Länder with currently nine regional channels. In addition, ARD operates the

national TV network, called "Das Erste" ("The First"), the news channel "Tagesschau24", the educational channel ARDalpha and the young entertainment channel "one".

ZDF ("The Second German Television") provides thee national TV channels, the main ZDF, ZDFinfo and ZDFneo. In addition, ARD and ZDF cooperate to produce Phoenix (current events, news and documentaries), KiKa (kids-oriented) and Funk (teenage-oriented, online only). And they jointly participate in the cross-border cooperations 3sat (culture-oriented, with Austrian ORF and Swiss SRG) and arte (a culture-oriented Franco-German cooperation).

Both ARD and ZDF operate their own VoD platforms ("Mediathek"⁵⁰⁸). Data on the weekly top 10 movies and series on these two platforms during our 17-week research period were kindly provided by the Media Research departments of ARD and ZDF.⁵⁰⁹

Both also maintain numerous channels on VSPs (including Funk⁵¹⁰ whose various formats initially were published exclusively on VSPs, but are now available on ARD's and ZDF's VoDs as well) which we did not analyse for this report but will look at more closely in future publications. Likewise, the online-offers of DLF and DW were not included in our analysis.

ZDF does not distinguish between movies and series at all, ARD does so only barely. The users who feed the IMDb in contrast have no difficulty in identifying "TV Movies" and "TV Series" or "TV Mini Series".

ZDF did not provide us with a list of movies but in its list of series, we could identify two serial programme slots that show movies ("Spielfilm-Highlights" and "Der Fernsehfilm der Woche"). We therefore moved these six movies from the PSM Series into the PSM Movies dataset.

The ZDF metadata we received, only distinguish between three genres: "fiction", "entertainment" and "information". The six movies and the majority of series are labelled as "fiction". The ZDF genre "information" includes the true-crime series "Aktenzeichen XY... ungelöst" (running continuously since 1967), documentaries about fictional history dramas ("Der Palast" and "Die Wannseekonferenz"), a political talk-show ("Markus Lanz") and a current affairs format ("ZDFzeit"). "Entertainment" includes comedy ("ZDF Magazin Royale", "heute-show") and a game-show ("Wetten, dass..?", 1981).

ZDF and ARD additionally provided us with the number of views of most of the titles. We did not include these data in the present report, but will again look into it more deeply in future publications.

On the other hand, the ARD Movies dataset contains a number of productions that IMDb identifies as series ("Der Amsterdam-Krimi", "Die Diplomatin", "Kommissar Dupin", "Zimmer mit Stall" etc.). We therefore moved these 16 titles from the PSM Movies into the PSM Series dataset.

After resorting PSM movies and PSM series and removing all doubles, we got one dataset with 79 movies and a second one with 92 series which are the basis for our present analysis.

Top Movies on ARD and ZDF VoD

Our remixed dataset of PSM movies contains 73 entries from ARD and six from ZDF.

One third of the movies in our sample had been freshly released during the last year (37%), ten of them even during the first nine weeks of 2022. Another large group is from the 2010s (19%). The oldest movie in our set is the New Years classic "Dinner for One" (DE 1963) that we also found on Amazon and Itunes. The other movies older than 2000 are the Adventure-Mystery-Thriller "The

https://www.ardmediathek.de/ and https://www.zdf.de/

A special thank goes to Camille Zubayr, Media Research at ARD, and to Natalie Beisch and Stefanie Best, Media Research at ZDF for providing us with data from PSM.

https://www.funk.net/

Deep" (UK, US 1977), the Comedy "Wir können auch anders" (DE 1993) and the War-Comedy-Drama "Das Leben ist schön" (orig.: "La vita è bella", Italy 1997).

Table S5_1: Top movies on PSM VoD, 11/2021 – 02/2022, DE (n=79)

12 Tage Sommer	Die Dienstagsfrauen	Geliefert (2021)	Schon tausendmal
(2021)	Sieben Tage ohne(2014)		berührt (2022)
Albträumer (2020)	Die Dunkle Seite des Mondes (2015)	(2021)	Schwein gehabt (7) (2018)
Aufbruch ins Ungewisse (2017)	Die Frau in Gold (2015)	Jane Eyre (2011)	Sprachlos in Irland (2022)
Breaking Surface – Tödliche Tiefen / Spielfilm-Highlights (2020)	Die Herzogin (2008)	Jeanny – Das fünfte Mädchen (2022)	Steirertod (2021)
Buddenbrooks (2008)	Die Luft, die wir atmen (2021)	Karla, Rosalie und das Loch in der Wand (2022)	The Deep (1977)
Challenger – Ein Mann kämpft für die Wahrheit (2013)	Die Versöhnung (2008)	Kryger bleibt Krüger (2020)	Toter Winkel (2017)
Charlotte Link – Die Betrogene (2018)	Die Welt steht still / Der Fernsehfilm der Woche (2021)	Lauf Junge lauf (2013)	Verleugnung (2016)
Das Haus (2021)	Die Zürcher Verlobung: Drehbuch zur Liebe (2007)	Leberkäsjunkie (2019)	Verlorene (2018)
Das Leben ist kein Kindergarten – Umzugschaos (2021)	Dinner for One – Das Original (1963)	Mammut (2009)	Verratene Freunde (2013)
Das Leben ist schön (1997)	Dr. Hoffmann – Die russische Spende (2022)	Meeres Stille (2013)	Verunsichert – Alles Gute für die Zukunft (2020)
Das Leben meiner Tochter (2019)	Drei Haselnüsse für Aschenbrödel (2021)	Mona & Marie / Der Fernsehfilm der Woche (2021)	Vicky Cristina Barcelona (2008)
Das Lied des toten Mädchens (2020)	Ein Leben lang (2022)	Nie zu spät (2021)	Weihnachten für Einsteiger (2014)
Der Beschützer (2022)	Eine Liebe später (2022)	Offenes Geheimnis (2018)	Wenn das fünfte Lichtlein brennt (2021)
Der Feind meines Feindes / Der Fernsehfilm der Woche (2022)	Eine riskante Entscheidung / Der Fernsehfilm der Woche (2021)	Oskar, das Schlitzohr und Fanny Supergirl (2022)	Willkommen bei den Sch'tis (2008)

