

***“Whose city is this?”:
Subcultural Self-Determination and Berlin Communities’ Struggle for Opacity, Space, and
Unidirectional Transparency against Technological Determinism***

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Abstract

Berlin is becoming a hot spot for tech-based foreign investment, with EUR 1.4 billion invested in the first half of 2026, doubling the second half of 2025.¹ The neighborhoods these tech companies are moving into are the same neighborhoods where Berlin's subcultures have been housed since reunification, including squats, studios, and galleries.² Rather than viewing the central tension as resistance to gentrification and to technology itself, this paper posits that the core conflict centers on how that technological future is built and framed. Berliners are, in the words of one interviewee, “not against AI, but against Big Tech.”³ We argue that Berlin's subcultural communities contest Big Tech's claim to authorship over the future by defending subcultural self-determination, or the ability for a subcultural community to assume a role of authorship in how their future will be written.

We argue that subcultural determination, a term that extends Germany's constitutional principle of informational self-determination to the level of subcultural communities, rests on two preconditions: a subculture's capacity to remain resistant to outside capture, which is inseparable from physical and digital space, and a direction of transparency pointed towards institutions of power rather than toward the public. We adapt and extend Thierauf's account of the Tesla Gigafactory as a “site of contested future-making” to Berlin's art scene and its struggle against the encroachment of Big Tech.⁴ Within this struggle, art functions as a tool of resistance in two ways. First, art makes obscure powers and processes tangible, creating transparency and preventing the establishment and perpetuation of monolithic narratives. Second, art helps build open-ended futures in which different perspectives can coexist. We draw on eighteen semi-structured interviews over six weeks of fieldwork, along with qualitative analysis of academic literature and media coverage to build our argument. We acknowledge the political limitations of art and are not proposing it as the sole solution in this tension, yet we still emphasize its historical and continued importance within Berlin. We also acknowledge that a scene defined by the opacity it maintains for itself cannot be fully explained by outsiders, nor should it be. Our research instead serves as a powerful case study in how places with cultural capital can respond to the encroachment of AI infrastructure that threatens to change creative communities' relationship to urban space.

¹ Asha-Maria Sharma, “Firms Invest Big in AI and Robotics in Berlin | Artificial Intelligence.” GTAI. Accessed August 12, 2026. <https://www.gtai.de/en/invest/industries/digital-economy/firms-invest-big-in-ai-and-robotics-in-berlin-2015412>.

² Quill Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism.” *Spectre Journal*. Accessed August 3, 2026. <https://spectrejournal.com/street-art-place-making-and-anti-capitalist-spatial-activism/>.

³ Jo Tiffe, interviewed by the research team, Berlin Germany, July 10, 2026.

⁴ Tamara Mercante Thierauf, “Fixing the Future? The Controversy Surrounding Tesla's ‘Gigafactory Berlin-Brandenburg’ as a Site of Contested Future-Making in Times of Climate Change.” *Time & Society* 34, no. 2 (2024): 202–22.

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Introduction



Figure 1 The Reichstag Dome, imaged from inside

The Reichstag Dome, with its spiral ramps around a mirrored center, serves as a metaphor that is often missed when walking the ramps: the public physically stands above the parliament and can look down and view the politicians transparently.⁵ The people decide Berlin's future, and the politicians beneath them merely effectuate it. Politicians, meanwhile, can only perceive the public's silhouettes against the sky. Any attempt to invert this configuration, where the direction of transparency is reversed and the order of power reverses with it, is seen as a claim of power to decide Germany's future. This paper argues that Big Tech's expansion into Berlin, with skyline-changing buildings like the Amazon Tower, factories, and soon-to-be data centers, is perceived as undermining this democratic orientation.

While the Reichstag dome is merely a symbol, the struggle between Berlin's communities and companies over who decides the future is one with physical battlegrounds. Tamara Mercante Thierauf, a doctoral researcher at the College for Social Sciences and Humanities (Essen, Germany), examines the Tesla Berlin- Brandenburg gigafactory as a site where competing visions of the future are at odds. She highlights how Tesla and their supporters present the factory as a needed step towards climate accountability and economic development whilst locals raise concerns over land use, environmental impact, and community participation.⁶ Building off Thierauf's treatment of the Tesla Gigafactory as a "site of contested future-making," we extend this framework to Berlin's cultural spaces and the land in the Berlin-Brandenburg area where Germany's sovereign AI stack will be built.⁷

Berlin is a uniquely useful case study in understanding resistance to AI and Big Tech because of the confluence of its artistic and counterculture communities and its growing

⁵Albena Yaneva, 'The 'Architectural' as a Type of Connector: A Realist Approach to Architecture. 42 (2010): 141--45.

⁶Thierauf. "Fixing the Future?"

⁷Sarah-Indra Jungblut, 2025. "Germany's Data Center Boom Is Pushing the Power Grid to Its Limits - AlgorithmWatch." In AlgorithmWatch. <https://algorithmwatch.org/en/germany-data-center-boom/>; Thierauf. "Fixing the Future?"

technology sector.⁸ Berlin hosts roughly one third of all German AI startups, 283 companies.⁹ This already large tech sector is expected to grow with Germany's new AI Action Plan that identifies sovereign AI as a central objective. This plan proposes doubling domestic data center capacity and quadrupling AI capacity by 2030,¹⁰ necessitating the use of more land to accommodate the build-out of this AI infrastructure stack.¹¹ Fueling the push for German AI sovereignty, in June 2026, the U.S. Department of Commerce temporarily suspended foreign access to Anthropic's Fable 5, the company's most powerful commercially available model.¹² Although access was restored 19 days later, Jo Tiffe, a Berlin-based artist and designer specifically interested in the peculiarities of LLMs, described the withdrawal as “an instability, which creates mistrust in Europe,”¹³ because it showed that the U.S. AI stack could not be relied upon. Building a sovereign AI stack means absorbing the local harms of data centers. Germany will increasingly have to confront the environmental and social costs of the land, water, and energy required to support AI infrastructure, rather than outsourcing these costs to the US.¹⁴ As Frankfurt, the home to roughly a third of the nation's data centers, approaches saturation, this development is expected to extend to other German states, namely the Berlin-Brandenburg area.¹⁵ The struggle for space in Kreuzberg and Grünheide amid tech-driven gentrification foreshadows broader conflicts between technology companies and communities over datacenter buildout.

Unlike other major cities, the start clock for gentrification in Berlin only began in 1990 after the fall of the Berlin Wall and the collapse of the GDR that left Berlin with a surplus of abandoned space. According to Quill Kukla, Professor of Philosophy at Georgetown University with a special focus on the philosophy of place and urban theory, these unoccupied lands “open[ed] themselves to bottom-up occupation and various creative and dynamic repurposings of space,” allowing subcultural communities to take root outside of preestablished commercial spaces.¹⁶ Over time, these communities transformed these spaces from undervalued areas to culturally significant spaces. The same qualities that allowed these communities to succeed (low rents, vacant space, and minimal corporate activity) attracted developers, investors, and Big Tech companies into their spaces.¹⁷ The cultural value in these previously undervalued areas created by these communities

⁸ Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism;”

⁹ Philip Hutchinson. “German AI Startup Landscape 2024 – Germany's AI Venture Ecosystem at a Glance.” appliedAI Institute - EN. Accessed August 3, 2026. <https://www.appliedai-institute.de/en/publications/ai-startup-landscape-2024/>.

¹⁰ Anna Keeley, *Germany's AI Aspirations: Exploring Tensions Between Decarbonization and Digitalization*, 2026; German Federal Government. Artificial Intelligence Strategy of the German Government: 2020 Update. Berlin: Federal Government of Germany, 2020.

¹¹ Keeley, *Germany's AI Aspirations*, 7

¹² Boris Friedrich. “The Fable Ban Explained: What It Means for Enterprises.” ADVISORI, June 14, 2026. <https://www.advisori.de/en/blog/fable-ban-explained-what-it-means-for-enterprises>.

¹³ Jo Tiffe, interview by the research team

¹⁴ Jungblut, “Germany's Data Center Boom Is Pushing the Power Grid to Its Limits”

¹⁵ Jungblut, “Germany's Data Center Boom Is Pushing the Power Grid to Its Limits”

¹⁶ Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism.”

¹⁷ Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism.”

was converted into real-estate value, leaving the communities that revitalized such spaces at risk of displacement.¹⁸ In 2025, Berlin saw 28 clubs close as the city's central neighborhoods have seen a 38% rent increase over a 5-year span.¹⁹ Berlin's club scene has been built and defined by the city's LGBTQ community, and gentrification further imperils the queer community and their culture. This dynamic is especially visible in Kreuzberg and Friedrichshain, the heart of Berlin's club scene and neighborhoods with an increasingly high density of tech companies. Amazon's German headquarters, a 36-story building employing more than 3,400 people, sits between Kreuzberg and Friedrichshain, casting a shadow on the cultural center, RAW-Gelände, giving it the name "Evil Tower" among some residents.²⁰



Figure 2 Amazon headquarters in Friedrichshain

This paper investigates two primary questions. First, to what extent do tech companies threaten Berlin communities' ability to determine their own cultural future, and what pushes Berliners to resist? Second, how do Berlin's communities respond to the threats they perceive through artistic expression? This paper proceeds in two main parts, with each part corresponding to these two questions.

To first examine what is being contested, we begin with the case study of Tesla's gigafactory in Grünheide and establish subcultural self-determination as the condition that Berliners struggle to protect. Next, we analyze the gradations in suspicion for Big Tech and local startups to narrow where perceived threat is located. Lastly, subcultural self-determination is further narrowed into its two preconditions. The second part turns to what the response looks like

¹⁸Claire Colomb, "Pushing the Urban Frontier: Temporary Uses of Space, City Marketing, and the Creative City Discourse in 2000s Berlin." *Journal of Urban Affairs* 34, no. 2 (2012): 131–52. <https://doi.org/10.1111/j.1467-9906.2012.00607.x>.

¹⁹Cedric Zuber. "Berlin Club Crisis: Pop-up Spaces and the Wilde Renate." *InspiredByBeatz*, May 14, 2026. <https://www.inspiredbybeatz.com/en/club-death-and-new-beginning-what-berlin-popup-spaces-have/>.

²⁰ UniGlobalUnion. "Berlin's 'Amazon Tower' Inaugurated: UNI Affiliate Ver.Di Protests and Demands Collective Agreement." Accessed August 20, 2026. <https://after1989.areweeurope.com/p6226260/>.

and the methods by which communities resist through artistic expression. We establish the two functions of art in protecting subcultural self-determination, and how artists manifest resistance through their work.

