doi:10.1017/S000305542400128X © The Author(s), 2025. Published by Cambridge University Press on behalf of American Political Science Association. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

Dating Apps and the Digital Sexual Sphere

ELSA KUGELBERG University of Oxford, United Kingdom

The online dating application has in recent years become a major avenue for meeting potential partners. However, while the digital public sphere has gained the attention of political philosophers, a systematic normative evaluation of issues arising in the "digital sexual sphere" is lacking. I provide a philosophical framework for assessing the conduct of dating app corporations, capturing both the motivations of users, and the reason why they find usage unsatisfying. Identifying dating apps as agents intervening in a social institution necessary for the reproduction of society, with immense power over people's lives, I ask if they exercise their power in line with individuals' interests. Acknowledging that people have claims to noninterference, equal standing, and choice improvement relating to intimacy, I find that the traditional, nondigital, sexual sphere poses problems to their realisation, especially for sexual minorities. In this context, apps' potential for justice in the sexual sphere is immense but unfulfilled.

ith around 350 million yearly users, dating apps have in many countries quickly become one of the most common avenues for meeting partners (Bergström 2022; Curry 2024; Rosenfeld, Thomas, and Hausen 2019). In creating this designated area for intimate relationships, separate from other realms of society, tech corporations have generated billions of dollars. Dating apps have also revolutionized social relations by providing a space where people can meet potential intimate partners directly and privately. While before, courtship happened wherever people worked, studied, and lived, the initiation of intimacy is now an individual activity, assigned its specific time and place (Bergström 2022, 6–7, 172; Illouz 2021; Williams 2024, ch1).

Political philosophers have in recent years started exploring the digital *public* sphere and the questions it raises concerning power, privacy, democracy, freedom, and justice (Aytac 2022; Cohen and Fung 2021; Fischli and Muldoon 2024; Lazar Forthcoming; Reich, Sahami, and Weinstein 2021; Véliz 2024). However, the digital private sphere remains under-theorized in political philosophy. In particular, there is no systematic overview of the normative political and political–theoretical implications of the digital revolutions for sex and intimacy.² Political philosophers have yet to turn their

Elsa Kugelberg , Postdoctoral Prize Research Fellow in Politics, Department of Politics and International Relations and Nuffield College, University of Oxford, United Kingdom, Elsa.kugelberg@nuffield.ox.ac.uk

Received: April 03, 2024; revised: July 31, 2024; accepted: October 18, 2024.

attention to what I will refer to as the *digital sexual* sphere, of which dating apps are a crucial part.³

Outside political philosophy, by contrast, dating apps have received a lot of attention and a substantial amount of critique. Several features have been problematized in politics, empirical research, art, and cultural discourse (Illouz 2012; Moreno 2024; Wilson 2023). Judging from recent debates, apps are to blame for issues ranging from plummeting birth rates to racist oppression and male loneliness. There are reasons to be worried: racism and sexism on these apps are well documented, people get scammed, and those who go online to date are sometimes harmed psychologically or physically (Pew Research Center 2023, 35–7; Williams 2024, ch5).

To many, the observation that people can suffer harm from online dating might seem obvious. However, to understand what is at stake we need a normative political—theoretical framework able to properly capture the harm, as well as the value, that these apps potentially bring about. In this paper, I provide such a framework. Specifically, I bring the tools of analytical political theories of justice to the dating app. I ask what it would mean to realize the demands of liberal egalitarian justice in this context, as these demands apply to the sexual sphere—the sphere of society that encompasses sexual relationships, and of which the digital sexual sphere is a substantial part. I defend the view

¹ In 2022, the dating app market made \$5.34 billion, of which Match Group made around \$3 billion (Curry 2024). Match Group owns several dating apps, including Tinder, Match.com, The League, and Hinge (Bryant 2023).

² Sonu Bedi (2019) has examined dating websites' racial filters. Amia Srinivasan (2021) discusses the expression of discriminatory preferences in online dating. Bouke de Vries (2024) recently explored the case

for state-run dating apps. Normative discussions about dating apps have taken place elsewhere, not least in empirical sociology (Bergström 2022; Illouz 2007; 2012; 2021).

³ I refer to the digital sexual sphere as the online ecosystem where people interact with potential sexual partners and exercise their sexual and intimate capacities. Compare Cohen and Fung's (2021, 32) formulation regarding the digital public sphere. The digital sexual sphere includes AI systems for intimacy, sex worker platforms, "date-me-docs," sex tech (Stardust, Albury, and Kennedy 2023), and online pornography platforms. Dating apps are sometimes used for purposes outside the sexual sphere, such as initiating friendships. However, as this remains a marginal phenomenon, I leave it aside.

that dating apps can be justified, provided they exercise their power in line with three distinct interests people have in this sphere. I show that based on these interests are three sexual-sphere-specific claims that individuals have against others: the claim to noninterference, the claim to equal standing, and the claim to choice improvement. These are the kinds of claims that theorists of justice have argued generally apply in society (compare, Kolodny 2023, 6-8; Scanlon 1998), but which have not previously been applied, explained, and explicated in the context of the sexual sphere. Because these claims—or something like them—best correspond to our general interests relating to the initiation of relationships involving sex, dating apps must be designed not to undermine them.

Applying this framework to the digital sexual sphere and specifically to the case of dating apps, I find that these apps can provide immense value to individuals, as they make the realization of the claims of equal standing and choice improvement more likely. However, they do this partially and unequally, and often fail to appropriately balance these claims against the claim to noninterference. I argue that regulation of this part of the digital sexual sphere is *prima facie* justified and propose novel policy interventions.

The paper makes three contributions. First, drawing on computer science, sociology, science and technology studies, and normative philosophy of computing, I provide the first systematic political philosophical examination of dating apps. As such, the paper offers guidance to policymakers, app designers, and professional organizations. Second, it shows how to practically think about social justice in the contemporary sexual sphere and contributes to the discussion of what members of the same society owe each other outside the "basic structure," and specifically in relation to sex and intimacy. Third, the paper opens new avenues for empirical research on topics such as nondiscriminatory platform design and user experience.

Before we begin, I note that many of the problems of the contemporary digital sexual sphere are caused by dysfunctionalities and inequalities in the wider digital world. The digital political economy prevents people from being in control over their digital and nondigital lives (Fischli 2022b), including over their digital sexual lives (Stardust, Albury, and Kennedy 2023). Therefore, it is worth underscoring that fully realizing justice in the digital sexual sphere would require the restructuring of the broader political economy of technology.⁴

However, in this paper, my purpose is not to provide a full account of what we might call a just "digital basic structure." Instead, the paper more narrowly considers problems concerning our specific interests in the digital sexual sphere, as they arise in dating apps. Specifically, I focus on the power exercised over users within these apps.

I start by introducing the practice of dating and the role of dating apps in this practice. Thereafter, I present my account of social justice for the digital sexual sphere. Using this framework, I explore how dating apps exercise power over individuals through their design choices concerning architecture, moderation, and amplification. Thereafter, I consider an objection concerning the limits of dating app markets. Finally, I consider to what extent apps further or undermine our claims in the sexual sphere and whether there is a case for their regulation.

DATING

According to many prominent theories of justice, social institutions that exercise significant power over individuals must be justified. They can be so justified if they exercise their power in line with individuals' interests (Rawls 1971; Raz 1986; Scanlon 1998). Many important debates in recent years have concerned which institutions this idea applies to. Is the family a social institution (Schouten 2019)? Is the institution of marriage (Macedo 2015)? Are private corporations (Cordelli 2022)? The issue of how we should view the seemingly more informal practices by which people initiate intimate relationships has not been explored. In different historical periods and cultural settings, the degree to which practices for intimacy initiation have been formalized has varied greatly. In the US, "dating" refers to a more formalized set of activities, in the sense that this practice involves specific chains of events, while in European countries, the process for intimacy initiation tends to be less rigid.⁵ For reasons of simplicity, I will refer to all forms of initiating intimate relationships and interactions (including so called hookups) as "dating" unless specified. This includes but is not limited to the specific American practice of going on dates, the "dating game," which developed during the 20th century (Weigel 2016).

Since dating *apps* are part of the wider practice of dating, we need to explore whether dating is a social institution exercising power over people in the relevant way, before we can ask how dating app power could be exercised in line with individuals' interests. In other words, we need to establish that dating is the kind of phenomenon to which the demands of justice apply.

While Rawls, for instance, theorizes about how social institutions should govern and be governed, he does not have a full account of what a "social institution" is (Miller 2019). In social science and philosophy of social science, however, a social institution is often defined as

⁴ To this end, Reich, Sahami, and Weinstein (2021, 255–7) present an agenda for limiting big tech companies' power as being constituted by three parts: (1) addressing the power imbalance in personal data control and providing individuals with ownership of their data would put them in a better bargaining position over the use of that data, (2) give stakeholders a say in companies, and (3) constrain major tech companies' from dominating markets. These proposals would require that legislation and court interpretation regarding anti-trust, privacy, and property rights be introduced and updated; see also Fischli (2022b). The EU's GDPR and AI Act frameworks constitute steps in the right direction.

⁵ I am grateful to Marie Bergström for discussion on this point.

a social system or structure organizing the primary social practices, roles, and relationships within a culture. For instance, Turner (1997, 6) argues it is:

a complex of positions, roles, norms and values lodged in particular types of social structures and organizing relatively stable patterns of human activity with respect to fundamental problems in producing life-sustaining resources, in reproducing individuals, and in sustaining viable societal structures within a given environment.

