Techno-pessimistic and techno-optimistic visions of surveillance and resistance in Europe

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Abstract: Our study explores peoples' visions of surveillance and resistance to surveillance, enabled through communication and digital platforms in Europe. The research involves future scenario development and analysis, which allows us to sketch out future outlooks concerning surveillance/resistance in Europe, examining how these visions reflect the main assumptions, fears and hopes about the future of societies in Europe. The analysis, which is anchored in surveillance studies, shows how the visions of surveillance and resistance are informed by people's dispositions towards technology, which centre around techno-optimism and techno-pessimism, focusing either on the empowering or liberating forces of technology or on technology's disabling and destructive power. These dispositions instruct ideas about the futures of Europe, seeing Europe as either a regulator or protector of people's privacy and freedoms or as a surveillant apparatus, curtailing peoples' freedom and democratic rights.

Keywords: surveillance, resistance to surveillance, techno-optimism, techno-pessimism, Europe, futures

INTRODUCTION

While evaluations and examinations of the past and present, in the context of social phenomena and the role of communication and digital technologies, are abundant, explorations of the future are less common. This reflects a tradition in the social sciences and humanities of refraining from predicting the future, and rather focusing on studying and trying to comprehend the past and the present. Still, the identification of trends and the normative assumptions and evaluations that accompany research in the field of communication and media studies, address directly or indirectly evaluations, fears and hopes of predicted future outcomes. This becomes clearer in instances, in which communication technologies are evaluated as a positive or negative force for societies' future (see, e.g., Königs, 2022; Negroponte, 1995; Postman, 1992). However, these kinds of studies do not often engage in methodologies that would facilitate future-oriented analyses.

One of the fields that offers such a toolbox is the interdisciplinary field of futures studies which focuses on "the systematic study of possible, probable and preferable futures including the worldviews and myths that underlie each future" (Inayatullah, 2012, p. 37)[1]. Our research touches upon this study area, contributing to the fertilization of communication and media studies with tools and methods employed in futures studies. This article, in particular, is an exploration of the visions of surveillance and resistance to surveillance, enabled mainly through communication and digital platforms in Europe. The study involves future scenario development and analysis (Glenn & Gordon, 2009), which allows scholars to sketch out future outlooks concerning surveillance/resistance in Europe, examining how these visions of the future reflect main assumptions, fears and hopes about technology and about Europe.

This study suggests that there are socially embedded visions, i.e., future-oriented images sketching out future conditions pertaining to social phenomena, which may be positive, negative or mixed.[2] Our analysis is theoretically informed by the scholarly work in the field of surveillance studies (see, e.g., Fernandez & Huey, 2009; Lyon, 2007; Martin et al., 2009; Zuboff, 2019) maintaining a focus on the debates of techno-pessimism and techno-optimism in media and communication (see, e.g., Königs, 2022; Lindgren, 2017; Negroponte, 1995; Postman, 1992; Ridley, 2010).

As will be elaborated throughout the analysis, the visions of surveillance and resistance are informed by people's dispositions towards technology. These

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1 Of particular interest is Luhmann's (1976) theoretical reflection on how to approach and define the future.

2 The concept of (societal) vision is often associated with desired future outcomes (see, e.g., Verkerk et al., 2018), however we choose to use it neutrally, seen as a (future) imagining.

dispositions (i.e. the beliefs and attitudes that impact on people's perceptions and usage of technology) construct particular visions about the social role of surveillance and the degrees of freedom people have to resist surveillance. Moreover, they are structured around techno-optimism and techno-pessimism, focusing either on the empowering or liberating forces of technology or on technology's disabling and destructive power. These dispositions also instruct the ideas about the futures of Europe, seeing Europe as either a regulator or protector of people's privacy and freedoms or as a surveillant apparatus, curtailing peoples' freedoms and democratic rights.

After briefly presenting the arguments that structure the debates of techno-optimism and techno-pessimism and addressing the premises of surveillance and resistance while maintaining a focus on Europe, the article will present the study's methods and then proceed with the research analysis and concluding reflections.

DEBATES OF TECHNO-OPTIMISM AND TECHNO-PESSIMISM

The debates around the force and implications of surveillant practices for individuals and societies, and around the possibilities for resistance, are intertwined with specific approaches concerning the role and force of technology, given that surveillance is largely enabled through technological applications and platforms. These approaches may be clustered around two main 'camps', those of techno-optimism and techno-pessimism, which inform disparate visions of how surveillance is orchestrated, enabled, performed and how it can be resisted, instructing in turn differing visions of societies.