Der Flensburg-Krimi:	Einmal bitte alles	Ottilie von Faber-	Winterkartoffelknödel
Der Tote am Strand	(2017)	Castell – Eine mutige	. Ein Eberhoferkrimi
(2021)		Frau (2019)	(2014)
Der Geschmack von	Eisland (2021)	Papa auf Wolke 7	Wir können auch
Rost und Knochen		(2020)	anders (1993)
(2012)			
Der große	Faltenfrei (2021)	Ray und Liz (2018)	Wo ist die Liebe hin
Eisenbahnraub 1963			(2020)
(1/2) (2013)			
Der Medicus (1/2)	Familie ist ein Fest –	Sanft schläft der Tod	Zero (2021)
(2013)	Taufalarm (2021)	(2016)	
Der Wein und der	Gegen die Wand	Sauerkrautkoma	Zoros Solo (2019)
Wind / Spielfilm-	(2004)	(2018)	
Highlights (2017)			
Der Wunschzettel	Geheimnis eines	Steirerrausch (2021)	
(2018)	Lebens (2018)		

Table S5_1a: Distribution of years of production (PSM Mov DE)

	n	%
2022	10	12.66
2021	19	24.05
2020	7	8.86
2019	4	5.06
2018	8	10.13
2017	4	5.06
2010-2016	15	18.99
2000-2010	8	10.13
<2000	4	5.06
N	79	100

Slightly more than half of the movies on German PSM platforms were produced or at least coproduced by Germany (58%), followed by the UK (9%), France (6%) and the US (6%) where the US only appear in coproductions with the UK or with EU countries Spain, Italy and France. The sample is trailed by eight single production countries.

Most of the coproductions involved two countries (10), three had three partners and one each had four and five countries involved. The largest cooperation (Spain, France, Italy, Argentina and Germany) is "Offenes Geheimnis" (2018), a Mystery-Thriller-Crime-Drama between Buenos Aires and the Madrid region.

Out of our sample of 106 production countries, ten are in the European Union. Of the 79 movies in our German PSM sample, 72 have at least one of their countries of origin in the EU (91%).

Table S5_2: Frequency of countries of origin (PSM Mov DE)

	n	%	EU
(West-) Germany	61	57.55	1
UK	10	9.43	0
France	6	5.66	1

US	6	5.66	0
Austria	4	3.77	1
Italy	3	2.83	1
Belgium	2	1.89	1
Sweden	2	1.89	1
Spain	2	1.89	1
Norway	2	1.89	0
Switzerland	1	0.94	0
Denmark	1	0.94	1
Luxembourg	1	0.94	1
Singapore	1	0.94	0
Poland	1	0.94	1
South Africa	1	0.94	0
Turkey	1	0.94	0
Argentina	1	0.94	0
N (total countries mentioned)	106	100	10

Our German PSM sample of 79 movies contains 107 original languages. The most common one by far is German (59%). English (20%) is the second most often spoken language, followed by French (5%), Hebrew (4%) and Spanish (3%).

Table S5_3: Frequency of languages of movies (PSM Mov DE)

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	n	%
German	63	58.88
English	21	19.63
French	5	4.67
Hebrew	4	3.74
Spanish	3	2.80
Norwegian	2	1.87
Arabic	1	0.93
Italian	1	0.93
Swedish	1	0.93
Tagalog	1	0.93
Thai	1	0.93
Turkish	1	0.93
Polish	1	0.93
Jiddish	1	0.93
Katalan	1	0.93
N (total languages mentioned)	107	100

When the focus is on the English and German language, we get a group of 84 movies of which a quarter use English and 75 percent German.

Table S5_4: Frequency of English and the national language German (PSM Mov DE)

	n	% mentioned
English	21	25.0
German	63	75.0

Total	84	100

As already mentioned, ZDF only uses three genres of which all of the six titles in the PSM Movies dataset are in the "fiction" category. ARD applies a more conventional scheme which reveals a range and weight of genres to be expected for such a PSM VoD service, with drama and comedy as the most popular.

Non-fictional elements are there in the genres "Biopic" ("Die Herzogin" about the 18th century Duchess of Devonshire, "Lauf Junge lauf" about a young boy fleeing from the Warsaw ghetto in 1942, "Verleugnung" about Deborah E. Lipstadt's legal battle against Holocaust denier David Irving, "Ottilie von Faber-Castell – Eine mutige Frau" about the granddaughter of the director of the famous pencil corporation, etc.) and "History" ("Challenger – Ein Mann kämpft für die Wahrheit" about Richard Feynman's role in the investigation of the 1986 Challenger space shuttle disaster, "Der Medicus" about a quest of an Englishman to gain medical knowledge in 11th-century Ispahan, etc.).

Table S5 5: Frequency of genres (as self-reported by the PSM platforms) (PSM Mov DE)

	n	%
Drama	56	34.78
Comedy	27	16.77
Love	15	9.32
Crime	13	8.07
Thriller	11	6.83
Biopic	7	4.35
History	7	4.35
Mystery	6	3.73
"Fiction" (ZDF)	6	3.73
Family	3	1.86
Adventure	2	1.24
War	2	1.24
Romance	2	1.24
Action	1	0.62
Sci-Fi	1	0.62
Fantasy	1	0.62
Short film	1	0.62
N	161	100

Top TV Series on ARD and ZDF VoD

Our remixed dataset of PSM Series contains 41 titles from ARD and 51 from ZDF or 92 all together.

One third of the series in our sample had been freshly released during the last year (34%), eleven of them even during the first nine weeks of 2022. Another large group is from the 2010s (24%), followed by the 2000s (16%) and those older than 2000 (10%).

The oldest series in our sample is the true-crime series "Aktenzeichen XY... ungelöst" (running continuously since 1967). This is followed in age and popularity by the fictional crime series "Tatort" ((West-)Germany, Austria, Switzerland, 1970) and its East-German counterpart "Polizeiruf 110" (1971). Other long-timers are the game-show "Wetten, dass..?" (DE 1981) and the

travel romance and drama "Das Traumschiff" (DE/AT 1981) in which every episode features a cruise to a different spectacular location aboard a German luxury liner.

Table S5_6: Top series on ARD and ZDF VoD, 11/2021 – 02/2022, DE (n=92)