We can use the term "social institution" to refer to institutions at varying levels of abstraction. Thus, democracy is a social institution, but so is the Swedish parliament. Dating is not like democracy, in the sense that the latter has a formal structure with a defined role distribution and formalized rules about authority within the institution, while the former often lacks such a formal process. Having said this, it is important to note that the evaluation of dating is made more difficult by the fact that there is a mystification embedded in the practices of the intimate spheres (Illouz 2012, 8–9)—we are primed by convention to think about intimate relationships as the products of chance or fate (Bergström 2013, 6; Slegers 2021). According to predominant narratives, dating is a series of events that *just so happen* to lead us to end up as a couple, which just so happens to be the kind of union that almost everyone else in our society is either a member of or trying to enter (Bergström 2022, 71–4). We are primed, especially, not to think about dating as a rule-bound process, influenced by the economic, social, or cultural structures of the rest of society (Bergström 2022, 8). As a result, dating is to some extent an invisible institution. Yet, societies tend to have some established practice for the initiation of intimate relationships. And these practices tend to be vital to the very function and reproduction of society over time. Indeed, they are examples of solutions to the aforementioned fundamental problems with "reproducing individuals," "sustaining viable societal structures," and "producing life-sustaining resources"-in particular that of human care and care work.

To see this, consider that in the study of social institutions, some institutions are considered particularly fundamental, meaning that they are presupposed by other major institutions and necessary for society's functioning over time. The family is often understood to be a prime example (Lamanna 2002; see also Okin 1989). In our societies, all other institutions rely on the care work and social reproduction that happens in families (Kugelberg and Kugelberg 2024). This is something recognized by social scientists and economists (see, for instance, Becker 1981), and a broad class of normative theorists including feminists (Fraser 2014), Marxists (Federici 1975), and liberals (Okin 1989; Rawls 2001). Citizens, consumers, and workers: they generally enter the world through the family. Capitalism, the university, the parliament: they all presuppose the work of the family.

This fundamental institution in turn relies on intimacy initiation, in some form. In some historical periods, this formation of care work units has been referred to as courtship. In other periods, arranged marriage has been the norm. Where, as in the US, the

American form of dating is an established practice for intimacy initiation, it is a precondition for the formation of socially prescribed forms of care work units such as couples and families (Weigel 2016). This does not imply that this form of dating, or this kind of care work unit, is necessary for any society as such—there are many alternative ways in which intimate relationships could be initiated. And there are many possible ways in which societies are and could be reproduced.

However, any society needs some way for individuals to form the relationships in which necessary care work and social reproduction can take place. In a society where dating serves this function, it is a fundamental social institution. Even though dating does not have the same formal role distribution as the Swedish parliament, it does have a clear social function, as well as an informal yet clearly socially enforced role distribution. Like schools and parliaments, dating also contributes to the reproduction of other important institutions. This does not entail that individuals engaging in this institution do so with the intention of contributing to this reproduction. The same is true for other institutions; to take an example, many shop at Amazon.com without having as their intention to reproduce global capitalism (Agmon 2022, 33–4).

The rituals, role distributions, and social norms of dating are under constant negotiation. In the US, it is, for instance, no longer the case that only members of the opposite sex can date each other, or—at least sometimes—that men must pay for everything consumed. However, the fact that social norms have changed is not an argument against seeing dating as a social institution because social institutions generally do not remain stable. Consider, for example, how family arrangements and our parliaments have changed under the pressure of social and technological change, as well as moral and political arguments.

Note that I am not making a normative argument about the point of dating, nor do I claim it is or should be about contributing to society by having children, caring for workers, or building a home. Many have questioned these norms, and rightfully so. Importantly, the norms regulating dating are questioned in part *because* people see its influence over them—because they take it seriously and see the immense power this institution has over their lives.

So much for dating. Where does this leave dating *applications*?

DATING APPS

According to sociologist Eva Illouz (2012, 180), "online dating represents the most significant trend in modern courtship." To understand the relationship between dating apps and dating, we need to consider how the development of online dating took place during a period in history that saw wider social changes. One of these is an ongoing compartmentalization trend whereby various social activities and spheres are each given their distinct logic: the gym is for moving one's body and colleagues are for work. While before, the initiation of intimate relationships happened where people worked and lived, they now meet in spaces

specifically designed for initiating intimate relationships. Instead of farmers meeting during harvest, fishermen falling in love by the sea, and students getting together at school, sex and intimacy have been assigned a specific time and place: the dating app (Bergström 2022, 171–3; Illouz 2012, 180–3; Kaplan and Illouz 2022, 26–7; Williams 2024, ch1).

Through this greater separation between sex and the rest of the social world, we are approaching an increasingly "pure" sexual sphere. This means, first, that dating *qua* social institution becomes visible. It is now easier to see that dating is not a random series of quasimagical events—that love is not (only) the work of Cupid's arrow. It is now easier to recognize that dating is a social institution, with its own governing norms. It becomes clearer that many of the problems that pester other social institutions are pestering institutions for intimacy initiation as well. Since dating apps have generated millions of experiences and vast amounts of data, it is now harder to dismiss, ignore, or romanticize problems that were perhaps always there (Bedi 2019; Bergström 2022; Slegers 2021; Weigel 2016).

Second, this development underscores the point that the sexual sphere needs special attention. Given that in contemporary practice, the sexual sphere increasingly is separated from other areas of human life, there is a need for the construction of particular principles of social justice for the activities that happen within it (compare, James 2012, 105; 2014, 114). As Rawls (1971, 29) argues, "the correct regulative principle for anything depends on the nature of that thing."

Regulative principles may apply to different agents in different ways. The state ought to bring about conditions in which people's claims can be realized. Individuals have duties of justice: they should contribute to the reform of unjust norms and institutions and the maintenance of just ones. Where just institutions are lacking, they should contribute to bringing them about (Shelby 2007). I say more about this in the next section. But what about the duties of private intermediaries, such as dating apps? To answer this question, we must first properly capture the role dating apps play in dating as a social institution.

Illouz (2012, 170–84) argues that while dating apps promise to rationalize the sphere of romance, these "technologies of choice" are not neutral: in importing the tools and logic of the market (Agmon 2024), they affect the shape and function of both intimacy initiation and intimacy itself.⁶ Dating apps, thus, can be seen as both a response to, and drivers of, the compartmentalization of the sexual sphere (Bergström 2022, 39–57). Against this background, they are best understood as agents intervening in the social institution of dating.⁷ As intermediaries, dating app corporations profit from mediating the relations, filling the roles, and distributing

the social goods of the sexual sphere that are organized through the institution of dating, an institution which is a precondition for other fundamental institutions of our societies. Inserting themselves as middlemen in dating enables dating apps to shape what is possible within individuals' intimate relationships.⁸ In the context of social media apps in the digital public sphere, Seth Lazar (Forthcoming) argues that intermediary power:

governs social relations from the inside out, shaping which kinds of social relations are possible or impossible, frustrating or encouraging behaviors through design, preempting choices and enabling in-principle perfection of coercive enforcement, with access to others as a cudgel.

Dating app companies, similarly, govern the digital sexual sphere in several ways. Acting as middlemen between individuals who otherwise would not have come into contact, these companies cannot avoid exercising some power over users. They must design their platforms and sort their information in *some* way, according to *some* guidelines and rules. Not influencing users' intimate lives does not exist as an option. Dating apps will influence what happens; the question is how this influence can best protect individuals' interests—rather than just the interests of shareholders.

In sum, a handful of private corporations have grabbed substantial control over dating. They oversee how this social institution, and its norms, develop. By comparison, the rest of us have very little say in what practices for intimacy initiation should look like. There is reason to question this situation. When social institutions have great power over our lives, we can at the very least demand that they work well for everyone, and not only for those already well-off. This is what I will argue concerning dating. We should demand that dating apps exercise their power in a way that does not undermine our interests.

I will now say more about the claims individuals have in the sexual sphere.

THREE CLAIMS IN THE SEXUAL SPHERE

Outside of the sexual sphere, liberal egalitarians often argue we have three broad claims on others: (1) that others do not wrongfully interfere with us (noninterference), (2) that we stand in relationships of equality with them (equal standing), and (3) that they act to improve our circumstances of choice (choice improvement) (compare, Kolodny 2023, ch1). These claims have not previously been extended to the

⁶ In her critique of online dating, Illouz (2007, 90) further argues that the principles of capitalism that this phenomenon introduces to the sexual sphere include competition, commodification, and abundance of choice and make it harder for people to choose to commit. I am grateful to an anonymous reviewer for this point.

⁷ Compare, Bedi's (2019, 84–6, 134–6) discussion of how to expand U.S. civil rights law to the private sphere. On his alternative view,

dating platforms are themselves understood to be public accommodations, as defined by the Title II of the U.S. Civil Rights Act.

⁸ Compare the discussion of similar phenomena in the digital public sphere in (Lazar Forthcoming; Reich, Sahami, and Weinstein 2021).

⁹ For similar arguments related to social media platforms, see (Gillespie 2015; Lazar 2023; Forthcoming).

¹⁰ These belong to the category of *general* claims we hold against members of society, regardless of any further partial relationship we might have to them (Kolodny 2023, 13–4; Scanlon 1998, ch1). We hold them against others *qua* members of the same society, not *qua* members of the same intimate relationship. In the relationships with particular others in which we engage in the sexual sphere, further

context of sexual attention or the initiation of intimate relationships in the sexual sphere. In what follows, I will assume that versions of these claims do apply in the sexual sphere. While the present context does not let me elaborate on this assumption fully, I will point to a number of features of the sexual sphere that suggest these claims—or something like them—are applicable in relation to the initiation of intimate relationships.

Interests in the Sexual Sphere

In the sexual sphere, individuals are especially vulnerable. This vulnerability is bound up with the intimacy that characterizes many of its activities. Intimacy involves willingly becoming vulnerable to others by letting them within "the boundaries we normally maintain around ourselves" as Robert Nozick (1989, 60) puts it. In intimate relationships, we show others psychological and physical parts of ourselves that are usually hidden (Gunkel 2024). Vulnerability, therefore, is both a goal in itself and an inevitable result of intimacy. Further, we have strong reasons to value choice in the sexual sphere, as it is especially important that what happens to our bodies in this realm of life is the result of our free choosing (compare, Scanlon 1998, ch6). Activities in the sexual sphere tend to be choice-dependent: "possible or valuable only insofar as they flow from [one's] own, autonomous choices or judgments" (Kolodny 2023, 21; Srinivasan 2021, 87). These two features make the claims to noninterference and choice improvement especially important in the sexual sphere.

