## deygender toolkit













</>DEVGENDER TOOLKIT </> best practices for gender inclusion

**MYGENDER** 

MEDIATED YOUNG ADULTS' PRACTICES: ADVANCING GENDER JUSTICE IN AND ACROSS MOBILE APPS

#### **TECHNICAL DATA SHEET**

DATE: SEPTEMBER 2023

TITLE: </>DEVGENDER TOOLKIT | BEST PRACTICES FOR GENDER INCLUSION AUTHOR: ANA MARTA M. FLORES FUNDING: FUNDAÇÃO PARA A CIÊNCIA E A TECNOLOGIA (PTDC/COM-CSS/5947/2020) GRAPHIC DESIGN: ANA MARTA M. FLORES

CONTACTS: UNIVERSITY OF COIMBRA FACULTY OF ARTS AND HUMANITIES LARGO DA PORTA FÉRREA 3000-370 COIMBRA HTTP://MYGENDER.UC.PT | MYGENDER@FL.UC.PT









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### -intro

A developer toolkit usually encompasses a collection of software routines and utilities designed to facilitate the development of applications by programmers. In the context of graphical user interfaces, it equips developers with the necessary tools and libraries for constructing elements such as menus, dialogue boxes, fonts, and icons. It can also offer the capability to establish connections between the application and software libraries, as well as to integrate it seamlessly with the underlying operating environment, which may include the operating system, database management system (DBMS), protocols, and more.

But this is a special developer toolkit.
Instead of focusing only on the technical aspects, it highlights a very important component of creating an app, website or software: gender inclusivity.

## is this really necessary?

Yes. The field of software engineering has historically been predominantly by men. Women are significantly underrepresented in software engineering. According to the U.S. Bureau of Labor Statistics (2020), women accounted for only 26.2% of computer and mathematical occupations, which includes software engineering roles. There is also a lack of racial diversity in the tech industry as well. According to the National Center for Women & Information Technology (NCWIT), black professionals held just 9% of computing jobs, and Hispanic professionals held only 7%.

Research from multiple sources has shown that women in software engineering often face a gender pay gap, earning less than their male counterparts for similar roles and responsibilities. The tech industry has also been criticized for its lack of inclusivity and hostile environments for underrepresented groups. This includes instances of harassment, discrimination, and bias. The underrepresentation of women and minorities in software engineering can be traced back to educational and pipeline issues. There is a need for more inclusive educational programs and opportunities to encourage diversity in the field. Research has shown that diverse teams in software development tend to produce more innovative and effective solutions.

# How do

To bring some guidelines on the initial phase of building a digital system we looked at how some aspects related to gender and sexuality appear in the most popular apps used by young adults. In a study developed by MyGender project team of researchers, a simplified version of the walkthrough method was employed in six categories of apps: dating/relationships, social media, games, self-tracking, health and fitness. The research starts with the

results of monitoring mobile app usage (n=342) over three months. This tracking was conducted by an external company as part of the MyGender project in 2021 focusing on Portuguese people from 18 to 30 years old. The most commonly used mobile app in each category (Tinder, YouTube, CandyCrush, O Meu Calendário Menstrual Flo, SNS24 and Strava), served as the entry point for exploration in the Google Play Store. The objective of this stage was to understand the affordances related to user identification on the platform, particularly in terms of gender and pronouns. It is noticeable that gender-related information appears in more apps, including those where this information

