frontiers | Frontiers in Communication

TYPE Original Research
PUBLISHED 29 December 2025
DOI 10.3389/fcomm.2025.1603650

OPEN ACCESS

EDITED BY
Esther Lea Neuhann,
Free University of Berlin, Germany

REVIEWED BY
Hamidulloh Ibda,
Institut Islam Nahdlatul Ulama Temanggung, Indonesia
Donovan Van Der Haak,
Tilburg University, Netherlands

*CORRESPONDENCE
Niclas Rautenberg
✉ niclas.rautenberg@uni-hamburg.de

RECEIVED 11 April 2025
ACCEPTED 15 October 2025
PUBLISHED 29 December 2025

CITATION
Rautenberg N (2025) The digital classroom as a site of political intervention? Existential-phenomenological considerations in the entangled times of digitalization and authoritarianism.
Front. Commun. 10:1603650.
doi: 10.3389/fcomm.2025.1603650

The digital classroom as a site of political intervention? Existential-phenomenological considerations in the entangled times of digitalization and authoritarianism

Niclas Rautenberg*

Research Group for Ethics in Information Technology, University of Hamburg, Hamburg, Germany

The digitalization of the university coincides with a strengthening of totalitarian projects in liberal democracies. For their own sake as well as for democracy's, academics must be able to intervene in moments when the classroom becomes a site of anti-democratic resentment. But what happens when the classroom becomes increasingly digitalized, i.e., when seminars and lectures take place via digital media instead of the 'physical' classroom or lecture hall? This article presents a philosophical, more specifically: existential-phenomenological, argument to cast doubt on the adequacy of such online spaces to battle anti-democratic resentment. In order to show this, it discusses three key phenomenological critiques of digital learning—e.g., Dreyfus's critique of telelearning, Wellner's 'Zoom-bie' student, and Aagaard's 'habitual distraction'. *Pace* Dreyfus and Wellner, I argue that the problem with the digital learning situation is not one of fundamental lack, but of overabundance. Building on Aagaard, I understand the screen as a portal that solicits several projects simultaneously, whereby the instructor attempting to political intervene rivals for attention with myriad other sources 'luring in' the habitually attuned student. The concluding section of the paper makes some general observations about the private nature of digital learning environments and of the platforms that they rival for attention with, and the need to think political resistance in online spaces anew.

KEYWORDS

digital learning, videoconferencing, democracy, political intervention, philosophy, existential phenomenology

1 Introduction

Michael S. Roth, president of Wesleyan University, recently argued that democracy and academic freedom are interdependent (Roth, 2024, 1 November). On the one hand, academia thrives in a political regime that allows for freedom of thought in laboratories and lecture halls; when authoritarianism is on the rise, higher education is usually among the first institutions under attack (The NYT Editorial Board, 2025, 15 March). On the other hand, a democratic polity benefits from the knowledge that the university produces and the critical thinkers that it trains. Roth's op-ed was published, crucially, a couple of days before Donald Trump's re-election in the US. Since then, the second Trump administration seems to be doing everything in its power to dismantle democratic safeguards, among which we find elite and non-elite institutions of tertiary education (Blinder, 2025, 20 March).

Louise Richardson, former vice-chancellor of the University of Oxford and the University of St Andrews, says in an address at Harvard that '[r]esisting tyranny' is a vital part of academia's responsibilities (Richardson, 2023). It may honor this obligation in different ways. One line of defense, as observed in Harvard's current efforts (Patel, 2025, 20 June), is the judicial path, i.e., seeking courts to block and roll back some of the government's most egregious intrusions. Another, as mentioned by Richardson herself, is to take in academics from countries that are descending into authoritarianism—a strategy we also see on display right now in, for example, Canada, France, Belgium, and the Netherlands (Kassam, 2025, 25 March; Le Monde, 2025, 27 June; Lopez and Wang, 2025, 27 March; Maiberg, 2025, 12 March).

The strategy that this essay is concerned with is the turning inward of universities and defending democracy in lecture halls and seminar rooms. More precisely, what I am interested in here is the potential for universities to instill democratic values and defend these values when anti-democratic resentment blossoms. The US's academic history shows that this usually takes the form of introductory modules on democratic and civic education or of facilitating on-the-ground community service by the student body—even though efforts toward the former have ebbed since the 1960s and learning effects of the latter on *democratic* citizenship seem insufficient (Daniels et al., 2021, esp. ch. 2).

But even *if* such measures *had* been more effective in relatively peaceful times, they certainly are not enough at a time like ours. Instead, it seems that it falls on instructors to politically intervene when students reproduce and disseminate clearly antidemocratic sentiments *during class*—i.e., when they vent opinions and ideas of an authoritarian, racist, sexist, or otherwise oppressive flavor. Importantly, I understand this responsibility *not* to be restricted to certain departments, but to extend to STEM, sports programs, and business schools. When democracy is under attack, as it is in virtually every liberal democracy at the moment, students will get in touch with antidemocratic convictions regardless of their disciplinary background and may thus air them in any module. Relegating the duty to intervene to university teachers from politics departments would leave such claims largely unchallenged.[1]

However, the recent rise of right-wing authoritarianism coincides with the advancing digitalization of the life-world (Ollinaho, 2018). To say that these two processes are unrelated seems cynical at the latest since Trump's inauguration ceremony (Davies, 2025, 18 January). The interplay between Silicon Valley's tech enthusiasm and anti-democratic ambition is only the newest iteration of a conspicuous entanglement of technology and totalitarianism (Marcuse, 1961/2002; Marcuse, 1941/2004; Marcuse, 1964/2013)—and even if this liaison seems temporarily stifled since Elon Musks's retreat from the 'Department of Government Efficiency' (Hayes and Drenon, 2025, 29 May), it is far from clear whether this ends (some) tech billionaires' authoritarian leanings in the long term (LaFrance, 2024, 30 January).

What implications do these twin-developments have for the university and tertiary education? Ever since the COVID-19 pandemic, instructors have become more accustomed to delivering lectures and seminars online. Apart from open universities that operate almost exclusively online—although even *their* programs may contain in-person events—tertiary education has mostly moved back to teaching in 'physical' spaces. But it is unlikely that the trend will be completely reversed. With increasing personal mobility and digitization, the virtual classroom has come to stay.[2] What does that do to the instructor's task to protect democratic values? Or, to put it differently, what does it mean for defending democracy if the teacher-student relationship becomes virtualized? Can the *digital* classroom be the site of political intervention for the sake of democracy?

In this critical essay, I want to advance a philosophical, existential-phenomenological argument that casts doubt on the digital classroom as an appropriate place for political intervention. Crucially, *pace* other phenomenologists, I will argue that it is not a fundamental lack of the digital because of which political interventions are ineffective on Zoom or Teams—to the contrary, the problem is that the digital realm offers an *overabundance of possibility*, i.e., it offers myriad spaces conducive to multiple projects *instantaneously*. To show this, I introduce in a first step a (brief) existential-phenomenological account of political intervention; drawing on the ideas of philosophers like Martin Heidegger, Maurice Merleau-Ponty, and Bernhard Waldenfels, I distinguish between intervention and interruption, and argue that political intervention involves the redirecting of an event into a productive revealing of other ways to understand and act in the *polis*. Second, I interrogate the specific situation of the classroom, in both its analog and virtual form, by assessing three influential phenomenological critiques of learning in digital times—Dreyfus's critique of telelearning, Wellner's 'Zoom-bie' student, and Aagaard's 'habitual distraction'. While Dreyfus's and Wellner's positions represent the 'lack thesis' in the phenomenological literature on online sociality, Aagaard's ideas pave the way for the 'overabundance thesis'. In my concluding remarks, I argue that the current political and digital development should give us reason for pause. These spaces are not meaningfully public and thus do not allow for the kind of political encounter needed to battle anti-democratic sentiment—something we sometimes need to do even in a lecture on business administration, or biology, or mathematics, or medicine.