The paper ultimately leaves the question of who gets to decide Berlin's future open-ended, and discusses how resistance in an age of AI infrastructure development looks different for communities that hold cultural capital, such as those in Berlin, and those that do not. Each section opens with a work of art or photo of resistance to an imposed future in Berlin, the idea being that the contour of our argument can be traced by looking at the paper's visual elements. As is discussed more carefully in the "Limitations" section, artistic communities claim opacity challenges traditional research and data collection methods. None of the photos captured and presented in this paper were obtained in environments where photo-taking was prohibited. By examining how community opacity enables art to function as a disruptor of future technological narratives, we hope our account serves to educate outsiders about this core tenet of Berlin's subculture, with the aim of preservation rather than explainability. Illuminating that which communities wish to hide from outsiders is the opposite of this paper's intended purpose.

Methodology

Given that our research concerns the reactions and perspectives of Berlin communities to AI, we based our investigation around interviews. We conducted eighteen interviews with people across industries, all of whom were based in Berlin. The majority of our interviewees were contacted through publicly available information, with the exception of referrals through past interviewees or by the Hot or Cool Institute, with whom we partnered throughout this research process. We recorded and transcribed interviews or took notes depending on interviewees' preferences. Interviews were conducted in English, in person or over Zoom, and followed a semi-structured format. To represent as many of Berlin's perspectives as possible, the positions of those we interviewed included: artists, musicians, a museum director, a historian, a professor researching digitalization, professors researching club culture, employees of music industry startups, a hacktivist, a live coder, and a former board member of Berlin's Club Commission.

Key terms

Art: We reached no settled definition of art, but from our observation, art is the method by which subcultural communities subvert imposed future narratives and present alternative futures. Given that Berliners reject the idea of a future already defined, we reasoned that defining the medium by which futures are contested and shared would likely be met with resistance. We instead asked artists how they define art; their responses differed:

- Alexandra Cárdenas: “I think what art does is that it reminds us of all these things that we lose because of language. And we can say art is a language itself, but I think art is way more than that.” Quoting John Cage, Cárdenas shares her belief that “Everything you hear is music. And everywhere is the best seat.”²²
- Emanuele Musca: “Art is made for art, and doesn't need to be defined. If you want to communicate something, and it's not useful for anything outside of communicating a feeling, that's enough to be art, I think. If people like it, it's good.”²³
- Helena Nikonole: “It's a way of communicating ideas through different media.”²⁴
- Jo Tiffe: “Creating new things. Exposure of reality you can step out of and see reality differently using the tools you are using.”²⁵
- A Berlin-based musictech CEO and artist: “Art is the process of making something. I wanted to say unique, but it doesn't necessarily have to be unique. I think art can be making dinner. It can be going on a walk. It can be painting. I think art is what you make of it.”²⁶
- Matthias Strobel: “Art is the result of the intention to express creativity through a medium.”²⁷

The definitions outlined above encompass many different art forms; we therefore use art not as a fixed category but rather as a framework to examine creative practices that communicate ideas, expose hidden systems, or enable communities to imagine and enact alternatives for their future. The practices discussed in this paper – techno, street art, tactical media, and hacktivism – are not presented as the only forms art can take, but were chosen because they most visibly demonstrate these functions within Berlin’s creative communities.

Big Tech: “Big Tech” traditionally covers a set list of the largest technology corporations. In this paper, we refer to “Big Tech” as not confined to any single corporation, but rather a sociopolitical employment of technology that is controlled by any corporation or governing body with the ability to dominate their specific sectors. A key feature of this definition is unilateralism: a corporation’s

²² Alexandra Cárdenas, interviewed by the research team, Zoom, July 28, 2026.

²³ Emanuele Musca, interviewed by the research team, Zoom, July 28, 2026.

²⁴ Helena Nikonole, interviewed by the research team, Zoom, July 22, 2026.

²⁵ Jo Tiffe, interview by the research team

²⁶ Berlin-based musictech CEO and artist, interviewed by the research team, Berlin Germany, July 22, 2026

²⁷ Matthias Strobel, interviewed by the research team, Berlin Germany, July 13, 2026.

economic power grants it the ability to make decisions without input from the people the decision affects.

Subculture: A community formed around a shared set of values, modes of expression, and shared community space that exist tangentially to dominant popular culture²⁸. In this paper, the term “subculture” is used to describe Berlin’s creative communities whose practices include, but are not limited to, club culture, experimental production, and artistic creation where preexisting visions of the future can be challenged and new ones created. It is important to note that subcultures are not concrete homogeneous groups, but constantly changing with the people they represent.

Subcultural Self-Determination: When West Germans protested the impending census in 1983, Germany’s Federal Constitutional Court established “informationelle Selbstbestimmung” (informational self-determination) as a legal standard, ruling: “Anyone who is uncertain whether deviant behavior is being recorded at any time and permanently stored, used, or passed on as information will try to avoid attracting attention through such behavior.”²⁹ Informational self-determination therefore safeguards the ability of the individual to decide who they are and what their future can hold. Subcultural self-determination, a term we introduce in this paper, extends informational self-determination to the level of subculture, and describes the capacity of a community to determine who they are and what their future may hold.

Technological Determinism: The idea that technology is the only way to bring about meaningful change in society. Written in a16z’s *The Techno-Optimist Manifesto*, “Love doesn’t scale, so the economy can only run on money or force.” Technological determinists view technology as the sole driver of this imagined economy that runs on money.³⁰

Opacity and Privacy: For the purposes of this paper, privacy is a right that is conferred by and protected by government or third parties, and is undermined through exposure. Opacity, on the other hand, is a condition that a community assigns to itself and enforces to prevent legibility or visibility.

²⁸Nicholas Sinclair, 2023. “Subcultures and Countercultures | EBSCO.” In EBSCO Information Services, Inc. | [Www.Ebsco.Com](https://www.ebsco.com/research-starters/social-sciences-and-humanities/subcultures-and-countercultures). <https://www.ebsco.com/research-starters/social-sciences-and-humanities/subcultures-and-countercultures>.

²⁹Judgment of 15 December 1983. Accessed August 3, 2026.

https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/1983/12/rs19831215_1bvr020983en.htm

³⁰Marc Andreessen. “The Techno-Optimist Manifesto.” Andreessen Horowitz, October 16, 2023. <https://a16z.com/the-techno-optimist-manifesto/>.

Part I: To what extent do tech companies threaten Berlin communities' ability to determine their own cultural future, and what pushes Berliners to resist?

1.1 Technological Determinism & Subcultural Self-Determination



Figure 3 : Grünheide says “No Thank you Tesla”

This section, extending the work of Thierauf, argues that Berlin subcultures contest Big Tech’s tendency to push narratives of inevitability, in which a single future is marketed as a public good that warrants bypassing community approval processes.³¹ Against these agency-depriving processes, Berlin creative communities struggle for what we term subcultural self-determination, or the capacity of a community to determine their identity and future. The following sections identify two preconditions to subcultural self-determination in Berlin: opacity and physical space for communities, and transparency from institutions of power.

Despite the narrative that Big Tech companies push, technological developments are not received by communities as the product of neutral processes, but as political acts that are imagined, publicized, and acted upon. Science and technology scholars Sheila Jasanoff and Sang-Hyun Kim

³¹ Tamara Mercante Thierauf, “Fixing the Future? The Controversy Surrounding Tesla’s ‘Gigafactory Berlin-Brandenburg’ as a Site of Contested Future-Making in Times of Climate Change.” *Time & Society* 34, no. 2 (2024): 202–228.

describe this relationship between technology and society as “sociotechnical imaginaries,” where “collectively imagined forms of social life and social order are reflected in the design and fulfillment of nation-specific scientific and/or technological projects.”³² From our observation, “collectively” does not belong to the general public, but to the subset of government agencies, private corporations, and individuals who gatekeep this co-creation.

Technological narratives often invoke popular political concerns, namely global warming, economic revitalization, and energy transitions, that are leveraged to accelerate the pace of development and used to dismiss critiques as unnecessary delays to addressing such concerns.³³ By presenting corporate goals as “national necessities,” large corporations disregard public deliberation and feedback as solely reactionary to already implemented key developments. This relegation of public feedback, from our observation, seems to be the central tension Berliners take issue with: residents may support AI and other digital technologies as tools, but challenge the idea that their development and implementation should continue without democratic deliberation.

Tesla’s Berlin-Brandenburg gigafactory was justified through a “sociotechnical imaginary” that linked their corporate goals to Germany’s targets of sustainability, economic revitalization, and technological advancement. The approval process limited public discourse as corporate goals were portrayed as a national necessity. Sebastian Walter, a member of the Berlin House of Representatives, reflects on where Tesla failed to win public trust: “There was a moment when Tesla came to parliament, and I was really happy that they were actually there ... But they just showed their PowerPoint presentation, and no one was allowed to ask questions.”³⁴ Tesla’s appearance before parliament created the appearance of engagement without meaningful dialogue.³⁵

Tesla’s Grünheide gigafactory provides a more direct connection to AI infrastructure than the initial proposal suggests. Despite initially being established as an electric vehicle factory, Musk plans to expand the factory into physical AI developments with his humanoid Optimus Robot, which is predicted to have large impacts on the labor market.³⁶ With this development, the site must not only be understood as an EV factory but also as a site of AI infrastructure. This expansion showcases how a project initially approved to reach climate goals and promote the local economy can expand its scope and change its goal without reopening public deliberation.

The *Techno-Optimist Manifesto* articulates the shared post-political techno-determinist views of some Silicon Valley technologists. Stated plainly in the manifesto is the affirmation that

³²Sheila Jasanoff, and Sang-Hyun Kim . Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea. 47, no. 2 (2009): <https://doi.org/10.1007/s11024-009-9124-4>.

³³Thierauf. “Fixing the Future?” ; Sören Amelang. “Tesla’s Berlin Gigafactory Will Accelerate Shift to Electric Cars | Clean Energy Wire.” March 7, 2022. <https://www.cleanenergywire.org/factsheets/teslas-berlin-gigafactory-will-accelerate-shift-electric-cars>

³⁴Pichaloff, “Tesla’s Gigafactory Is Coming”

³⁵Pichaloff, “Tesla’s Gigafactory Is Coming”

³⁶Oliver Moody. *Trained by Humans, Built by Musk: Machines on the March*. n.d. Accessed August 16, 2026. <https://www.thetimes.com/world/europe/article/robot-train-replace-tesla-optimus-elon-musk-berlin-gigafactory-fb26fm6lc>.