	Dio Toton vom		· · · · · · · · · · · · · · · · · · ·
Aktenzeichen XY	Die Toten vom	Karneval im ZDF	Sophie Cross –
ungelöst (1967)	Bodensee (2014)	(1973)	Gefährliche Dünen:
			Teuflischer Plan (1)
			(2021)
Atlantic Crossing –	Die Toten von	Kolleginnen (2022)	Stralsund (2009)
Über das Meer für ihr	Salzburg (2016)		
Land und ihre Familie			
(2020)			
Babylon Berlin (2017)	Dia	Kommissar Dupin –	Sturm der Liebe
Dabyion Deniin (2017)	Wannseekonferenz	Bretonische	(2005)
			(2003)
D D (2000)	(2022)	Geheimnisse (2014)	T (((0.00)
Das Begräbnis (2022)		Kranitz – Bei Trennung	Tatort (1970)
	Dokumentation	Geld zurück (2021)	
	(2022)		
Das Quartett (2019)	Die	Legal Affairs (2021)	Taunuskrimi (2017)
	Wannseekonferenz –		
	Die Dokumentation		
	(2022)		
Das Traumschiff	Ein Hauch von	Lena Lorenz (2015)	Thin Ice (2022)
(1981)	Amerika (2021)		,
Dengler (2021)	Ein Sommer in	Marie Brand und	Ungebetene Gäste –
	(2021)	(2008)	Der Usedom-Krimi
	(2021)	(2000)	(2021)
Der Amsterdam-	Ein starkes Team	Markus Lanz (2008)	Unter anderen
Krimi: Das	(1994)	Warkus Luriz (2000)	Umständen (2006)
verschwundene Kind	(1334)		Offisianden (2000)
(2020)	E: ((0004)	NA 11 1 E 11	\/ 1
Der Bergdoktor	Einfach Liebe (2021)	Mord in der Familie –	Verrückt nach Meer
(2008)		Der Zauberwürfel	(2010)
		(2021)	
Der Doktor und das	Eldorado KaDeWe	München Mord (2014)	Warten auf'n Bus
liebe Vieh (2020)	(2021)		(2020)
Der Kommissar und	Entführt – Der	Neben der Spur (2014)	WATAHA – Einsatz an
das Meer (2007)	Usedom-Krimi (2021)		der Grenze Europas
			(2014)
Der Kroatien-Krimi:	Erzgebirgskrimi	Nord bei Nordwest –	Wenn die Stille
Tod im roten Kleid	(2022)	Der Andy von nebenan	
(2016)	,	(2014)	
Der lange Abschied –	Familie Bundschuh	Nord Nord Mord	Wetten, dass?
Der Usedom-Krimi	(2015)	(2011)	(1981)
(2021)	(2010)	(2011)	(1301)
` '	Ericeland (2014)	Polizeiruf 110 (1971)	White Sands – Strand
Der Palast (2022)	Friesland (2014)		
			der Geheimnisse

			(2021)
Der Ranger - Paradies Heimat: Himmelhoch (2018)	Frühling (2011)	Rebecka Martinsson – Weiße Nacht (2017)	Wilsberg (1995)
Der Staatsanwalt (2005)	Furia (2021)	Rosamunde Pilcher (1993)	Wolfsland (2016)
Der Überfall (2022)	Herzkino / Die Sterntaler des Glücks (2021)	Rote Rosen (2006)	ZDF Magazin Royale (2020)
Der Zürich-Krimi: Borchert und der verlorene Sohn (2021)	heute-show (2009)	Schneller als die Angst (2022)	ZDFzeit (2012)
Die Bergretter (2021)	HIP: Ermittlerin mit Mords-IQ (2021)	Sloborn (2020)	ZERV – Zeit der Abrechnung (2022)
Die Chefin (2012)	Hubert ohne Staller (2011)	Snow Angels (2021)	Zimmer mit Stall: Schwein gehabt (7) (2018)
Die Diplomatin – Entführung in Manila (2016)	In 80 Tagen um die Welt (2021)	SOKO Leipzig (2001)	
Die Heiland – Wir sind Anwalt (2018)	In aller Freundschaft (2021)	SOKO Stuttgart (2009)	
Die Kanzlei (2015)	Inga Lindström (2004)	SOKO Wismar (2004)	
Die Küchenschlacht (2018)	Ingo Thiel (2017)	Solo für Weiss (2016)	

Table S5_6a: Distribution of years of production (PSM Ser DE)

	n	%
2022	11	12.0
2021	20	21.74
2020	7	7.61
2019	1	1.09
2018	3	3.26
2017	4	4.35
2010-2016	22	23.91
2000-2010	15	16.30
<2000	9	9.78
N	92	100

The majority of Series on German PSM VoD platforms are produced or coproduced by Germany (70%). In fact there are no productions without German involvement except two series each from Denmark and from Sweden, one each from France, Norway, Poland and UK and one Swedish-Icelandic-French coproduction. There was only a single series available which had US involvement ("Atlantic Crossing").

Most of the coproductions involved two countries (7), four had three partners and one each had five and six countries involved. The largest cooperation (Norway, Germany, US, Sweden, Denmark and the UK) is "Atlantic Crossing – Über das Meer für ihr Land und ihre Familie" (2020), a historic family war drama about Norwegian Crown Princess Märtha who finds refuge from Nazi occupation in the US, influencing President Roosevelt into joining the War in Europe.

Out of our sample of 116 production countries, eight are in the European Union. Of the 92 series in our German PSM sample, 90 have at least one of their countries of origin in the EU (97.8%).

Table S5_7: Frequency of countries of origin (PSM Ser DE)

	n	%	EU
(East- & West-) Germany	83	70.34	1
Austria	6	5.08	1
Sweden	5	4.24	1
UK	3	3.39	0
France	4	3.39	1
Denmark	4	3.39	1
US	1	1.69	0
Switzerland	2	1.69	0
Norway	2	1.69	0
Poland	2	1.69	1
Italy	1	0.85	1
Belgium	1	0.85	1
South Africa	1	0.85	0
Iceland	1	0.85	0
N (total countries mentioned)	116	100	8

Our German PSM sample of 92 Series contains 114 original languages. The most common one by far is German (71%). English (6%), Swedish (6%) and Danish (5%) are the next most often spoken languages.

Table S5_8: Frequency of languages of series (PSM Ser DE)

	n	%
German	81	71.05
English	7	6.14
Swedish	7	6.14
Danish	6	5.26
French	4	3.51
Norwegian	2	1.75
Chinese / Cantonese	2	1.75
Arabic	1	0.88
Italian	1	0.88
Polish	1	0.88
Hindi	1	0.88
Greenlandic	1	0.88
N (total languages		
mentioned)	114	100

When the focus is on the English and German language, we get a group of 88 movies of which eight percent use English and 92 percent German.

Table S5_9: Frequency of English and the national language German (PSM Ser DE)

	n	% mentioned
English	7	7.95
German	81	92.04
Total	88	100

The 92 titles in our sample of PSM Series give us 158 genres in total. As largest emerges the ZDF's "Fiction" (26%) which essentially covers all the detailed genres which ARD is listing. These again offer little surprise and are to be expected in such a PSM catalogue, with drama and crime as favourites.

There is a fair share of crime stories (Tatort", "Polizeiruf 110", "SOKO Leipzig", "... Stuttgart", "... Wismar" etc. and other regional crime series ("Taunuskrimi", "Wolfsland")). Not only for the older audiences, there is romance and drama in settings with doctors, lawyers, captains or park rangers ("In aller Freundschaft", "Legal Affairs" about a media lawyer, "Der Ranger", "Rosamunde Pilcher", "Rote Rosen" etc.). This partly overlaps with a number of geographic excursions ("Ein Sommer in ..." "Istrien", "der Bretagne" etc., "Das Traumschiff" (Namibia etc.) and the Reality-TV series "Verrückt nach Meer").