The paper advances the debate on three fronts: first, while political education is hardly a new concern for philosophers of education and political theorists (e.g., Brownhill and Smart, 1989; Callan, 1997; Engel, 2008; Euben, 1997; Keehn, 2022; Kettler, 2002; Lilja, 2018; Moilanen, 2025), the responsibility of university instructors of any department to intervene when students in the classroom begin to vent anti-democratic sentiment remains, thus far, undertheorized. Second, these investigations rarely engage with the issue from a phenomenological angle (for an exception, see Frazer, 2006). This paper, in engaging with the phenomenology of digital education *simpliciter*, attempts to show

1 In response to the legitimate worries of one reviewer, I want to clarify that I do not mean to imply that antidemocratic thoughts must never be considered in the classroom or elsewhere on campus. The university should remain a space where open inquiry is possible; yet I also believe that it is the instructor's duty to contextualize and, where necessary, oppose such thoughts.

2 Indeed, the German online database for statistics and surveys, *statista*, projects global revenue with online learning platforms (including in tertiary education) to increase steadily to 279.3 billion US-dollars over the course of the current decade, with the number of users rising similarly to 1.1 billion; see ('Online Education - Online Education–Worldwide, n.d.).

that it can also contribute to educational matters of political purport. Third, and finally, my essay contributes to the recent and on-going phenomenological debate in both philosophy and the social sciences on online sociality and digitality, defending a third interpretation of digitality not as a space of lack or as a space not too dissimilar to analog ones, but as one of overabundance.

2 Political intervention: a (very brief) existential-phenomenological sketch

In this paper, I tackle the question of political interventions in digital classrooms from an existential-phenomenological perspective. Defining or delineating phenomenology in one or two sentences is almost impossible, given the field's rich history of internal controversies, breaks, and rediscoveries.[3] Accepting the challenge as well as biting the bullet of inevitable oversimplification, I take phenomenology to be an inquiry into the conditions of possibility of meaningful experience. In other words, phenomenology is interested in understanding how our consciousness' relation to its environment must be structured so that we make certain experiences precisely in the way that we do.[4]

Existential phenomenology is a particular movement in this field, emphasizing the inherently practical character of this relation. Represented by authors like Martin Heidegger, Jean-Paul Sartre, Maurice Merleau-Ponty, and Simone de Beauvoir, existential phenomenology holds that we navigate our lives by taking up a particular practical identity, an understanding of who we are—e.g., a researcher, a teacher, a friend, a spouse—concerned with adequately gauging worldly possibilities for the pursuit of these projects. As Mark Wrathall puts it, existential phenomenology is concerned with the structure of 'fluid, highly skilled coping' (Wrathall, 2017, p. 228).

Importantly, as stressed by Bernhard Waldenfels, a range of possibilities is always circumscribed by a sphere of impossibilities; given that our practical engagement with the world is structured in this and *not another* way, we make some experiences rather than others, and correspondingly can act or tend to act in some ways rather than others (Waldenfels, 1997, p. 19–20; 2011: 19). Postphenomenological research, often drawing on existential phenomenology, adds to this the element of technology as such an enabling/disabling mediating entity; depending on the technology with which *and through which* we gear into the world, certain possibilities of action and experience become available to a person while others are foreclosed (e.g., Rosenberger and Verbeek, 2015).[5] With respect to the objective of this paper, then, the question becomes *what conditions of possibility must be given so that an experience in the (digital) classroom becomes one of political intervention and not something else?*

Before moving on to this question, let me make an intermediate step and interrogate what constitutes an experience of political intervention in more general terms. What are we doing when we intervene in something; how do we disclose such an instance? An initial thought would be that we interrupt something from continuing, we bring it to a (preliminary) close. But interruption and intervention, though similar, have quite different phenomenalities. When interrupting something, we 'break' (lat.: *rumpere*) 'between' or 'through' (*inter*) and insert something in an originary flow. As the word 'rupture' signals, what happens is a break, fracture, or even destruction. Someone or something interrupts a concert, a conversation, a news program. When a person interrupts, they insert themselves, their desires, beliefs, and/or goals, oftentimes rather self-centeredly. The interruption may not succeed, and the originary flow may be restored, but an interruption does not in itself contain a productive element (with respect to the activity interrupted).

Take the following scenario: you and I meet for coffee and sit outside the café on a busy street. In the moment that you want to respond to a question of mine (say, 'How has work been lately?'), a passerby moves up to our table and asks for the time. You stop in the middle of your sentence, turn to me questioningly, while I am fumbling around with my watch. After finally managing to turn the dial to meet my gaze, I give them the time; they nod, thank me, and go about their day. This instance constitutes a mild type of an interruption. The thread of our conversation is weakened, but not irreparably severed. You collect your thoughts before answering my initial question. We continue to dwell on the issue at hand. Yet, it is also clear that the interruption did not add anything of worth to our dialog.

Now consider a more extreme case: we are still at the café, but now a passerby interjects by calling us wimpy snowflakes that are 'ruining' *their* country. Our 'woke' agenda would make us weak against threats from the outside, presented by the 'flood' of 'illegal' immigrants crossing the border. The two of us sit there, flustered, irritated, maybe even a bit frightened. Our requests to be left alone are ignored. Only after the café owner steps outside and shoos them away can we resume our initial conversation. However, in this case, the situation feels tainted. The aggression, even though 'only' verbal, has left a mark on our get-together. The coffee now tastes mildly sour; the atmosphere feels slightly hostile; the exhaust pipes of the cars passing by roar a bit too loudly. We still end up finishing our conversation, but we feel at least annoyed about the 'rude' passerby. Something has changed, but not for the better.

Now on to intervention: when inter-*vening*, we arrive somewhere, we *come between* something. We do this in order to stand in the way of, oppose, or hinder. What do we hinder? As in interruption, the free unfolding of an event. But other than in interruptions, the person intervening does not insert themselves, but attempts to steer the event in a direction that leads to a new understanding of a situation. The intent behind an intervention is not destruction, but alteration and improvement.[6]

3 As Paul Ricœur so aptly diagnoses, phenomenology amounts to a series of 'heresies' against its founding father, Edmund Husserl. See Ricœur (1987), p. 9.

4 This characterization is roughly co-extensive with the view of leading contemporary phenomenologists such as Zahavi (2019) and Crowell (2013).

5 As the name implies, *post*-phenomenology is supposed to be a decided evolutionary step from classical phenomenology, in the sense that it leaves behind the all-encompassing and (allegedly) all-too gloomy transcendental analysis of technology per se and focuses on the specific agent-world relations that individual technologies co-constitute (Ihde, 2009). Although this may be an important difference to its 'predecessor', I take it that postphenomenology is still an inquiry into the conditions of possibility for certain types of meaningful experience. Therefore, in the rest of the article, I will bracket these different ontological, epistemic, and methodological commitments.