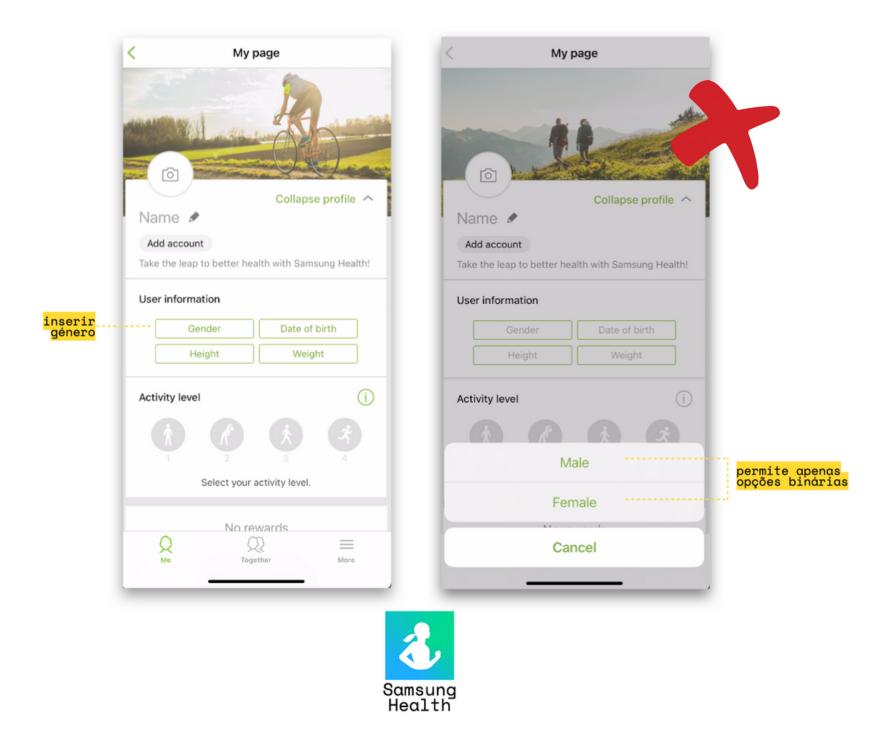
would not make any significant difference to the uses and purposes applied to it.

		identificação geral		género				sexualidade		
арр	icon	login obrigatório	Inserir foto ou avatar	identificação de género	se sim, quais	Personalizar género	rather not to say (gender)	identificar sexualidade	se sim, quais	sexualidade privada
SNS24	0	<b>~</b>	×	×	-	×	×	×	-	-
YouTube		×	<b>~</b>	<b>V</b>	female, male, other	<b>~</b>	☑	×	-	<b>~</b>
Candy Crush saga		×	$\overline{\checkmark}$	×	-	×	×	×	-	×
Tinder		☑	☑	<b>~</b>	woman, man, more	<b>~</b>	×	✓	heterossexual, gay, lésbica, bissexual, assexual, demisexual, pansexual, queer	<b>~</b>
O meu calendário menstrual Flo	Flo	<b>~</b>	<b>▽</b>	×	-	×	-	-	-	×
Strava	<b>\frac{1}{4}</b>	$\overline{\mathbf{V}}$	<b>▽</b>	☑	men, woman, non-binary, prefer not say	×	☑	×	-	×

Summary of the functionalities allowed by the apps evaluated in the areas of in-app identification, gender and sexuality.

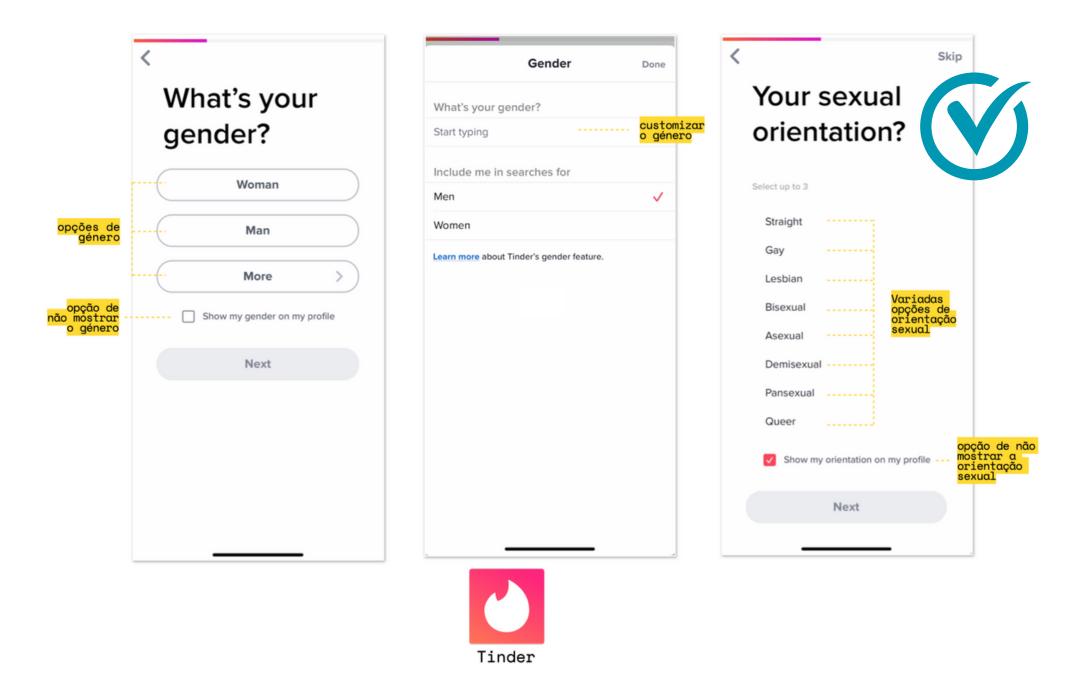
This is the case with YouTube, for example (see table above). Even so, the apps offer completely customisable possibilities in this regard, including the possibility of making this information public or not. The games apps Candy Crush Saga and the Portuguese government health app SNS24 have no mention of gender when registering.