In addition, although some inequalities in sexual attention and sexual opportunity are not injustices, there is reason to believe that a person's being generally ineligible for sexual relationships can be a sign of an unacceptable breach of her claim to stand in relationships of equality with others. Egalitarians have previously pointed out regarding social standing that where people are not standing in relationships of equality in society, some are likely to be seen as unfit for certain important relationships (Kugelberg 2024). For instance, others might think that they could not be potential colleagues, neighbors, or friends (Scanlon N.d.).¹¹ This is likely true also for intimate relationships, not least because an individual's unequal social standing can make it the case that others do not attend to her personal, particular, traits as they attend to those of more privileged people (Fanon 1967, ch5). In the sexual sphere, where many activities and relationships require that one be very attentive to people's individualities, personalities, and particular traits, this risk appears

agent-relative interests, claims, and demands arise. Some special obligations exist between people who are already in a sexual relationship, further obligations come about when people also share a home. In this paper, I explore what we can ask of our social environment when it comes to social conditions for initiating intimate relationships. These conditions will affect the terms on which we have intimate relationships, and how easy or hard it is to fulfil the special demands therein. The paper will, however, not examine this issue directly.

especially high. As Kolodny (2023, 112), drawing on Fanon (1967), puts it: "People whose particular traits are not attended to are thereby disbarred from forms of association, such as love and friendship, that require attention to particular traits." By extending the idea of social standing into the sexual sphere, we can capture the impact that unequal standing has on intimate relationships.

The basis of the three claims, thus, is not the social function of intimacy initiation as a social institution reproducing society. Instead, they are based on the particular interests individuals have concerning sex, given that we are particularly vulnerable in this realm of life, that its activities are choice-dependent, and that we have reason not to be generally excluded or seen as inferiors.

The claims apply in the sexual sphere generally, against digital intermediaries as well as nondigital actors, both public and private. I say more in the next section about how an individual's claims apply against other persons. Whether an individual's full set of opportunities is valuable, and her claims realized, depends on her wider social environment, digital and nondigital. The nondigital world raises considerations that are separate from those in the digital one and that warrant separate treatment. This paper focuses on the digital realm, to which a non-negligible part of the sexual sphere has migrated, while a full explication of the theory's application in the nondigital world falls outside its scope.

Readers need not agree with my specific explication of the three claims to accept my argument; it suffices that they see that the sexual sphere raises considerations of its own, that demands of justice can be applied to the social institutions within it, and that liberal egalitarianism is useful for this purpose, to see that something like the three claims arise in this sphere. Nevertheless, for the subsequent discussion to get off the ground, we need determinate specifications of the claims in order to evaluate the dating apps. Other specifications might reach slightly different conclusions, but for those who accept the three broad liberal egalitarian claims, the general thrust of the argument should not be affected. I will now say more about how I explicate the three claims.

Defining the Claims

First, we have a claim to noninterference, which I understand broadly, as a claim not to be harmed, coerced, disrespected, or non-tolerated. This concerns our person and our digital profile. It includes threats, unwanted explicit pictures, nonconsensual contact or touching, and offensive name-calling.

Second, we have a claim to equal standing. In a sexual sphere where people stand in relationships expressing equality, we can acknowledge that even if we do not see Amy as a potential partner, we see that she could be a potential partner of someone. In an unjust society, by contrast, there are some individuals who others see as being neither a potential partner for themselves nor anyone else. In sum, it is reasonable to think that,

¹¹ Cited with Scanlon's permission.

although appropriately limited, we have some kind of claim to equal standing in the sexual sphere.

Plausibly, one important part of realizing this claim in a society is to ensure everyone has access to "sexual standing." A person has sexual standing if she is someone who some relevant other(s) consider, in a non-degrading way, as a potential partner in a sexual relationship. This concept is related to the idea of social standing discussed above, which one has if one is generally eligible for friendship, neighborship, or collegiality (Rawls 1971; Scanlon N.d.). Our sexual standing claim is based on our interest in living in a society where no one is seen as generally ineligible for intimacy. Therefore, having access to sexual standing is one part of what equal social standing would look like in the sexual sphere. 13

Third, we have a claim to choice improvement. This can be understood as a claim that, when this is not unreasonably costly for them, others improve our choice situation. An example of how others can improve our situation in the sexual sphere is through the provision of valuable opportunities to follow a "sexual life plan": a plan for some time relating to one's sexual relationships. Sometimes, a person has sexual standing and is not wrongfully interfered with by others. Her claims to equal standing and noninterference are then realized. Still, she might not be able to live as she wants to. Imagine that Bella wants to have a short-term relationship and that she is desired by many people in her community. If these people only want partners for marriage, she has insufficient opportunities to follow her sexual life plan and thus an unfulfilled claim to choice improvement. One plausible way to realize the claim to choice improvement with regards to sexual life plans is through a principle of distribution of opportunities for sexual life plan(s), on which what is to be distributed are genuinely valuable opportunities to set, follow, and develop sexual life plans, where valuable is defined as that which enables the person to follow their sexual life plan.

There is no duty to consider someone as a sexual partner or to follow someone else's sexual life plan. Because of the strong value of choice that characterizes the sexual sphere, there can be no right to sex (Srinivasan 2021, 87). However, this does not mean that individuals have no duties regarding others' sexual standing or sexual life planning. On the contrary, they have duties of justice: they should contribute to a more just sexual sphere, and to the reform of any unjust institutions within it. They can do this by refraining from policing and enforcing unjust social norms, and by being permissive of non-normative lifestyles, relationships, bodies and expressions. Expressing attitudes that people of a certain race or height or with a particular disability are generally unfit for sexual relationships, for instance, would be a breach of one's duties in the sexual sphere.

Having said this, individual persons have only limited influence over how institutions develop, especially when compared to dating apps. While apps cannot ensure that individuals' claims are fully realized, they affect how likely it is that such claims are realized.¹⁴ For comparison, consider the Rawlsian (1971, 178) argument that features of institutions must be such that people are provided with the social bases of selfrespect: Rawls argues that self-respect "normally depends upon the respect of others. Unless we feel that our endeavors are honored by them, it is difficult if not impossible for us to maintain the conviction that our ends are worth advancing." Because social standing is crucial for people's self-respect, which in turn is crucial for their abilities to follow their life plans, features of formal institutions must be such that people can develop them. Institutions must be set up in this way, even though such institutions cannot directly determine how other people view us. Similarly, even though neither dating apps nor other intermediaries can ensure people become interested in any individual, their design in part determines our chances to develop sexual standing.

Now that we have our conceptual framework in place, we are ready to explore the case of dating.

Three Problems in the Traditional Sexual Sphere

Because the three claims best represent the general interests individuals have in the sexual sphere, dating apps—as they exercise their power in this particular sphere—must, to be justified, do so in a way that does not undermine these interests. To set the scene for our examination and to make sense of the success of dating apps, let us consider a generalized version of the traditional, nondigital and noncompartmentalized, sexual sphere. Using my conceptual framework, it is possible to detect at least three problems related to the initiation

 $^{^{\}rm 12}\,\rm The$ concept is related to the concept of sexual capital, which sociologists have developed by drawing on Pierre Bourdieu's concept of cultural capital (Kaplan and Illouz 2022, 36). Sexual capital can be understood as a currency for the sexual sphere: a form of resource or status that people assign each other according to norms for valuing, for instance, beauty, social group membership, or other characteristics (Green 2013; Kaplan and Illouz 2022). There are aspects of sexual capital; however, that makes it unfit as basis for a theory of justice in the sexual sphere. Although there is variation between social contexts, sexual capital is conceptually linked to power hierarchies in wider society (Kaplan and Illouz 2022, 91-2). Further, sexual capital is agnostic about the normative content of social norms of attractiveness; a person can have sexual capital while being fetishized or degraded. Therefore, it is not something we could reasonably owe each other to distribute fairly as a requirement of justice. To avoid similar problems, any reasonable explication of sexual standing would need to exclude attention an individual is given because of her fulfilling oppressive or degrading requirements of social norms. For a discussion of fetishization (see Chan 1988; Lee 2021; Li and Chen 2021; Williams 2024, ch4; Zheng 2016).

¹³ This is not meant to be exhaustive. The claim to equal standing in the sexual sphere likely includes further aspects, such as not having one's status in the sexual sphere affect one's general social standing. For reasons of simplicity, I leave this aside for now.

¹⁴ I am grateful to an anonymous reviewer for helpful comments on this issue.

of intimate relationships in this traditional sexual sphere. 15

First, outside of dating apps, it is hard to find potential partners in whose eyes one has sexual standing and whose sexual life plan is compatible with one's own, not least for sexual minorities living in smaller communities. Call this the Matching Problem. Historically, queer people growing up in rural areas have often had to move to cities to realize their claims. The multiplicity and pluralism of urban areas can enable sexual exploration, while in smaller communities, it often has not been possible to choose to follow non-normative sexual life plans, or even to conceive of such plans. In the traditional sexual sphere, this problem can be hard to remedy especially when there are no others in one's hometown who share one's sexual orientation, are open about this, and are not sanctioned for it.

Second, it is difficult to know if one has what I have called sexual standing. Call this the Information Problem. In the nondigital world, there is limited information about others' intent, interests, and availability. There might be signs that others like you or find you attractive. However, there are risks involved in both interpreting and sending these romantic or sexual signals. The risks of misunderstanding can be immense, not least if the potential partner is also a friend, colleague, or neighbor (Bergström 2022, 84–7).