6 See also the Merriam Webster entry on intervention: 'the act of interfering with the outcome or course especially of a condition or process (as to prevent

Imagine the café situation again; only this time, we are having a rather uninformed conversation about the pros and cons of free borders. Imagine further that this time, the passerby does not impose themselves to spew hate, but to inform us about the incorrectness of our assumptions and, potentially, the moral questionability of our normative stance toward vulnerable and marginalized people. The critical potential in this situation is entirely different from the rupturing moments from before. The passerby's intervention challenges us, invites us to think our political space and the role that we take up in it anew.

It is this productive element that distinguishes interruption from intervention. Political actors intervene because they deem the current flow of an interaction to miss, disregard, or even violate one or several important facts and values. As the one intervening—but not necessarily the one being intervened on—we disclose our actions *as* political interventions because they yield a transformative potential; they point toward an excess of possibility that would not reveal itself in the otherwise unfettered and routine unfolding of the event (Waldenfels, 2011). A political intervention may thus reveal a completely new idea or one that was formerly buried. Think of protesters 'disrupting' a parliamentary debate, a rally, or a speech; while often perceived as nuisance, they gear into the situation to raise awareness of an issue or an aspect thereof largely ignored by the speakers and their audience.

This is *not* to say political interruptions cannot yield change, but it does so in a different mode: interruption is the volcano that erupts and allows for something to rise from the ashes. Intervention is the dam; it halts the free flow of an event to steer it into a new direction.

Granted, sometimes it may be rather complicated to clearly delineate between interruption and intervention. What appears to some as an intervention (as it does to the intervener) may appear as an interruption to others. Also, upon due reflection, the person who thought they were intervening might realize that they were actually only interrupting, egocentrically inserting themselves into a situation because they *thought* they were engaging constructively with others. And yet, it should be clear why these are two situations different in important ways. Put succinctly: an act of political intervention can only be experienced as such because it taps productively into the excess of a situation the meaning of which is never fixed by any particular viewpoint (or way of life).

What constitutes a *successful* intervention? Evidently, it can only be successful when it effectuates change; but the chances for change in part depend on the response of those being intervened on. Usually, a couple of options are on the table: broadly speaking (and thus ignoring nuance), we can *flee* the challenge; we can *attack* the intervening person (verbally or even physically); we can (try to) *ignore* them; or we can yield and *engage* with the content of their address.

Which path we decide to go down (or 'intuitively' gravitate toward), depends on a great number of factors: *inter alia*, our emotions (e.g., anger or fear) and our mood (e.g., boredom, fearfulness, exhaustion, ecstasy) may make one or several options particularly salient or may foreclose some options entirely (Heidegger, 1927/1996; Ratcliffe, 2013). Prior experiences will have sedimented in a way so as to give us a routine courses of action or habits in such instances (Merleau-Ponty, 1945/2012; Schutz and Luckmann, 1973). Also, explicit knowledge (e.g., sociological and psychological facts)—or lack thereof—may dispose us to handle this situation in one rather than in another way. All of these features play a role in the way that the 'space of possibilities' (*Möglichkeitsraum;* see Slaby, 2011) is polarized so as to make some options for action more salient for the agent than others (and render some options even 'invisible'). Put differently, the situation is traversed by vectors of different strengths for possible (re)action.

Yet, it is clear *that* we have to respond. No answer—in this case, attempting to ignore the intervention—is still an answer (Waldenfels, 2011, p. 38). Our response is thus two-tiered: first, how do we position ourselves toward the address of the other; and second, in the case of the 'engagement vector', how do we respond to the perspective presented in the claim?

Given these response vectors, I believe there to be a weak and a strong notion of interventional success. The latter would involve changing the political beliefs, attitudes, or goals of the person whose expressed viewpoint is the reason for the intervention. While I do not want to deny that this may happen, the past years should not give us too much optimism on this count either. In fact, it seems as if intervention, for example in online spaces like social media, is predominantly received as interruption by antidemocratic supporters and thus elicits the attack or flight vector (e.g., Heatherly et al., 2017; Lu and Liang, 2024; Karlsen et al., 2017). On the weak reading, it suffices for a political intervention if it succeeds in thwarting the spilling over and proliferation of antidemocratic beliefs, attitudes, or goals. Thus, the target of an intervention is not (only) the messenger, but the recipient(s) of the otherwise unfettered political signal. Political interventions have a public character; they address sender, direct recipient (interlocutor), and even indirect recipients (bystanders) of the situation.

It is this weak idea of interventionist success that I am (primarily) concerned with. The academic instructor will have a hard time if they perceive their civic duty to reside in changing every student's mind. What they *can* try, however, within their power, is to stop the *spread* of anti-democratic *ressentiment* by addressing all students in the classroom and encourage them to engage with the pro-democratic perspective.

3 Classroom interventions: analog vs. digital

From the previous section, we can synthesize that a teacher politically intervenes when they come between a situation of political controversy and steer the conversation in a new direction. They can abuse their power for their own personal gain, of course, but in this case, we would end up calling their actions rather a case of interruption than of intervention. But as argued at the beginning of the text, they can also politically intervene in defense of democracy. Classroom interventions can serve the function of fighting bigotry, untruth, and authoritarian fantasy.

I also argued that any intervention implies a response from those who were intervened upon. They can ignore the intervention (until they cannot) and attempt to reinstate the prior flow and direction of the conversation; they can flee the situation entirely; they can fight the intervention; or they can try to work with and on the intervention.

What is it that is different in the virtual learning environment? Well, first and foremost, the seminar or lecture takes place *elsewhere*. In the 'analog' case, students and teacher congregate to dwell in one

harm or improve functioning)': https://www.merriam-webster.com/dictionary/intervention (accessed 13 September 2025).

and the same physical location, i.e., a classroom or lecture hall in a building of a university. Such a classroom 'hosts' furniture and tools that refer to one another and in unison lend themselves to what students and teachers usually do at a university: learning and teaching. Thus, desks, tables, projectors, whiteboards and blackboards, markers and chalk are oriented in a way that helps with the task at hand (Heidegger, 1979/1985; Heidegger, 1927/1996).

The digital classroom—as offered by videoconference software such as Zoom or MS Teams—lacks this obvious physicality. We are miles, in some cases even hundreds or thousands of miles, apart. There are no desks and chairs, except for those that every individual participant in the seminar sits at and on at their home (or a café, a library, etc.). There is also no chalk or pen, no whiteboard, blackboard, or projector.

Yet, in a previous article (Rautenberg, 2023), I have argued that despite the 'non-physicality' of such places, we can still consider them locations in a meaningful sense: they allow for some actions rather than others; are conducive to certain plans and projects rather than others; and 'embody' certain norms of what one is to do in them. In a digital classroom, the goals and expectations remain the same: one dwells in them to learn and to teach.[7] It summons us to engage in the teacher-student(−student) relation and offers gadgets that can be seen as roughly analogous with those we find in a university building. For instance, screensharing serves a function similar to a projector; while screensharing, we can activate the comment function and use the cursor analogous to a marker; we can even initiate group work by opening breakout rooms.

Thus, it may be best to consider digital classrooms to constitute *hybrid spaces*: with physical elements—e.g., the desk that we sit at, the laptop with its screen 'through which' we enter the digital classroom, the keyboard that we type on—as well as non-physical elements, among them, crucially, the videoconference software (Berger, 2020, pp. 616, 619; see also Ekdahl, 2022, pp. 9–10).