“any deceleration of AI will cost lives.”³⁷ The fear of “death” dismisses questions of how technologies are developed, who benefits, and what alternatives exist and are ignored, leaving the role of future building solely in the hands of these Big Tech companies.

Our fieldwork suggests that Berlin communities’ resistance to Big Tech is fueled by the will to preserve coauthorship of their future. In a conversation with Lutz Leichsenring, a spokesman for Berlin's Club Commission and cofounder of VibeLab consultancy, regarding how Big Tech is coming into Berlin, he asks, “But there's also the question of whose city is this?” He warns that if communities don’t “show opposition” to who decides the future of the city, money or communities, then “Things will just sanitize over time. Things will just disappear.”³⁸ In his view, Berlin’s trajectory as a city will depend on whether its communities coauthor the futures they want to inhabit, or whether they will blindly follow plans for the future drafted in Silicon Valley.



Figure 4 Celebrators at Berlin’s Christopher Street Day Parade with flag that reads “The Future is Us”

At Berlin’s Christopher Street Day (CSD) Parade, we encountered a flag reading “The Future is Us.”³⁹ Unlike declarations like “Tesla is the Future” from Grünheide’s mayor Arne Christiani, this declaration gives agency back to Berliners and recognizes that future-building is an iterative and collaborative process. The flag symbolizes the shared struggle for future coauthorship and belonging, a desire that becomes self-evident when we consider the companies the city refuses.

³⁷ Andreessen. “The Techno-Optimist Manifesto.”

³⁸ Lutz Leichsenring, interviewed by the research team, Berlin Germany, July 22, 2026.

³⁹ Christopher Street Day is an event celebrating and advocating for LGBTQ+ communities,

1.2 Startups and Big Tech: Technology, Trust and Community Agency



Figure 5 : Poster advertising “Art against Big Tech” event, seen in artistic collective space Lause

Jo Tiffe captured a sentiment that recurred throughout our conversations: “[I am] not against AI, but against Big Tech”, suggesting that Berliners are more concerned about the companies behind the technology rather than the technology itself.⁴⁰ The distinction between Big Tech and startups is not simply a matter of scale, but in how their relationships with Berlin’s communities, spaces, and cultural values differ. Dr. Anita Jóri, a Technische Universität (Berlin) professor of linguistics and expert in club culture, measures the loss of land by this loss of culture to Big Tech, which she reflects is “vanishing in front of our eyes every day” while “Silicon Valley is doing a lot of things in this city.”⁴¹ Jóri adds that the concern is not only corporate property buyouts, but American

companies making distant decisions about Berlin’s physical and cultural future.⁴²

Beyond cultural differences and concerns of gentrification and displacement, Berliners also associate these Big Tech companies as a threat to privacy and cultural opacity. From our observations, many Berliners associate these corporations with their unwanted collection of personal data and the pervasive control they exercise over the internet. The threat from Big Tech is therefore felt not only in physical space, but also in digital spaces. Both preconditions to subcultural self-determination will be expanded upon in the next section.

Unlike large corporations, Berlin’s startup ecosystem is known for its interaction with creative communities, which gave rise to companies like SoundCloud, Ableton, and Native Instruments.⁴³ Matthias Strobel, a music tech entrepreneur and founder of MusicTech Germany, explains that local startups may be perceived differently, as they develop technologies in close communication with its users:

⁴⁰ Jo Tiffe, interview by the research team

⁴¹ Dr. Anita Jóri, interviewed by the research team, Berlin Germany, July 17, 2026.

⁴² Dr. Anita Jóri, interview by the research team

⁴³ Berlin-based MusicTech CEO and artist, interviewed by the research team

“Tech startups flourish here because...the artists or the creative people meet tech entrepreneurs and then come up with ideas, and these days they can build it with them together rather than having a corporate company building a solution.”⁴⁴

Strobel highlights that Berlin’s creative and artistic communities often interact with startups through curated events and organizations.⁴⁵ Strobel acknowledges, however, that many musicians in Berlin still “don’t differentiate between corporate giants and a tech startup.”⁴⁶ The business model and physical encroachment of Big Tech taints public perception of technology itself. As an interview participant involved in Berlin’s education-technology sector explained when discussing their decision not to pursue venture capital funding: “I haven’t seen one startup that has been able to stay true to its origins after receiving VC money.”⁴⁷ Their words serve as a reminder that many startups still experience corporate pressures and can be acquired by large tech companies misaligned with the startup’s founding ethos.

This section has traced the broader threat to future co-authorship that Big Tech poses to Berliners. In reading how Big Tech and startups differ in their interaction with communities, we transition to our next section that examines what specifically makes a Berlin community feel their future is at threat from Big Tech. The sections that follow narrow the focus to where that threat, and the resistance to it, becomes most concrete.

1.3 Opacity and Space

Quoted in a 1987 New York Times article, one West German census protester shared: “I have nothing to hide - I’m not close to the terrorist scene - but I just don’t like anybody to look through me. It’s a power question, just a power question.”⁴⁸ The words of this unnamed protester clarify a common misunderstanding of the meaning of opacity and its relationship to personal freedom: opacity is not always about concealment. Borrowed from the “Poetics of relation” by Édouard Glissant, a community’s “right to opacity” serves as a safeguard against



Figure 6 Art exhibit including quotes from Glissant and hooks at Berlin University of the Arts open house

⁴⁴ Strobel, interview by the research team

⁴⁵ Strobel, interview by the research team

⁴⁶ Strobel, interview by the research team

⁴⁷ Berlin based education technology professional, interviewed by the research team, Berlin Germany, August 6, 2026

⁴⁸ Markham, James. *Germans Stand Up Not to Be Counted*. May 10, 1987.

their own domination.⁴⁹ Maintaining a layer of unexplainability, where artists and activists expose power through their work, but power can't expose them, is a necessary condition for critical art forms to flourish in Berlin amid the city's changing relationship to unoccupied space. Berlin's subcultures, as Professor Dr. Anita Jóri put it to us, are both "radically inclusive and intensely guarded."⁵⁰ Opacity is a property that a community assigns to itself.

Physical spaces are often the precondition for opacity, providing a habitat for autonomous future-making and cultural growth. Vita Peacock, an anthropologist researching surveillance in Britain and Germany, connects the history of privacy and surveillance skepticism in her book chapter "Privacy as Unfolding: German Netzpolitik and the Legacy of Colonial Registration," to space, via the German word for privacy, *privatsphäre*. Peacock writes that the word has a spatial orientation which "permits a shift between interior intellectual growth, and spaces for the growth of democratic society."⁵¹ We extend Peacock's positioning of individual privacy as the unfolding (Entfaltung) of an individual's personality to the level of subcultural communities and tie opacity, rather than privacy, to space and subcultural self-determination (see fig. 8).

The following subsections examine the relationship between opacity, space, and subcultural self-determination. A threat to community spaces is often perceived as a threat to opacity, and the threat to opacity is therefore received as a threat to subcultural self-determination. Digital spaces, unlike physical spaces, increasingly enable the subversion of subcultural opacity, making physical space all the more important. Social psychologist Shoshana Zuboff argues that in the age of surveillance, any meaningful concept of liberty is tied to the concept of "will to will," which is our ability to access our personal autonomy. To secure such rights, we must reclaim "sanctuary," which is a place where our experience is free from monitoring and surveillance.⁵²

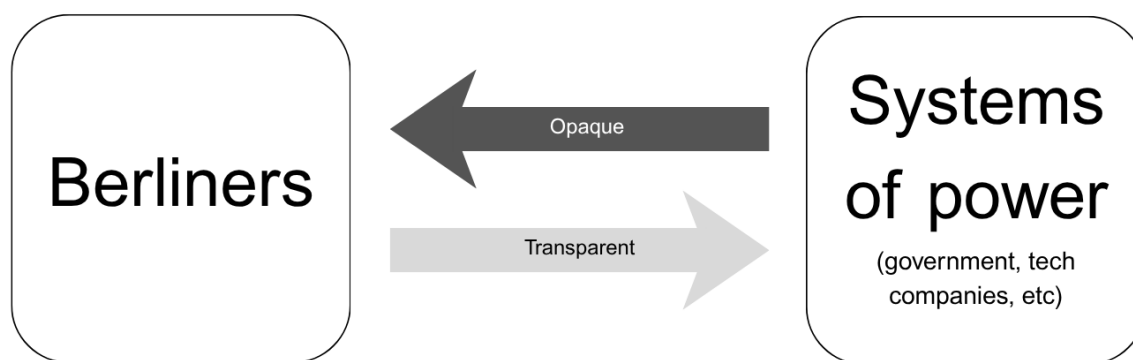


Figure 7 Diagram illustrating relationship between Berliners and governing forces

We acknowledge that Berlin's relationship to opacity and transparency is heavily shaped by Stasi surveillance in East Berlin and the historical memory of the Third Reich,⁵³ yet as Vita

⁴⁹Édouard Glissant, *Poetics of Relation*, trans. Betsy Wing (Ann Arbor: University of Michigan Press, 1997)

⁵⁰ Dr. Anita Jóri, interviewed by the research team, Berlin Germany, July 17, 2026.

⁵¹Vita Peacock, Mikkel Kenni Bruun, Claire Dungey, and Matan Shapiro, eds. *Rhythm and Vigilance: Ethnographies of Surveillance and Time*. Bristol University Press, 2025.

⁵²Hartmann, "Google Is Not a Good Neighbor." Quoting Shoshana Zuboff

⁵³ Federal Archives. "Introduction." Stasi-Unterlagen-Archiv, 2025. <https://www.bundesarchiv.de/en/stasi-records-archive/education/what-was-the-state-security/introduction/>.

Peacock reminds us, attributing too much to historical memory “achieves a purification of the present that consigns the dangers of new forms of surveillance to the past.”⁵⁴ Her words remind us of the importance of situating our arguments in the present day.

1.3.1: Physical Space



BERLIN IN TRANSITION CEMETERY OF STREET ART

A memorial for a Berlin that drives its artists off the squares.
MEMORIAL TO DISPLACED STREET ART

These figures recall a Berlin in which public squares were still stages. Music, theatre, clowns, acrobatics, laughter and encounter in the middle of the city. Today street art is treated more and more often as a disturbance: regulated, displaced, punished.

While the real problems in public space go unsolved, it is precisely the people who give joy, enliven squares and strengthen social cohesion who come under pressure.

This exhibition asks:

Who owns public space?

Street art is not a nuisance.

Street art is urban culture.

CULTURE NEEDS SPACE.

Figure 8 A street art exhibition by Adam Reed and Dumova pictured outside Berlin Central Station. The original German text is to the left; translated on the right into English with assistance from Claude.