The self-tracking app 0 meu Calendário Menstrual Flo also doesn't explicitly ask about users' gender, although it makes it clear from the purposes for which the app is used - menstrual tracking. The fitness app, Strava, also asks about gender and presents binary and non-binary options, as well as allowing users not to answer.



Considering the recommendation logic of Google's online shop, we get the Samsung Health app with the highest number of downloads — one million 700 million downloads (2023) in the fitness category. This is an application that tracks various aspects of the user's health, including physical activity, nutrition, sleep and stress levels. The app also offers personalised health insights,

challenges and training programmes to help you achieve your health goals.Of all the apps analysed, Samsung Health is the only one that only offers binary options as a gender option. What's more, the app doesn't allow you to optionally enter this data or keep it private. This is an example of how an app is not aligned with the demands of gender representativeness.



When it comes to sexuality, only apps related to dating or hook-ups ask for this information. In the process of entering the data, the user's gender is requested, with the options Woman, Man and More. By clicking on "More", it is possible to customise the gender using any word or expression. In this sense, considering that the app is designed for people to meet

other people and that this search is often influenced by gender when customising this information, the user needs to define whether they want to be included in searches for people who want to meet men, women or both. Tinder began implementing "More Genders" in all countries starting in 2020, except where there are state laws that discriminate against sexual orientation.

## -What are our main challenges?

While progress is being made, there are still significant challenges to overcome in achieving gender and racial equity in software engineering. These challenges include changing workplace cultures, addressing unconscious bias, and promoting diversity at all levels of the industry.

It is important to recognize these disparities and work towards creating a more inclusive and diverse software engineering environment, as diversity can lead to greater innovation and better outcomes for the industry as a whole.

### 12 steps to be part of the solution

When developing an app with a focus on inclusive language regarding gender, there are several critical stages to consider. In the next pages we gather a step-by-step guide to help you ensure inclusivity throughout the development process.

# Project Planning and Requirements Gathering

From the outset, consider inclusivity as part of your project's goals and requirements. Discuss with stakeholders the importance of using inclusive language and avoiding gender bias in the app.

### 2 Design Phase

During the design phase, ensure that user interfaces and user experiences are designed to be gender-neutral. Avoid using gender-specific icons, colours, or terminology. Instead, opt for neutral alternatives.

### **3** Content and Text Review

Carefully review all text and content in the app. Ensure that labels, buttons, error messages, and any written content use inclusive language. Avoid gendered pronouns (he/she) and use gender-neutral terms like "they" or "the user."

### 4 User Profile and Registration

If your app, website or software requires user profiles or registration, provide options beyond just binary gender choices. Allow users to select their gender identity or provide an "other" or "prefer not to say" option.

Make this field non-mandatory.

### 5 Personalization and Recommendations

If your app uses
personalization algorithms,
avoid making assumptions about
user preferences based on
gender. Allow users to
customize their experience
rather than pigeonholing them
based on gender.

### 6 Language Localization

When localizing your app for different languages and regions, be aware that gender norms and language constructs can vary. Ensure that translations maintain genderinclusive language.

### 7 User Feedback and Testing

Involve diverse groups of users in testing to gather feedback on language and inclusivity. Use this feedback to make necessary adjustments to the app's language and features.

### 8 Education and Training

Educate your development team about the importance of inclusive language and its impact. Provide training on how to implement gender-inclusive practices in coding and design.

### 9 Accessibility Considerations

Ensure that your app is accessible to all users, including those with disabilities. Inclusivity goes beyond gender and includes accessibility features like screen readers and voice commands.