Third, it is hard to negotiate the social norms of the sexual sphere. Call this the Social Control Problem. In the sexual sphere, there tends to be a high degree of social control as social norms interfere and constrain us from following our sexual life plans. These norms can also hinder us from developing sexual standing when they prohibit us from looking for relevant others. Norms demanding monogamous heterosexuality further ensure that people with queer, nonmonogamous, or polyamorous sexual life plans face social constraints (compare, Brunning 2024). Norms for femininity, further, often hold that women should neither take the initiative nor "sleep around" (Bergström 2022, 149–55; Garcia 2021, 22–32). Such gender norms often prescribe submission, chastity, and passivity for women, while being more permissive for men. As sociologist Marie Bergström (2022, 142–3) finds in her quantitative study of contemporary dating in Europe:

female modesty works as an organizing principle of heterosexual relations. It is all at once a measure of women's respectability, a fundamental component of the dating game, and a female strategy for counteracting sexual violence. Although the norm applies to women, it regulates men's behaviors and attitudes as well.

While the idea of female modesty has evolved over time, transgressing such norms can still make a person seem less interesting and generate feelings of discomfort in others (Bicchieri 2017, ch1). Even more worryingly, the social norms can code a failure to come across as unassertive as an invitation to abuse or violence in the sexual sphere (Bergström 2022, 153–5).

Research in empirical sociology indicates that dating apps can help individuals avoid some of these issues (Bergström 2022). This provides people with a reason for using them. If dating apps help individuals realize their claims to noninterference, sexual standing, and choice improvement in the sexual sphere, this would constitute a reason for thinking their power could be justified. To understand whether dating apps, in their exercise of power over us within the app, further our interests, we first must explore how they exercise this power. Like other platforms, dating apps exercise their power over users through their choices regarding architecture, amplification, and moderation.¹⁶ Therefore, I will discuss these functions in relation to the claims we have in the sexual sphere. Rather than surveying every aspect of these functions in the light of justice, I will discuss some important considerations they give rise to. In so doing, I offer a systematic way to evaluate dating apps' exercise of power over users. I start by examining dating apps' choices concerning application architecture.

ARCHITECTURE

In the context of platform technology, "architecture" refers to the design of the platform and its protocols (Van Dijck, Poell, and De Waal 2018). Like the architecture of a physical space, the app's architecture affects where users can go and what they can do in the digital space. In the context of dating, the architecture does not fully determine with whom users will match or go on a date, but it nudges their choices by providing the framework through which specific option sets are presented and other options made impossible.

One major dating app architecture is the match architecture, in which users are presented with potential partners, whom they then can choose whether to accept (David and Cambre 2016). Importantly, they can only start writing to someone who, at that point, has already indicated an interest in them (Wu and Trottier 2022, 91). This furthers users' interests in noninterference, as they do not risk being contacted without their consent. The grid architecture allows people to send a direct private message to anyone whose photo appears on the screen. Both architectural designs solve the Information Problem, to varying degrees. On the match architecture, there is no ambiguity regarding the intent of the particular user: they have matched with you. Even if users of the grid architecture cannot know if they have sexual standing in the eyes of the person they

¹⁵ Diverse problems in the traditional sexual sphere have been well documented in empirical research in sociology (see, for instance Bergström 2022; Illouz 2007; 2012; 2021).

¹⁶ Compare Lazar Forthcoming; Van Dijck, Poell, and De Waal 2018. Dating app corporations also exercise power outside of the digital sexual sphere through their business and marketing decisions. They also have power over nonusers. However, in this article, I consider only the power they exercise over users within the app.

start chatting with, they can infer other users are looking for some kind of intimate connection.

Dating apps, importantly, are built around private messaging. Users cannot see who others interact with, or who their friends and family are. Compare this to the digital *public* sphere, where platforms are built around interactions with public or semipublic posts, as well as the building of networks. Where the issue for actors operating in the digital public sphere is to determine which content gets to go "viral" or be seen by more people, it is a crucial feature of dating apps that they *lack* publicity. This aspect of dating apps has contributed to the compartmentalization of society and privatization of dating where individuals' search for potential partners is fully independent of their communities (Bergström 2022, 173–5).

Therefore, the privacy feature of dating app architecture contributes to solving the Social Control Problem by allowing people to follow any sexual life plans even in the presence of harshly enforced norms of chastity, monogamy, or heterosexuality. Shielding them from outside interference from their social network, the app provides people living in the presence of oppressive norms with an opportunity set that is valuable given these norms. Because individuals can chat with a greater number of potential partners without either their social network or these potential partners finding out, it also becomes less costly to take advantage of these opportunities (Bergström 2022, 87–91). Users can develop sexual standing without risking their social standing.

Sexual minorities have historically often not had their sexual-sphere-based claims realized—in fact, the state and important social institutions such as the church have actively tried to undermine them (Rubin 1984). Therefore, their claims should be taken particularly seriously in the deliberation about potential future regulation as their realization counts as a particularly strong argument in favor of their power being at least partly justified. There are signs that these claims are being better realized. Pew Research Center (2023, 8, 18) reports that "51% of lesbian, gay or bisexual (LGB) Americans say they have ever used a dating site or app, compared with 28% of those who are straight," and that "LGB users are more likely than straight users to [report positive experiences (61% versus 53%)." Consider that 24% of partnered LGB adults say they met their partner online dating, compared to 9 per cent of straight Americans (Pew Research Center 2023, 7).

What dating apps provide is not only truly valuable but also something individuals are owed as a matter of justice. They allow individuals to access sexual standing and opportunities to follow sexual life plans without having to worry about social sanctions. However, as I have argued elsewhere (Kugelberg 2021, 373; see also Okin 1989, 183; Jewkes and Morrell 2010), a feminist approach to targeting gender norms needs to be both "gender-transformative," as in aiming to alter oppressive norms, and "gender-sensitive" as in providing "those who presently live under such norms with opportunities that are valuable given said norms, and which protects them from harm in the meantime." The

dating apps' privacy architecture amounts to a gendersensitive approach because this feature allows women to discreetly navigate the sexual sphere in the presence of harmful modesty norms. However, because users' norm infringement happens out of sight, this behavioral change will not necessarily be reflected in a change in the social norm itself (Bergström 2022, 163). To change the norm, behavioral changes would need to be public (Bicchieri 2017, 1–49; Brennan et al. 2013, ch1). Doing little to change the idea that modesty is important for women, app architectures generally are not gendertransformative. In the digital sexual sphere, courtship norms remain in place.

Some apps have filters that let users fill in their preferences for potential partners of a certain race or age, for example. This architectural feature offers to help users solve the matching problem by helping users find relevant potential partners while not having to see "irrelevant" ones. This way, users could potentially develop sexual standing faster. However, asking users to predefine their preferences via filters also promotes existing sexual and social hierarchies and encourages people to conform to discriminatory and oppressive sexual norms. Such architectural features run the risk of reinforcing tendencies of homogamy concerning age, looks, race and level of education. When probed, people are likely to define their preferences in relation to people around them, leaving less room for surprise or exploration.¹⁷ This is especially troubling in the context of historical injustices where people's preferences tend to adhere to the resulting class or racial hierarchies (Kaplan and Illouz 2022), as the architectural features risk exacerbating these very inequalities. Conner (2023, 8) finds that "Grindr reproduces categories [according to physical attributes that align with the sociological literature on sexual hierarchies] by formatting their platform to emphasize those traits." Another study finds a correlation between the frequent use of dating platforms and skepticism of multiculturalism (Callander, Holt, and Newman 2012).

In sum, filters can threaten people's access to sexual standing in several ways. By encouraging users to think about others as belonging to categories that one should opt out from interacting with, the app's architecture will result in fewer potential matches for the filtered-away groups. Note that it does not need to directly discriminate against anyone to have this effect. By making it easy to make racist or ableist choices, filters can, as Sonu Bedi (2019, 141; see also, Robinson 2015; Williams 2024) argues, be seen as a form of more indirectly discriminatory, and equal-standing-undermining, *steering* of the kind the U.S. Civil Rights Act prohibits in other areas of society.

App architecture can also hide or make it harder to realize that one is making choices in line with social norms for desirability, or that one is considering only users who are similar to oneself. Tinder's swipe function, for instance, encourages users to engage with the app in an absent-minded way, allowing "unconscious

¹⁷ I am grateful to an anonymous reviewer for this suggestion.

racial preferences to be expressed without troubling users' perceptions of themselves as non-racist" (Narr 2021, 3). When dating apps were first introduced, their creators could not be held responsible for people's preferences. However, when we take seriously the vast impact these intermediaries have in the contemporary sexual sphere, we see that this is not true anymore.

Designers could choose differently in relation to users' pre-existing preferences. As Bedi (2019, ch4) argues about racial filters, removing them does not hinder anyone from acting on their racist preference. However, there is no duty on the part of dating app corporations to architecturally encourage—steer—users to opt out of considering potential matches belonging to certain social groups. In contrast, they owe all users not to undermine their claims of sexual standing and choice improvement.

To sum up, dating apps' architectural choices have furthered people's interests in noninterference and choice improvement. To better realize individuals' sexual standing claims, they could do more to counteract patterns of discrimination through design. There are ways to, for instance, encourage users to explore outside the group of profiles it predicts the users would be most likely to "like" or say yes to (Hutson et al. 2018, 10). This would amount to a transformative approach of the kind I discussed above.

MODERATION

Penalizing abusive users is one way dating apps can cater to others' claims of noninterference in the sexual sphere. Through moderation, platforms exercise power by enforcing rules for conduct on the app, evaluating users' reports of others' behavior, protecting users from each other, settling disputes between users, and removing content that is harmful or illegal (Gillespie 2018, 6; Williams 2024, 149). As Tarleton Gillespie (2018, 5) argues, platforms come to:

serve as setters of norms, interpreters of laws, arbiters of taste, adjudicators of disputes, and enforcers of whatever rules they choose to establish.

When a user reports another, the app must weigh the users' claims. If the app removes the reported, it will further the interests in noninterference of users who are similar to the reporter. At the same time, this makes the reported lose the opportunities to develop sexual standing and follow sexual life plans that exist on the app. Therefore, his claims about equal standing and choice improvement are undermined.

