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Essay

Teaching for Transformation: Lessons from Critical Pedagogy for Design Futures Education

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Abstract

This essay considers the meaning of criticality in design futures education. It identifies three such meanings – criticality as an indication of importance, as a style of reasoning, and as attentiveness to power – and argues that the latter is most suitable for seeding transformative change. By drawing connections between critical pedagogy and critical futures studies, we aim to chart a path through which design futures education can potentially grapple with the political, contentious aspects of future-making.

Keywords

Critical Futures, Critical Design, Critical Pedagogy, Design Futures

Introduction

Training students to face uncertain futures has become a key task of education worldwide (Király & Géring, 2019; OECD, 2018). Prominent examples of futures education initiatives include UNESCO's global Futures Literacy program and the European Erasmus project FUEL4Design, the latter being specifically targeted at design students and educators. One trend within such initiatives and institutional curricula is a desire for 'criticality'. 'Critical reflection', 'critical thinking', 'critical literacy', or 'critical engagement', it is argued, are crucial for engaging with futures and operating in an uncertain and complex world. However, little attention is generally given to what is meant by 'critical' in these futures education contexts. Is the term being evoked as an alternative for 'crucial'? Is it used to connote the logical or analytical engagement associated with 'critical thinking' and information literacy? Or is it an indicator of attentiveness to relationships of power that are central to emancipatory pedagogies and to design practice in general?

As we argue here, each of these meanings carries significant implications for futures literacy and education, and the inability to distinguish between meanings may result in the "mask[ing of] very diverse expectations about what and how pupils will/should learn" (Johnson & Morris, 2010, p. 78). A first aim of this essay, then, is to highlight different archetypical conceptions of criticality in order to facilitate dialogue between educators who may currently be speaking past one another. We do so by drawing primarily from two comprehensive reviews of 'critical thinking' and 'critical pedagogy' (Burbules & Berk, 1999; Johnson & Morris, 2010), and while acknowledging that in reality, futures literacy and education make for a fuzzier, more complex terrain than our archetypes can fully capture.

After considering the differing conceptions of criticality we argue that the third one carries the most potential to contribute to real transformative change. We base our argument on current work that seeks to foreground the political, contentious aspects of design futures, and on contemporary pedagogy. Together these allow us to consider what it could mean to engage 'critically' with futures in a design education context, and thus respond to Facer and Sriprakash's (2021) call for dialogue between (design) futures and "popular, critical and democratic education" (p. 8).

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'Critical' as an indication of importance

A first, common usage of 'critical' emphasizes the importance of something. In a futures education context this often refers to skills, capacities, or knowledge that are considered necessary to survive or thrive in a particular (future) context. Some examples of this usage can be found in Miller's argument for developing Futures Literacy (2018), where he states that for both the anticipatory and the emergent modes of futuring (sometimes referred to as the "two legs" of futuring), futures literacy "is a *critical* step in becoming able to embrace complexity" (p. 22, emphasis added). Similarly, Miller's use of the term 'design-critical' draws attention to components that are crucial for the educational process's goals to be met (p. 46). A kindred use of critical was present at the recent Anticipation Conference (2022) in the sub-theme 'Critical Anticipatory Capacities'. The questions associated with this sub-theme were generally focused on understanding the development and deployment of key anticipatory capacities, with the term critical used, again, to emphasise important anticipatory skills, capacities and literacies.

As evident in these examples, this use of critical connotes importance, but does not provide a basis, standard or metric on which to assess the claims of importance. There are several other terms that can be used to communicate this sentiment, such as 'important', 'crucial', 'essential', 'vital', 'key', etc. We would suggest using these in future work to avoid ambiguity and to reserve 'critical' for the conceptions discussed next.

'Critical' as a style of reasoning

In other cases criticality is associated with a style of analysis. 'Critical thinking', for instance, foregrounds analytical capacities and a concern with truth. Burbules and Berk (1999) explain that "to be 'critical' basically means to be more discerning in recognizing faulty arguments, hasty generalizations, assertions lacking evidence, truth claims based on unreliable authority, ambiguous or obscure concepts, and so forth" (p. 46). In the context of formal education, this often translates to training students in "thinking based upon reliable procedures of inquiry" so they are able to question information disseminated to them, and through this become "self-sufficient" (pp. 46-47). This may entail teaching students 'close reading' and conceptual analysis, about principles of reliability and relevance, engaging them in Socratic dialogue or debate, and habituating them into a knowledge paradigm based in western traditions of rationalism, realism and enlightenment thinking. Within a futures context, such analytical skills are vital for conducting horizon scanning, system analysis, forecasting trends or backcasting possible pathways, as one needs to be able to see and understand connections between parts and the whole, and draw conclusions based on evidence and not whim.