In the words of Dr. Steffen Lepa, an audio communications researcher at Technische Universität Berlin who studies club culture, “the most important thing is spaces,” which is exactly what tech-driven gentrification is threatening in Berlin.⁵⁵ This recognition of the importance of physical space as a precondition for future building and cultural creation is also shared by tech executives. “It’s very hard to build a culture, to keep a culture, when you don’t interact with people in-person,” Alex Karp, the CEO of Palantir, is quoted as saying in his biography “The Philosopher in the Valley.”⁵⁶ The conflict over Berlin’s land is therefore a conflict over whose culture deserves the physical space in which culture can grow. But what exactly makes physical space the perfect incubator for culture? In-person interaction, as Karp acknowledges, is important, but for Berlin subcultural communities, it is the opacity that physical spaces provide that is worth fighting for.

⁵⁴Vita Peacock, Mikkel Kenni Bruun, Claire Dungey, and Matan Shapiro, eds. *Rhythm and Vigilance: Ethnographies of Surveillance and Time*. Bristol University Press, 2025.

⁵⁵ Dr. Steffan Lepa, interviewed by the research team, Berlin Germany, July 17, 2026.

⁵⁶Michael Steinberger, “The Philosopher in the Valley: Alex Karp, Palantir and the Rise of the Surveillance State”, pg. 217

Perhaps the most well-known example of Berlin communities protecting the opacity of cultural spaces is the selective door policy that many clubs maintain. Leichsenring shared that the purpose of a strict door policy is to create a space where people can authentically and safely express themselves. He said, “I’ve seen people in the line of Berghain who are just trying to mock something, you know, they try to dress up as somebody but not be it.”⁵⁷ The selectiveness prevents these people from entering the safe space of a club and protects freedom of expression for those who are granted admission. Opacity enables those whose identities don’t fit the mainstream to find each other and build community. According to Dr. Jóri, the “guarding” makes inclusivity mean something.⁵⁸ Elon Musk, the face of techno-determinism and greed for Berliners, was allegedly denied entry to Berghain; no amount of power or mainstream status can buy entry into the spaces that foster resistance for both.

If opacity is the precondition for subcultural self-determination, land and physical space can be thought of as a precondition to opacity. Subcultural self-determination requires more than the freedom to express ideas; it requires spaces in which those ideas can develop collectively and anonymously.

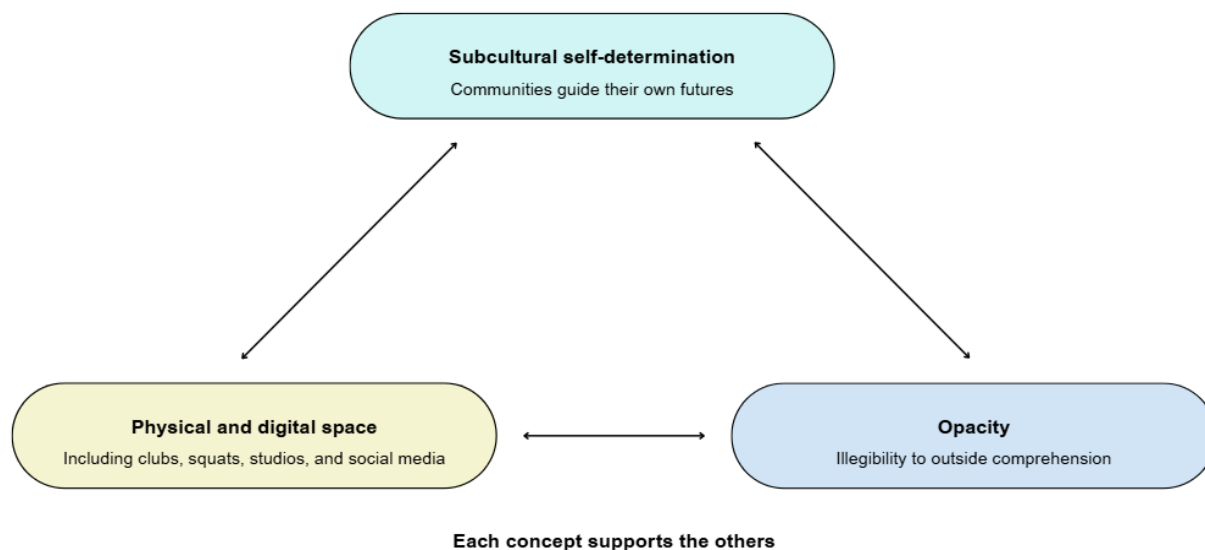


Figure 9 Graphics displaying how subcultural self-determination, physical space, and opacity all depend on each other

This relationship between space and opacity is also seen through the messaging on the graffiti painted on the exterior walls of Köpi, a squat house in Mitte and a symbol for the radical left in Berlin. On a building behind barbed wire, a message read “Hands off our homes.”

⁵⁷Lutz Leichsenring, interview by the research team

⁵⁸ Dr. Anita Jóri, interview by the research team



Figure 10 The mural outside Köpi reads: “HANDS OFF OUR HOMES”

⁵⁹ The language of this message is revealing, as the artists behind the expression could have explicitly written: “don’t take our homes.” “Hands off” expresses the view shared by communities that the subversion of opacity, not just the capture of land, is often what resembles the encroachment of developers and corporations.

Another way in which opacity is undermined is through a process known as artwashing. Real estate developers in Berlin have often sponsored short-term art events on the sites of their future buildings to drive up rent prices.⁶⁰ This practice of “artwashing” can be thought of as developers making artists visible for the purpose of

eventually erasing them. Artist Blu’s anti-capitalist work *Shackled by Time* and *Take off That Mask* in Kreuzberg was among Berlin’s most well-known street art pieces. When the land next to the artwork was purchased by Berlin’s notorious developer Mediaspree, they turned Blu’s murals into a selling point for the new residences. Blu was therefore forced to have his own anti-capitalist work turn into part of a commodified aesthetic that functioned as a tool of displacement.⁶¹ Culture needs space, yet the same culture that gives neighborhoods their identity increasingly becomes the mechanism through which displacement is justified. Importantly, public-facing cultural spaces like a wall of graffiti are not enclosed, enabling capture by developers. Art washing therefore raises the question: what conditions does a physical space need in order to protect opacity? Blu demonstrates that space enables opacity only when its boundaries and access are controllable.

⁵⁹ Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism.”

⁶⁰ Claudia Seldin. 2026. “Artists and Urban Artwashing in 2020s Berlin: Co-Optation, Gentrification, and Resistance.” *Urban Geography*, March, 1–25. doi:10.1080/02723638.2026.2642194.

⁶¹ Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism.”

1.3.2. Digital space⁶²



Figure 11 Blu, "Shackled by Time/Take Off That Mask."

The failure of digital platforms to preserve the opacity of subculture increases the importance of physical space. An example of the limitation to preserving opacity online involves Berlin's famous squat houses. When certain artistic spaces and squat houses have tried to blur their location on Google Maps in an attempt to try to erase themselves from online records and retain a sense of opacity, however, the blurred photos only attracted more attention (See Figure 12).⁶³ Communities have the choice between complete online visibility or opacity through means that cause the same popularity and visibility they hope to prevent.

Describing why subcultural spaces draw popularity, bell hooks writes, "The commodification of Otherness has been so successful because it is offered as a new delight, more intense, more satisfying than normal ways of doing and feeling."⁶⁴ Paradoxically, Berghain's popularity has much to do with the mystery and anonymity that it projects as a way of protecting

⁶² Kukla, "Street Art, Placemaking, and Anticapitalist Spatial Activism."

⁶³ Kukla, "Street Art, Placemaking, and Anticapitalist Spatial Activism."

⁶⁴ bell hooks, 1992, *Black Looks: Race and Representation*, South End Press.

itself from mainstream appeal. In doing so, it allows dominant culture to mimic the “new delight”⁶⁵ of Otherness online without experiencing the social ramifications of living as Other.⁶⁶



Figure 12 79 Rigaer Straße hiding Themselves from Google Maps

Creative communities are susceptible not just to the penetrable gaze of the digital space, but its extractive architectures. The problem, viewed by Berlin creatives, is that algorithmically driven content extracts the aesthetic and mystery around Berlin’s subculture, and removes the history, the norms, and why it came to be popular in the first place. As Boiler Room, a platform that films and streams full-length DJ sets from around the world, including many Berlin DJs, writes:

“Club culture has always been a tool for community and resistance. It’s only in coming together that we can fight the isolating forces of the algorithm. In this context, club culture pushes against the boundaries of an increasingly homogenous online landscape.”⁶⁷

Dr. Jóri cites that the threat that “homogenous online landscapes” impose is that they attract newcomers to Berlin’s club culture who arrive at the scene with a curated impression of the culture

⁶⁵ Kukla, “Street Art, Placemaking, and Anticapitalist Spatial Activism.”

⁶⁶ hooks, *Black Looks: Race and Representation*,

⁶⁷ Boiler Room. *More Human Than Ever: Youth, Music, Arrived Cultural Reckoning*, with AI. 2026. <https://boilerroom.tv/insights/>.

and a lack of understanding of its cultural significance and unwritten rules.⁶⁸ Dr. Jóri points to “TikTok techno” that characteristically is “very fast, high bpm, [and features] fast transitions to other clips,” as a trend that transforms the heritage genre of techno into an algorithmically palatable genre.⁶⁹



Figure 13 Street art pictured in RAW-Gelände

It is here that Glissant’s conception of opacity diverges from Peacock’s definition of privacy in a way that elucidates how the two terms are different. TikTok techno would not be best understood as a violation of privacy; no one’s personal information is leaked, and that which occurs behind the walls of Berghain is never brought to light. Instead, we situate TikTok techno and related trends as a violation of opacity through the reduction of a subcultural scene to a copyable and extractable format. Without referencing algorithmic media, Glissant best articulates why homogenization is the outcome of undermined community opacity: “opacity is also the force that drives every community: the thing that would bring us together forever and make us permanently distinctive.”⁷⁰ Leichsenring relates this back to the performance of

subculture; before, “you really had to work to be part of a scene...you had to pull up to a record store to get the new music,” whereas “now everything is accessible. Everything is, I would say, performative.”⁷¹ While accessibility is often a word viewed in a positive light in socio-cultural contexts, Berlin demonstrates that accessibility and the opacity required to maintain authenticity are often inversely related when it comes to subculture.