The potential harm on the side of the reporter includes psychological, physical, sexual, and economic harm. Over 50% of female users have been threatened, called offensive names, contacted despite declining, or sent unwanted explicit images (Pew Research Center 2023, 35–7). If the reported is harmful in his interactions with other users, not removing him would risk undermining the claims to noninterference of anyone the app matches him with. On the other hand, the reported risks being effectively

blocked from meeting potential partners if the AI or human moderator decides to ban him. Dating apps now constitute crucial sites for developing sexual standing and following sexual life plans in the contemporary sexual sphere. If he is banned, his claims of sexual standing and choice improvement would be undermined. The stakes are high because blocking is often for life (Tinder N.d.).

Further, apps with the same owners are likely to use the same moderation practices over several big platforms, something that can be especially burdensome to users in the growing context of what Kleinberg and Raghavan (2021) define as algorithmic monoculture, a situation in which many decision-makers use the same algorithms. Where several of the more prominent apps utilize identical systems or algorithms, this increases the risk for outcome homogenization, which is "the phenomenon of individuals (or groups) exclusively receiving negative outcomes from *all* decision-makers they interact with" in a particular sphere of life or society (Bommasani et al. 2022, 2).

Unfortunately, there is reason to worry that moderation systems undermine innocent users' claims to sexual standing and choice improvement, without at the same time furthering other users' claims to noninterference. The report systems can be easy to misuse. For instance, some users employ "revenge report" strategies, reporting anyone who rejects them. Others use it to target trans people, people of color, members of other minoritised groups, and people who support specific political causes (Cheung 2022; Williams 2024, 147). Unless the rules for moderation are adequately fine-tuned, the moderation AI can mistakenly be triggered by these report revengers to block users who have done nothing wrong. At the same time, it is notoriously difficult to complain about moderation decisions.

Overall, moderation systems must be made to better balance users' claims of noninterference with claims of equal standing and choice improvement. While users have an interest in not being wrongfully interfered with, they also have an interest in being able to develop sexual standing and follow sexual life plans. There is a need for effective report systems that are harder to misuse for dubious or harmful purposes, and that are tailored to the multiplicity of users on these platforms. The experiences of users who are most at risk of harm, such as women, queer individuals, and members of racial minorities, must be centered in the development of such systems (Rigot 2022; Williams 2024, 171–5).

In their communication with users, platforms must also be clear about how their moderation practices work, and about the steps taken when users make reports about, for instance, sexual harassment (Williams 2024, 174). Without adequate moderation control, reporting risks becoming a weapon with which abusive users can punish people, rather than a tool with which abused users can protect themselves and others from unwanted interference (Larson 2023). Since being blocked from these apps effectively hinders individuals from pursuing the kinds of lives they want to live, a justifiable moderation practice must provide access to due process systems in the case of wrongful banning.

AMPLIFICATION

Apps exercise power in a third way: through amplification. By increasing some content's visibility and reach, at the expense of other content, the app determines who gets attention from whom (Keller 2021). Based on information about users and their preferences, algorithms could, if adequately fine-tuned, predict which profiles a user is likely to match with. Therefore, this function offers a potential solution to the Matching Problem and a way for users to realize the claim of equal standing and choice improvement. Different users will be benefited or penalized depending on the apps' use of specific algorithms—processes or rule sets "by which calculations are made, problems solved, or decisions reached" (Fischli 2022a, 132; see also Hao 2018). Even though it is up to the individual user whether, when presented with a potential match, they will accept or reject it, the algorithm provides the options in the opportunity set. Users are presented with options, but they are also presented to others as options.

Recall that apps cannot help but intervene—they need to sort profiles in *some* order. The option to do nothing does not exist. Without amplification, the app would not help users find people they are likely to share sexual life plans with or in whose eyes they have sexual standing. Such an app would be a poor solution to the Matching Problem. It also would not necessarily be fairer to "do nothing" than to sort profiles according to some other rule. For instance, if by "do nothing" we mean chronological sorting by when people signed up to the app, this would arbitrarily favor users who have been members for longer. It is not obvious we should think this is a better way to distribute opportunities in the sexual sphere than some other algorithmic rule.

A user who is presented as an option to few others has fewer opportunities to develop sexual standing. Filters are therefore not the only feature that disadvantage certain groups of users. To solve the matching problem, the amplification algorithm sorts users according to perceived features, often through built-in assumptions about connections between physical similarity and compatibility: as Apryl Williams (2024, 3) shows, the dating industry's "decisions about whom you might be attracted to (and whom you may attract) are largely influenced by how you look, how attractive the algorithm deems you to be, and how often other highly attractive individuals have interacted with your profile." However, the algorithm need not be designed with this purpose to have the same effect. It will treat users who do not have certain preferences as if they do have them, if they share certain features with those who have the preferences in question. When many people reject users with specific characteristics, the algorithm learns to see similar profiles as less attractive. In turn, this gives these profiles fewer matches (Nader 2020). This process can, as Narr (2021, 6, see also Williams 2024, ch2) points out in the case of racism, "make it impossible to circumvent the racial biases of the entire network of past and present users." The problem is aggravated if the app uses these users' data to predict the preferences of new users whom the app codes as similar (Wang et al. 2011), especially as this process will not be visible to the affected users.

Dating apps know that amplification affects users' self-respect and how to monitor this effect. For instance, the Tinder Boost pay feature is presented to users as a means to increase their chances of getting matches. It "amplifies a profile's visibility for half an hour in the physical area where the user is currently located. The profile is put on top of others" "stack of recommendations without indicating this to these other users" (Courtois and Timmermans 2018, 7). As the Swedish Tinder user Simon, 23, explains,

It's a way for me to get more matches, plus it gives you validation when you are feeling lonely. Today I basically only get likes and matches if I use 'boosts' (Eklund 2022). 18

In the data economy, 'there exists an entire ecosystem designed to capitalize on individuals" vulnerabilities' (Fischli 2022a, 141). As the dating app operates in the sexual sphere, where we are particularly likely to be vulnerable, this has especially troubling effects. Emil, a man in his thirties, tells the newspaper *Svenska Dagbladet*:

I've probably burnt [7000 pounds] on Tinder. Sure, it creates an addiction, especially when you are desperate for love. Once you have started paying, I do not think you can go back. If I stop paying, it goes all quiet (Eklund 2022). 19

With the help of its data collection, the dating app has ample resources to predict when users are "at their lowest" and most likely to buy to get that boost—and their self-esteem back. A recent report shows that Tinder charged some customers up to 12 times more for the same service than others, without neither alerting users to this, nor providing an explanation as to why prices differed (Sveriges Konsumenter 2022). Because Tinder collects data about gender, sexual orientation, age, and geographic area, they have the means to discriminate against certain users. In response to the report, Tinder promised that prices were not discriminating according to certain features but simultaneously refused to reveal how they set their prices on Tinder (Eklund 2022). Following a dialogue with the European Commission, the company later committed to no longer use personalized pricing without clearly informing users (European Commission 2024). Note that no one is interfering with users like Emil and Simon. However, through their amplification decisions, some apps have made it unreasonably costly for people like them to realise their claims of sexual standing and choice improvement.

¹⁸ My translation from the Swedish. Original quote: "[d]et är ett sätt för mig att få mer matchningar, plus att det ger bekräftelse om man känner sig ensam. I dag får jag i stort sett bara likes och matchningar om jag använder boosts."

¹⁹ "Jag har säkert bränt över 100 000 kronor på Tinder. Visst skapar det ett beroende, speciellt när man är desperat efter kärlek. När man gått över till betalningsträsket tror jag inte att man kan komma tillbaka. Om jag slutar betala är det stendött."

Unfortunately, despite their potential to provide more predictable, efficient, and objective results than human decision-making, algorithms often incorporate the biases of their creators. Bias in algorithms can often be explained by the fact that developers share our societies' assumptions and that they train their algorithms on the data of people living in these societies (Goggin, Ellis, and Hawkins 2019; Lillywhite and Wolbring 2019; Tilmes 2022).

As the Tinder case shows, we do not need to know an algorithm's rules to have our behavior effectively constrained and ruled by it (Gillespie 2014). When algorithms shape our behavior, it is harder for users to pin down the content of the rule shaping us and where it comes from. This feature is an essential source of the dating platforms' power to dominate users. The inequality between the masses, who provide the data, and those who collect and analyze them, is steadily growing, and the only people who understand the expensive and complicated technologies, datasets, and software that impact so much of our lives, are those who are in control over them (Andrejevic 2014, 1676; Fischli 2022a, 131–4; Spiekermann et al. 2021; Williams 2024, 170–1).

While dating apps clearly *can* use amplification to provide people with valuable opportunities to follow a wide range of sexual life plans, these opportunities are presently only made available to those who accept the dating app corporations' unfavorable terms. The only way to resist the power of this system is to log off and meet up with potential partners in some other forum. But in a compartmentalized society where most people meet potential partners through dating apps, this option is less viable—especially for sexual minorities for whom the Matching Problem is especially salient.

Philosophers have shown how, in the digital *public* sphere, users struggle to hold platforms accountable because these exercise power in a nontransparent way (Aytac 2022, 9; Everett 2018; Flew and Wilding 2021). This problem is arguably amplified in the context of sex and intimacy, where political organizing, consciousness-raising, and activism are less palatable due to the stigma surrounding sex and the resulting risk of distress—few would want to stand under the banner of the "unmatched."

THE LIMITS OF MARKETS

Before we return to the question of whether dating app power can be justified, we must turn to an objection. Given that individuals freely download dating apps, readers might think this consent already constitutes a justification for their power. They might wonder why, beyond basic legal requirements, we should consider any duties on the part of individual apps. Could we not simply trust the market to ensure people's interests are realized?²¹

There are a few things to say in response. First, as Lazar (2023; Forthcoming) argues concerning the digital public sphere, for consent to platforms to have the justifying effect, there needs to exist sufficiently good alternatives to being involved in the digital market. As dating apps grow more pervasive, leaving the digital sexual sphere becomes costlier and less realistic. As we saw above, the institution of dating has evolved alongside the rise of dating app corporations, making its goods and roles difficult to access without being affiliated with them.