Techno-optimism relates to the belief that technology is inherently tied to (human) progress and that technological progress genuinely profits societies (Königs, 2022; Ridley, 2010). Techno-optimism is partly founded on technological solutionism, the belief that the key to solving societal problems lies in (humans' ingenuity to design and implement) technological applications. The idea that technological progress is the key to human and societal progress and wellbeing often echoes technological determinism, which prioritizes technology over other factors, forces and dimensions in what defines social formation and engineers societal change (Winner, 1999[1980]). Techno-centrism, a related concept, concerns the examination of broad societal phenomena through the prism of (certain types of) technology, positioning these technologies at the core of any associated consideration (Morozov, 2011). In the context of contemporary media technologies, techno-optimism is reflected in the sometimes-utopian belief shared during the early days of the 'digital revolution' (Negroponte, 1995), that the digital technologies and the internet offer open and decentralized spaces

fostering "new forms of direct democracy, increased participation and creativity, and the destabilization of old hierarchies of power" (Lindgren, 2017, p. 51).

Contrary to techno-optimism, techno-pessimism relates to the belief that technological progress impedes societies' wellbeing and that its benefits are less than its harm (Königs, 2022; Postman, 1992). Techno-pessimists tend to see technologies as harmful or destructive, and when a new form of technology appears they tend to focus on the damage it may cause to particular groups and society at large. Interestingly, the belief that technology is all-powerful coupled with techno-centrism or technological determinism is shared by techno-optimists and techno-pessimists alike. Techno-pessimism may sometimes reflect a technophobic attitude, that is expressed through fear or aversion of using particularly new forms of technology, as the latter are seen as threatening, harmful and destructive (Brosnan, 1998). Of relevance here is the concept of luddism. The Luddite movement, in the 19th century, concerned textile workers in central and northwest England who, in opposing the replacement of the skilled workforce by cost-efficient machinery in the textile industry, destroyed the newly installed factory machines (Jones, 2006). (Neo)luddism describes today a broader stance against technology, sometimes driven by a romantic vision and desire for a simpler life, and the appeal for a return to nature without the mediation of technology (Fox, 2002). Anarcho-primitivism is a related idea, which argues that technology-led civilization destroys authentic forms of social and natural life; hence the return to pre-technological lifestyles can lead to the liberation of humans and their reconnection with (their) true nature (Aaltola, 2010).

Both techno-optimist and techno-pessimist views may be techno-critical engaging in a critical reflection towards technology's roles in society, either from a more optimist or pessimist stance. These techno-optimistic and techno-pessimistic approaches, as will be exemplified later in the analysis, feed into people's visions of the future, structuring specific imaginings of societies and their assemblages of surveillance/resistance.

ASPECTS AND PRACTICES OF SURVEILLANCE AND RESISTANCE IN EUROPE

Surveillance concerns the "focused, systematic, and routine monitoring of behavior, activities, or information" (Costanza, 2018, p. 95) through the collection and processing of data (Lyon, 2007) of individuals and collective entities, "for the sake of control, entitlement, management, influence [, …] protection" (Murakami Wood, 2006, p. 4) or profit (Costanza, 2018, p. 95). Surveillance can be performed by state, public, corporate and private actors and entities.

Among the main arguments for state surveillance are efficient policy and governance, together with the enhancement of security and the protection of the state and its subjects. Systematic data collection and the creation of national or supra-national databases, facilitated by enhanced technologies and artificial intelligence, allow the state to offer its citizens the services and benefits they are entitled to, as it concerns social welfare and protect the citizens against violence and crime (Clarke, 2005). At the same time, this type of governmentality (Foucault, 2007, p. 108) enables social control, and allows for the "social sorting" (Lyon, 2003, p. 1), and discrimination against 'undesirable' or 'problematic' citizens, and the exclusion of 'illegal' subjects, as non-citizens (Bauman, 2004). Such processes and practices are systematically enforced, for instance, in migration-control policies across Europe (Broeders, 2007; Topak, 2019), frustrating the vision of Europe as a benevolent host (Carpentier & Doudaki, 2023). Enhanced securitization in Europe is enabled through a supra-apparatus of movement surveillance via the development of, for instance, the Eurodac biometric database for undocumented migrants, or the Schengen Information System that ensures mobility within the EU area (Bellanova & Glouftsios, 2022).

The dangers that surveillance poses for democracy, social justice and the rule of law have been recurrently addressed by critical scholars (Costanza, 2018; Taylor, 2002). Western democracies in Europe, guided by the European Convention on Human Rights, are equipped with legislations that restrict the use of surveillance practices against their 'recognized' citizens (Taylor, 2002), as these practices are seen as infringing various freedoms and rights. Still, in the context of public safety being reputedly at risk, the state is expected to protect itself and its subjects against external and internal threats and enemies. State authorities retain the "enhanced ability to collect detailed information on potential threats to society and take preventive measures" (Costanza, 2018, p. 99), even without judicial permission, which raises serious concerns related to privacy, civil rights and due process.

Another area of surveillance-related threats addressed by critical scholarship concerns the corporate sector. This strand of research scrutinizes the exploitative relations the capitalist logic imposes between the powerful telecommunications and media oligopolies, and the users (consumers and citizens), and the broader implications these fundamentally unequal power relations have, for societies and democracy. Scholars use terms such as data capitalism, platform capitalism, surveillance capitalism, and dataveillance (Degli Esposti, 2014; Zuboff, 2019) to argue that corporations harvest users' produced content and online behavior without the users' knowledge or consent. Corporate actors then process, reuse and sell these data to third parties (state and corporate). Through these practices, companies not only make profit at the users' expense, but also expose the latter to multiple risks caused by the separation of people and the data they

produce, risks which go far beyond privacy harms (Degli Esposti, 2014; Lyon, 2003; 2007; Zuboff, 2019).