Just as in PSM Movies, there is a strong presence of fictionalised history series. These include "Eldorado KaDeWe" about a Berlin department store, "Der Palast" about the Berlin theatre Friedrichstadt-Palast, and "Die Wannseekonferenz" about the conference in January 1942 where the Nazis decided on the "Final Solution to the Jewish Question". The latter two also each had a documentary shedding factual light on the subject matter of the fictionalised series. As a current affairs series, we may include Polish "WATAHA – Einsatz an der Grenze Europas" about an elite squad of border guards at the Polish-Ukrainian border.

Different from the commercial VoD platforms, not all Series on PSM are fictional. The ZDF genre "Entertainment" includes weekly comedy shows ("ZDF Magazin Royale", "heute-show" that regularly get top rankings when they are made available on demand), a cooking show ("Die Küchenschlacht") and a game-show ("Wetten, dass..?", 1981).

The ZDF genre "information" includes the true-crime series "Aktenzeichen XY... ungelöst" (1967), the documentaries about the two aforementioned fictional history dramas ("Der Palast" and "Die Wannseekonferenz"), a political talk-show ("Markus Lanz") and a current affairs format ("ZDFzeit").

In the Christmas week (51.) 2021 the eight episodes of "In 80 Tagen um die Welt", a 2021 remake of the Jules Verne novel, dominated the top positions. The series is produced as a joint project of the European Alliance by the public broadcasters Rai, France Télévisions and ZDF.

Table S5_10: Frequency of genres (as self-reported by the PSM platforms) (PSM Ser DE)

	n	%
"Fiction" (ZDF)	41	25.95
Drama	36	22.78
Crime	25	15.82
Mystery	14	8.86
Thriller	13	8.23

Comedy	9	5.70
"Information" (ZDF)	5	3.16
"Entertainment" (ZDF)	5	3.16
Love	4	2.53
History	2	1.26
Family	2	1.26
War	1	0.63
Reality-TV	1	0.63
N	158	100

Conclusions

In this Work Package, we have taken an empirical look at the platformisation of video, or more exactly at the most relevant Video Sharing and Video-on-Demand platforms in Germany. What emerges from the results are two entirely separate and unconnected bodies of online video, where VSPs are primarily for commercial communications by brands and influencers and VoD platforms nearly exclusively contain fictional entertainment.

VSPs

In Section 1, we looked at the top 100 channels on four video sharing platforms – Youtube, Tiktok, Instagram and Dailymotion – their number of subscribers, views, languages and genres. While the original data for Youtube and Dailymotion were selected based on the channel having its origin in Germany, selection for Tiktok and Instagram was based on an audience-centred country rank. This led to a mixed sample with all the Youtube and Dailymotion channels, 83 percent of Tiktok and only 19 percent of Instagram channels originating in Germany. This obviously limits the comparability of the two kinds of sets. In Section 2, we complemented our first three platforms with information on the location, the sex and age of the audiences.

Comparing the number of followers or subscribers on the four platforms, the difference is evident. While Youtube and Tiktok show similar values and Dailymotion is the smallest platform in our sample, the top channels on Instagram have nearly a power of ten more subscribers than Youtube and Tiktok. We have to keep in mind that rather than at the national champions, in case of Instagram, we are looking at the global champions who are not in any way connected to Germany (only 19% of the channels in our sample are based in Germany, 51% in the US). The German contributions to these global top 100 on Instagram are astonishingly focussed on two kinds of brands: automobiles and football.

Table S6_1: Number of subscribers of the top 100 channels in Germany by total video views

No. of subscribers / platform	Youtube	Tiktok	Instagram	Dailymotion
> 1 million	92	79	100	9
> 10 million	6	8	79	0
> 20 million	0	0	32	0

Comparisons by views over all four of our VSPs are impossible. For Youtube, Hypeauditor gives total video views of a channel. For Dailymotion, it also has total views but no average views. A comparison shows that channels on French Dailymotion in Germany get about three powers of ten less views than on market leader Youtube.

Table S6_2: Number of total video views of top 100 channels

Youtube		Dailymotion	
Views	No. of channels	Views	No. of channels
> 1 billion	100	> 1 million	100
> 2 billion	56	> 10 million	21
> 3 billion	17	> 20 million	12

For Youtube we also have the number of average views per video of a channel. Hypeauditor also gives the average for Tiktok which lacks the totals. Tiktok clearly surpasses Youtube in usage intensity. Half of the videos on our top 100 channels get more than one million views on average, while only eight of those on Youtube do. For Instagram, Hypeauditor provides no information on views, but only a composite metric called "Average engagement" which contains views.

Table S6_3: Number of average video views of top 100 channels

Youtube		Tiktok	
Views	No. of channels	Views	No. of channels
> 100k	43	> 100k	100
> 1 million	8	> 1 million	50

The top channels on Youtube and Tiktok are predominantly German-speaking, while the German section of Dailymotion is more linguistically diverse and Instagram is again showing a global dominance of the English language.

Table S6_4: Languages spoken on the top 100 channels in our study

Language / Platform	Youtube (%)	Tiktok (%)	Instagram (%)	Dailymotion (%)
German	50	52	8	16
English	39	40	85	18

Looking at all of the hand-coded content categories in our sample, some characteristics of the platforms emerge. Tiktok and Instagram have a common focus on "Self and Private Life" and on "Fashion, Beauty and Make-up". "Music" is something that Youtube and Dailymotion have in common, the latter also with a focus on sports. "Parodies and Funny Videos" constitute an overlap of Youtube and Tiktok.

Online news, current affairs and debate have been the subject matter in WP2 but are not in our focus in WP3. Also, by selecting the top 100 channels, it is to be expected that we get the most widely connectable and least controversial messengers. Even so, "News and Political Content" is visible on Dailymotion (10%) and Youtube (7%), while at least among the top 100 it is absent on Tiktok (1%) and Instagram (1.6%). To what degree these platforms are used for political campaigning and debate was not within the scope of our research, but from the results it is clear that it takes place below the threshold set by the top 100.

"Games" are surprisingly absent from all our platforms. Letsplays used to be a major category on Youtube, and Games still has a two-digit percentage today (12%), while much of it has found a new home on Twitch (see Czech WP3 country report). On Dailymotion the category has 6% while it is barely present on Tiktok and Instagram.