### 10 Privacy and Data Handling

Be sensitive to user privacy, especially for users who may not conform to traditional gender norms. Ensure that user data is handled with care and that privacy settings are customizable.

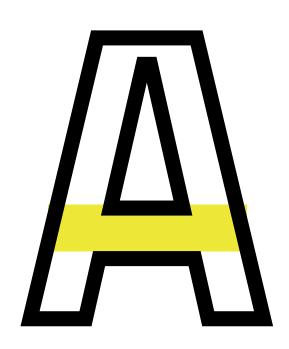
### 11 Continuous Monitoring and Updates

After the app is launched, continue to monitor user feedback and make updates as needed to improve inclusivity. Technology and language evolve, so staying up-to-date is crucial.

### 12 Documentation and Style Guides

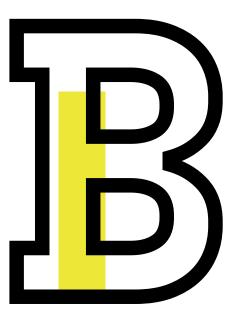
Develop style guides and documentation for your team that emphasize the use of gender-inclusive language. This ensures consistency throughout the development process.

### pocket of tech and of tech and gender-related expressions



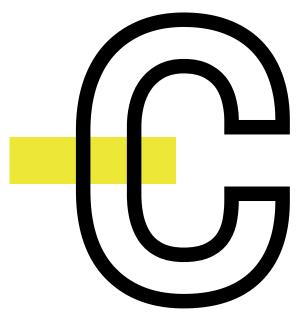
### **ALLY**

People, institutions, places, etc., that actively seek the creation of a comfortable environment for people who are discriminated due to their belonging/identification to certain categories (such as age, class, gender, racialisation, ethnicity, sexual orientation, gender identity, nationality, religion, etc.). We speak of allied things or ally people when they, even if they do not have a sense of belonging to these identity categories, are associated with struggles for the defence of the human rights of historically, economically and socially excluded populations.



### **BIGENDER**

Bigender: A gender identity which can be literally translated as 'two genders' or 'double gender'. These two gender identities could be male and female, but could also include nonbinary identities.

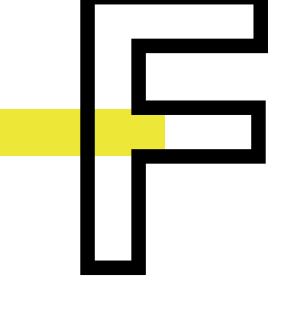


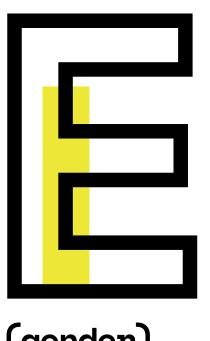
### // CISGENDER

Term relating to a person whose gender identity corresponds to the binary gender (woman or man) assigned to them at birth, due to the identification of their sexual characteristics. As an example, think of someone who identifies as a woman and was referred to as a woman at birth, as a result of the sexual characteristics she was born with. Cisgender is a term that can be understood as opposite to the term transgender.

### COMING OUT//

TProcess of affirmation of the LGBTI+ identity that must be done by the person, when and how they want to do it and for whomever they want to do it. In practice this may mean that not all people know about it or that the person is only out in some contexts. You can also say "come out of the closet".





### (gender) // EXPRESSION

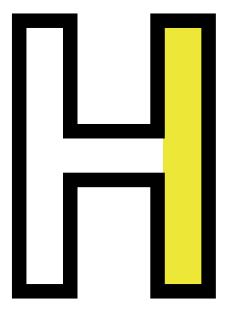
A set of characteristics visible to other people (way of dressing, gestures, tone of voice, etc.) that suggest belonging to a certain gender.

### FEMINISMS

There is a whole set of social, political, ideological and philosophical movements that focus on the recognition of women's absolute freedom, with equal rights as their main objective. Throughout history, different and specific feminist movements have been developed, with different views both on the ideal of society and the way to achieve such an ideal. That is to say, they differ with respect to various factors according to the specificity of the situation of women in the world, the particularities of each culture and each society. However, and despite the specificities of each movement, they are all part of a global phenomenon guided by the same philosophical basis and the political objective of equality.