Importantly, the two first uses of 'critical' generally focus on the individual, with some proponents of critical thinking equating 'self-sufficiency' with 'liberation' by arguing that a "liberated person... [is] free from the unwarranted and undesirable control of unjustified beliefs" (Siegel, 1988, cited in Burbules & Berk, 1999, p. 47). As Burbules and Berk (1999) state, for critical thinking "the attainment of individual critical thinking may, with success for enough people, lead to an increase in critical thinking socially, but it does not depend upon it" (p. 55). Social change, therefore, is seen as the potential outcome of the aggregate actions of better informed, more capable individuals, rather than the outcome of collective action. This, however, may be problematic for a few reasons: first, each individual is expected to develop the same sets of skills, ordained by a knowledge authority that also defines standards of reliability, objectivity and truth. Learners who do not conform to these prescribed standards are labelled 'illiterate' and deprived of formal opportunities to speak truth back to power (Street, 2011). Second, insisting on one set of skills or a singular notion of 'literacy' has the potential to lead to 'epistemicide': "the systematic destruction of knowledge and the creation of epistemological monocultures", thus reducing instead of expanding ways of engaging in/with the world (Facer & Sriprakash, 2021, p. 5, paraphrasing de Sousa Santos, 2016). Third, as we elaborate below, an approach that focuses on liberating individuals often leaves unaddressed the structural barriers to social transformation.

'Critical' as attentiveness to power

The third conception of criticality is rooted in broad understandings of the relations between knowledge and power

(Foucault, 1980). In Paulo Freire's *Pedagogy of the Oppressed* (1970/2005), conventional education is described as a means by which elites exert power over others by, for instance, gatekeeping educational institutions or developing curricula that support and propagate hegemonic values, interests and worldviews. The response, Freire argues, is the cultivation of criticality, posited as the capacity to attend to and act upon asymmetrical power relations, thus enabling learners to engage in open dialogue and collective reflection that may create opportunities for the marginalized to oppose dominant structures of power. By embracing what Freire calls *praxis* – collective "reflection and action upon the world in order to transform it" (p. 51) – critical educators not only create spaces to collectively reconsider the everyday contexts of learners but also work to problematize conventional, western-centric approaches to pedagogy and knowledge production. In this sense, as Burbles and Berk (1999) summarise, "the primary preoccupation of Critical Pedagogy is with social injustice and how to transform inequitable, undemocratic, or oppressive institutions and social relations" (p. 3).

Importantly, Freire (1970/2005) illustrates criticality as a *collective* feature of emancipatory pedagogy. He explains that in order for pedagogy to contribute to emancipation it must consistently recognise the humanity of all peoples – it requires a sense of "fellowship and solidarity" (p. 85). Pursuing emancipation in "isolation" leads to the individual acting on the basis of what is best for them, thus resulting in the "dehumanization" of the collective (pp. 85-6). This means that an approach that focuses on emancipating or liberating the individual instead of recognizing the intersectional and context-dependent identities of those who constitute the collective (Cope & Kalantzis, 2015) may limit the capabilities of others to do the same.

From critical pedagogy to critical design futures

As we illustrate above, differing concerns with social justice and different conceptions of social change provide key distinctions between critical pedagogy and critical thinking. These also extend to critical futures studies, which seek to understand how power shapes ideas and practices around 'the' future and temporality more broadly (Ahlqvist & Rhisiart, 2015; Goode & Godhe, 2017; Inayatullah, 1990). Building this understanding is important because the future, like the past, is a space of projection – it can be filled with ideas, visions and promises and used to mobilise support for or against a range of projects. Additionally, potential futures are both enabled and constrained, materially and imaginatively, by our expectations (Beckert, 2013; Polak, 1973), by our understandings and actions in the present (Adam & Groves, 2007; Tutton, 2017), and by existing structures and discourses (Goode & Godhe, 2017). The latter are especially important to consider in a futures context, as they enable those in positions of power to shape narratives of the future, and through this to discursively and materially 'close down' or 'open up' futures that serve their vested interests (Rickards et al., 2014). Critical futuring argues that understanding these dynamics is key to unlocking the potential of futuring as a means for social transformation.