Attempting to respond to these challenges, the EU adopted in 2016 the General Data Protection Regulation (GDPR), which regulates basic features and dimensions of privacy and processing of EU citizens' personal data by companies and third parties, aiming to enhance individuals' control and rights over their personal data. Due to its broad scope, GDPR is seen as a pioneer regulation and a model to follow by countries outside the EU and as the embodiment of Europe's vision as regulator and protector of individuals' rights and freedoms. Still, as scholars point out, in conditions where users have limited agency for accessing, navigating and using online platforms and environments, corporations find ways to harvest data from the platforms' users. This practice is facilitated by GDPR's failure to effectively regulate data transparency and to address the implications of artificial intelligence (Schade, 2023).

The scholarly discussion on state and corporate practices of surveillance brings to the fore issues of power and control. Surveillance implies unequal, exploitative or extractive relations of power, which need to be scrutinized in explorations of surveillance (Fernandez & Huey, 2009). At the same time, these relations shall not be taken for granted or considered unchanged, cemented in fixed positions where the powerful surveils and the weak is being surveilled, in a panoptic rationale (see Foucault, 1977), which brings us to the logics and practices of resistance. Resistance to surveillance can be described as the act or power of opposing, refusing or fighting against the systematic and routine monitoring of behavior and activities, and against the gathering and analysis of information concerning individuals or groups.

Historical analyses have shown that in all systematic or extensive practices of surveillance, there are developed practices of resistance (Hollander & Einwohner, 2004; Martin et al., 2009). In effect, both surveillance and resistance to it are constitutive of contemporary societies (Giddens, 1984), and as Martin and his co-authors (2009) argue, "resistance is not merely an epiphenomenon of surveillance – it is a basic and necessary co-development of surveillance" (p. 216). Resistance to surveillance may be formal, organized, largescale, long-term, but also informal, unorganized, everyday, trivial, ad-hoc and discontinued (Fernandez & Huey, 2009; Marx, 2009), and may involve "resistors other than the subjects of surveillance" (Martin et al., 2009, p. 217). Furthermore, resistance can take many forms. Scholars describe, for instance, processes and practices of counter-surveillance, surveillance neutralization (Marx, 2009) and sousveillance ("inverse surveillance in which citizens monitor the surveillors as a means to challenge the surveillance state"—Fernback, 2013, p. 14). In a similar vein, McCahill and Finn (2014), drawing on Bourdieu, refer to "surveillance capital" to describe "how surveillance subjects utilize the everyday forms of tacit knowledge

and cultural know-how that is acquired through first-hand experience of power relations to challenge the very same power relations" (p. 4).

One crucial element in citizens' perception of, and resistance to, state and institutional surveillance is trust. Studies show a positive correlation between trust in public institutions and tolerance or acceptance of surveillance, as trusting citizens are "more likely to cede their civil liberty protections and accept government surveillance practices" (Viola & Laidler, 2021, p. 10). On the other hand, low levels of political trust can be seen as a "vital component of maintaining liberty in democracies" (Hall, 2021, p. 50) and may be connected to greater citizen involvement and political engagement.

In any case, manifestations of enhanced general distrust towards the state and major institutions in Europe are increasing, targeting the media (EBU, 2020), science (Eurofound, 2022), education and contemporary forms of liberal democracy, having at times a full-scale antisystemic character. The people who experience such high levels of institutional distrust share beliefs about being subjects of powerful panoptic surveillance (see Foucault, 1977), which they sometimes attempt to resist or escape through community-building with like-minded people, in online and offline echo chambers. These echo chambers, in which disinformation and conspiracy theories circulate (Marwick & Lewis, 2017), seem to be functioning as communities of trust, while simultaneously allowing to express a lack of trust towards the institutions.

The case of the COVID-19 pandemic-related measures is relevant in the discussion concerning socially accepted surveillance in Europe and resistance to it. On the one hand, mandatory vaccination and other measures limiting mobility, enabled through technologically enhanced surveillant practices, appeared within mainstream media and public debate in Europe as positive action for the protection of public health. These supportive responses, shared by the majority of the population, were associated with a certain degree of trust to main institutions, such as those of science and medicine (Eurofound, 2022). On the other hand, these measures were opposed by certain parts of the population, as they were considered antidemocratic and major practices of orchestrated surveillance, aimed at curtailing people's freedoms. This opposition was expressed, e.g., through the COVID-19 anti-vaccination mobilization, which was largely voiced on social media and other online spaces, and which was associated with high levels of institutional distrust (Eurofound, 2022; Miconi, 2022).