So, if digital classrooms are still locations, if they still have spatial features, we may go on to say that nothing of importance has changed in a way that would significantly alter the learning experience—neither generally nor with respect to political intervention. However, this would be an overly hasty conclusion. To the contrary, I argue that things can go awry in digital classrooms so that political interventions (tend to) fail.

But what is it that works against a conducive learning environment that also hinders instructors at productively opposing anti-democratic sentiment? The current debate in the phenomenology of online sociality tends to focus on the question of whether or not the digital is marked by a fundamental lack. For instance, take the recent discussion concerning other-understanding or *empathy*; while a skeptic like Thomas Fuchs argues for the position that digital spaces do not allow for the kind of dynamic emotive interplay necessary for authentically grasping the mental states of other online agents (Fuchs, 2014), Lucy Osler attempts to show that such engagement is, on the contrary, still possible (Osler, 2021). The debate thus displays a split into a thesis about the *lack* of the digital and a thesis of the digital's *similarity* to the analog—or one of *discontinuity* and one of *continuity*.

Phenomenological critiques of digital education often defend the lack thesis. I disagree with this view, yet not because I believe that the digital classroom is sufficiently similar to its traditional counterpart. Conversely, I claim that the problem of digital education is not a fundamental lack, but an excess. I thus want to support a third thesis about the digital—at least with respect to the digital classroom—i.e., a thesis of *overabundance*. To do this, I assess three critical analyses of digital classrooms: Hubert Dreyfus's classical critique of disembodied telelearning, Galit Wellner's Zoom-bie student, and Jesper Aagaard's habitual distraction. As I will argue, Dreyfus and Wellner, representing the 'lack camp', misinterpret the true problem of digital education, whereas Aagaard's account provides the most promising route to illuminating what is at stake in digitalizing the classroom and, thus, digitalizing political interventions in this classroom.

3.1 Dreyfus's critique of telelearning

Dreyfus's seminal *On the Internet* (2009) is a reckoning with the digital world as a poor substitute for the real deal. Crucially for the purpose of this paper, Dreyfus dedicates a whole chapter to the problem of 'telelearning', i.e., education mediated by digital technologies. Dreyfus excoriates the digital classroom. In fact, his position is, in opposition to some of my previous remarks, that a digital environment is not conducive to learning at all! Here is his argument: learning in its full sense involves taking risks, testing one's assumptions and abilities and thereby accepting the possibility of failure as determined by the instructor. Precisely this form of risk, the risk of being wrong, is missing in the digital situation:

> … even if we… suppose that the students are all watching the professor at the same time, as with interactive video, and everyone watching hears each student's question, each student is still anonymous and there is still no class before which the student can shine and also risk making a fool of himself. The professor's approving or disapproving response might carry some emotional weight but it would be much less intimidating to offer a comment and get a reaction from the professor if one had never met the professor and was not in her presence (Dreyfus, 2009, p. 33; see also Ollinaho, 2018, p. 201).

Thus, what is lacking for Dreyfus in the online situation is an *existential* form of risk. Striving to become knowledgeable, becoming an expert in a field—Heidegger would speak of taking up a 'practical identity' (*Seinkönnen*; see Crowell, 2013, p. 180)—involves submitting oneself to a set of norms of appropriateness or success. Studying mathematics, for instance, implies becoming a mathematician and good mathematicians are able to grasp complex mathematical theories and principles, as well as their relations between them. They are, further, able to transfer this knowledge onto practical issues, thereby contributing to problem-solving in domains not exclusively mathematical. A student of mathematics can—and almost by necessity—*will* fail in living up to these standards. In a way, this is the whole point of learning; we learn from our mistakes.

But we can only learn from our mistakes if we (a) dare to make them and (b) take the eventualities of failure and success seriously.

7 Lucas Introna and Fernando Ilharco similarly attest screens a role in the everyday relevance structure in which our practices are embedded. See Introna and Ilharco (2006), p. 64.

When students are invited to recede into the anonymous background of digital space, a fundamental element in becoming who we aim to be is thwarted. And if students *do* gear into the situation and contribute their viewpoints, testing their skills and knowledge, there is not really a *risk* of failure, since the online situation is not disclosed as *mattering* by the student.

Applied to the issue of political intervention, the following picture presents itself: if the online situation is one in which real learning cannot matter in general, how could a political intervention possibly do? Students as an anonymous mass could never be touched by the instructor's appeal, simply because nothing really matters to them in that realm in the first place. The call of the instructor to redirect the flow of attention toward democratic values halts at the screen as an almost natural barrier. This, at least, would be the conclusion in the spirit of Dreyfus's argument.

Granted, Dreyfus put these ideas to paper a whopping 16 years before me reiterating them (if we refer to the book's updated second edition, as I do here). As Dreyfus underlines in his preface (2009: xi), he declares distance learning in the way that it was conceived—i.e., Ivy League colleges offering their elite courses to a worldwide audience—a failed agenda. But if we look at online learning in its *current* form, it should become clear that Dreyfus's claims may have lost at least *some* of their force: digital education is decentralized—i.e., seminars and lectures are not delivered by an illustrious circle of prestigious colleges, but potentially by *any* institution of tertiary education. This shrinks the number of students that congregate with the instructor in the digital learning environment. Coupled with the added element of dynamic audiovisual input—via microphones and webcams—digital education is significantly *de*-anonymized. Teacher and students can become acquainted in a way previously thought impossible in the digital realm. Thereby, they can create meaningful teacher-student(–student) relations.

This reintroduces the stakes that Dreyfus deems necessary for learning: precisely *because* student and instructor can build a rapport, *because* student and instructor dwell together in a space that allows for mutual identification and knowing one another, the student's input can be weighed by their teacher and their practical identity be shaken. It is precisely *because* there is existential risk involved in the digital learning environment that students may choose to retreat into the anonymity granted to them by shutting off camera and microphone (see also the next sub-section). If there was not the risk to hear, directly or indirectly, that 'you do not have what it takes', students would not be afraid to leave their cameras and microphone on. They would not hesitate to say the wildest things imaginable. Granted, some of them do. Others, however, seem to feel a restraint that is tied to the possibility of failure.

For Dreyfus, the digital situation fundamentally excludes the lived body (e.g., Dreyfus, 2009, p. 6; see also Fuchs, 2014; Zhao, 2004, 2015). This expressive and vulnerable vehicle that we ourselves always are (Merleau-Ponty, 1945/2012) allegedly does not 'reach through the screen', to put it somewhat crudely. Therefore, we as embodied beings are never really under threat of being attacked, hurt, or disappointed. But recent phenomenology on digitality has challenged this idea: indeed, the lived body with its expressive capabilities and vulnerabilities is still present in the online situation. This holds even in videogames or text-based communication. An avatar in a videogame can be incorporated and thus expressive of our intentions and mental states (Ekdahl and Osler, 2023). And a text can, under certain conditions, betray our being angry, flustered, or excited (Osler, 2021). We can expect the same to hold for videoconferencing, where they lived body is even more directly involved. The constant fidgeting with the technical equipment alone plays an expressive role that is taken up by and dynamically exchanged with digital co-dwellers (Ferencz-Flatz, 2023, pp. 65–6). In fact, it is *because* we are embodied in cyberspace that we can still be hurt emotionally and existentially (e.g., Grīnfelde, 2022); as Tanja Staehler highlights, otherwise we could not explain the horrid consequences that online hate, shitstorms, and cyberbullying can have for users, suicide being the most extreme of them (Staehler, 2014, p. 240).