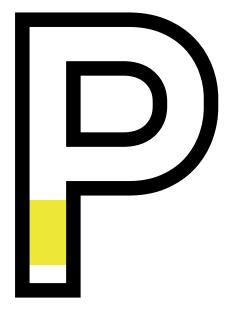


Socially constructed set of roles, expectations and characteristic expressions of someone. It is a social construction historically linked to the sexual binary idea of male/female, and consequent understanding of people as man/woman. However, gender goes beyond binary and sexual constructs, just as it is not static, and can change over time, varying its social understandings within and between different cultures. Therefore it is neither biologically determined nor forever fixed. It influences how people see themselves, but also how they see others. It thus impacts how people act and interact in society.



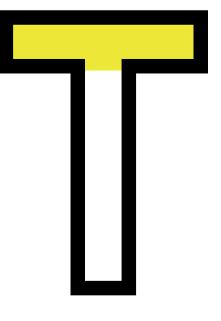
### **HETERO-**NORWATIVITY

Term used to describe the social imposition of the belief that sexual orientations that are somehow different from heterosexuality are not seen as normal. It is an institutionalized process that ignores the diversity of sexual orientations, identities, gender expressions and sexual characteristics that exist in society. It results in the marginalization, segregation and sometimes persecution of people who, as a result of their sexual orientation, are not perceived as the norm, i.e., do not fit into the heteronormative standard.



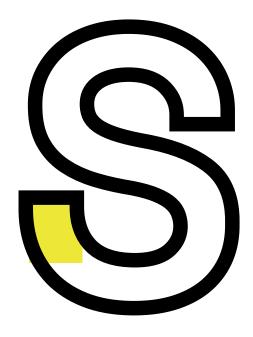
### //PATRIARCHY

Patriarchy corresponds to a social organisation/system, which literally translates as the authority of the man. Nowadays, the term is mainly used to refer to the domination and power of men over women and other people, which goes beyond the domestic sphere, including a predominance in situations such as political leadership roles, moral authority and any kind of social privilege. It characterizes the system by which women are kept subordinated in various ways, which translates into the superiority of men in various social spaces.



### TRANSPHOBIA//

Wide range of depreciative attitudes and practices, which can even be violent. that are directed towards trans people or people who are socially perceived as trans, regardless of whether or not they self-identify as trans. The suffix "phobia" implies a fear or even repulsion of transgender people. Trans people are usual targets of prejudice and discrimination regarding the way they express their gender. These prejudices and discriminatory acts are born from the illusory view that being trans is not part of the natural human condition, but rather that it is some kind of disease or mental disorder. Hence, it results in the condemnation and even demonisation of trans people.





Set of structural and functional characteristics of biological and physiological scope that distinguish male (male sex) and female (female sex) classifications.

### SEXISM //

Sexism is any expression (attitude, word, image, gesture) which is based on the assumption that some people, identified with a certain sex, generally masculine, are superior to the remaining ones. Thus, it typically involves the demeaning of women, either individually or even in a group, and which occurs in the public or private sphere, electronically or otherwise, with the aim of, or at least having as some kind of consequence offending the intrinsic dignity or rights of a person or a group of persons, causing physical, sexual, psychological or socio-economic harm or suffering, creating an intimidating hostile, degrading, humiliating or offensive environment, hindering the autonomy and full enjoyment of one's human rights or perpetuating and reinforcing gender stereotypes.





#### LESBIAN

This term is generically used to describe a woman who is attracted affectively and/or sexually to another woman.



#### GAY

Initially used as a concept to replace the medical appropriation of the term "homosexual", its use has changed and it can even be used as an umbrella term, similar to "homosexual" to describe non-heterosexuality. However, it may be limited to referring to a man who is attracted affectively and/or sexually to another man.



#### **BISEXUAL**

Someone who identifies as bisexual can be of any gender. This is a term that refers to a person who is attracted to people who identify with the same gender or other genders. According to Teixeira et al. (2021), bisexual people can feel attracted to cis people (vd. cis/cisgender), trans and/or non-binary people, although for some people, bisexual identity/identification translates solely to affective and/or sexual attraction to cisgender people, thus implying experiences restricted to gender binarism. The terms bisexual and pansexual can generate particular confusion due to their similarities.