RESEARCH METHODS

This study involves future scenario building and analysis, concerning the prospective or unlikely futures in and of Europe, related to surveillance/resistance enabled or facilitated through digital technologies. For the purposes of the research, two methods of scenario building were developed.

The first is (a simplified version of) the Delphi method, which is often used in futures studies and scenario development (Glenn & Gordon, 2009), and which was adjusted to serve the aims of the project. The method typically employs surveys, focus groups and workshops, aiming to synthesize in a systematic way expert opinions (Gordon, 2009, p. 11) and to structure "communication between a group of people who can provide valuable contributions to resolve a complex problem" (Landeta, 2006, p. 468). What we here call Delphi+ workshops relied more on focus group method tools and were condensed in time.

Four face-to-face scenario building Delphi+ workshops were organized, in three European cities (Malmö, Sofia and Rome), within a one-year period (July 2022–June 2023), as part of the EUMEPLAT research project[3]. The Delphi+ workshops engaged 29 expert participants (6–10 participants per workshop) of varying profiles (e.g., artists, academics, journalists, (science fiction) writers, media producers). Each Delphi+ workshop was structured around three phases: introduction, future scenario development in small subgroups, and summary and conclusion. Each subgroup was asked to develop three scenarios on surveillance/resistance.[4]

The second method of scenario building concerned the writing of future scenario essays by some of the authors of this article. The aim of this component was to complement and enrich the diversity of the produced future scenarios, and involve the research team members in both scenario writing and analysis. Apart from broadening the range of the Delphi+ produced scenarios, this second component allowed the introduction of reflexive moments in the research (Alvesson & Sköldberg, 2000).

The research material comprised 35 future scenarios[5] coming out the four Delphi+ workshops and four written future scenario essays, totaling 39 future scenarios, all focusing on surveillance and resistance to it. The Delphi+ workshops material consisted of the scenario cards (SCs) produced during the workshops

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3 See https://www.eumeplat.eu.
4 The workshops focused, apart from surveillance/resistance, also on four other themes pertinent to digital platforms and futures in Europe (algorithms and choice, toxic debate and pluralistic values, destructive technologies and war, and gender in society). See the workshop script (Carpentier & Hroch, 2023) and the introductory article of this special issue, for an overview of the future scenario building design and methods.
5 Incidence of future scenarios focusing on surveillance/resistance, per workshop: Sofia 1: 6 scenarios; Malmö: 10 scenarios; Rome: 9 scenarios; Sofia 2: 10 scenarios.

by the participants, summarizing each scenario in keywords, and the transcriptions of the discussions that took place during the workshops.

For the purposes of the study, a qualitative content analysis (Saldaña, 2013) was conducted on the Delphi+ workshops and future scenario essays material. The analysis of the material followed a series of cycles. Initially, the main issues, topics and dimensions concerning surveillance/resistance were identified through open coding, by registering keywords and illustrative quotes. The preliminary analysis of the open coding was followed by a series of iterations between the empirical material and the study's theoretical foundations, through an abductive approach (Matthews & Ross, 2010). This resulted in the identification of the main dimensions of analysis, structured around the techno-pessimistic and techno-optimistic visions of surveillance/resistance.

IDENTIFYING VISIONS OF SURVEILLANCE AND RESISTANCE IN EUROPE

The scenario analysis showed how techno-pessimism and techno-optimism feed into perceptions of surveillance and resistance and Europe's visions of the future. These two approaches are consistent in informing distinct visions of the future, grounded in main assumptions, and echoing main hopes and fears about social organization and technology, and thus can be seen as glimpses of what to look for, and what to avert, in societies in Europe.

TECHNO-PESSIMISTIC VISIONS

The analysis structured around the techno-pessimistic visions comprised three main interrelated constituents: visions of surveillance; visions of resistance to surveillance; and visions of Europe. These constituents address how techno-pessimism instructs specific understandings of surveillance and responses to it through forms of resistance, and how these techno-pessimistic visions inform also specific visions of Europe, which are guided by a negative or disparaging disposition toward technology.

◼ VISIONS OF SURVEILLANCE

In techno-pessimistic visions of surveillance, the focus is the problems technology creates for individuals and society at large, with technology being apprehended as the optimal tool for surveillance. In these techno-centric imaginings, humans have hardly any agency, being subjected to the force of technology, complying to its demands. Technology is apprehended as a disabler of people, restricting them to a large extent. Its force and impact are mainly destructive, impacting negatively on people's private, professional and social life. In the most dystopian

variants of these visions, humans lose all their freedom and become slaves of technology (SiiD)[6]. Surveillance then becomes absolute, as people's lives are tracked and controlled in every detail, through emotional tracking, or collection of biometric and DNA data (MD).