⁶⁸Dr. Anita Jóri, interview by the research team

⁶⁹Dr. Anita Jóri, interview by the research team

⁷⁰Édouard Glissant. *Poetics of Relations*

⁷¹ Lutz Leichsenring, interview by the research team



Figure 14 The only Instagram post by Berghain's Panorama Bar (294k followers), reiterating their no-camera policy

in the absence of physical space often fail. Atop physical space, opacity can serve as the ground that subcultural self-determination sits on.

1.3.3. Case Study: When the opacity of digital and physical space is threatened simultaneously

In some instances, large tech companies in Berlin have threatened the opacity of subculture in both digital and physical spaces at the same time. Perhaps the best example, and the one this section highlights as a case study in Berlin's struggle for opacity and space against Big Tech, is Google. In November 2016, Google announced plans for a campus to be built in a former electrical substation in Kreuzberg. Neighborhood groups and networks, the loudest of which claiming the name "Fuck off Google," held demonstrations for close to two years alongside other neighborhood

Berghain's lack of a digital footprint and the squat houses blurred on Street View inspire more public attention, yet both spaces succeed in keeping outsiders out.

Berghain demonstrates the importance of physical space as the precondition for opacity: the venue's popularity on social media platforms doesn't have to undermine opacity if a physical barrier sits in the way. Similarly, even though blurring images on Street View attracts more popularity and mystique, visitors will similarly have trouble gaining access to Köpi. The fact that it still exists is a testament to this reality. Enclosed by fences and covered in graffiti, the space projects an image of closure that helps residents deter outsiders and protect themselves from surveillance and domination.⁷² Köpi is therefore more than an occupied building. It is an attempt to preserve one of the few remaining spaces in which communities can determine their own cultural future outside the priorities of developers and technology companies. Physical spaces function as a buffer from visitors who are merely there to look. Digital spaces lack a controllable threshold, which is why communities that try to replicate enclosure online

⁷² Quill Kukla. "Street Art, Placemaking, and Anticapitalist Spatial Activism." *Spectre Journal*, n.d. Accessed August 3, 2026. <https://spectrejournal.com/street-art-place-making-and-anti-capitalist-spatial-activism/>.

initiatives. In October 2018, Google abandoned the plan, but denied that local protests factored into the decision.⁷³

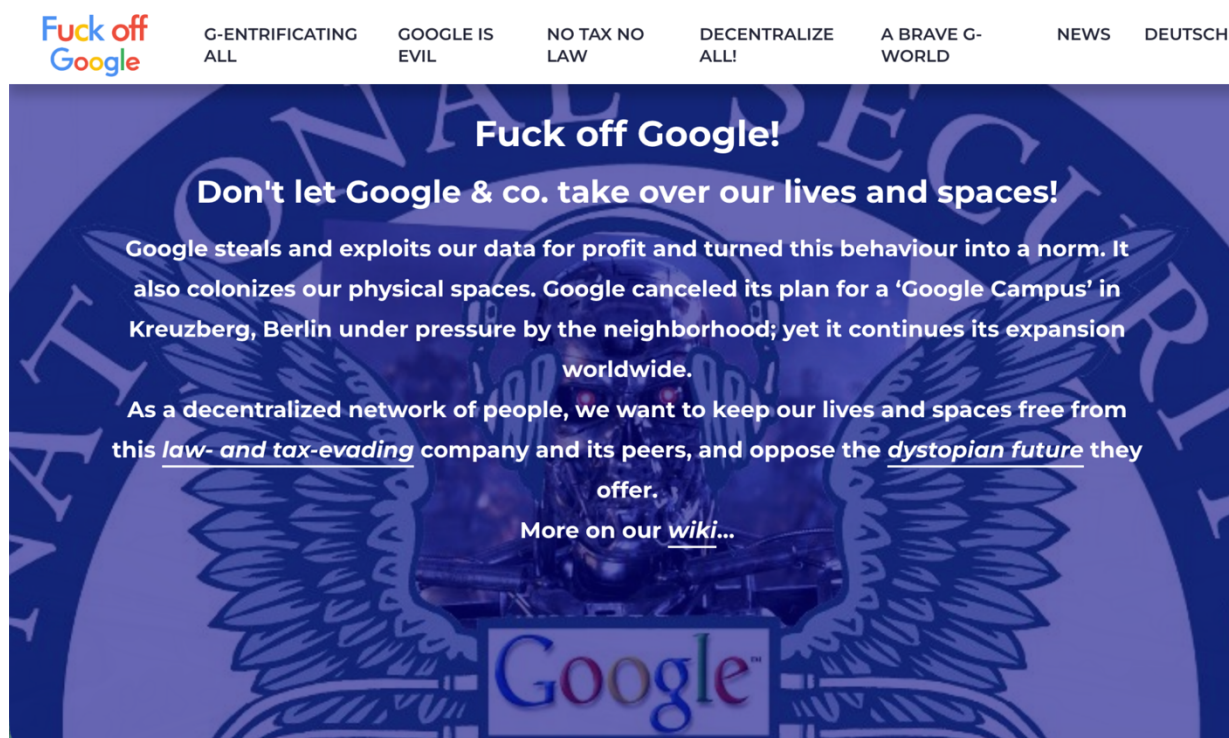


Figure 15 Screenshot of “Fuck Off Google,” a grassroots organization protesting Google’s proposed Kreuzberg campus, main page

In Maren Hartmann’s article “Google Is Not a Good Neighbor: The Google Campus Protests in Berlin,” she writes: “The protests against Google have put their finger on the double gentrification aspect that is made possible by Google’s geomedia regime—a datafication and surveillance regime, a gentrification of the internet.”⁷⁴ Google wasn’t just any tech company in the eyes of Kreuzberg residents; it was a company that had profited off building digital transparency infrastructure. In Kreuzberg, Google threatened opacity directly through physical displacement and ensuing rent increases, but also indirectly through bringing datafication and digitization to the neighborhoods of Berlin. Increasingly, gentrification is happening in both the digital and physical world, where colonization of the internet helps to drive the colonization of physical space. Google was therefore viewed as a company capable of delivering a one-two punch to Berlin subculture.

⁷³Victoria Turk, “How a Berlin Neighbourhood Took on Google and Won.” Wired, October 26, 2018. <https://www.wired.com/story/google-campus-berlin-protests/>.

⁷⁴Maren Hartmann. ““Google Is Not a Good Neighbor”: The Google Campus Protests in Berlin.” Space and Culture, vol. 27, no. 1, Feb. 2024, pp. 110–26. DOI.org (Crossref),

1.4 Unidirectional transparency

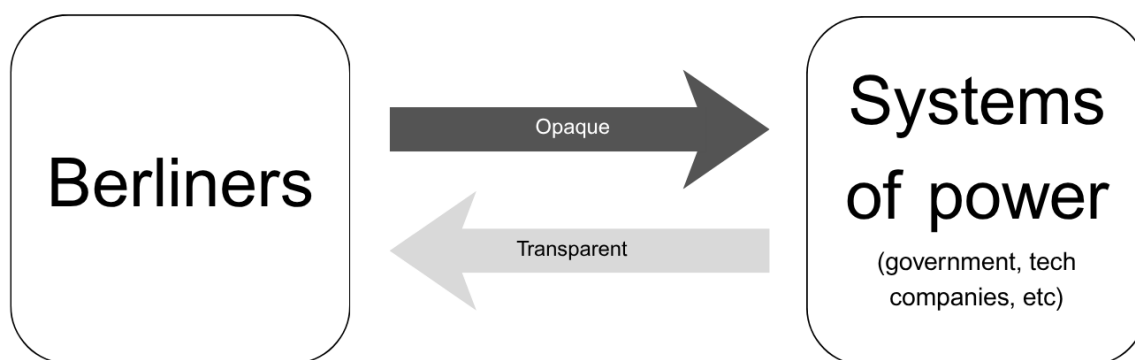


Figure 16 Graphic illustrating the flow of opacity ideal for subcultural determinism between Berliners and those who govern them

The first part of this paper has explained why Berlin communities value opacity for themselves and the specific threats they perceive to their opacity from Big Tech. This section argues that Berlin communities view opacity not just as a boundary against being observed, but also as a claim about the directionality of transparency between communities and power. Subcultures in Berlin struggle for transparency to be unidirectional, where power is made transparent, but those subject to power are opaque. They ask for the burden of explanation and transparency to be redirected away from themselves. The clearest present-day test of this direction of transparency is the campaign against the restrictions planned for Germany's Freedom of Information Act (IFG), which gave any person a right to information held by the government and administration.⁷⁵ A new exemption to the Act could undermine the mechanism that once ensured data center projects were subject to public scrutiny.

Following a January 2025 attack on a cable bridge in Berlin, which left thousands of households without power for days, Kai Wegner, the mayor of Berlin, reflected on the IFG: "We have to put an end to too much transparency."⁷⁶ The idea was that information regarding critical infrastructure that the IFG requires to be made accessible makes infrastructure more vulnerable to being attacked. The government's response, however, has generated intense backlash, specifically because of the new exemption that removes the law's application entirely whenever information concerns critical infrastructure. When asked which facilities Berlin's Critical Infrastructure

⁷⁵ Federal Act Governing Access to Information held by the Federal Government (Freedom of Information Act), 5 September 2005, as amended by Article 2 of the Act of 7 August 2013 (Federal Law Gazette I, p. 3154), trans. Language Service of the Federal Ministry of the Interior, § 1, https://www.gesetze-im-internet.de/englisch_ifg/englisch_ifg.html

⁷⁶ Mark Hallam, and Timothy Jones. "Germany News: Economy Narrowly Avoids 3rd Year of Recession." Dw.Com. Accessed September 21, 2026. <https://www.dw.com/en/germany-news-economy-narrowly-avoids-3rd-year-of-recession/live-75513024>.

Coordination Office covered, the Senate Department refused to answer, employing the reasoning that the question itself has to do with critical infrastructure, and is therefore exempt from the IFG.⁷⁷

In July 2026, more than 130 civil society groups signed an open letter opposing the changes.⁷⁸ Among them is the Chaos Computer Club, Europe's largest hacker association⁷⁹ with a large presence in Berlin. They express their concern for the new changes to the IFG:

“Today's Freedom of Information Act (IFG) grants everyone a legal right to access government documents without having to provide a reason. It reverses the relationship between the state and its citizens: citizens no longer have to justify why they are entitled to know something; instead, the state must justify why it wants to conceal something.”⁸⁰

The state decided, without input from the general public, that “critical infrastructure” should sit beyond the reach of Germans, and in doing so, safeguarded that which tech companies want most: opacity. Transparency often means more oversight, democratic deliberation, and community dialogue, which many tech companies view as obstacles in the way of progress. Large tech companies' demand for opacity is evidenced by the prevalent use of NDA agreements between developers and government officials while discussing data center development and location in the US.⁸¹ Data centers themselves physically obscure their internal workings, often resembling drab warehouses on the side of the freeway, so the rationale is that if the process by which they arrive is also obscured, communities cannot object to what they never even knew was being decided on their behalf.⁸² As Germany builds out its sovereign AI stack, it remains unclear whether Berlin will learn from the failures of American lawmakers in securing community consent and ensuring transparent approval processes. Berlin communities view land and opacity for themselves, and transparency to power, as the preconditions for subcultural self-determination, where if either is threatened, so is authorship of community futures. That said, some of the issues related to AI development in Berlin are still not widely discussed. Jo Tiffe said that there is a slow reckoning among people about the risks of AI, but the majority are still not aware of its harms. We view the IFG critical infrastructure exemption as the start of what will increasingly be on the minds

⁷⁷ FragDenStaat. “Berlin: Informationsfreiheits-Fiasko mit Ansage.” June 17, 2026.