Table S6_5: Content categories on four VSPs

	You	tube	Tik	tok	Insta	gram	Dailyn	notion
	n	%	n	%	n	%	n	%
Self and Private Life	4	3.05	45	15.20	56	22.49	0	0
Challenge, Experiments and Tricks	10	7.63	27	9.12	3	1.2	1	1.06
Parodies and Funny Videos	21	16.03	52	17.57	13	5.22	6	6.38
Food	4	3.05	9	3.04	1	0.4	1	1.06
Fashion, Beauty and Make-up	2	1.53	41	13.85	51	20.48	1	1.06
Sports	4	3.05	10	3.38	33	13.25	13	13.83
Creative practices and								
performances	29	22.14	64	21.62	51	20.48	46	48.94
Travel and Nature	0	0.0	2	0.67	16	6.42	1	1.06
News and Political Content	9	6.87	3	1.01	4	1.61	9	9.57
Music	32	24.43	41	13.85	18	7.23	10	10.64
Games	16	12.21	2	0.67	3	1.2	6	6.38
Total coded	131	100	296	100	249	100	94	100

Looking at additional demographics, we find that the audience of the top 100 Youtube channels in Germany tends to be between 18 and 34 years old and male. The Tiktok audience is younger, between 13 and 24 years old and female. Our Instagram sample again is global rather than German, therefore also the largest audience for the top 100 channels is in the US (60%) and only 16% of the audience is in Germany. In this sample, the audience tends to be between 18 and 34 years old and female. Hypeauditor does not provide demographics for Dailymotion.

How much do influencers earn, respectively cost? That is, of course, the crucial question for advertisers, competitors, wannabe influencers and the tax office. As such, reliable estimates are hard to come by. Also, calculating income from social video is not straightforward. A footballer like Ronaldo, a model, actor, singer will typically earn most on their main job. The social video income is gratefully taken along. As a side-product, social media posts are cheap to make, they regularly reach millions, are free advertising that even earn them a few hundred thousand euro. For others, their e.g. food videos serve to draw audiences to their recipe blog where they run ads and sell merch. Others rose from being unknown to celebrity purely on social media.

According to the UK based Social media agency Hopper, the 2022 Instagram Rich List is led by Cristiano Ronaldo (442 million followers) at US\$ 2,397,000 per post, followed on place 3 by another footballer, Lionel Messi (327 million followers, \$1,777,000 per post). On place 2 is the first of four Kardashians/Jenners in the top 10 (Kylie Jenner, 338 million followers, \$1,835,000 per post). Musician Beyonce at place 8 (256 million followers, \$1,393,000 per post) is among the sports stars and models.⁵¹¹

Another agency published a similar list of Instagram celebrities and added a list of the 15 richest non-celebrity influencers who gained their popularity through their social media accounts. These include beauty influencers and models like Araya A. Hargate from Thailand (11.1M followers, \$35K per post), Zach King who became known for his Final Cut Pro tutorials on Youtube and now for his magic video tricks (24.4M followers, \$82K per post), the Swedish vlogger and actor Logan Paul and his brother Jake Paul and the wealthy businesswoman and mother Joanna Gaines (13.6M followers \$45K per posts).⁵¹²

The 2022 Instagram Rich List – Who Earns The Most From Sponsored Instagram Posts?, Hopperhq, 04.10.2022, https://www.hopperhq.com/blog/2022-instagram-rich-list/

⁵¹² 30 Top Highest Paid Instagram Influencers In 2023, Ainfluencer, 03.10.2022, https://blog.ainfluencer.com/highest-paid-instagram-influencers/

For TikTok, Hopper's 2022 Rich List⁵¹³ is led by 18-year old model Charlie D'Amelio (142.4 million followers, US\$ 105,770 per post, US\$ 20 million net worth). Her 21-year old sister Dixie D'Amelio is on place 9 (57.4 million followers, US\$ 42,567 per post, US\$ 10 million worth). The two Tiktok megastars had been offered their own eight-episode Hulu series in 2020.⁵¹⁴ Number 2 is Khabane Lame, Senegalese-born social media star who with hilarious common sense mocks life hack and challenge videos and partnered with Xbox, Netflix, Amazon Prime, Hugo Boss and others (143.2 million followers, US\$ 92,270 per post, US\$ 5 million net worth). Actor, rapper and film producer Will Smith is number 5 (72.3 million followers, US\$ 53,741 per post, US\$ 300 million net worth). TikTok's own official page is number 7 (63.2 million followers, US\$ 44,469 per post, US\$ 50 million worth). The number 8, Zach King we already know from Instagram, and beatboxer Spencer Polanco Knight is number 10.

An example that it is possible to rise to fame purely by one's social videos is the number 3 on Hopper's list: Bella Poarch was born in the Philippines, raised in Texas and served in the US Navy as a helicopter mechanic. In August 2020 she posted a lip-sync video to "M to B," a song by a British rapper, which became the most-viewed TikTok in 2020. Since then, she struck deals with Google, Prada and Tinder and in in May 2022 released her first single (90.1 million followers, US\$ 66,829 per post, US\$ 2 million net worth). Another example is Kris Collins, number 5 on Forbes' Tiktok list of top-earners (\$4.75 M, 42 M Follower). Before the pandemic, Collins was a hairdresser in Vancouver. When Covid made working impossible she discovered Tiktok, developed a sketch comedy show and within only one year amassed 42 million followers on Tiktok and 4.5 million subscribers on Youtube. Her family-friendly humour attracted sponsors like Hershey, Lionsgate and Pantene.⁵¹⁵

But how do people actually make money with social video? Youtube's Partner Programme seems rather straightforward. After reaching certain thresholds – 1,000 subscribers, 4,000 public watch hours in the last 12 months and 10 million public short video views in the last 90 days – a creator can apply to become Partner and earn a share of the ad revenues her videos generate. ⁵¹⁶

On Instagram, the ad-revenue share programme was discontinued in 2022. There are several other options to make money. "How much money you can make on Instagram depends on your credentials, audience size, engagement, strategy, hustle, and a dash of dumb luck."⁵¹⁷ Sponsored content is the most important and the most lucrative one, as Business Insider explains: "From posting a picture to the main feed with #ad to sharing swipe-up links in a series of Stories, sponsored content takes on many different shapes. ... For instance, one influencer with 275,000 followers told Insider she had booked \$700,000 in brand deals in six months. And two micro influencers told Insider they earned six-figure yearly salaries as full-time creators."⁵¹⁸

Then there are commissions on affiliate links and a number of bonus programmes, e.g. for Instagram Reels, to incentivise creators to contribute to this highly addictive flow of short videos.