Enhanced or complete surveillance appears in several of the analyzed scenarios as enabling the full control of people's behavior, bodily performance and consciousness. Two of the scenarios involve implanting microchips into people's bodies, to achieve "total and absolute social control", in what is described as "QR-codization of life" (RD). This type of control is corporeal, fully restraining movement, as people will need to continuously scan their microchips, to be allowed mobility and access. These applications of biopolitics reach the level of dehumanization. One of the scenarios concerns a modified version of the dystopian science fiction television series 'Severance' (premiered in 2022), in which technology-enabled surveillance supports the separation of the self. In the TV series, people's work and personal lives' memories are separated, leading to people developing distinct consciousnesses and personalities, in professional and personal life. In the future scenario, people's memories are deleted, they abolish the memories of their lives and of how to be human (SiiD).

In such forms of "hyper-surveillance" or "micro-surveillance", not only does people's private sphere completely collapse or disappear (MD), but also massive social control is engineered. By developing predictive models of 'good' and 'bad', 'suitable' and 'unsuitable' citizens, extensive 'social sorting' (Lyon, 2003) is put to effect, excluding, punishing, or even exterminating 'unsuitable' individuals, in the name of social order and public safety (MD).

One other technophobic and dystopic scenario focuses on isolation and fragmentation of the social world, where technology-facilitated surveillance disrupts social cohesion and "everyone would try to survive by themselves. Manipulation and propaganda will divide people in several groups" (SiiD), there will be no trust in information, in (news) media and in institutions, and the levels of stress will increase for everyone due to a generalized suspicion and distrust.

These conditions of social fragmentation foster different types of conflict and social divides. One of these types concerns on the one hand the majority of oblivious people who are not resistant to surveillance and have fully complied, not perceiving surveillance as a problem, or the ones who do not realize that they are "giving their data away" (RD) and that they are subjected to surveillance, and on the other hand the small minority of people who are conscious of being surveilled and are resisting. The latter few, called in one of the scenarios

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6 For references to the Delphi+ workshops, the following abbreviations are used: SiD = Sofia 1 Delphi+ workshop; MD = Malmö Delphi+ workshop; RD = Rome Delphi+ workshop; SiiD = Sofia 2 Delphi+ workshop.

the "leftovers" of society, are accused by the rest of society of being conspiracy theorists (RD).

◼ VISIONS OF RESISTANCE

The ideas pertaining to resistance in the techno-pessimistic visions of surveillance are twofold. One cluster sees people as lacking agency and as powerless to resist, and another identifies some forms of resistance, which often involve technology avoidance or full rejection.

According to the first cluster, technology is seen as a dominator and enabler of enhanced or total surveillance, either at the individual or at the broader societal level, and resistance is not possible. Such visions are grounded largely in a fear-driven attitude towards technology, in which high interconnectedness creates conditions where there is no escape to surveillance, as non-traceability is impossible. As described in one scenario, "trillions of devices will be connected. It will be impossible to, be anonymous, go under the radar" (MD).

Within this logic, attempting to manage or control surveillance is considered aimless. For instance, struggling to manage consent for the collection of users' data in digital platforms is of limited effect, given that technological applications are purposefully complicated for ordinary users. Furthermore, while the requirement for consent will continue to exist, if users do not share their data, they will not be able to have access to services and social networks, and will be excluded from the social realm:

> You can choose to not give your data, but then you won't have access to basically anything. […] Like if you don't have a social security number or even the physical ID, you can't do anything. You basically don't exist (MD).

Developing literacy skills for self-protection is time-consuming and will require extra resources (training and money) to protect oneself (SiiD); hence the divide between the already socially and economically privileged, the ones possessing cultural and economic capital, and the ones who lack this capital, will deepen.

In the cases where resistance is identified in the techno-pessimistic visions, it involves, as mentioned previously, technology avoidance or technology rejection, either at the individual or collective level, driven by technophobic, or neo-luddite beliefs. For instance, one example is the scenario where the essay writer describes a fictitious person employed by an agency, who collects and analyses personal data of European citizens, and who develops paranoia about being surveilled. The person, subsequently, employs a series of technology avoidance practices, such as deleting their own social media accounts, stop using mobile devices, and cancelling their own accounts on video-on-demand platforms. The same

person gradually engages in more enhanced forms of technology avoidance and rejection, such as not using online banking and credit cards, paying only with cash, not having any online activity, and replacing all their digital devices with analogue ones (FSE[s&r]3[7]).

The visions of technology rejection include a scenario, in which a neo-Luddite movement wins power in Europe and abolishes all surveillance. The supporters of the movement advocate "for a return to a world without surveillance" and for an "immediate abolition of all surveillance systems aiming to subjugate the European population to the Machine'" (FSE[s&r]1). These neo-Luddites ground their views in a broad anti-technological sentiment and "blame technological progress for the misery of poorer populations" (FSE[s&r]1). Resistance in this case is expressed not only through technology rejection, but also through the claim for the elimination of technology. As described in the scenario, "the neo-luddite movement advocated for the immediate physical elimination of all machines and electronic devices capable of harvesting, storing, and processing private data, including computers, smartphones, data centers, and servers" (FSE[s&r]1). The visions that promote luddism are also embedded in ideas of primitivism, the belief that humankind needs to return to times prior to the industrial society and modern lifestyles. This belief is described through "Rousseau's archetypical figure of the 'noble savage'", which "signifie[s] an unspoiled, morally superior, and innocent creature that ha[s] not been contaminated by the evilness of modern civilization" (FSE[s&r]1).