### **PANSEXUAL**

This term can overlap with bisexuality, however a typical identifier for who is pansexual is that gender is not a limiting factor for romantic or sexual attraction. This is not to understand that pansexual people are not attracted to gendered or sexualised characteristics, but rather that potential attraction can overcome such limitations. This term is also used by people who understand that the bisexual identification only means affective and/or sexual attraction to cisgender people, translating experiences restricted to gender binarism, wanting to identify beyond these restrictions. In a simpler way, Teixeira et al. (2021) define pansexual as a "person who feels affectively and/or sexually attracted to people, regardless of attributions and/or identifications regarding sex/gender".



### **ASEXUAL**

A term that encompasses a very heterogeneous population and is sometimes called the grey area of sexuality. Somewhat simplistically it refers to people whose sexual orientation is built on the basis of little or no sexual attraction to anyone, regardless of their gender identity. The issue of less or no sexual attraction is central to this conceptualisation, to which people in the asexual community oppose the term 'allosexual' - that is, someone who lives and experiences sexual attraction in a normative way. Within the idea of asexuality, there are other more specific terms such as "demisexual" - the case of people in whom sexual attraction only arises when there is emotional or affective involvement or connection with these people -, or even of "sapiosexual" - a term which reflects the limitation of the main source of sexual and/or romantic attraction to people's intellectual or even educational capacity.

# //about the project

"MyGender - Mediated young adults' practices: advancing gender justice in and across mobile apps" is the first study in Portugal to explore how young adults engage with the technicality and imaginaries of mobile applications (m-apps), incorporating them into their everyday practices and (re)negotiating from them their sexual and gender identities. Adopting α critical perspective contemporary digital media. the project analyses affordances, grammars, platform politics and content, as well as uses, appropriations and incorporations, understand how they influence hegemonic normativity and alter the lives of young adults.

One of the project's tasks is the MyGender Knowledge Platform that proposes an innovative and integrated approach aimed at providing digital tools and resources targeted at young adults, educators and community organisations on gender awareness in Information and Communication Technologies (ICTs), critical literacies, digital risks and vulnerabilities, and gender justice. This task aims to promote transformative changes in behaviours and cultures by raising awareness.



### References

- Burke, L. E., Wang, J., & Sevick, M. A. (2011).
   Self-monitoring in weight loss: A systematic review of the literature. Journal of the American Dietetic Association, 111(1), 92-102.https://doi.org/10.1016/j.jada.2010.10.008
- Couldry, N. (2014). The myth of "us": Digital networks, political change and the production of collectivity. Information, Communication & Society, 17(4), 479-491.
- Flores, A. M. & Antunes, E. (2023). Uses, perspectives and affordances: an exploratory study on gender identity for young adults in social media platforms in Portugal. *About Gender*, 12(23), 35-263. https://doi.org/10.15847/obs0BS17220232141
- Gallegos-Carrillo, K., Favela, J., & Tentori,
   M. (2019). Enhancing daily routines: A mobile app supporting young adults with ADHD.
   Computers in Human Behavior, 98, 186-198.
- Gaver, W. W. (1991). Technology affordances. In Proceedings of the SIGCHI conference on Human factors in computing systems (pp. 79-84).
- Gillespie, T. (2010). The politics of "platforms". New Media & Society, 12(3), 347-364.

- Krebs, P., & Duncan, D. T. (2015). Health app use among US mobile phone owners: A national survey. JMIR mHealth and uHealth, 3(4), e101. https://doi.org/10.2196/mhealth.4924
- Nurius, P. S., Green, S., Logan-Greene, P., & Borja, S. E. (2018). Minding the gap: Appsupported time management enhances well-being for adults with ADHD. Journal of Attention Disorders, 22(4), 381-392.
- Pearson. (2019). The efficacy of mobile learning.https://www.pearson.com/content/dam/on e-dot-com/one-dot-com/global/Files/news/newsannouncements/2019/efficacy-of-mobile-learningreport.pdf
- Perrin, A. (2021, April 7). Mobile devices and apps. Pew Research Center. https://www.pewresearch.org/internet/factsheet/mobile
- Seaver, N. (2017). Algorithms as culture: Some tactics for the ethnography of algorithmic systems. Big Data & Society, 4(2), 2053951717738104.
- Van Dijck, J., Poell, T., & De Waal, M. (2018). The platform society: Public values in a connective world. Oxford University Press.