However, the free-market objector might respond, even if there are no nonmarket alternatives, there might be sufficiently good alternatives within the market. If this were the case, dating apps would give us less cause for concern. Discontented users could simply leave any app that does not meet the requirements of justice and join one that better serves their interests, creating incentives for tech companies to design apps that do realize them.²² In other words, one could argue that there are circumstances where voluntary actions between consenting adults should be limited, but these are cases where such limitation is necessary to realize some social good. If the market is enough to realize the good, subjecting actors to further demands is wrong.

While this objection might theoretically be valid in ideal settings, it does not hold in practice. Simply put, the market has thus far not generated apps that fully realize individuals' claims. This is unsurprising; under the mode of production that characterizes the digital economy, it is unlikely that the market will provide apps that do not prioritize data gathering and extraction over everything else—this, after all, constitutes a main source of profit (Cohen 2019).²³ Even though there are different apps, the market of dating apps is characterized by "mimetic isomorphism": whether niche or mainstream, apps tend to copy competitors, resulting in product homogenization. Consequently, this market has failed to generate meaningful diversity when it comes to platform features (Bergström 2022, 40–2, 47–8).²⁴ Further, network effects make the bigger apps hard to leave; to be worthwhile, a dating app must reach a certain level of users. Even the most ethically

²⁰ See, for instance, the discussion in (Shakespeare 2000, 160) on the history of the British disability movement and the difficulties of organising around the opposition to being excluded from sex and sexuality compared to the opposition to being excluded from, for instance, the labour market.

²¹ To clarify, neither the objection nor my response to it are concerned with the mere buying and selling of services that help people

find dates—i.e., the commodification of dating services, to use Agmon's (2024) recent taxonomy. Rather, it focuses on their marketization.

²² I am grateful to an anonymous reviewer for pressing me on this issue, and to Shai Agmon and Valerie Soon for helping me think it through.
²³ My thanks to Roberta Fischli for helpful discussion about this.

²⁴ A tendency aggravated by the fact that a majority of the market (including Tinder, Hinge, OkCupid, and match.com) is controlled by a single company, Match Group. As discussed above, this drives the risk of algorithmic monoculture and outcome homogenization. To enable healthy competition, there is likely need for antitrust legislation and other measures that would decrease the power of "Big Dating." A thorough evaluation of such and other proposals falls outside the scope of this paper.

governed app would be useless without enough potential partners to interact with.

Finally, limits on markets are justified when the voluntary actions of individuals harm others, for instance, through negative externalities for third parties (Heath 2006). Dating apps have such externalities. The online dating industry has changed what it means to have sex, to initiate intimacy, and how we relate to each other both as partners and potential partners (Bergström 2022, ch4; Illouz 2007, 90; 2012, 180–3). As we saw, apps' design choices about architecture, moderation, and amplification not only affect crucial practices in the sexual sphere but aggravate, for example, racial stereotyping. Apps shape what life is like even for those who would never date online (compare, Lazar 2023; forthcoming).

So far, I have responded to the free market objection on its terms: I showed that even though individuals freely sign up and consent to apps' terms, it would be justified to limit some aspects of the contemporary market in dating apps. However, it is important to emphasize that I resist the objection's fundamental premise, namely that the normative landscape of intimacy initiation, including the operations of dating apps, is best described as a set of voluntaristic actions by consenting adults. One main aim of this paper is to show exactly the opposite: intimacy initiation is a social institution impacting society and individual lives. Since this is the case, we cannot reach relevant normative conclusions by primarily focusing on specific individual actions or wishes. Taking this seriously amounts to seeing that, like with other social institutions, there is justification for limiting voluntary actions, especially of powerful actors. By intervening in and shaping the institution, apps acquire responsibility to ensure that its goods and roles are distributed fairly, rather than simply in a way that keeps users online. The existence of different apps does not change this. Instead, dating apps are collectively responsible for providing a digital sexual sphere where people's interests are not undermined. The responsibility will be greater for actors that make up a greater share of the market, but the assessment of an individual's opportunities in the digital sexual sphere must include not only the functioning of the particular app she is using but also the full flora of available apps. What matters is whether a user can realize her claims; if she lacks opportunities on one app but has opportunities on the rest, she is unlikely to have a complaint.

JUSTIFYING DATING APPS

Going back to the question of whether the power of dating apps can be justified, we are now able to say that these intermediaries do offer individuals something that they, as a requirement of justice, are owed. Dating apps' ability to provide users with something valuable—opportunities to develop sexual standing and form, revise, and pursue sexual life plans—is the most plausible explanation of the value of online dating available to liberal egalitarians. Note, however, that we only see this if we

recognize that we have something like claims to equal standing and choice improvement in the sexual sphere.

Dating apps offer solutions to the three major problems of the traditional, nondigital sexual sphere. Since dating apps connect people to potential partners and provide a system where users can reveal their intent and preferences vis-à-vis particular dates and intimate relationships generally, they are particularly beneficial for sexual minorities. They have provided access to opportunities to develop sexual standing in the eyes of relevant others and follow their sexual life plans to groups who have been worse off in terms of such opportunities. In terms of liberal egalitarian justice, this improvement in the choice situations of people who have had and continuously have the weightiest complaints about the sexual sphere is something that significantly counts in favor of dating apps.

However, dating apps only offer such opportunities partially, and to some individuals. Thus, they are not doing enough to realize the claims we have in the sexual sphere. There is reason to think that the apps' design features and practices threaten some people's claims to noninterference, equal standing, and choice improvement. These apps also disempower people by making them dependent on unexplained and arbitrary highstake decisions. The dating apps' lack of publicity concerning algorithms and data processing contributes to the power imbalance between companies and users that has arisen after the digital revolutions. It should make us pressure tech companies to be transparent about what is "under the hood": to know that and how an algorithm is being used (Reich, Sahami, and Weinstein 2021, 105). One way to ensure that app companies' use of user data and algorithms is in line with our values and interests would be to make them provide explanations of how they balance these demands (Adadi and Berrada 2018; Suzor et al. 2019; Vredenburgh 2022).²⁵

While, as noted above, a systematic treatment of non-digital-sphere solutions falls outside the immediate scope of this paper, there is reason to underline that the state also must enable people to meet outside of the digital sexual sphere. This would counteract the compartmentalization of the sexual sphere, while also resisting the development by which tech companies colonize and benefit from private areas of our lives. Promoting free time, supporting reform of unjust social norms, and providing open and safe public spaces, inclusive sexual education as well as a functioning nightlife, are some of the measures the state can implement to improve the realization of individual claims in the sexual sphere.

In the meantime, dating app workers have reason to contribute to the establishment of a professional organization that can monitor the actions and impact of its members. Reich, Sahami, and Weinstein (2021,

²⁵ The European Union's General Data Protection Regulation (GDPR) codifies this as a right to an explanation. While it is challenging to design AI systems in a way that is explainable in this way, it is not impossible. See discussion in Creel (2020).

246–52) have proposed a "Hippocratic oath for tech" setting up ethical guidelines for this technologists' organization which would be able to license workers and sanction misconduct. While dating app developers would fall under a general professional organization for tech, their practice is special. Governing the digital sexual sphere comes with particular responsibilities. Yet, the producers of dating apps have often lacked expertise regarding social practices relating to intimate relationships. As one of Bergström's (2022, 42–3) dating app technologist respondents puts it, "I made a carpooling site that doesn't work that well, I have the know-how to do websites, why wouldn't I make a dating site? [...] The advantage is that technically it's the same thing."

Acknowledging dating apps' role in realizing social justice in the sexual sphere, an important area for further research and public deliberation is to what extent developers of systems for sexual matchmaking should be subject to sexual-sphere-specific rules. It seems reasonable to expect that such matchmaking, based on its shared features with sexology and therapeutic work, requires skills that go beyond those of the general tech worker. We might also suspect that if dating apps were developed by psychologists and sociologists rather than by professionals trained primarily in technology and computer science, they would look quite different. At the very least, there is reason for the dating app organization to implement a voluntary code of conduct, on which moderation, amplification, and architectural choices should take into account everyone's claims to noninterference, equal standing, and choice improvement in the sexual sphere. This could, for instance, involve features that encourage users to be more open and creative in their choice of potential partners.

Regrettably, the tech sector has thus far failed to self-regulate. There is therefore a case for intervening in the market of dating platforms to bring their conduct more in line with the demands of social justice for the sexual sphere. Tech companies have adjusted their business in Europe in response to legislation such as GDPR, which, as Williams (2024, 176) argues, shows that when given the incentive, they can increase transparency. Exactly how this regulation should look is a question for further research and something that would need to be subjected to consultation with and deliberation among the public, democratic representatives, dating app companies, and other stakeholders.

Since dating apps are matchmaking tools, it appears that any rules or potential regulations must be symmetric and apply to anyone who professionally matches romantic mates. One argument against this has to do with scale —matchmaking a few individuals at a time and matchmaking millions by automatic means may be relevantly different. This is an issue that needs more attention, and I am here only able to tentatively say it is plausible to think that my analysis applies to all kinds of matchmaking. One reason that matchmaking has not previously been regulated may be that sexual standing and sexual choice have not been taken seriously as concerns for social justice. It is time that was changed.

CONCLUSION

Online dating has become a scapegoat for many troubles of the modern world. But while we know that dating apps are causing people distress, a systematic political–philosophical evaluation of their effects has been lacking. In this paper, I have provided a framework that helps us understand the challenges facing individuals initiating relationships in the digital sexual sphere and properly weigh the values and interests involved in using dating apps.