The 2022 TikTok Rich List: Who Earns The Most from TikTok Sponsored Posts?, Hopperhq, 05.10.2022, https://www.hopperhq.com/blog/2022-tiktok-rich-list/

TikTok Superstars Charli And Dixie D'Amelio Are Officially Getting Their Own Hulu Show, 18.12.2020, https://www.forbes.com/sites/abrambrown/2020/12/18/tiktok-superstars-charli-and-dixie-damelio-are-officially-getting-their-own-hulu-show/

Top-Earning TikTok-ers 2022: Charli And Dixie D'Amelio And Addison Rae Expand Fame – And Paydays, Forbes, 07.01.2022, https://www.forbes.com/sites/abrambrown/2022/01/07/top-earning-tiktokers-charli-dixie-damelio-addison-rae-bella-poarch-josh-richards/

Yotube Help: YouTube Partner Program overview & eligibility, https://support.google.com/youtube/answer/72851? hl=en

How to Make Money on Instagram in 2023 (14 Proven Strategies), Hootsuite, 13.09.2022, https://blog.hootsuite.com/how-to-make-money-on-instagram/

⁵¹⁸ How much money Instagram influencers make, Insider, 23.12.2022, https://www.businessinsider.com/how-much-money-instagram-influencers-earn-examples-2021-6

Fans can tip creators by giving them "Badges" on Live or "Gifts" on Reels, and through an in-app purchase they can subscribe to their channels and get exclusive content and other benefits. Finally creators can in-app sell their own merchandise and services through Instagram's shopping features, e.g. reselling clothing brands or promote their own brands. "These payments are constantly in flux for creators while Meta continues to test the program," writes Insider, which also gives a number of portraits of macro & mega, micro and nano influencers with estimates of their audiences and incomes (ibid.). Insider also published the media kit of an influencer with 1.2 million Instagram followers and over 400,000 fans on Tiktok (Alexa Collins).

Looking only at the high end of top-earners gives a misleading picture of the overall state of affairs. In June 2021, Hypeauditor conducted a survey of 1,865 Instagram influencers, which gives a more realistic impression. 520 48.49% of influencers said they earn money from their accounts. On average, influencers earn \$2,970 per month with their Instagram account (micro-influencers 1K-10K earn \$1,420 per month, mega influencers over 1M earn \$15,356 per month). Creators, who earn money work 28.7 hours per week on average on maintaining their account. 25.78% of respondents are hopeful that in the future they will be able to live on income from their Instagram account. Only 4.27% said they already live on income from an account (on average, these influencers receive US\$ 5,912 from their account per month). 521 Not even 5 percent of those producing social video content are able to make a living by it – this is actually not untypical of starbased systems like music, movies, sports, literature and fine arts.

Youtubers.me publishes estimates for most of our top 10 channels on Youtube. Hypeauditor gives estimates in its reports on Youtube and Tiktok. For all of our global top 10 on Instagram it says: "Not available for influencers with 10M+ followers. Celebrities post price depends not only on their audience quality." And it does not have any data on Dailymotion (For further information on what these numbers mean, please see footnotes in the tables).

The number one in our Youtube sample is "Tsuriki Show", a sitcom format without words, a couple playing pranks on each other. In Youtubers.me's list of "The Highest-Paid YouTubers of 2021", the Tsuriki Show is on place 35 globally, with an estimated income of US\$ 13.5 million.⁵²² The others in the top 10 seem to earn around US\$ 3 million each (see Table S6 6).

The numbers, again, are difficult to interpret, but a rough comparison between incomes on Youtube and on Tiktok (Tables S6_7 and 8) seems to indicate that significantly more money is being made by the top 10 on Tiktok.

Table S6_6: Estimated earnings of the top 10 Youtube channels in DE (from Youtubers.me)

				income /	
			Income per	subscriber	Estimated earnings
		Total views of	year (in	s (in	in past 30 days (in
Position	Channel	the channel	US\$) ⁵²³	US\$) ⁵²⁴	US\$) ⁵²⁵
1st	Tsuriki Show	18,155,404,341	13,500,000	0.73	56,4000 - 3,390,000

Insider, 01.12.2020, https://www.businessinsider.com/instagram-influencer-shares-media-kit-pay-rates-1-million-followers-2020-11

Among those surveyed 45.74% were women and 33.19% were men. 23% were in the 18-24 age group, 28% in the 25-34 age category.

Our Survey Data of 1865 Instagram Influencers, Hypeauditor, 28.06.2021, https://hypeauditor.com/blog/data-from-our-study-of-1865-instagram-influencers/

https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

Data from https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

Data from https://us.youtubers.me/global/all/the-highest-paid-youtubers-of-2021

Data from https://us.youtubers.me/germany/all/top-1000-youtube-channels-in-germany

	Kinder Spielzeug				
2nd	Kanal	9,190,741,920	2,900,000	0.14	58,700 – 352,000
3rd	Crazy Frog	6,737,431,883	n.a.	n.a.	n.a.
4th	ArkivaShqip	6,608,386,482	n.a.	n.a.	15,800 – 95,000
5th	Kontor.TV	6,329,956,093	n.a.	n.a.	n.a.
6th	Family Booms	5,788,573,069	3,450,000	0.42	179.000 – 1,080,000
7th	German Spidey	5,690,355,144	3,600,000	0.5	76,6000 – 460.000
8th	Paluten	4,135,954,518	n.a.	n.a.	18,600 – 111,000
9th	ProsafiaGaming	3,933,332,909	n.a.	n.a.	n.a.
10th	Rammstein Official	3,941,757,811	n.a.	n.a.	32,500 – 195,000

Table S6_7: Estimated price and earnings of the top 10 Youtube channels in DE (from Hypeauditor)

		Estimated		
			Account CPM	Earned media value
Position	Account	(US\$) ⁵²⁶	(US\$) ⁵²⁷	(US\$) ⁵²⁸
1st	Tsuriki Show	4,000 – 10,000	1.57 – 3.91	5,300 – 140,000
2nd	Kinder Spielzeug Kanal	700 – 5,000	2.95 – 13.37	3,800 – 201,000
3rd	Crazy Frog	n.a.	n.a.	n.a.
4th	ArkivaShqip	500 – 3,000	16.87 – 83.41	440 – 3,600
5th	Kontor.TV	500 – 3,000	13.96 – 77.40	610 – 1,900
6th	FAMILY BOOMS	n.a.	n.a.	n.a.
7th	German Spidey	n.a.	n.a.	n.a.
8th	Paluten	3,500 - 7,500	9.76 – 20.92	2,600 - 5,600
9th	ProsafiaGaming	5,000 – 15,000	7.32 – 21.97	5,400 – 70,500
10th	Rammstein Official	1,000 – 7,500	2.13 – 9.48	4,800 – 865,000

Table S6_8: Estimated price and earnings of the top 10 Tiktok channels in DE (from Hypeauditor)

		Estimated		
		integration price	Account CPM	Earned media value
Position	Account	(US\$)	(US\$)	(US\$)
1st	Erik Schmitt	500 – 800	2.86 – 4.57	1,200 – 2,400
2nd	Dilara Duman	10,000 – 20,000	1.41 – 2.82	24,200 – 42,300

Hypeauditor: "We use the country of the influencer, the number of followers, the interaction rate and the overall quality of the audience to estimate the price, using machine learning, which focuses on market values. The actual price may differ."