VISIONS OF EUROPE

The techno-pessimistic visions of Europe are mainly dystopic, expressing fears of Europe being controlled by corporate and statist forces, and of European democracy shrinking.

Some of the analyzed scenarios see Europe as being defeated in the conflict with the (non-European) corporate sector. In such a scenario, "private companies will have a strong say, [pushing] for deregulation" (MD) and Europe will become unable to protect its citizens against corporate surveillance. Moreover, "infrastructure in Europe [will be owned] by foreign owners, enabling them to influence or control sensitive systems like electricity, water supply, etc." (MD).

In one scenario which focuses on issuing European identity cards for all citizens and abolishing national identity cards, techno-pessimistic voices are highly concerned about the collection of data for all European citizens and their use by companies. For them, "this is a project promoting globalized capitalism, imposed by the big multinational companies" (FSE[s&r]4). According to these

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7   Future scenario essays (FSE) on the theme of Surveillance and Resistance [s&r] use FSE[s&r]1, 2, 3 or 4 as code.

critics, "these conglomerates will get access to all European citizens' personal information and use this data in an uncontrolled fashion to enhance their profits, and expand their business activities to a pan-European scale, further damaging local business activity" (FSE[s&r]4). Another dystopic variant sees Europe becoming "subservient to the US", to its companies and institutions (RD). These visions see corporate forces as damaging or destroying Europe and some of these visions incorporate a neo-luddite stance, arguing for the need to return to the past, promoting the disregard of technology in Europe as the solution for happier people and fairer societies (RD).

In another dystopic variant, Europe will become authoritarian. Citizens will be subjected to enhanced surveillance, their freedoms will be curtailed, and they will be unprotected against the nation-states and the European institutions, that will have become surveillant apparatuses. For instance, the resistance against the European ID cards, presented in the aforementioned scenario, is grounded in the critique from right-wing and nationalist voices that "Europe is being transformed into an apparatus of severe surveillance and control, fiercely attacking the national identity and sovereignty of the nation-states" (FSE[s&r]4). For left-wing voices who oppose the European ID cards project, "Europe functions as a supra-state, aiming to surveil and control all individuals", which "goes against people's individual identities and freedoms" (FSE[s&r]4). Similarly, in the scenario where a person is secretly "collecting and analyzing … personal data of European citizens", they engage in extensive forms of surveillance which expand into these citizens' "taste, behavior and preferences" (FSE[s&r]3).

A warning against the uncontrollable repercussions of surveillance of European citizens is expressed in the European ID cards scenario. Human rights advocates argue that "access to the pan-European ID cards database by third parties will infringe citizen rights and freedoms" (FSE[s&r]4). The danger is arguably greater "in countries with highly networked systems of public administration (e.g., Sweden)", where "uncontrolled third parties" can "have access to detailed information about individuals, related to income, professional activity, but also to criminal records, health records, etc., exposing individuals to multiple risks connected to the lack of control of their own information" (FSE[s&r]4).

These "uncontrolled third parties" may be either state or corporate entities, something that is shared in a number of the analyzed scenarios, which center around the state– or Europe–corporate collaboration as a threat to democracy, leading Europe to giving up its democratic values and becoming more authoritarian. In one of these versions, "the state–corporate nexus intensifies" (RD), leading to increased control of the European citizens through the state-business collaboration enabled by technology: "[The] social credit system will be intensified, states [will be] collaborating with corporations to deepen social control [and Europe will resemble] more authoritarian states" (RD). In such a scenario,

"Europe, [the] European Union could play a particularly negative role because it's one of the few supernational institutions capable of harmonizing social control across nation-states" (RD).

In another scenario, the state-corporate collaboration allowed for enhanced surveillance at the European level, leaving European citizens exploited and deprived of their main rights and freedoms:

> [a] secret, state-backed, and privately operated program was monitoring citizens through microchip implants that were inserted voluntarily into their bodies to help them with everyday decision-making. The data from these implants was […] sold to advertisers and governments around the world without the users' consent (FSE[s&r]1).

However, not all techno-pessimistic visions of Europe are dystopian. For example, in neo-luddite apprehensions of technology, present in the aforementioned scenario, the abolition of technology and the return to pre-industrial lifestyles would lead to a better and surveillance-free Europe. There "the exaltation of natural life, agriculture, and the archaic roots of European civilization" would help create a new European identity, of the pure, morally 'clean' "new European noble savage" (FSE[s&r]1).

TECHNO-OPTIMISTIC VISIONS

The analysis of the techno-optimistic visions comprised the same three interwoven constituents, as in the techno-pessimistic 'camp', namely visions of surveillance, of resistance and of Europe. As the analysis shows, these imaginings are constructed through fundamentally distinct understandings of surveillance, practices of resistance, and visions of Europe, fed by a positive disposition toward technology.