<https://fragdenstaat.de/artikel/policy/2026/06/informationsfreiheits-fiasko-mit-ansage/>.

⁷⁸e.V., Transparency International Deutschland. “Breites Bündnis warnt: Koalition will Informationsfreiheitsgesetz faktisch abschaffen.” Transparency International Deutschland e.V. Accessed August 3, 2026.

<https://www.transparency.de/aktuelles/detail/article/default-4f963cc1f7fc0b8875b2dee6ac65b796>.

⁷⁹Chaos Computer Club. “Startseite.” April 23, 2009. <https://www.ccc.de/>.

⁸⁰Chaos Computer Club. “Abschaffung der Informationsfreiheit verhindern!” July 7, 2026.

<https://www.ccc.de/updates/2026/abschaffung-der-informationsfreiheit-verhindern>.

⁸¹Natalie Kainz, “How Big Tech Uses NDAs to Hide AI Data Center Details from Americans.” NBC News, October 28, 2025. <https://www.nbcnews.com/tech/tech-news/data-center-ai-google-amazon-nda-non-disclosure-agreement-colossus-rcna236423>.

⁸²Ezra Klein, host. The A.I. Revolt Is Here . The Ezra Klein Show. August 4, 2026. <https://www.youtube.com/watch?v=rbgvTlt1VB8>.

of Berliners as data centers begin entering Brandenburg without the mechanism that once ensured data center project plans were made accessible to the public.

The first part of this paper explored reasons Berlin communities fight for opacity while demanding transparency from institutions of power as a means for self-preservation against domination.

1.4.1: Open-source: the technological embodiment of unidirectional transparency

Amongst artists who openly use AI, many express a preference for open-source models when available, while acknowledging that established AI models are often more powerful. The students at Technical University Berlin, despite voicing disapproval of the Big Tech products they use, admitted that “if we didn’t have Claude Pro, we wouldn’t have built this.”⁸³ As Kalam Ali — music-tech AI builder-strategist and cofounder of Sound Obsessed — explains, open-source models give artists the ability to “get away from the dependency” that comes from relying on American AI companies.⁸⁴ It is not just dependency on companies culturally maligned to Berlin that garners trust for open-source technology. An anonymous programmer at the Chaos Computer Club, for instance, shared concern about using Claude because Anthropic would be able to see his entire codebase. Artists also voice concerns about the biases that are embedded in the obscure training processes of closed-source AI models. Both concerns map onto our diagram that highlights the directionality of opacity and transparency. From our observation, Open-source tools are regarded as the technological embodiment of unidirectional transparency, offering users a window into the inner workings of technological development while simultaneously enabling user autonomy and privacy. As Alexandra Cárdenas, a livecoder and pioneer of the algorave community, stated succinctly: “open-source is an ideology.”⁸⁵

⁸³ Technical University (Berlin) Students, conversation with the research team, Berlin Germany, July 17, 2026.

⁸⁴ Kalam Ali, interview by the research team

⁸⁵ Alexandra Cardenas, interview by the research team

Part II: How do Berlin communities respond to the threats they perceive through artistic expression?



Figure 17 : Poster reading “No AI surveillance in our neighborhoods”, seen in nearby RAW-Gelände (cultural center in Friedrichshain)



Figure 18 Sign in support of Snowden and Assange along Kalitzer Straße (Kreuzberg)

In the above section, we discuss the reality that for communities to retain subcultural self-determination, they must have 1) opacity and space for future-making away from the influence of Big Tech, and 2) demand transparency from existing tech powers. The sections that follow examine how art functions as a tool of resistance in two ways.

First, art serves to direct transparency back at power by exposing future narratives and thwarting the attempts of Big Tech to push narratives that depend on the public not examining them. Second, art is used as a tool of open-ended future-making, in which alternative futures that include the voices of communities can be conceived of and presented in public space. We focus on four art forms in Berlin where these two functions are most visible: techno, street art, tactical media and hacktivism.

2.1 Art as a tool to make centralized power transparent and disrupt singular narratives

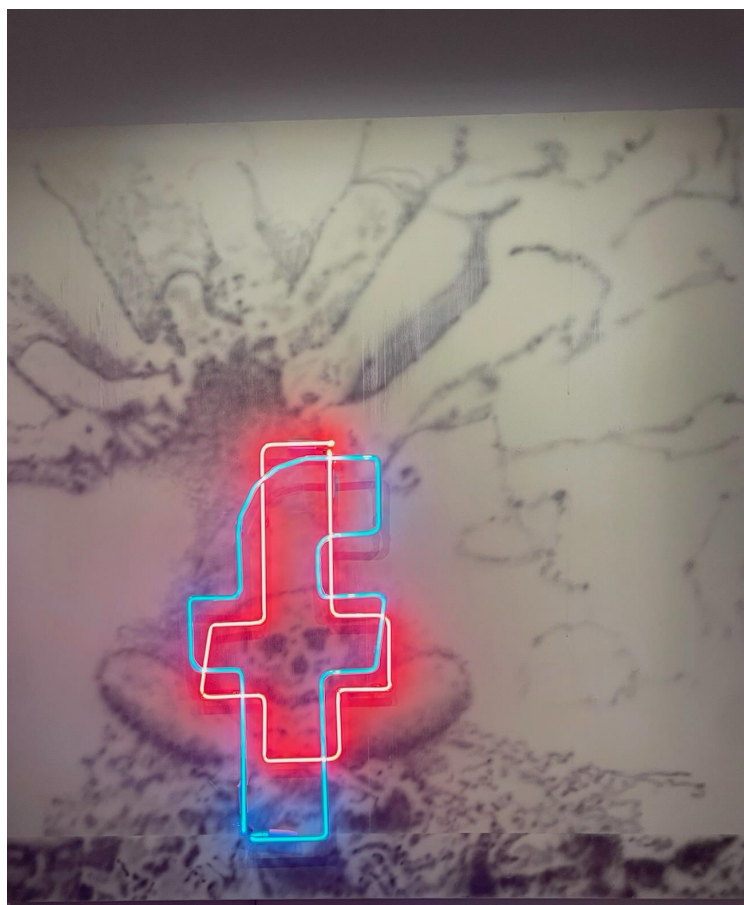


Figure 19 Work in BROMANCE exhibit displaying Facebook's logo overlaid with upside-down cross

Art exposes the hidden infrastructure and processes of technological power. According to Thierauf, the future will only become an object of controversy when “a taken-for-granted aspect of daily life becomes the focus of ‘intense public interrogation.’”⁸⁶ Artists are able to render systems designed not to be examined – such as data centers, surveillance systems, and data extraction visible so that they can become political questions rather than technical inevitabilities.

Jo Tiffe's 2022 installation *GANcud*, staged at the Lause in Berlin, exemplifies this function of art by exposing a process that AI companies normally obscure: the manual construction of training data (See Figure 20). Behind every generated image lie datasets that are curated by humans who have scraped websites and archives. *GANcud*

purposefully chose an unglamorous subject of discarded face masks from the pandemic as its focus point. The participants first had to collect, organize, and individually photograph several hundred masks to be fed into the StyleGAN model to generate images. The process shows the amount of data that is needed to train AI models, pointing to issues of internet scraping. The masks collected were also arranged into an image of a face on the ground. By making participants gather masks to mimic the normally hidden labor of curating datasets, the work disrupts the illusion that AI-generated imagery emerges effortlessly from computation alone. The installation reminds the audience that AI systems, despite their power, rely on human decisions and actions to function. It also reveals that AI systems are never completely autonomous or neutral: they reflect human choices and biases, and therefore must be adequately examined.

⁸⁶ Thierauf. “Fixing the Future?”

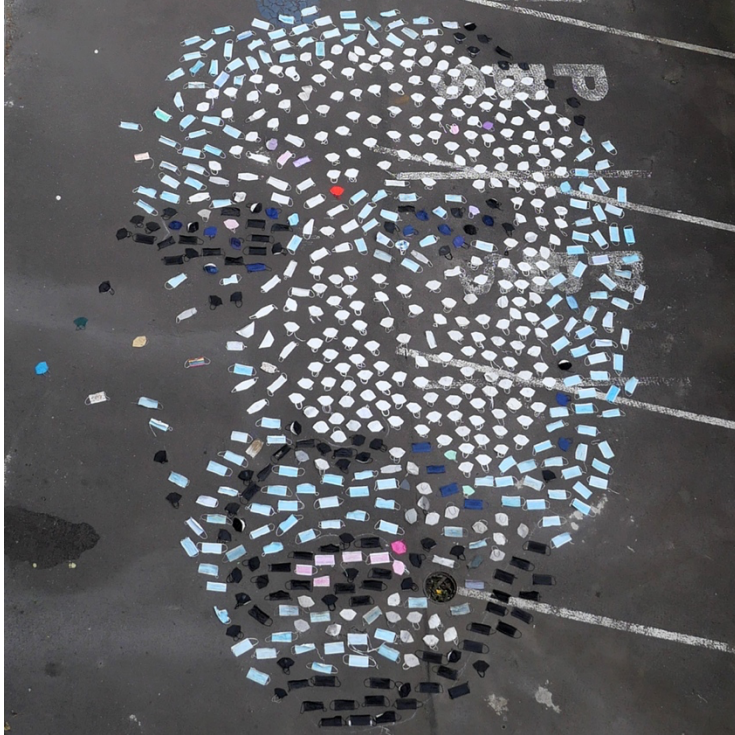


Figure 20 Jo Tiffe's GanCUD Featuring Discarded Facemasks

The infrastructure concealed by the singular narratives pushed by tech powers is not just material, but also political. Art doubly functions to reveal such political messaging. As mentioned in our first section, Tesla's Gigafactory tells a story of green transitions and development for the community it's housed in. In January 2025, a British campaign group called Led By Donkeys disrupted this utopian future by projecting Elon Musk's Nazi-style salute at US President Donald Trump's inauguration onto the facade of the Tesla Gigafactory⁸⁷, along with the word "Heil" to form the phrase "Heil Tesla" (See Figure 21). The projection challenged people's views that the

Gigafactory is a neutral site where a green future is built and transformed it into an arena for political debate and protest. Pictures of the projections generated mass discussions online with more than 190k likes and almost 2,000 comments. Thierauf's "place of contestation" was created through the projection, becoming a topic of political debate and attention.