3.2 Wellner's 'Zoom-bie' students

Hence, Dreyfus's analysis seems the wrong starting point for the purposes of this paper. The issue is not that political interventions can never matter to us by default, because no claim to think our political situation anew can ever reach through to the screen. But what if the issue is not the technology itself, but the student's use of it?

In an insightful—and provocatively titled—paper, Wellner (2021) investigates the reasons for what she calls 'Zoom-bie students', i.e., students that seem 'digitally present but apathetic about the course' (154). Wellner describes a phenomenon all-too familiar to anyone who had to teach during the height of the COVID-19 pandemic: one or several squares that *could* present students remain dark. The students behind those 'curtains' remain unresponsive, and often stay 'online' even after the session has officially ended.

According to Wellner, the underlying reason of the Zoom-bie student is their failure to properly gear into the digital learning environment (157). How does this failure come about? Wellner lists four reasons (157–8): (1) extending their perceptual senses into the digital environment without equally extending their body tires the student out more quickly than in the analog case, leading to 'Zoom fatigue'; (2) the student fails to disclose the learning environment as relevant or significant to their projects; (3) the student refuses to meaningfully incorporate the technology into its educational toolbox; and (4) the student's experience lacks the 'buzz' of learning jointly with other students as in an analog lecture hall, therefore lacking constitutive togetherness or intercorporeality indispensable for learning.

Reasons (1) to (3) seem quite Dreyfusian in spirit and thus similarly contentious: as I argued above on the basis of other phenomenological contributions, the digital learning situation is not disembodied and can thus be meaningful in a real sense for students. Further, I want to pause for a moment and ask if we should frame the Zoom-bie phenomenon in terms of students' 'failures' or 'refusals'. Such notions imply responsibility for a lack of sufficiently meeting some pre-determined set of standards; 'refusal' even suggests that students willfully *choose* not to meet the expectations inherent in the learning situation. For me, the more interesting question lies deeper, i.e., *why* meaningful engagement with the situation seems to be obstructed; for I would not attribute (at least by default) to students a general unwillingness or incompetence to gear into the digital learning environment.

Further, when it comes to reason (4), i.e., the lack of togetherness, it should be said that it is debated if there is such a categorical intercorporeal absence. Sarah Pawlett-Jackson indeed argues that videoconference software flattens the space to a wall of equally arranged boxes that does not allow for meaningful relations between individual participants to take shape organically (Pawlett-Jackson, 2021, pp. 47–7). But as in the case with (individual) embodiment,

several authors observe that a deep sense of togetherness and inter-bodily coordination is possible, be it in videogames (Ekdahl and Ravn, 2022; Hardesty and Sheredos, 2019; Osler, 2020); video chats and conferencing (Ferencz-Flatz, 2023; Osler, 2020); or even messenger apps (Osler, 2020). Thus, as in the case of embodiment, the issue is not so much that feelings of belonging with others are ruled out *tout court* in the digital case, but rather that it may be harder to establish them. The question remains why this is the case.

While a Dreyfusian (and, arguably, Wellnerian) account grounds the problems of online learning in a fundamental lack, I wonder if the actual crux is in fact a glut of possibilities. In other words, the problem is not that the digital offers too little. The problem is that it offers too much.

3.3 Aagaard's screens as portals and habitual distraction

To start, we should remind ourselves of the particular nature of the online encounter. Technologically mediated, a laptop or PC allows for the flight vector, the possibility of retreating from a situation such as (political) intervention, to become particularly salient. As highlighted by Ollinaho, a connection established via a PC can be cut by unplugging the power chord (Ollinaho, 2018, p. 200). Or, as an interviewee in Māra Grīnfelde's study on teleconsultation states:

> The fact that I am behind the screen allows me to feel safe, at least in the sense that at any time I have a power over what will be said, at any time I can mute the doctor, I can take out my earplugs, I can turn away, I can turn off [my computer] if I don't like something. And this gives me a sense of control over the situation… (Grīnfelde, 2022, pp. 690–1).

Therefore, the digital situation allows for options of disengagement that are less available or salient in analog classrooms. Closing the laptop is easy; but standing up and moving out of a lecture hall is something else entirely. Yet, students do not need to make use of such drastic steps as ending a Zoom session to retreat from the learning environment.

In an illuminating paper (2018), Jesper Aagaard frames the screen as a *portal*, offering us access to (digital) worlds formerly out of reach. More so, such portals allow us to connect *with one other*, even when we are geographically far apart. Digital classrooms are one such example of social spaces that we can enter via the portal. Not disregarding such benefits, Aagaard is nonetheless wary of the consequences for intersubjective life in the analog world. Similar to sociologist Sherry Turkle (2011), he is concerned that presence online correlates with an absence offline that impacts our 'real-world relationships':

> Such departure may to some extent depend on active intentionality on behalf of the user, but it leaves behind an empty shell of a body to spatially proximal companions. This is considered both annoying and rude (Aagaard, 2018, p. 51).

According to Aagaard, we become this 'empty shell' not only when being with friends and family, but also in the analog classroom (Aagaard, 2015). Instead, of focusing on the course, students, when equipped with a device, are constantly enticed to heed the call of the digital:

> The laptop is experienced as endowed with an attractive allure that 'pulls you in'. When becoming aware of this distraction, students can break at any moment and resist the attraction, but it may take several minutes before this happens. Students explain that engaging in off-task activity such as visiting Facebook can indeed be a conscious choice (as described in the cognitive literature), but this mainly happens when their visit is rooted in a specific purpose such as writing to somebody or posting something. Otherwise, distraction is usually experienced as taking place beneath the level of willful choices and purposeful decisions (Aagaard, 2015, p. 93).

Thus, in pointing toward the non-conscious and involuntary, Aagaard does away with the assumption that students simply refuse to gear into the digital learning situation. Rather, the distraction that they undergo—and become aware of when it is already too late—is *habitual*; i.e., it is a learned (sedimented) embodied response to this ever-luring call reaching us through the portal (Aagaard, 2015, p. 95).

Aagaard's focus rests on the use of laptops and other devices in the analog classroom setting. What we can learn from that for political intervention is, obviously, that with the omnipresence of digital devices in educational facilities, an instructor's chances of success are already dampened. When the instructor tries to steer the unfolding of a political conversation in a new, pro-democratic direction, students will be easily driven to 'flee' the situation by 'going through the portal'.

However, this avenue may be open to different degrees: while the 'bystanders' of the situation will be able to 'flee' the gaze of the instructor—as it is not directed toward them—it will be harder for those directly implicated, i.e., the sender and immediate recipient of the political message. And even the bystanders will become aware of the new direction that an event has taken, e.g., by the new voice (of the instructor) 'entering' their field of attention, as well as the voice's pitch and/or intonation that communicate a sense of urgency.

Additionally, instructors have the possibility to polarize the students' field of attention toward themselves by telling students to close their laptops and store away their phones (Aagaard, 2015, pp. 94–5). If students refuse to even do this, then the learning situation is tainted with a completely different problem.

In case of the digital classroom, however, the issue of habitual distraction is multiplied. First, the demand toward students to redirect their attention away from their device is either non-sensical (in the case of the laptop as a constitutive element of the educational hybrid space) or hardly enforceable (in the case of the phone).