■ VISIONS OF SURVEILLANCE

In the techno-optimistic visions of surveillance, the focus is on the positive and empowering aspects and forces of technology. Technology is put to the service of people and societies, and surveillance appears as either a neutral reality (neither positive or negative) or as desirable and beneficial for societies and for the greater good. There are instances where a warning is raised against potential harm caused by technology-enabled surveillance, but these concerns are countered by the belief in control or regulation of surveillance by societies. Even if the techno-optimistic visions tend to be also technocentric, echoing sometimes technological solutionism, there is a clearer focus on what people do or what Europe does with technology, to improve people's lives and societies

at large. Technology is powerful, but people can use it in ways that will benefit them. It is thus perceived more as an enabler or facilitator of people and societies, than a threat.

In the techno-optimistic visions of surveillance, the latter is not perceived as enhanced or total, but rather as regulated and controlled, by elaborate regulatory frameworks and societies at large. There is also an emphasis on surveillance being moderate, leading to societies having as much surveillance as needed. This vision promotes "a balanced and completely ethical approach where you only have the surveillance you need. And no more, no less" (MD). In such imaginings there are incentives for voluntary engagement in surveillance, where responsible citizens have "opt-out options, voluntary opt-in and opt-out". This model of voluntary surveillance "would be […] harmonized with the governance structure in each society or community" (MD).

In similar scenarios, surveillance can contribute to safe societies, in a model where the state is not imposing severe control, but societies are self-governed: "Society can value more security […] [and surveillance] can be performed in [a] more humane form. [The] state is not controlling individuals, but society is governing itself" (SiD). The systematic collection of information concerning the citizens will allow, among other aspects, for policy planning and regulations concerning, for instance, better health control and the prevention of health crises and climate disasters (MD).

Technology-facilitated surveillance is seen also as an enabler of participation, democracy and civic engagement, and contributes to the vision of social justice. In this vision, surveillance is beneficial as it helps to build responsible societies, promoting "accountability and solidarity", "fairness", "equity", the protection of diversity and human rights, as well as the "protection of vulnerable groups" and their inclusion in the social realm (RD). Such conditions of enacted social justice will facilitate the reduction of societal conflicts and will result in "power distributed democratically" in societies (MD).

Visions of socially responsible surveillance see the latter as "human-centric" and "value-driven", where there is a strong emphasis on individual and collective ethics (MD). For instance, the scenario of "decentralized accountability" sees surveillance as "a system of solidarity where people are accountable for each other", taking "into account the […] diversity of experiences of different socioeconomic groups" and the "individual situations of people" (RD). This scenario argues that, as people and groups are affected in different ways from models of social organization, their rights and perspectives need to be considered when designing and implementing systems of control.

◼ VISIONS OF RESISTANCE

The ideas pertaining to resistance in the techno-optimistic visions of surveillance are clustered around two main approaches. The first expresses the view that people have the agency to resist surveillance, and the other that there is no need for strong opposition to surveillance, as the latter is mostly beneficial for societies. The latter approach is embedded in considerable levels of societal and institutional trust, which are not generally met in the techno-pessimistic imaginings.

In the techno-optimistic visions, people have high levels of agency and control over both technology and their lives. In these visions, there are always ways of negotiating, managing, controlling or resisting surveillance, as people have developed forms of knowledge based on their own experiences that allow them to navigate the complex environments of surveillance and control.

One important aspect is technological and digital literacy. If people develop literacy skills and are critical towards digital technologies, they can use technologies in beneficial ways and can control parts of surveillance. According to one scenario, "algorithmic literacy" (RD) will lead to the increase of "individual resistance" to surveillance (RD). In these versions resistance appears as being up to people's interest and active engagement. Thus, people who are interested can develop skills that enable them to control surveillance and use media and communication platforms to their benefit. A number of these scenarios emphasize the role of instrumental and selective use of technology grounded in informed decisions, still acknowledging that enhanced skills and financial resources are required: "People who can, want, will afford to use non-algorithmic social media, which doesn't spy on them but is expensive" (SiiD).

According to one scenario, literacy helps people become knowledgeable of how surveillance functions and allows them to maintain some control in this process, being aware that they cannot avoid surveillance completely. This echoes an agency-oriented pragmatist approach towards technological use and surveillance, structured around

> [the] recognition that […] there is a compromise made between convenience and surveillance. […] it's a recognition that you can never be completely off-grid, but a much greater literacy around the exposure of being on-grid [allows to decide] how much of the trade-off you're willing to make (MD).

Literacy in the form of a continuous education for citizens is seen also as a mechanism of corporate regulation, due to societal pressure. "Corporate" literacy would support "the rise of critical currents that would foster resistance and pressure companies to adopt self-regulation measures" (FSE[s&r]2) "motivated by the demands of society and consumers" (FSE[s&r]2). Furthermore, literacy is connected with citizen responsibility and accountability in a vision where the

self-governance of societies will replace top-down surveillance, but "of course to make this work, it is necessary to foster critical thinking through education and active participation of people instead of just having policies to control … to exert surveillance from the top" (RD). In such visions of socially responsible surveillance, "resistance has turned into organized unions constructing civil engagements, data literacy, participatory designs, cooperation and inclusion" (MD).