Figure 21 Projection of Elon Musk's Nazi-style salute on Tesla Gigafactory in Grünheide

⁸⁷ Deutsche Welle, 2025, "Police Investigate Musk Salute Projected on Tesla Factory." Dw.Com, Deutsche Welle, January 24, <https://www.dw.com/en/germany-musk-tesla-nazi-salute/a-71403737>.

2.2 Art as a process for open-ended future-making



Figure 20 Poster seen at Mauerpark reading "STOP THE WARMONGERS!"

Art's political function extends beyond making technological narratives and overlooked infrastructure visible. Art is the medium and creative practice that enables communities to build alternative futures. Unlike policy mandates or singular narratives pushed by tech companies, which require compliance, art asks for attention, and the audience has the autonomy to decide whether that attention should be given or withheld. Kukla argues that street art "can be a restructuring force that changes how a space is legible or interpretable to its users."⁸⁸ This restructuring of legibility, beyond the content itself, gives art its future-making capacity. Because of the open-ended nature of art itself, many different, even conflicting, voices can shape the same space at once, rather than one narrative overriding the rest.

Teufelsberg is one of the examples of the second function of art. Built on top of WWII rubble with a complicated history as a Cold War American listening station, the space was abandoned for two decades. Developers have tried multiple times to commercialize and utilize this space with no luck, leaving it abandoned and foreclosed. Yet when people started adding graffiti to the abandoned space, it was transformed into a vibrant creative hub where people could express identity and share political messaging. Art has completely transformed the meaning and the future

⁸⁸ Quill Kukla, 2020, "Street Art, Place-Making, and Anti-Capitalist Spatial Activism." In Spectre Journal. <https://spectrejournal.com/street-art-place-making-and-anti-capitalist-spatial-activism/>.

of the space. The future of Teufelsberg is still in flux, with new artworks being added to the site⁸⁹ by international artists every month.⁹⁰



Figure 21 Teufelsberg then and now: Cold War Listening Station Turned Park Built on Top of Berlin Rubble

In Berlin, this same openness is what allows marginalized perspectives to gain a foothold in future-making. These perspectives contribute to a culturally vibrant, inclusive, and open-ended future for Berlin. “I never have seen so much diversity in music and in people in Berlin as there is now,” says

Leichsenring, pointing

to Brazilian beach parties and the Black-owned, African funk-playing club Maaya.⁹¹ Visibility is power, and in an art-driven city, the emergence of different subcultures forms an alliance of power to disrupt dominant culture.

Berlin’s present-day openness is not a recent phenomenon. It has its roots in the liberating techno culture, which has a historical lineage of marginalized communities seeking freedom. It started in Detroit in the early 1980s, where technological progress gave rise to techno and became the music of the forward-looking Afrofuturism movement.⁹² The movement, dedicated to envisioning a future of black liberation, repurposed the sounds and imagery of automation into an art form. In the late 1980s, techno made its way to East Berlin, where it found home in the post-wall backdrop, claimed by communities who also shared dreams for a future of freedom and reinvention. From the start, Berlin’s clubs were spaces of inclusivity, and many of Berlin’s clubs formed around LGBTQ communities. Berlin’s queer community, in ways that ran parallel to Detroit’s Black community, saw nowhere to go but look to the future. Techno was the lens through which a marginalized population could realize their utopian vision of a future of freedom and liberation. Tresor, opened in 1991 in a former department store’s abandoned bank vault, shows how a space built to secure capital was repurposed into a site of collective freedom, where people

⁸⁹ Spudnik, 2024, “Teufelsberg Tale.” Abandoned Berlin, August 19,

⁹⁰ VisitBerlin, 2024, “Teufelsberg.” [Www.Visitberlin.De](https://www.visitberlin.de/en/teufelsberg), March 8, <https://www.visitberlin.de/en/teufelsberg>.

⁹¹ Lutz Leichsenring, interview by the research team

⁹² “Ask the Expert: How Detroit and Its People Are Integral to the Rise of Techno Music.” Accessed September 21, 2026. <https://arts.msu.edu/story/ask-the-expert-how-detroit-;and-its-people-are-integral-to-the-rise-of-techno-music/>.

from both former East and West could express themselves freely and imagine futures together.⁹³ Techno's placemaking did not just fill empty space; it turned abandoned property into an open and contested space of self-invention, shaping the emotional and social terrain of a reunifying city. To this day, techno is still a core part of Berlin, continuing to shape the city by claiming yet not dictating space.

In 2018, when thousands of supporters of the AfD, Germany's far-right political party, convened at the Brandenburg Gate to show political support, Berlin's techno scene met them in the streets⁹⁴. Counter-demonstrations organized by 100 clubs had boats and floats cruising down the River Spree and trucks with DJs to accompany the AfD march. One group statement said, "The Berlin club culture is everything that Nazis are not. We are progressive, queer, feminist, anti-racist, inclusive, colorful and we have unicorns."⁹⁵ The presence of clubs and their use of techno in the protest scene ensured that there were diverse voices at a far-right political rally, making sure that the building of Berlin's future will not go uncontested.



Figure 22: Boats on the during the AfD Protest



Figure 23: DJ trucks at the AfD Protest

The creation of alternative voices is also visible in Helena Nikonole, a Berlin-based artist and researcher working at the intersection of art, technology, and activism, who developed Guerrilla Wearables, a project that incorporates fashion and wearable technologies that enable off-grid private communication, especially when there are internet restrictions. Dissatisfied with the limited practical impact of existing art and activism, Nikonole turned toward hacktivism because she wanted to achieve "more practical impact." Her project goes "beyond artistic context" by developing technologies that people can use during protests or in war zones. The device aids mobilization among communities under surveillance, allowing the making of alternative voices and futures even when there is severe repression. Nikonole wants to move artistic practice beyond

⁹³ DW History and Culture. "How Techno Shapes the Future." YouTube, October 8, 2023. <https://www.youtube.com/watch?v=JQEYL2fI9VU>.

⁹⁴ Agence France-Presse, "Thousands from Far Right and Berlin's Techno Scene Face off in Rival Rallies." World News, *The Guardian*, May 27, 2018, <https://www.theguardian.com/world/2018/may/27/thousands-from-far-right-and-berlins-techno-scene-face-off-in-rival-rallies>.

⁹⁵ Agence France-Presse, "Thousands from Far Right and Berlin's Techno Scene Face off in Rival Rallies."

galleries and reach broader communities, including those without specialized technical knowledge. Yet she does not see this practical turn as requiring a departure from art. She describes herself as a “trickster,” moving across artistic, activist, and technological communities rather than being confined to any one of them, and sees being an “outsider” between these communities as valuable. Her work therefore illustrates how art can retain its openness and experimental character while extending into the more practical domain of intervention and futuremaking.



Figure 24 Helena Nikolone's *Guerrilla Wearables Design*

Art's political value lies not in prescribing a solution or promoting a certain idea about technological change, but in refusing the certainty on which technological determinism depends. Rather than demanding consensus, art invites interpretation and reflection. As artist William Kentridge emphasizes he is interested

in “an art of ambiguity, contradiction, uncompleted gestures and uncertain endings.”⁹⁶ It is this ambiguity that enables audiences to become participants in future-making. As Livia Nolasco-Rózsás, a curator and researcher working at the intersection of art, data, and technology said, “the artworks are not shown to generate consensus but to render visible the networks of association and stakes that structure contemporary conditions.”⁹⁷ In Berlin, the political strength of art lies not in providing answers, but in ensuring that the future remains open to question.

⁹⁶ Petersen, Robin. “Art | William Kentridge.” *Kentridge.Studio*, August 8, 2023.

<https://www.kentridge.studio/stumbling-to-utopia/>. Quomamake,,ke,,ting William Kentridge

⁹⁷ Nolasco-Rózsás, *DATAS: The Data and the Sovereign*

Potential Limitations

Honoring the “right to opacity.” In acknowledging and writing about how Berlin communities struggle for the right to opacity, it would be ironic, for the purpose of this paper to be making these communities perfectly explainable. As outsiders, we sought to understand how art is a visible tool of resistance and the ways in which communities safeguard this tool. Through field research and conversations with artists, who shared only what they are comfortable sharing about the scene, we focused on what is publicly expressed, and therefore studied resistance from the vantage point at which these communities want to be seen. We recognize that we don’t have a perfect grasp of subcultural attitudes toward technology. But as Glissant reminds us, “To feel in solidarity with him or to build with him or to like what he does, it is not necessary for me to grasp him.”⁹⁸ While we were surprised by how high our response rate was from cold emailing artists, researchers, technologists, and other experts, we recognize that those who were willing to speak with us represent the most open and transparent edge of a scene that is defined by its opacity. The “no photos allowed” sign outside Köpi, alongside our unsuccessful attempts to gain admission into Berghain, served as a powerful reminder of how much of the Berlin scene is out of our reach.

Time constraint. Our 6-week stay in Berlin constrained how many voices we could hear from Berlin’s communities and the time we could take to get to know them. As such, our interviews cannot be taken to be representative of all of Berlin’s communities.

Reliance on publicly displayed art. Fieldwork involved photo journaling in specific neighborhoods, where the art that was most visible to a pedestrian was what we noted. Further, we came across a number of the artists we interviewed through public installations and galleries, limiting our representation of the ideas of artists that exist primarily in the subculture or underground space.

Diversity of interviewees. Though we endeavored to reach out to people and organizations who occupied a variety of different spaces, including musicians, artists, startup employees, and activist groups, our interviews are not a comprehensive sample of Berliners’ attitudes. Particularly, groups that operate in unofficial or semi-legal capacities, like some hacktivists and activists, were, understandably, harder to get in contact with. Even within the artist/musician category, we communicated more with those who are pro-AI, as most of the Berlin-based art we found that addresses AI employed the technology.