Second, even if students dedicated their undivided attention to something in the digital classroom, it would be unclear if that attention was directed at the teacher or some other element of the learning situation. As we can learn from Ferencz-Flatz (2023), pp. 66–7. the grid view of the videoconferencing rooms allows for a 'synoptic attentionality' that entices to shift attention from speaker to other listeners. This:

> Invites the mind to wander in, for instance, freely probing into the private living rooms of others, or esthetically admiring the framing, scenography and shot composition as if in front of a gallery of self-portraits (which they also are in a certain sense) (Ferencz-Flatz, 2023, p. 66).

However, I believe that the main issue stems from the fact that the screen is not simply a portal to *one* digital space, i.e., the digital classroom, but to several digital worlds, and transitioning from one to the other is almost instantaneous. For instance, a student can switch from the Zoom 'window' to a browser (and its sheer limitless number of tabs) with a mouse click or a simple shortcut on their keyboard. In

the analog case, devices 'constitute a backdoor through which students may escape' (Aagaard, 2015, p. 93). In the digital case, the classroom is shot through with a countless number of backdoors, hatches, and fire exits. Hence, *pace* Dreyfus and Wellner, the problem with digital learning is not a matter of lack, but of overabundance.[8]

To spell this out a bit further in existential-phenomenological terms, screens function as nodal points for many different spaces and can thus be regarded as soliciting many relevant projects at the same time. Thus, the teacher's call also competes with a multitude of other calls that, while residing in the background, can snap to the fore at any point in time. The teacher that attempts to intervene politically on a bigoted side-comment; on a dog-whistle masked as an innocuous contribution; on a group discussion in a 'breakout room'; or a chat on the latest political events between two or more students in the Zoom room before the lecture has officially started; must compete with a (felt) infinity of other claims luring the student in their direction at any time.

Political interventions tend to fail in the digital classroom, but not because students 'refuse' to listen nor because the student cannot, out of principle, be touched by the lecturer's claims. They fail because the lecturer's claims are threatened to be drowned out by the myriad calls from other sources, hailing through the infinite number of other portals that the screen harbors and thus render the flight vector the most salient for responding to political intervention. The problem for digital learning—more generally and with respect to democratic education specifically—is not lack, but excess.[9]

4 Concluding remarks

There is a more general issue with digital learning platforms, i.e., their private nature. Turning phenomenology critical here,[9] we should observe that when using platforms such as Teams, Zoom, or Google Meet, we use intellectual property of private companies, all with their own economic agenda. While it is true that any claim coming our way is 'filtered' according to prevailing social meanings that we passively take up (Heidegger, 1927/1996), it is a completely different matter when such mediation is further 'enhanced' by a technology designed, deployed, and controlled by an actor with vested economic interests. One should not mistake spaces with a public semblance for truly public. Digital learning software does not turn public only because they are purchased or leased by public institutions. It is thus doubtful if such (private) digital software *could ever* provide a space in which the political finds its proper place (Arendt, 1958/1998). Accordingly, the race among tech corporations to entrench their software at universities and colleges should concern us (Singer, 2025, 7 June).

Moreover, we should note that the digital platforms that Zoom and Co. rival for attention with, e.g., social media, are specifically designed as attention maelstroms. Their whole business model is to affectively engage users, so that they will spend more time on their platforms, on the one side in order to produce and deposit monetizable data and on the other to consume ads tailored on the basis of data thusly generated. Additionally, these platforms have begun to systematically favor content from the extreme right (Ortutay, 2024, 13 August). I thus follow Leslie Nelson in her diagnosis that such digital sites are an expression of a wider and older attitude that discloses the world, others, and ourselves as something to calculate and control (Nelson, 2020). In short, Silicon Valley's tools express a will to domination. Its reach into politics, emboldened by Trump's second administration and geographically manifest in tech billionaires flocking to Washinton D. C. (Murphy and Hammond, 2025, 19 January), should makes us think about proper platform choice. Political interventionists must know what they are up against when entering the digital realm.

I would thus respond with moderate pessimism to the moderate hopes that online learning could provide new avenues for instilling democratic values in students (Margolis and Moreno-Riaño, 2009, p. 153). It will be important to find ways of resistance that do not play into the hands of anti-democratic forces. That such resistance is necessary has become increasingly clear. Again, when democracy is at stake, academic freedom gets caught in the crossfire. No discipline or department can shrug their shoulders when US vice-president Vance declares universities and professors 'the enemy' (Damiano and Burns, 2024, 16 July), for any idea from any discipline can become 'ridiculous' (Knott, 2024, 16 July) under the arbitrary judgment of authoritarians (see also Lewandowsky et al., 2025).

In her Harvard lecture, Richardson quotes US educational philosopher Robert Maynard Hutchins: 'The death of democracy is not likely to be assassination from ambush. It will be a slow extinction from apathy, indifference, and undernourishment' (Hutchins in Richardson, 2023). I believe Richardson is right to invoke Hutchins's words; it will not be enough to focus on yourself and look the other way while colleagues are under attack. Similarly, it will not suffice to move from an increasingly authoritarian country to one that is, for now, (relatively) stably democratic. As understandable and sometimes necessary as such exodi are, they may only postpone the impact. Steep hierarchies and scarce job opportunities are certainly not conducive to building a joint political consciousness among academics. But our future may depend on us building one and bringing it into action.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

8 Dreyfus discusses overabundance in Chapter 4 of his On the *Internet* (2009), though with a different thrust than the one I am championing here. In the text, Dreyfus argues that the digital space harbors a sheer infinite amount of 'desituated' information that 'level' the heterogenous topography of mattering of everyday life, ultimately plunging the user into despair and nihilism. When we have access to everything from everywhere at every moment, the argument goes, we fail to really care for anything at all. Although I am sympathetic to Dreyfus's analysis and consider a lot of it true, I also believe that there are problems with it that lie rooted in his account of online existence as disembodied. He thereby fails to consider sufficiently that digital spaces are not completely severed from the 'real world', and that we can pursue meaningful projects in these spaces. My claim to overabundance is thus not that the digital learning environment leads us to jump from 'hyperlink to hyperlink' because we fundamentally do not care (e.g., about learning). Pace Dreyfus (2009: 78), relevance and significance have, in my eyes, not (necessarily) disappeared. Instead, I argue that the digital learning situation allows for an infinite number of 'fire exits' to pursue projects that can very much matter to us.

9 For introductions to critical phenomenology, see, e.g., Guenther (2021), Magrì and McQueen (2023), and Weiss et al. (2020).

Author contributions

NR: Conceptualization, Writing – original draft, Writing – review & editing.

Funding

The author(s) declare that financial support was received for the research and/or publication of this article. Work on this article was part of the research project 'Virtual Battlefields: Political Conflict in Digital Spaces', funded by the University of Hamburg's 'Excellence Strategy'. For the publication, the author received financial support from the University's Open Access Publication Fund.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The authors declare that no Gen AI was used in the creation of this manuscript.

Any alternative text (alt text) provided alongside figures in this article has been generated by Frontiers with the support of artificial intelligence and reasonable efforts have been made to ensure accuracy, including review by the authors wherever possible. If you identify any issues, please contact us.