I identified dating apps as agents intervening in dating—a social institution involved in the reproduction of our societies and with substantial power over people's lives. Making a profit, dating apps insert themselves into this dating institution and thus come into control over the distribution of its goods and roles. I drew on liberal egalitarian theories of justice to argue that, given that apps have this power over individuals and society, we should be able to demand they exercise it in line with individuals' sexual-sphere-specific interests in noninterference, equal standing, and choice improvement. This allowed me to identify three problems relating to the initiation of intimate relationships in the traditional, nondigital, sexual sphere, which make it harder for individuals to have their claims realized. Surveying dating apps' exercise of power over users through their choices concerning architecture, moderation, and amplification, I found dating apps offer valuable solutions to the problems of the nondigital sphere, but they do so partially and unequally.

While liberals have previously considered how the claim to noninterference applies in the sexual sphere, especially concerning consent and commercial sex, this paper demonstrated how the claims to equal standing and choice improvement can be explicated in this area of human activity. The paper also indicated which principles should guide the regulation of algorithms, and profit-seeking practices of agents in the digital sexual sphere. Acknowledging that people have these claims in the sexual sphere appropriately captures the motivation to use these apps but also why they often find their experience unsatisfactory. Providing a justice-based vocabulary corresponding to people's experiences in this sphere, the framework should be of help to policymakers, activists, technologists, and other stakeholders.

ACKNOWLEDGMENTS

I would like to thank the editor and four anonymous reviewers for American Political Science Review. Their comments greatly helped me improve the manuscript. My thanks also to Zofia Stemplowska and Jonathan Wolff, Diana Acosta-Navas, Shai Agmon, Rufaida Al Hashmi, Marie Bergström, Léa Bourguignon, Luke Brunning, Caitlin Brust, Simon Caney, Filippa Crafoord Kugelberg, Linda Eggert, Cecile Fabre, Roberta Fischli, Jack Hume, Kalewold H. Kalewold, Henrik D. Kugelberg, Cécile Laborde, Lorenzo Manuali, Emily McTernan, Zeynep Pamuk, Rob Reich, Valerie

Soon, and Amia Srinivasan. The paper benefited from discussions at the Center for the Study of Social Justice and the Nuffield Political Theory Workshop, both at the University of Oxford, the Political Philosophy of Attention Workshop at London School of Economics and Political Science, the University of Reading's Politics Research Seminar, the Stockholm Early Career Workshop in Political Philosophy, the Tiny Leviathan workshop at Stanford University's Department of Political Science, the Department of Political Economy at King's College London, and Warwick University's Philosophy Department.

CONFLICT OF INTEREST

The author declares no ethical issues or conflicts of interest in this research.

ETHICAL STANDARDS

The author affirms this research did not involve human participants.

REFERENCES

- Adadi, Amina, and Mohammed Berrada. 2018. "Peeking Inside the Black-Box: A Survey on Explainable Artificial Intelligence (XAI)." IEEE Access 6: 52138-60.
- Agmon, Shai. 2022. "Two Concepts of Competition." Ethics 133 (1): 5-37.
- Agmon, Shai. 2024. "The Moral Limits of What, Exactly?" Economics and Philosophy. https://doi.org/10.1017/ S0266267124000191
- Andrejevic, Mark. 2014. "The Big Data Divide." International Journal of Communication 8: 1673–89.
- Aytac, Ugur. 2022. "Digital Domination: Social Media and Contestatory Democracy." Political Studies 72 (1): 6-25.
- Becker, Gary. 1981. A Treatise on the Family. Cambridge, MA: Harvard University Press.
- Bedi, Sonu. 2019. Private Racism. Cambridge: Cambridge University
- Bergström, Marie. 2013. "The Law of the Supermarket? Online Dating and Representations of Love." Ethnologie Française 43 (3):
- Bergström, Marie. 2022. The New Laws of Love: Online Dating and the Privatization of Intimacy. Cambridge: Polity.
- Bicchieri, Cristina. 2017. Norms in the Wild: How to Diagnose, Measure, and Change Social Norms. Oxford: Oxford University Press.
- Bommasani, Rishi, Kathleen Creel, Ananya Kumar, Dan Jurafsky, and Percy Liang. 2022. "Picking on the Same Person: Does Algorithmic Monoculture lead to Outcome Homogenization?" Advances in Neural Information Processing Systems 35: 3663–78.
- Brennan, Geoffrey, Lina Eriksson, Robert E. Goodin, and Nicholas Southwood. 2013. Explaining Norms. Oxford: Oxford University
- Brunning, Luke. 2024. Romantic Agency: Loving Well in Modern Life. Cambridge: Polity.
- Bryant, Chris. 2023. "Tinder Finally Wants to Define the Relationship." Washington Post, January 10. https://www.washingtonpost.com/ business/tinder-finally-wants-to-define-the-relationship/2023/01/10/ d6b07d1a-90ac-11ed-90f8-53661ac5d9b9_story.html
- Callander, Denton, Martin Holt, and Christy E. Newman. 2012. "Just a Rreference: Racialised Language in the Sex-Seeking Profiles of Gay and Bisexual Men." Culture, Health & Sexuality 14(9): 1049-63.

- Chan, Connie S. 1988. "Asian-American Women: Psychological Responses to Sexual Exploitation and Cultural Stereotypes."
- Women & Therapy 6 (4): 33–8. Cheung, Kylie. 2022. "Dating Apps Are Locking Out the Wrong People." Jezebel, February 25.
- Cohen, Joshua, and Archon Fung. 2021. "Democracy and the Digital Public Sphere." In Digital Technology and Democratic Theory, eds. Lucy Bernholz, Hélène Landemore, and Rob Reich, 23-61. Chicago, IL: University of Chicago Press.
- Cohen, Julie E. 2019. Between Truth and Power: The Legal Constructions of Informational Capitalism. Oxford: Oxford University Press.
- Conner, Chris T. 2023. "How Sexual Racism and Other Discriminatory Behaviors Are Rationalized in Online Dating Apps." Deviant Behavior 44(1): 126-42.
- Cordelli, Chiara. 2022. The Privatized State. Princeton, NJ: Princeton University Press.
- Courtois, Cédric, and Elisabeth Timmermans. 2018. "Cracking the Tinder Code: An Experience Sampling Approach to the Dynamics and Impact of Platform Governing Algorithms." Journal of Computer-Mediated Communication 23(1): 1–16.
- Creel, Kathleen. 2020. "Transparency in Complex Computational Systems." Philosophy of Science 87 (4): 568–89.
- Curry, David. 2024. "Dating App Revenue and Usage Statistics." Business of Apps. November 12. https://www.businessofapps.com/ data/dating-app-market/.
- David, Gaby, and Carolina Cambre. 2016. "Screened Intimacies: Tinder and the Swipe Logic." Social Media + Society 2(2). https:// doi.org/10.1177/2056305116641976.
- de Vries, Bouke. 2024. "State-Run Dating Apps: Are They Morally Desirable?" Philosophy & Technology 37 (1): 30.
- Eklund, Henning. 2022. "Så lockas användare betala för kärlek på Tinder." Svenska Dagbladet, November 11. https://www.svd.se/a/ P448LJ/sa-lockas-anvandare-betala-for-karlek-pa-tinder
- European Commission 2024. "Press Release: Tinder Commits to Provide Consumers with Clear Information." IP/24/1344. Publications of the European Union. https://ec.europa.eu/ commission/presscorner/detail/en/ip_24_1344.
- Everett, Colby M. 2018. "Free Speech on Privately-Owned Fora." Kansas Journal of Law & Public Policy 28 (1): 113-45.
- Fanon, Frantz. 1967. Black Skin, White Masks. New York: Grove. Federici, Silvia. 1975. Wages Against Housework. Bristol, UK: Falling Wall Press.
- Fischli, Roberta. 2022a. "Citizens' Freedom Invaded: Domination in the Data Economy." History of Political Thought 43 (5): 125-49.
- Fischli, Roberta. 2022b. "Data-Owning Democracy: Citizen Empowerment Through Data Ownership." European Journal of Political Theory 23 (2): 204–23.
- Fischli, Roberta, and James Muldoon. 2024. "Empowering Digital
- Democracy." *Perspectives on Politics* 22 (3): 819–35. Flew, Terry, and Derek Wilding. 2021. "The Turn to Regulation in Digital Communication: The ACCC's Digital Platforms Inquiry and Australian Media Policy." Media, Culture & Society 43 (1):
- Fraser, Nancy. 2014. "Behind Marx's Hidden Abode." New Left Review 86: 55-72
- Garcia, Manon. 2021. We Are Not Born Submissive. Cambridge, MA: Harvard University Press.
- Gillespie, Tarleton. 2014. "The Relevance of Algorithms." In Media Technologies, eds. Tarleton Gillespie, Pablo J. Boczkowski, and Kirsten A. Foot, 167-94. Cambridge, MA: MIT Press.
- Gillespie, Tarleton. 2015. "Platforms Intervene." Social Media + Society 1 (1). https://doi.org/10.1177/2056305115580479.
- Gillespie, Tarleton. 2018. Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media. New Haven, CT: Yale University Press.
- Goggin, Gerard, Katie Ellis, and Wayne Hawkins. 2019. "Disability at the Centre of Digital Inclusion: Assessing a New Moment in Technology and Rights." Communication Research and Practice 5 (3): 290–303.
- Green, Adam Isaiah. 2013. "'Erotic Capital' and the Power of Desirability: Why 'Honey Money' Is a Bad Collective Strategy for Remedying Gender Inequality." Sexualities 16 (1-2): 137-58.