◼ VISIONS OF EUROPE

In the techno-optimistic visions of surveillance, Europe appears as having a generally positive or constructive role, using technology-enabled surveillance to the benefit of societies. Europe sometimes appears also in a rather neutral fashion, as a regulator or facilitator of data collection and management, still not invoking harm to individuals and societies.

In some eutopian techno-optimistic visions, Europe is presented as an active protector of people's rights and freedoms, fighting (successfully) against companies that aim to monitor people's behavior in online platforms for profit-oriented purposes. The vision of Europe as a powerful legislative regulator adheres to ideas of Europe governed by the rule of law, based on which people's privacy and freedoms have priority over corporate interests, and are rightfully protected. In this vision, in which "European states take competitive advantage of a more ethical use of data" and technology (MD), the role of nation-states and of European institutions is more powerful than that of companies.

These imaginings present Europe as the democratic paradigm, the example to follow in the USA and in other parts of the world. Some of the analyzed scenarios "recognize the role of European values and European institutions […] in equal rights or human rights and gender" (MD) and emphasize the need for a "European model of an ethical governance of data" (MD), that will prioritize values and freedoms over profit or political gain. For instance, one of the scenarios promotes the idea of a "European social contract for ethical use of surveillance for health and sustainability" (MD). These visions see Europe as a regulator of surveillance or facilitator of data collection and management, aimed at protecting social welfare, security, justice, peace and the environment.

Some scenarios promote the idea that regulated and supervised surveillance, based on the rule of law, would help protect democracy in Europe, and strengthen some sense of a European identity. For instance, the European ID cards project, which would require the collection and processing of information for citizens at a pan-European level, is seen "as an opportunity for the (pan-)European citizen, and for a Europe for all, which will be more inclusive and solidary than the EU" (FSE[s&r]4). Issuing the identity cards, according to supporters of the project, would allow the European citizens "to access services in different

European countries", and is seen as a means "to enhance mobility and boost the economy", but also as a way "to ease the trauma of the war in Ukraine[8] and the broader tensions and conflicts in Europe […] signifying a pan-European vision" (FSE[s&r]4). For these groups, which exhibit considerable trust in the national and European institutions, "the ID cards project does not constitute a surveillance threat per se, as long as access to the collected information is protected and supervised by independent authorities" (FSE[s&r]4).

CONCLUDING REFLECTIONS

This study focused on the analysis of future scenarios pertaining to surveillance and resistance in Europe, enabled largely through communication and digital technologies. The research aim was to explore the visions –i.e., the hopes and fears– that these scenarios encapsulate, about societies and about Europe.

The analysis of the future scenarios highlighted how people's visions of surveillance/resistance are fed by their dispositions towards technology. As the analysis showed, the scenarios imagining surveillance/resistance are anchored in techno-pessimistic or techno-optimistic approaches that construct specific visions of the future. The techno-pessimistic visions tend to imagine more enhanced forms of surveillance and fewer opportunities for resistance, enabled through digital and algorithmic affordances. These visions also express concerns regarding the future of Europe, as either succumbing to corporate pressures, failing thus to protect its citizens from enhanced forms of corporate surveillance, or as becoming more authoritarian, giving up some of its democratic freedoms and values. Of particular interest in these dystopic visions is the state– and Europe–corporate nexus gaining prominence and leading to enhanced forms of surveillance (through, e.g., online data harvesting) in conditions of shrinking democracy and powerful corporate interests that will leave citizens highly exposed and unprotected.

The scenarios and their visions of the future, anchored in techno-optimism, leave space for a more democratic, inclusive and socially fair Europe. They also see moderated surveillance, through data sharing, as facilitating life-improving conditions. These visions imagine increased levels of participation by the citizens in social organization and enhanced social responsibility, with the assistance of communication platforms and affordances. Such visions are related to considerable levels of societal or institutional trust, not met in the techno-pessimistic

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8 In this future scenario, the war will be over and Russia will be part of the European ID card project.

imaginings, but also to higher levels of compliance to forms of what is perceived as socially responsible surveillance.

As shown, the varying dispositions towards technology are underpinned by broader questions around justice, equality, progress and human agency. Hence, technology appears as a field of struggle for diverse future visions, which are in turn bound to larger visions about politics, ethics and the social good, intersecting with the diverse political visions on Europe. Furthermore, the debates around technology-facilitated surveillance and control are connected to different levels of trust and distrust in Europe and its institutions, being part of the struggles over what constitutes Europe, and over the desired and undesired futures for Europe. In a way, these visions and their struggles, which might be exaggerating the fears and hopes about future societies, reflect people's expectations about Europe and the EU's role as protector of people's privacy, freedoms and democratic rights, preventing the materialization of the dystopian scenarios of full-scale surveillance in conditions of shrinking democracy.

ACKNOWLEDGEMENT

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