Publisher's note

References

Aagaard, J. (2015). Drawn to distraction: a qualitative study of off-task use of educational technology. *Comput. Educ.* 87, 90–97. doi: 10.1016/j.compedu.2015.03.010

Aagaard, J. (2018). "Entering the portal: media technologies and experiential transportation" in Postphenomenological methodologies: New ways in mediating techno-human relationships. eds. J. Aagaard, J. K. B. Olsen Friis, J. Sorenson, O. Tafdrup and C. Hasse (Lanham, MD: Lexington Books).

Arendt, H. (1958/1998). The human condition. Chicago, IL: University of Chicago Press.

Berger, V. (2020). Phenomenology of online spaces: interpreting late modern Spatialities. *Hum. Stud.* 43, 603–626. doi: 10.1007/s10746-020-09545-4

Blinder, A. (2025). Trump's battles with colleges could change American culture for a generation. The New York Times. Available online at: https://www.nytimes.com/2025/03/20/us/trumps-battles-with-colleges-could-change-american-culture-for-a-generation.html. (Accessed March 20, 2025).

Brownhill, R., and Smart, P. (1989). Political education. Abingdon: Routledge.

Callan, E. (1997). Creating citizens: political education and liberal democracy. Oxford Political Theory. Oxford, UK: Clarendon Press.

Crowell, S. G. (2013). Normativity and phenomenology in Husserl and Heidegger. Cambridge, UK: Cambridge University Press.

Damiano, M., and Burns, H. (2024). "Attack the universities." Trump's VP pick JD Vance has harsh words for higher education. The Boston Globe. Available online at: https://www.bostonglobe.com/2024/07/16/metro/vance-trump-rnc-universities/ (Accessed July 16, 2025).

Daniels, R. J., Shreve, G., and Spector, P. (2021). What universities owe democracy. Baltimore, MD: Johns Hopkins University Press.

Davies, P. (2025). Donald Trump's inauguration: which tech leaders attended and who skipped it? Euronews. Available online at: https://www.euronews.com/next/2025/01/18/donald-trumps-inauguration-which-tech-leaders-will-be-attending-and-who-will-skip-it (Accessed January 18, 2025)

Dreyfus, H. L. (2009). On the Internet. *2nd* Edn. Abingdon: Routledge.

Ekdahl, D. (2022). Both physical and virtual: on immediacy in Esports. *Front. Sports Act. Living* 4, 1–13. doi: 10.3389/fspor.2022.883765

Ekdahl, D., and Osler, L. (2023). Expressive avatars: vitality in virtual worlds. *Philos. Technol.* 36:24. doi: 10.1007/s13347-023-00628-5

Ekdahl, D., and Ravn, S. (2022). Social bodies in virtual worlds: intercorporeality in Esports. *Phenomenol. Cogn. Sci.* 21, 293–316. doi: 10.1007/s11097-021-09734-1

Engel, S. M. (2008). Political education in/as the practice of freedom: a paradoxical defence from the perspective of Michael Oakeshott. *J. Philos. Educ.* 41, 325–349. doi: 10.1111/j.1467-9752.2007.00560.x

Euben, J. P. (1997). Corrupting youth: political education, democratic culture, and political theory. Princeton, NJ: Princeton University Press.

Ferencz-Flatz, C. (2023). Screened Intercorporeality. Reflections on gestures in videoconferences. *J. Br. Soc. Phenomenol.* 54, 56–70. doi: 10.1080/00071773.2022.2139189

Frazer, E. (2006). Iris Marion Young and political education. *Educ. Philos. Theory* 38, 39–55. doi: 10.1111/j.1469-5812.2006.00173.x

Fuchs, T. (2014). The virtual other: empathy in the age of virtuality. *J. Conscious. Stud.* 21, 152–173.

Grīnfelde, M. (2022). Face-to-face with the doctor online: phenomenological analysis of patient experience of teleconsultation. *Hum. Stud.* 45, 673–696. doi: 10.1007/s10746-022-09652-4

Guenther, L. (2021). Six senses of critique for critical phenomenology. *Puncta* 4, 5–23. doi: 10.5399/PJCP.v4i2.2

Hardesty, R. A., and Sheredos, B. (2019). Being together, worlds apart: a virtual-worldly phenomenology. *Hum. Stud.* 42, 343–370. doi: 10.1007/s10746-019-09500-y

Hayes, C., and Drenon, B. (2025). Elon musk leaves white house but says doge will continue. BBC. Available online at: https://www.bbc.com/news/articles/cz9y4exj822o (Accessed July 16, 2025).

Heatherly, K. A., Lu, Y., and Lee, J. K. (2017). Filtering out the other side? Cross-cutting and like-minded discussions on social networking sites. *New Media Soc.* 19, 1271–1289. doi: 10.1177/1461444816634677

Heidegger, M. (1927/1996). *Being and Time*. ed. J. Stambaugh (Albany, NY: SUNY Press).

Heidegger, M. (1979/1985). *History of the concept of time: prolegomena*. (Bloomington, IN: Indiana University Press).

Ihde, D. (2009). *Postphenomenology and Technoscience: the Peking University lectures*. ed. D. Ihde (Albany, NY: SUNY Press).

Introna, L. D., and Ilharco, F. M. (2006). On the meaning of screens: towards a phenomenological account of screenness. *Hum. Stud.* 29, 57–76. doi: 10.1007/s10746-005-9009-y

Karlsen, R., Steen-Johnsen, K., Wollebæk, D., and Enjolras, B. (2017). Echo chamber and trench warfare dynamics in online debates. *Eur. J. Commun.* 32, 257–273. doi: 10.1177/0267323117695734

Kassam, A. (2025). European universities offer "scientific asylum" to US researchers fleeing trump's cuts. The Guardian. Available online at: https://www.theguardian.com/us-news/2025/mar/25/europe-universities-us-researchers-trump-administration-science (Accessed March 25, 2025).

Keehn, G. (2022). Can we bridge the divide? Right-wing memes as political education. *Educ. Theory* 72, 745–761. doi: 10.1111/edth.12558

Kettler, D. (2002). Political education for a polity of dissensus: Karl Mannheim and the legacy of Max Weber. *Eur. J. Polit. Theory* 1, 31–51. doi: 10.1177/147488510200100104

Knott, K. (2024). J.D. Vance called universities "the enemy." Now he's Trump's VP pick. Inside Higher Ed. Available online at: https://www.insidehighered.com/news/government/politics-elections/2024/07/16/trump-taps-jd-vance-sharp-critic-higher-ed-vp (Accessed July 16, 2025).

LaFrance, A. (2024). The rise of techno-authoritarianism. The Atlantic. Available online at: https://www.theatlantic.com/magazine/archive/2024/03/facebook-meta-silicon-valley-politics/677168/ (Accessed January 30, 2025).

Le Monde, L. (2025). French university welcomes first US researchers. Available online at: https://www.lemonde.fr/en/france/article/2025/06/27/french-university-welcomes-first-us-researchers_6742785_7.html (Accessed June 27, 2025).

Lewandowsky, S., Kempe, V., Armaos, K., Hahn, U., Abels, C. M., Wibisono, S., et al. (2025). The anti-autocracy handbook: a scholars' guide to navigating democratic backsliding. Version 1.0.0. Preprint, Zenodo.