Language barrier. Some of our artifacts, including the Brandenburg planning documents, Freedom of Information Act campaign, and club culture theory, exist in German. Putting readings through Google Translate inevitably means the loss of meaning.⁹⁹ Moreover, our interviews were all conducted in English. Particularly for those who spoke English as a second language, connotations of words and phrases undeniably vary across linguistic backgrounds.

⁹⁸ Édouard Glissant. *Poetics of Relation*.

⁹⁹ Yehoshua Bar-Hillel, “The Present Status of Automatic Translation of Languages,” in *Advances in Computers*, vol. 1, ed. Franz L. Alt (New York: Academic Press, 1960), 91–163, [https://doi.org/10.1016/S0065-2458\(08\)60607-5](https://doi.org/10.1016/S0065-2458(08)60607-5).

Unanswered Questions and Future Directions

If a space is both “radically inclusive and intensely guarded”, who is included and who exactly is the guarding meant to keep out? Guarding doesn’t have to imply protecting one specific identity, but it does imply that some people are not welcome. While being someone who moved to Berlin as an adult, Alexandra Cárdenas pushes back on the premise that Berlin subcultural spaces are truly spaces for open dialogue given their guarded nature: “it’s a safe space, supposedly... but it’s only safe and inclusive for people who think the same.... I think live coding should be open for everyone. And now it seems that a lot of people don’t think that way.”¹⁰⁰

What can be said about the forms of art that are embraced in Berlin versus rejected? We ask: why is it that livecoding hasn’t gained traction in Berlin? The practice of improvising code using open-source tools projected on a screen for anyone to view transparently seemed so characteristically Berlin. However, it is not yet embraced by the city. Is Berlin resistant to incoming art forms that originated elsewhere? This, we believe, is unlikely given the range of emerging art forms our interviewees described, and Leichsenring’s observation that Berlin’s scene is the most diverse he’s ever seen, citing clubs like Maaya that play afrobeats instead of strictly four-to-the-floor techno music. Perhaps live coding is too open a practice for Berlin’s protected, guarded ethos, or maybe live coding will find its footing, and it is too early to make the claim that Berlin rejects live coding.

Why are Berlin communities not more concerned about the local community impacts of data centers? What should be done to raise awareness?

Germany holds roughly 4.4% of data centers globally (after the US with 38% and the UK with 5%)¹⁰¹, and within Germany the Frankfurt region carries the main share (around ⅓) of data centers.¹⁰² Still, the Berlin-Brandenburg area has already begun the rollout of data centers, particularly as Frankfurt’s resources and power grid become strained and public opinion pushes for decreased reliance on foreign AI. Nonetheless, data centers did not emerge as a concern in our conversations and investigations, even when working with those who specifically inhabit activist spaces. This supports our finding that what Berliners choose to organize against is not necessarily arbitrary, but resists a clean theory.

Younger generations are making up an increasingly small percentage of club-goers. Is this more so due to social shifts or a failure of clubs to bring new perspectives in? The Club Commission found the average age of a Berlin club-goer has increased to 30, with only 9% of club-goers 18–21 years old.¹⁰³ Our interviewees brought in opposing ideas about this loss. Dr. Jóri pushes back against simply scapegoating the next generation; at the same time, she says digitalization has made younger club-goers fundamentally different, who now don’t “understand

¹⁰⁰ Alexandra Cárdenas, interview by the research team

¹⁰¹ Rasmus Leichter, “Number of Data Centers by Country (November 2025),” Cargoson, last updated January 4, 2026, <https://www.cargoson.com/en/blog/number-of-data-centers-by-country>.

¹⁰² Jungblut, “Germany’s Data Center Boom Is Pushing the Power Grid to Its Limits”

¹⁰³ Joe Baur, “Is This the End of Berlin’s Famous Club Scene?,” *BBC Travel*, January 14, 2025 <https://www.bbc.com/travel/article/20250113-is-berlins-famous-club-scene-ending>.

the unwritten rules of clubbing.”¹⁰⁴ Strobel also suggests that “this generation...they already have a kind of anxiety for other people.”¹⁰⁵ Gruber points to how clubs relate to their audience as one factor among several. He cites Watergate's Uli Wombacher, who observed that "generational leaps are quick in this business" — the average clubber goes out for a few years before the next cohort arrives. For Gruber, rising prices matter, but a club that doesn't keep pace with the next generation loses it.¹⁰⁶

¹⁰⁴ Dr. Anita Jóri, interview by the research team

¹⁰⁵ Matthias Strobel, interview by the research team

¹⁰⁶ Albert Gruber, interview by the research team

Conclusion



Figure 25 Sign posted on a wall outside of the Renate club asking potential renters and buyers to consider the neighborhood's cultural significance before moving in.

Our first question asked to what extent tech companies threaten Berlin communities' ability to determine their own cultural future and how art can be an important tool to empower social change. Our qualitative research revealed that Berlin communities regard physical space, opacity for themselves, and transparency for those in power as the preconditions for cultural authorship and community future-making. These are also the conditions Big Tech threatens most. As Thierauf reflects, "The opposition against the factory makes evident the need for a democratic space in which disparate future visions can clash with each other and be recognised as alternatives."¹⁰⁷ Art functions in Berlin both as a tool to make technological narratives of inevitability visible, and as one such medium where alternative futures can be built and allowed to "clash" with those presented by large tech corporations.

Our second question asked how and why Berliners respond to the threats they perceive. We find that Berliners are most skeptical of technology when it is the product of powerful corporations, especially those in the business of centralized data collection that has defined some

¹⁰⁷ Thierauf. "Fixing the Future?" 220

of Berlin's darkest periods. Art functions as a tool of resistance in two ways: making hidden power transparent by disrupting singular narratives, and enabling communities to build open-ended futures. In zooming in on art as a tool of resistance and community future-making, we acknowledge that Berlin also exhibits unique forms of non-artistic resistance.

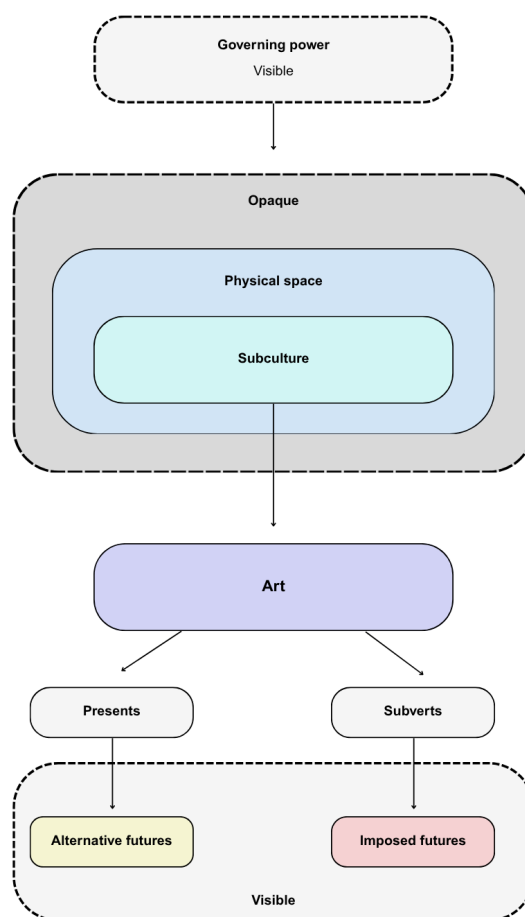


Figure 26 Diagram summarizing interplay of power, subcultures, art, and futures

A throughline that should become apparent from reading our reflections in the preceding two sections is that Berlin is a city of contradictions and tensions that resists cleanly formulated theories and the norms of academic writing. Berlin's art scenes have grown out of resistance to oppressive governments and societal turbulence. In the world that AI is shaping, that resistance, as is detailed in our Unanswered Questions / Future Research Directions section, did not always take the shape we expected. When asked about whether art needs a definition, Alexandra Cárdenas succinctly captured a truth that took us nearly 6 weeks to understand about Berlin. At a certain point, Cárdenas says, "we need to learn to shut up the intellectualism and understand that

everything comes together.”¹⁰⁸ We interpret Cárdenas's words as a reminder that while our analysis can help to identify pressures likely to be felt more strongly by communities, culture in Berlin will ultimately be sustained by the city's self-organized and diverse forms of resistance. Increasingly, whether Berlin communities are able to effectively take root will depend on the extent to which politicians and developers recognize Berlin's culture as an asset to protect rather than an obstacle in the way of a future the city is told to embrace.

Although this paper stresses the importance of art, art and cultural recognition must not be the sole method that protects communities. The comparison to Grünheide raises the question of how communities that lack Berlin's wealth of culture and community organizing ability can mount resistance. What little resistance Grünheide was able to mount against Tesla was made possible by Berliners and professional protest organizations, such as Ende Gelände, travelling to the small town outside of the city.¹⁰⁹ In March 2024, Berlin's techno scene was added to the “country's list of intangible cultural heritage,” further reinforcing this recognition and giving techno club culture institutional legitimacy in policy. This recognition and legitimacy give Berlin's communities greater power when challenging corporate developments. Lutz Leichsenring adds, this decision helped protect clubs as a “valuable sector worthy of protection and support.”¹¹⁰ Recognition of Berlin's history serves as a powerful driver of change. “If you don't care in Berlin, I don't know where else you will care”, a Berlin-based musician and producer, acknowledged.¹¹¹

While Berlin's perceived cultural significance is a useful tool in preserving established communities, relying on it as the sole basis for protection can disproportionately burden communities with less recognized cultural importance. Protecting communities, therefore, means more than celebrating recognized cultural assets; it requires transparent policymaking, space for political discourse, and community involvement in decisions concerning development.

The orientation of the Reichstag Dome, where transparency runs in one direction toward power positioned below the public and opacity runs in return, symbolizes a relationship but, importantly, does not foreclose the possibility that it may one day be inverted. The architecture describes a relationship between the public and institutions of power that, crucially, must be maintained. Our fieldwork and interviews revealed the work that Berlin communities do to protect the meaning of this national symbol.

¹⁰⁸Alexandra Cárdenas, interview with the research team

¹⁰⁹ “Aktionstage gegen Tesla.” *Ende Gelände*, n.d. Accessed August 12, 2026. <https://www.ende-gelände.org/news/aktionstage-gegen-tesla/>.

¹¹⁰Aneesa Ahmed. “Germany Adds Berlin's Techno Scene to Unesco Cultural Heritage List.” *World News. The Guardian*, March 15, 2024. Quoting Lutz Leichsenring <https://www.theguardian.com/world/2024/mar/15/berlins-techno-scene-added-to-unesco-intangible-cultural-heritage-list>.

¹¹¹ Berlin based education technology professional, interview by the research team

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