Hypeauditor: "Cost Per Mille (CPM) refers to the money an advertiser invests for 1,000 ad impressions. CPM usually applies to display ads – banners, integrated ads, etc. In HypeAuditor's TikTok report, the CPM metric is used to determine the estimated amount of money an analysed TikTok influencer receives for one thousand views of their videos."

Hypeauditor: "Earned media value shows what it would have cost to achieve the same reach through paid social media among audiences with similar demographics." More at https://help.hypeauditor.com/en/articles/3955889-what-is-emv-and-how-is-it-calculated: "EMV or Earned Media Value is the accepted advertising industry standard for measuring PR activities and influencer marketing campaigns. HypeAuditor EMV is based on a proprietary methodology and shows what it would have cost to gain the same reach through paid social among an audience with similar demographics."

3rd	Sweky Bros	10,000 - 15,000	2.56 – 3.85	8,400 – 15,700
4th	Dave Ardito	10,000 - 20,000	3.45 – 6.90	14,100 – 33,500
5th	Alphonso Davies	20,000 - 35,000	5.13 – 8.97	9,600 – 37,100
6th	foodgod	5,500 - 9,000	3.24 - 5.29	13,800 – 17,900
7th	unlabeled	8,500 - 10,000	4.47 – 5.26	12,300 - 21,400
8th	desartdestro	1,000 – 2,000	1.08 – 2.17	6,400 - 15,300
9th	noelgoescrazy	15,000 - 30,000	3.66 – 7.32	33,800 - 53,000
10th	Bessan Ismail بیسان اسماعیل	10,000 – 15,000	1.85 – 2.78	22,100 - 32,900

In summary, we see a universe of video that is very different from the following on VoD platforms. VSP videos, particularly on Instagram and Tiktok, retain the casual, highly subjective, selfie-kind of perspective of Karim's first ever Youtube video in 2005: the influencer sharing her private life with her fans, taking them along to photo-shootings, trips to spectacular locations, parties, intimate cuddle sessions with the cat. Being 'authentic' has become the core selling point in the age of fake. Yet, while today's top videos still have some of casualness and intimacy of the early days, there is nothing amateurish about them. They have become part of the professionally staged public image of an influencer.

VoD Platforms

In the second half of this study, we move to an entirely different universe of online video. Instead of the staged radically subjective window on the world of VSPs, we are now dealing with traditional scripted fictional movie productions, long-form story telling, produced by studios, production companies and TV networks. While top-earning VSP stars also spend ever more on their productions, they are far away from the budgets and profits in cinema. E.g. James Cameron's "Avatar 2", released for Christmas 2022, on which Disney reportedly spent US\$ 460 million – the most expensive movie in Hollywood history –, made more than US\$ 2 billion globally in its first month in the cinemas, ⁵²⁹ i.e. before exploitation in pay TV and on prime VoD even started. There is a clear tendency towards serial formats, which can run for centuries – e.g. Doctor Who by the BBC since 1963 –, are more economical to produce and leave audiences craving for more.

In Sections 3 and 4, we focus on movies and TV series on for-profit VoD platforms: two pure SVoD players (Netflix, Amazon), one tech player (Apple) and one Hollywood studio (Disney). While three of these offer both SVoD and TVoD services, Apple separates them. We have no data on its SVoD Apple TV+, the exclusive place for Apple Originals. We can only see its TVoD service Itunes.

For the commercial VoD platforms – as well as those in the final Section 5 on the VoD services of Public Service Media –, data were gathered for the top 10 most viewed titles in the 17 weeks period from the beginning of November 2021 to the end of February 2022. Since titles reoccur in the top 10 lists, we removed the doubles for our analysis.

For **movies** on VoD platforms (Section 3), this gave us a corpus of 83 movies made available on Netflix, 54 on Amazon and 72 on Itunes. The range and weight of their genres is to be expected for such entertainment services. Non-fictional elements (Documentary, potentially Biography and History) are marginal on Netflix and entirely absent on Amazon and Itunes.

With nearly a quarter, the share of movies at least coproduced in the EU is highest on Netflix (24%), followed by Itunes (22%) and Amazon (18.5%).

How Avatar: The Way of Water Became the 6th Movie in History to Make \$2 Billion, Time, 23.01.2023, https://time.com/6249282/avatar-2-box-office-history/

Table S6 9: (Co-) Country of Origin for movies on VoD platforms

		(Co-) produced in	(Co-) produced in	(Co-) produ	uced in
Platform	No. of movies	the US (%)	Germany (%)	the EU (%))
				No.	%
Netflix	83	54	6	20	24
Amazon	54	48	5	10	18.5
Itunes	72	47	5	16	22

On Netflix, 36 out of the 83 movies in our sample are Netflix Originals. Amazon and Apple keep their Originals exclusive to their premium services, therefore we do not see them in our sample.

That German is one of the original languages spoken in a movie, is an indicator that it is either about German history (Anne Frank, World War II, princess Elisabeth "Sissi" of Austria; on Netflix) or, in a contemporary setting, it is a comedy ("Fack ju Göhte 3", "Catweazle", "Kaiserschmarrndrama" and "I'm Your Man"; Amazon and Itunes). Original languages (other than English) in international film corpora could be an interesting way to study the internal and external perception of a culture, the stereotypes at a certain time.

A few movies address current affairs issues and thereby might actually impact opinion forming. "I'm Your Man", in a comical way, sketches our future of living together with robots. The terrorism drama "The Mauritanian" (UK/US 2021) is based on the memoir "Guantánamo Diary" by Mohamedou Ould Slahi who had been imprisoned without charge by the U.S. government for years.

For **series** (Section 3), we chose Disney+ as our third platform, because Flixpatrol does not provide data on the series on Amazon. This gave us a corpus of 53 TV series on Netflix, of 21 on Disney and 61 on Itunes.

With 40 of 53 series (75.5%) being Netflix Originals, Netflix series is even more of its own universe than Netflix movies. These include non-US titles like "Money Heist" (Original title: "La casa de papel") from Spain and "Squid Game" from South Korea, and "Das Haus Anubis" and "Kitz" from Germany. The latter two and the German-Danish coproduction "Sløborn" (2020) were the only German productions in our Netflix sample.