Lilja, P. (2018). Defending a common world: Hannah Arendt on the state, the nation and political education. *Stud. Philos. Educ.* 37, 537–552. doi: 10.1007/s11217-018-9618-3

Lopez, A., and Wang, Y. (2025). Three prominent Yale professors depart for Canadian university, citing Trump fears. Yale News. Available online at: https://yaledailynews.com/blog/2025/03/27/three-prominent-yale-professors-depart-for-canadian-university-citing-trump-fears/ (Accessed March 27, 2025).

Lu, S., and Liang, H. (2024). Reactance to uncivil disagreement? The integral effects of disagreement, incivility, and social endorsement. *J. Med. Psychol.* 36, 15–26. doi: 10.1027/1864-1105/a000378

Magrì, E., and McQueen, P. (2023). Critical phenomenology: an introduction. Cambridge, UK: Polity Press.

Maiberg, E. (2025). NASA, Yale, and Stanford scientists consider "scientific exile," French university says. Available online at: https://www.404media.co/nasa-yale-and-stanford-scientists-consider-scientific-exile-french-university-says/ (Accessed March 12, 2023).

Marcuse, H. (1941/2004). Technology, war and fascism: collected papers of Herbert Marcuse, vol. *1*. Abingdon: Collected Papers, Routledge.

Marcuse, H. (1961/2002). "Das Problem des sozialen Wandels in der technologischen Gesellschaft" in Das Schicksal der bürgerlichen Demokratie, by Herbert Marcuse. ed. P. E. Jansen, vol. *1* (Germany: Nachgelassene Schriften. Zu Klampen).

Marcuse, H. (1964/2013). One-dimensional man: studies in the ideology of advanced industrial society. Abingdon: Routledge.

Margolis, M., and Moreno-Riaño, G. (2009). The Prospect of internet democracy. Farnham, UK: Ashgate Publishing, Ltd.

Merleau-Ponty, M. (1945/2012). Phenomenology of perception. Abingdon: Routledge.

Moilanen, A. (2025). Immanent critique in political education: indoctrination or emancipation? *Constellations* 1, 1–12. doi: 10.1111/1467-8675.12794

Murphy, H., and Hammond, G. (2025). Meta's Mark Zuckerberg explores purchase of Washington, DC, property. Financial Times. https://www.ft.com/content/93109ba4-b779-46dc-8370-0dd871fac82a (Accessed January 29, 2025).

Nelson, L. (2020). The good, the bad, and the ugly. *Techné: Res. Philos. Technol.* 24, 195–217. doi: 10.5840/techne2020514124

Ollinaho, O. I. (2018). Virtualization of the life-world. *Hum. Stud.* 41, 193–209. doi: 10.1007/s10746-017-9455-3

Online Education–Worldwide. (n.d.). Available online at: https://www.statista.com/outlook/emo/online-education/worldwide (Accessed September 13, 2025).

Ortutay, B. (2024). How Elon Musk uses his X social media platform to amplify right-wing views. PBS News. Available online at: https://www.pbs.org/newshour/politics/how-elon-musk-uses-his-x-social-media-platform-to-amplify-right-wing-views (Accessed August 13, 2024).

Osler, L. (2020). Feeling togetherness online: a phenomenological sketch of online communal experiences. *Phenomenol. Cogn. Sci.* 19, 569–588. doi: 10.1007/s11097-019-09627-4

Osler, L. (2021). Taking empathy online. *Inquiry* 1, 1–28. doi: 10.1080/0020174X.2021.1899045

Patel, V. (2025). What to know about Harvard's legal battles with Trump. The New York Times. Available online at: https://www.nytimes.com/article/harvard-trump-legal-battles.html. (Accessed June 20, 2025).

Pawlett-Jackson, S. (2021). Three bodies: problems for video-conferencing. *Phenomenol. Mind* 20:42. doi: 10.17454/pam-2004

Ratcliffe, M. (2013). "Why mood matters" in The Cambridge companion to Heidegger's Being and Time. ed. M. A. Wrathall (Cambridge: Cambridge University Press).

Rautenberg, N. (2023). Making room for the solution: a critical and applied phenomenology of conflict space. *International Journal of Philosophical Studies* 31, 424–49. doi: 10.1080/09672559.2023.2264724

Richardson, L. (2023). How can universities address the crisis in democracy? Samuel L. and Elizabeth Jodidi lecture. The Weatherhead Center for International Affairs, Harvard University. Available online at: https://www.wcfia.harvard.edu/event/jodidi-louise-richardson.

Ricœur, P. (1987). À l'école de la phénoménologie. Paris: J. J. Vrin.

Rosenberger, R., and Verbeek, P. P. (2015). "A field guide to Postphenomenology" in Postphenomenological investigations: Essays on human-technology relations. eds. R. Rosenberger and P. P. Verbeek (Lanham, MD: Lexington Books).

Roth, M. S. (2024). Defending democracy, defending the university. Available online at: https://www.insidehighered.com/opinion/views/2024/11/01/defending-democracy-defending-university-opinion. (Accessed November 1, 2025).

Schutz, A., and Thomas, L. (1973). *The Structures of the Life-World*. Vol. 1. Northwestern University Press.

Singer, N. (2025). Welcome to campus. Here's your ChatGPT. The New York Times. Available online at: https://www.nytimes.com/2025/06/07/technology/chatgpt-openai-colleges.html (Accessed June 7, 2025).

Slaby, J. (2011). "Affektive Intentionalität – Hintergrundgefühle, Möglichkeitsräume, Handlungsorientierung" in Affektive Intentionalität. Beiträge zur welterschließenden Funktion menschlicher Gefühle. eds. J. Slaby, A. Stephan, H. Walter and S. Walter (Paderborn, Germany: Mentis).

Staehler, T. (2014). Social networks as inauthentic sociality. *Metodo* 2, 227–248. doi: 10.19079/metodo.2.2.227

The NYT Editorial Board. (2025). The authoritarian endgame on higher education. The New York Times. Available online at: https://www.nytimes.com/2025/03/15/opinion/trump-research-cuts.html. (Accessed March 15, 2025).

Turkle, S. (2011). Alone together: why we expect more from technology and less from each other. New York: Basic Books.

Waldenfels, B. (1997). "Topographie des Fremden" in Studien zur Phänomenologie des Fremden 1 (Berlin, Germany: Suhrkamp).

Waldenfels, B. (2011). Phenomenology of the alien: basic concepts. Evanston, IL: Northwestern University Press.

Weiss, G., Murphy, A. V., and Salamon, G. (2020). 50 concepts for a critical phenomenology. Evanston, IL: Northwestern University Press.

Wellner, G. (2021). The Zoom-bie student and the lecturer. *Techné: Res. Philos. Technol.* 25, 153–161. doi: 10.5840/techne2021121132

Wrathall, M. A. (2017). ""I" "here" and "you" "there": Heidegger on existential spatiality and the "volatilized" self" in Yearbook for Eastern and Western philosophy. ed. M. A. Wrathall (Berlin: De Gruyter Brill), 223–234.

Zahavi, D. (2019). Phenomenology: the basics. Abingdon: Routledge.

Zhao, S. (2004). Consociated contemporaries as an emergent realm of the lifeworld: extending Schutz's phenomenological analysis to cyberspace. *Hum. Stud.* 27, 91–105. doi: 10.1023/B:HUMA.0000012246.33089.68

Zhao, S. (2015). Constitution of mutual knowledge in telecopresence: updating Schutz's phenomenological theory of the lifeworld. *J. Creative Commun.* 10, 105–127. doi: 10.1177/0973258615597376