While in the tradition of the Frankfurt School critical analysis is largely deconstructive – aimed at countering existing hegemonic ideas, images and discourses (Horkheimer, 1937/1972) – Goode and Godhe (2017) suggest that critical futuring can also be generative when it works to expand "the repertoire of ideas about the future available for public deliberation" (p. 114). The movement between deconstruction (of existing visions and conceptions of futures) and generation (of new images of the future) mirrors Freire's (1970/2005) insistence that marginalized communities themselves must engage in both reflection *and* action if their efforts are to be transformative. In this vein, for critical futuring to live up to its name it must find ways to engage the public instead of enacting 'futuring from above'. In this vein, democratizing futures has become a key argument for integrating participatory or co-creative design approaches into futuring activities as means to facilitate collaborative or participatory work while rendering futures more tangible and less abstract (Candy & Kornet, 2019; Farias, Bendor & Van Eekelen, 2022; Van Leemput, 2019). While Maze (2019) has argued that most futures and design work is still "permeated" by "technocentric and positivist logics" (p. 25), there are examples of tools and approaches that aim to involve non-experts and the public in futuring in power-sensitive ways (Bisht, 2020; Fleener & Coble, 2022). There is a productive overlap here with critical design (Bendor, 2022; Design & Oppression Network, 2023; Dunne, 1995; Fry, 2011), which mobilizes criticality in the third meaning (as attention to power) to challenge design theory and practice.

In understanding both design and futuring as forms of worldmaking (Escobar, 2018; Vervoort et al., 2015), and

by positing material engagement as a form of critique, we believe the convergence between critical design and critical futures may serve two purposes: it may help futures researchers and practitioners respond to Goode and Godhe's (2017) call for generative critical futuring, and may enable greater consideration of the "political dimensions of futurity" (Maze, 2019, p. 24) in both design and futuring.

Critical Design Futures Education

Based on the preceding analysis, we argue that design futures education may better contribute to social transformation when it adopts an understanding of criticality rooted in attentiveness to power in both design and education. While the analytical skills associated with critical thinking are valuable for processing information and considering causality, critical thinking's focus on truth over power and promotion of change through individual development make it less effective in potentiating social transformation. This does not mean that such skills have no place within a critical design futures curriculum – in fact, in practice they often do – but that in the context of critical design futures an analytical style of thinking should be channelled towards social and emancipatory aims, practiced collectively, and consider the very epistemological assumptions it mobilizes. In this sense, failing to critique this meaning of 'critical' would undermine important efforts to decolonise both design and futures studies (Gesturing Towards Decolonial Futures, n.d.; Tunstall, 2023).

Furthermore, in the spirit of Freirean pedagogy, it is not enough to proclaim a desire to contribute to social change; we must also seriously consider how our own educational activities both challenge and reinforce the status quo, and redesign them so that they serve and reflect emancipatory aims. We must be committed to criticality in both means and ends, and position ourselves as co-learners with our students, giving them space to lead and contribute to social transformation. Based on our reading of critical futures, critical design and critical pedagogy literature, we suggest that a critical approach to design futures education should focus on creating opportunities for students to identify, analyse and critique conceptions of futures that exist within their contexts. It should invite them to explore futures and forms of futurity on and in their own terms, while also developing an understanding of how their capacity to imagine and pursue futures is enabled and constrained by the structural forces and conditions of their everyday lives. Such an approach would embrace both deconstructive and generative modes of futuring. When introducing students to existing design and futuring tools, methods and approaches it would do so in ways that invite them to consider both potentials and limitations, as well as the epistemic and ontological assumptions that lie behind these apparatuses, all while providing them opportunities to (re)mix and (re)invent futuring in ways that respond and reflect their own goals, values and contexts.

While seemingly abstract, enacting such an approach can be as simple as inviting students to interrogate future visions found in news and entertainment media, or to collectively reflect on the futures they create themselves (e.g. Bodinet, 2016). Additionally, identifying the target audiences for their own future visions can act as an opening to consider not only who has a stake in specific issues, but also who holds what power to affect change. Who needs to see and consider these futures? Who is responsible for them? Possibilities for practice are endless, and in this manner design futures education may help disrupt the status quo and contribute to transformative and just social change.

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