- Gunkel, Jasmine. 2024. "What Is Intimacy?" *Journal of Philosophy* 121 (8): 425–56.
- Hao, Karen. 2018. "What Is Machine Learning?" MIT Technology Review, November 17. https://www.technologyreview.com/ 2018/11/17/103781/what-is-machine-learning-we-drew-youanother-flowchart/
- Heath, Joseph. 2006. "Business Ethics Without Stakeholders." Business Ethics Quarterly 16 (4): 533–57.
- Hutson, Jevan A., Jessie G. Taft, Solon Barocas, and Karen Levy. 2018. "Debiasing Desire: Addressing Bias and Discrimination on Intimate Platforms." *Proceedings of the ACM on Human-Computer Interaction* 2(CSCW): 1–18.
- Illouz, Eva. 2007. Cold Intimacies: The Making of Emotional Capitalism. Cambridge: Polity.
- Illouz, Eva. 2012. Why Love Hurts. A Sociological Explanation. Oxford: Oxford University Press.
- Illouz, Eva. 2021. *The End of Love*. Oxford: Oxford University Press
- James, Aaron. 2012. Fairness in Practice: A Social Contract for a Global Economy. Oxford: Oxford University Press.
- James, Aaron. 2014. "A Theory of Fairness in Trade." Moral Philosophy and Politics 1(2): 177–200.
- Jewkes, Rachel, and Robert Morrell. 2010. "Gender and Sexuality: Emerging Perspectives from the Heterosexual Epidemic in South Africa and Implications for HIV Risk and Prevention." Journal of the International AIDS Society 13 (6). https://doi. org/10.1186/1758-2652-13-6
- Kaplan, Dana, and Eva Illouz. 2022. What is Sexual Capital? Cambridge: Polity Press.
- Keller, Daphne. 2021. "Amplification and its Discontents." Knight First Amendment Institute, Occasional Paper, June 8. https:// knightcolumbia.org/content/amplification-and-its-discontents.
- Kleinberg, Jon, and Manish Raghavan. 2021. "Algorithmic Monoculture and Social Welfare." *Proceedings of the National Academy of Sciences* 118 (22): e2018340118.
- Kolodny, Niko. 2023. The Pecking Order: Social Hierarchy as a Philosophical Problem. Cambridge, MA: Harvard University Press.
- Kugelberg, Elsa. 2021. "Responsibility for Reality: Social Norms and the Value of Constrained Choice." *Politics, Philosophy & Economics* 20 (4): 357–84.
- Kugelberg, Elsa, and Henrik D. Kugelberg. 2024. "Public Justification, Gender, and the Family." *European Journal of Political Theory* 23 (1): 4–22.
- Kugelberg, Henrik D. 2024. "Civic Equality as a Democratic Basis for Public Reason." Critical Review of International Social and Political Philosophy 27 (2): 133–55.
- Lamanna, Mary Ann. 2002. Emile Durkheim on the Family. London: Sage.
- Larson, Lauren. 2023. "Ghosted by an App." The Cut, March 7.Lazar, Seth. Forthcoming. "Governing the Algorithmic City."Philosophy and Public Affairs.
- Lazar, Seth. 2023. "Communicative Justice and the Distribution of Attention." *Knight First Amendment Institute*, October 10. https://knightcolumbia.org/content/communicative-justice-and-the-distribution-of-attention
- Lee, Jin. 2021. "Talking through Race: Two Raced Women's Tinder Stories." *Communication, Culture and Critique* 14 (3): 454–70.
- Li, Haili, and Xu Chen. 2021. "From "Oh, You're Chinese..." to "No Bats, Thx!": Racialized Experiences of Australian-Based Chinese Queer Women in the Mobile Dating Context." *Social Media* + *Society* 7(3). https://doi.org/10.1177/20563051211035352.
- Lillywhite, Aspen, and Gregor Wolbring. 2019. "Coverage of Ethics Within the Artificial Intelligence and Machine Learning Academic Literature: The Case of Disabled People." *Assistive Technology* 33 (3): 129–35.
- Macedo, Stephen. 2015. Just Married: Same-Sex Couples, Monogamy, and the Future of Marriage. Princeton, NJ: Princeton University Press.
- Miller, Seamus. 2019. "Social Institutions." *The Stanford Encyclopedia of Philosophy*. https://plato.stanford.edu/archives/sum2019/entries/social-institutions
- Moreno, J. Edward. 2024. "Dating Apps Have Hit a Wall. Can They Turn Things Around?" *New York Times*, March 12.

- https://www.nytimes.com/2024/03/12/business/dating-apps-tinder-bumble.html
- Nader, Karim. 2020. "Dating Through the Filters." Social Philosophy and Policy 37 (2): 237–48.
- Narr, Gregory. 2021. "The Uncanny Swipe Drive: The Return of a Racist Mode of Algorithmic Thought on Dating Apps." *Studies in Gender and Sexuality* 22 (3): 219–36.
- Nozick, Robert. 1989. *The Examined Life: Philosophical Meditations*. New York: Simon and Schuster.
- Okin, Susan M. 1989. *Justice, Gender and the Family*. New York: Basic Books.
- Pew Research Center. 2023. "From Looking for Love to Swiping the Field: Online Dating in the U.S." Report, February 2. https://www.pewresearch.org/internet/2023/02/02/from-looking-for-love-to-swiping-the-field-online-dating-in-the-u-s/
- Rawls, John. 1971. A Theory of Justice. Cambridge, MA: Belknap Press.
- Rawls, John. 2001. Justice as Fairness: A Restatement. Cambridge, MA: Harvard University Press.
- Raz, Joseph. 1986. The Morality of Freedom. Oxford: Oxford University Press.
- Reich, Rob, Mehran Sahami, and Jeremy M. Weinstein. 2021. System Error: Where Big Tech Went Wrong and How We Can Reboot. London: Harper Collins.
- Rigot, Afsaneh. 2022. "Design from the Margins: Centering the Most Marginalized and Impacted in Design Processes—from Ideation to Production." *Belfer Center for Science and International Affairs*, May 13. https://www.belfercenter.org/publication/design-margins Robinson, Brandon A. 2015. ""Personal Preference" as the New
- Robinson, Brandon A. 2015. "Personal Preference" as the New Racism: Gay Desire and Racial Cleansing in Cyberspace." *Sociology of Race and Ethnicity* 1(2): 317–30.
- Rosenfeld, Michael. J., Reuben J. Thomas, and Sonia Hausen. 2019. "Disintermediating Your Friends: How Online Dating in the United States Displaces Other Ways of Meeting." *Proceedings of the National Academy of Sciences* 116 (36): 17753–8.
- Rubin, Gayle. 1984. "Thinking Sex: Notes for a Radical Theory of The Politics of Sexuality." In *Pleasure and Danger: Exploring Female Sexuality*, ed. Carole S. Vance, 143–78. London: Routledge.
- Scanlon, Thomas M. 1998. What We Owe to Each Other. Cambridge, MA: Belknap Press.
- Scanlon, Thomas M. N.d. "Testimony of an Incomplete Rawlsian." Working Paper.
- Schouten, Gina. 2019. Liberalism, Neutrality, and the Gendered Division of Labor. Oxford: Oxford University Press.
- Shakespeare, Tom. 2000. "Disabled Sexuality: Toward Rights and Recognition." Sexuality and Disability 18: 159–66.
- Shelby, Tommie. 2007. "Justice, Deviance, and the Dark Ghetto." Philosophy & Public Affairs 35 (2): 126–60.
- Slegers, Roos. 2021. "The Ethics and Economics of Middle Class Romance: Wollstonecraft and Smith on Love in Commercial Society." *The Journal of Ethics* 25 (4): 525–42.
- Spiekermann, Kai, Adam Slavni, David V. Axelsen, and Holly Lawford-Smith. 2021. "Big Data Justice: A Case for Regulating the Global Information Commons." *Journal of Politics* 83 (2): 577–88.
- Srinivasan, Amia. 2021. The Right to Sex. London: Bloomsbury.
- Stardust, Zahra, Kath Albury, and Jenny Kennedy. 2023. "Sex Tech Entrepreneurs: Governing Intimate Data in Start-Up Culture." New Media & Society. https://doi.org/10.1177/14614448231164408
- Suzor, Nicolas P., Sarah M. West, Andrew Quodling, and Jillian York. 2019. "What Do We Mean When We Talk About Transparency? Toward Meaningful Transparency in Commercial Content Moderation." *International Journal of Communication* 13: 1526–43
- Sveriges Konsumenter. 2022. "Rapport 2022: jakten på kärlek och dolda priser. Dejtingappen Tinder och hyperindividanpassad prissättning." https://www.sverigeskonsumenter.se/vad-vi-gor/digitala-rattigheter/granskning-av-tinder/
- digitala-rattigheter/granskning-av-tinder/
 Tilmes, Nicholas. 2022. "Disability, Fairness, and Algorithmic Bias in
 AI Recruitment." Ethics and Information Technology 24: article
 21. https://doi.org/10.1007/s10676-022-09633-2.
- Tinder. N.d. "My Account Is Banned." https://www.help.tinder.com/ hc/en-us/articles/360009042331-My-account-is-banned
- Turner, Jonathan H. 1997. *The Institutional Order*. London: Longman.

- Van Dijck, Jose, Thomas Poell, and Martijn De Waal. 2018. *The Platform Society: Public Values in a Connective World*. Oxford: Oxford University Press.
- Véliz, Carissa. 2024. *The Ethics of Privacy and Surveillance*. Oxford: Oxford University Press.
- Vredenburgh, Kate. 2022. "The Right to Explanation." *Journal of Political Philosophy* 30 (2): 209–29.
- Wang, Tingting, Hongyan Liu, Jun He, Xuan Jiang, and Xiaoyong Du. 2011. "Predicting New User's Behavior in Online Dating Systems." In *Advanced Data Mining and Applications: ADMA 2011, Part 2*, eds. Jie Tang, Irwin King, Ling Chen, and Jianyong Wang, 266–77. Berlin, Germany: Springer.
- Weigel, Moira. 2016. *Labour of Love*. New York: Farrar, Straus and Giroux.
- Williams, Apryl. 2024. Not My Type: Automating Sexual Racism in Online Dating. Stanford, CA: Stanford University Press.
- Wilson, Jennifer. 2023. "When the Novel Swiped Right." *New York Times*, February 10.
- Wu, Shangwei, and Daniel Trottier. 2022. "Dating Apps: A Literature Review." Annals of the International Communication Association 46 (2): 91–115.
- Zheng, Robin. 2016. "Why Yellow Fever Isn't Flattering: A Case Against Racial Fetishes." *Journal of the American Philosophical Association* 2 (3): 400–19.