In our Disney sample, 7 of the 21 series are Originals (33%). On Itunes we do not see any Apple Originals which, again, the company keeps exclusive to Apple TV+. What we do see is, that Itunes is the only platform to include originals from PSM stations BBC, Channel 5 and PBS. Itunes and Disney have some overlap between them, e.g. both have "Grey's Anatomy", "Brooklyn Nine-Nine" and "Family Guy". Itunes has "Star Trek", Disney has "Star Wars". They share no titles with Netflix, with one exception: "Brooklyn Nine-Nine" which was available on Itunes and Netflix.

The share of series at least coproduced in the EU is again highest on Netflix (21%), followed by Itunes (16%), while on Disney all the series were purely US-American with one exception, the documentary mini-series "The Beatles: Get Back" (2021) coproduced by UK, New Zealand and the US.

Non-fictional or fictionalised current affairs elements are absent from the series on all three of our VoD platforms, with two exceptions: Disney has the documentary mini-series "The Beatles: Get Back" (2021) and Itunes had the food documentary "The Event: Inside Wolfgang Puck Catering" (US 2021).

Table S6 10: (Co-) Country of Origin for series on the VoD platforms in our sample

Platform	No. of series	(Co.) produced in	(Co.) produced in	(Co-) produced in the
i ialioitti	140. 01 301103	(Co-) produced in	(Co-) produced in	(Co-) produced in the

		the US (%)	Germany (%)	EU (%)	
				No.	%
Netflix	53	52	5	11	21
Disney	21	100	0	0	0
Itunes	61	58	9	10	16.4

Public Service Media Platforms

In the final Section 5, we look again for movies and series, only this time on the VoD platforms of PSM in Germany, or more specifically those of ARD and ZDF. Just as in the case of the for-profit VoD platforms, we took the top 10 most viewed movies and series in the 17 weeks period from the beginning of November 2021 to the end of February 2022 and removed the doubles, which gave us a dataset with 79 movies and another one with 92 series.

These corpora are entirely different from those of the commercial platforms with essentially no overlap (one exception is the New Years classic "Dinner for One" (DE 1963) that we also found on Amazon and Itunes).

Even though there is no clear indication in the data, we can assume that a large percentage of both movies and series, including coproductions, are PSM originals.

3sat would expect us to see more coproductions of Germany, Austria and Switzerland, yet in our sample there is none in movies and only two in the series set: "Tatort" and "Aktenzeichen XY... ungelöst". The German stations have bilateral cooperations with both, as well as with partners in Germany's other immediate neighbours France, Belgium, Poland, Denmark and Sweden.

There was only a single series available on German PSM, which had US involvement: "Atlantic Crossing" (Norway, Germany, US, Sweden, Denmark, UK, 2020), which is also the largest series cooperation in our sample. It is a historic family war drama about Norwegian Crown Princess Märtha who finds refuge from Nazi occupation in the US and influences President Roosevelt into joining the War in Europe.

The second largest coproduction is the eight-episodes series "Around the world in 80 days", a 2021 remake of the Jules Verne novel which dominated the top positions at Christmas 2021. The series is produced as a joint project of the European Alliance by the public broadcasters Rai, France Télévisions and ZDF with partners in the UK and South Africa.⁵³⁰ The European Alliance of the three PSMs had been announced at the Series Mania festival in Lille in May 2018. In order to address the new VoD offers, namely Netflix, the Alliance, which is open to participation of other PSM, provides a cooperation platform for the production of high-end fictional series. The Alliance also declared that it will ensure that linear and non-linear TV rights shall remain within the European PSM services. Delphine Ernotte Cunci, CEO of France Télévisions exlained: "The European Public Broadcasters invest €14 billion annually in original programming, while Netflix invests only €7 billion. If we share some of these resources, we can tomorrow weigh on the international scene."⁵³¹ At its launch, three initial projects were announced: "Leonardo", based on the life of Leonardo da Vinci to mark the 500th anniversary of the artist's death in 2019, "Mirage", a spy thriller set in Dubai, and "Eternal City", a murder mystery thriller set at the time of President Kennedy's visit to Rome in 1963.⁵³²

⁵³⁰ Cf. Around the world in 80 days Filming resumes in Romania on the Jules Verne Classic, Federationstudios PR, 10.11.2020, https://federationstudios.com/around-the-world-in-80-days-filming-resumes-in-romania-on-the-jules-verne-classic-adventure-for-france-televisions-zdf-rai-the-european-alliance-masterpiece-pbs/

France Télévisions, RAI and ZDF decide to create The Alliance, Francetvpro, 03.05.2018, https://www.francetvpro.fr/contenu-de-presse/1762

In our PSM movies dataset, there are some more countries involved (Spain, Turkey, Luxembourg, Singapore). The US are involved in six coproductions, including the docu drama "Challenger" (US, UK 2013). The largest cooperation (Spain, France, Italy, Argentina and Germany) here is "Everybody Knows" (orig.: Todos lo saben, 2018), a Mystery-Thriller-Crime-Drama between Buenos Aires and the Madrid region.

Table S6_11: (Co-) Country of Origin for movies/series on the PSM VoD platforms in our sample

			(Co-) produced in Germany (%)	(Co-) produced in the E (%)	
				No.	%
Movies	79	6	58	71	90
Series	92	2	70	91	99

Non-fictional elements in PSM Movies are there in the genres "Biopic" ("Die Herzogin" about the 18th century Duchess of Devonshire, "Lauf Junge lauf" about a young boy fleeing from the Warsaw ghetto in 1942, "Verleugnung" about Deborah E. Lipstadt's legal battle against Holocaust denier David Irving, "Ottilie von Faber-Castell – Eine mutige Frau" about the granddaughter of the director of the famous pencil corporation, etc.) and "History" ("Challenger – Ein Mann kämpft für die Wahrheit" about Richard Feynman's role in the investigation of the 1986 Challenger space shuttle disaster, "Der Medicus" about a quest of an Englishman to gain medical knowledge in 11th-century Ispahan, etc.).

Also in PSM Series, there is a strong presence of fictionalised history. These include "Eldorado KaDeWe" about a Berlin department store, "Der Palast" about the Berlin theatre Friedrichstadt-Palast, and "Die Wannseekonferenz" about the conference in January 1942 where the Nazis decided on the "Final Solution to the Jewish Question". The latter two also each had a documentary shedding factual light on the subject matter of the fictionalised series. Notable is also the Polish series "Wataha" about an elite squad of border guards at the Polish-Ukrainian border which shows how quickly a current affairs issue is turned from news into a fictionalised reflection.

We may assume that fictional formats, even though they might not be directed at public opinion forming, do have an effect by allowing viewers to get into the scene and see issues from different perspectives. With European production rates of 90 and 99 percent it is clear that PSM remain the lighthouse of European sovereignty, providing Europeans with glimpses into life in neighbouring countries, both culturally and economically nurturing European audiovisual expressions which provide an alternative to US cultural hegemony.

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