

Cole, M. (2020) *Climate Change, the Fourth Industrial Revolution and Public Pedagogies: The Case for Ecosocialism*. Routledge. pp. 3-11

Introduction

It could be argued that two topics dominate world politics and economics in the second decade of the twenty-first century. These are the onward march of climate change destruction and how to stop it, and the relentless pace of technological change and how to regulate itⁱ. In this book, the case is made that the only viable answer to both questions and the solution to impending catastrophe entails a ‘movement of movements’, encompassing a scientifically informed and serious commitment to lasting ecological sustainability in tandem with a twenty-first century vision of socialism in pursuit of ‘a great transition’ towards ecosocialism (Löwy, 2018)ⁱⁱ, an ecosocialism that is ecofeminist (e.g. Brownhill and Turner, 2020). Specifically, the book uses public pedagogy (put simply, educational activity and learning that occurs outside of formal educational institutions in the sense of schools, colleges and universities) as a theoretical lens through which to analyse discourses around climate change and the Fourth Industrial Revolution (4IR), and interrogates these with Marxist and ecosocialist theory and practice (praxis). I begin by outlining the concept of public pedagogy.

Public Pedagogy

Promoting progressive social change

Social justice educator Roger Simon (1995, 109) has argued that pedagogy as a concept lends itself to a variety of sites for education to take place, that are ‘multiple, shifting and overlapping’. *Public* pedagogy extends pedagogical analysis beyond schools, colleges and universities to learning in other institutions such as museums, zoos and libraries, as well as informal educational sites like popular culture, commercial spaces and the media, including of course, social media. It also occurs through figures and sites of activism, including public intellectuals and grassroots social movements (Sandlin, Schultz and Burdick, 2010)ⁱⁱⁱ. It is also a widely used medium in the speeches, tweets and interviews of politicians and other public figures, and in podcasts and video lectures as well as blogs, articles and books. In the Fourth Industrial Revolution, public pedagogy is increasing exponentially. It can be regressive or progressive. With respect to progressive social and socialist and ecosocialist movements and parties, public pedagogy is definitively not intended to replace more traditional struggles in the workplaces, on the streets and in communities but to complement them.

Public Pedagogy is an important corrective to the common parlance notion that pedagogy only takes place in schools, colleges and universities.

While the parameters of the concept to public pedagogy are wide-ranging, traditionally the overwhelming focus of the majority of historical and contemporary public pedagogy theorists has been on the promotion of social justice for all. To this end, as Sandlin *et al.* (2011) point out, many have been involved in a counter-hegemonic project against neoliberalism and its multiple manifestations per se, and/or against the oppression of multiple identities based on gender, ‘race’, age, sexual orientation, and social class that it upholds. Moreover:

Although the context and meaning of ... [public pedagogy] differ in early sources from current parlance, in some ways ... [it] ... remains consistent – the term ... [dating back to 1894] implied a form of educational discourse in the service of the *public good*. (Sandlin *et al.*, 2011, 341–342)

In a recent book on Donald J. Trump and the alt-right (Cole (2019a), I introduce public pedagogies that address contemporary American political realities, including anti-fascist (94–95), anti-capitalist and pro-socialist formulations (97–115), thus going beyond the social justice agenda of progressive public pedagogy theory, expanding it to include not just ongoing struggles against the growing threat of neo-nazism –but the challenge to the capitalist system itself and the promotion of the socialist alternative. I advocate Marxism as a theory that, unlike many other progressive theories, provides both a rigorous critique of capitalism and an emblematic vision for the future (this is developed in detail in Cole, 2008 and 2018). In addition, I discuss a ‘public pedagogy for ecology’ (Cole, 2019a, 111) and a ‘public pedagogy of love’ (Cole, 2019a, 101-102).

In a parallel volume (Cole, 2020a) that focuses on ex-UK Prime Minister Theresa May and the way in which racism was exacerbated via her creation of the ‘really hostile environment’ during her periods as Home Secretary and Prime Minister, I continue to address socialist public pedagogy, this time primarily in the UK, making the case for a socialist future without borders, viewing a borderless future as inevitable as well as socially just.

To conclude this section of the Introduction, it should be stressed that public pedagogy against capitalism and for socialism is not, of course, new, and dates back at least to the early socialists (see Cole, 2008, 13-27). One of the most auspicious and powerful public pedagogical treatises, Marx and Engels’ (1848) *Manifesto of the Communist Party*, has sold around 500 million

copies, and is one of the four best-selling books of all time. Both the *Manifesto* and Marx's three volumes of *Capital* (1887, 1893, 1894) are UNESCO World Heritage documents (deutschland. de. 2018). However, given that Sandlin et al. (2011) limited their analysis of 'public pedagogy' to 'public pedagogy literature', that is to say to scholarly works that actually use the term^{iv}, a discussion of Marx or Engels or socialism was not present in that literature at that time and was therefore not addressed^v. It is worth noting here that during 2019, the World Socialist Web Site (WSWS), a formidable organ of public pedagogy, experienced an enormous growth in its readership.^{vi} The total number of page views increased to 20 million, from 14 million in 2018 (a growth of more than 40 percent). The largest period of readership, with more than two million people accessing the site each month, corresponded with the General Motors strike and the auto workers' struggle in September and October in the US (North and Kishore, 2020).

Promoting regressive social change

Public pedagogy analysis has also been deployed to look at ways in which regressive (or reactionary) discourses and accompanying policies are permeated. Thus Henry Giroux (2010, 7) refers to a 'public pedagogy of hate' in the US, emitted by a 'right-wing spin machine', influenced by the right-wing media, in particular conservative radio talk show hosts, that 'endlessly spews out a toxic rhetoric' against Muslims, African Americans and other people of colour, immigrants, and many other groups (Giroux, 2010, 8).

In Cole, 2019a (chapters 2, 3 and 4; see also Cole, 2020b), I develop and extend Giroux's public pedagogy of hate to analyse how Donald Trump promotes hatred through his speeches and via Twitter. Trump's public pedagogy of hate serves not only as an attempt to 'educate' the public at large, often to promote racism, sexism and climate change misinformation, and to mock disability, but also to embolden and legitimize the views of individuals and groups associated with the alternative right or alt-right, and other far right groups with core fascist beliefs. Ongoing policies, I demonstrate, accompany Trump's public pedagogy. I also refer to 'public pedagogy in reverse', this formulation referring to Trump's describing as 'fake news', any news that he claims is published or broadcast by certain news outlets in order to undermine or discredit him: 'don't take any notice of them because you are being misinformed.' The reality is that it is the Trump administration that has developed, institutionalised and weaponised the concept of 'fake news' to serve and further its own right wing agenda (e.g. Agostinone-Wilson (ed) 2020).

The alt-right, I argue, are, spurred on by Trump, also clearly and manifestly also engaged in public pedagogies of hate, including misogyny, but in addition actively promoting a public pedagogy for fascism, both in their quest for white supremacy and a white ethno-state and in terms of policy recommendations for a neo-Nazi USA that embodies some key elements of classic fascism. Just as Giroux (1998, 2000), in Sandlin *et al.*'s (2011, 344) words, 'draws on cultural studies literature that focuses on popular culture' to challenge hegemony, so do Trump and the alt-right, but from the perspective of the (far) right rather than from the left. Whereas, to reiterate, public pedagogy has traditionally been for *more* social justice and more equality, that of Trump the alt-right and other far-right factions is, from the viewpoint of progressives, for *less* justice and equality. Thus Trump and the alt-right can be viewed as attempting to undermine 'liberal democracy' (e.g. Shattuck *et al.*, 2018). In Cole, 2020a (see also Cole, 2019b), I widen regressive public pedagogy formulations still further. Specifically, I discuss public pedagogies of hate and threat as key components of Theresa May's 'really hostile environment' directed at ('illegal') immigrants, a toxic policy that continues under the right-wing populist government of Boris Johnson (BBC News, 2020a; Bulman, 2019; Gayle *et al.*, 2020; Gentleman, 2019a, b, c; Gentleman *et al.* 2020; McQue *et al.* 2019; Webber, 2019).

Preparedness pedagogy

There is also a substantive literature on 'preparedness pedagogy' ('civil defence education', 'emergency education' and 'disaster education'), relatively new, that can be seen as a form of regressive public pedagogy.^{vii} John Preston (2019, chapter 1) has spelt out the reactionary political ramifications of this form of pedagogy. He argues that it is used by capitalist states to ensure the continuity and stability of capitalism in the event of disasters and emergencies. It includes activities to maintain consumption. Examples are the rapid reopening of markets following 9/11 (developed in more detail in chapter 1, {pp??} of this book) and after the London Bridge Borough Market attack in 2017.

It also includes, Preston (2019, chapter 1) argues, the continuity of capitalist production such as its restoration in the face of existential threats, for example, preserving property rights in the event of nuclear war in the US. In this event, the money supply would need to be restored and property rights maintained by keeping property deeds in deep bunkers in order to 'restart' capitalism. It further includes enabling and facilitating disaster capitalism in the form of

primitive accumulation, such as making new markets where they didn't exist before after a disaster. This occurred in the aftermath of Hurricane Katrina in attempts to marketise and privatise public schooling ['state schooling' in the English sense] (e.g. Saltman, 2007). Public pedagogy is also used as a mode of 'responsibilisation', placing the responsibility for preparedness onto marginalised populations (usually by class or 'race') and acting as a mode of eliminationism where the State can absolve itself of responsibility (Preston, 2019, chapter 1).

A good example of both responsibilisation and eliminationism is the Grenfell Tower disaster where the instruction to 'stay put' had a devastating effect on the victims (mainly poor people of colour) and placed blame for this policy on the Fire Service rather than considering purposive austerity by the Coalition and Tory governments, and the way in which the violent gentrification of Grenfell benefited property speculators (finance capital) (Preston, 2019, chapter 1). As Preston explains, the whole area of tower block fires is under-researched and under-funded. Grenfell did not have adequate protection measures for compartmentalisation (which the fire service had been trained on) and safety was completely inadequate. The fire service were victims of austerity and did not have the resources or training, so should not be blamed for the tragedy.

Following John Holloway (e.g. Holloway, 2010), Preston argues, that since capitalism is crisis (capitalism needs workers' labour power to survive and the labour/capital relationship is always antagonistic so crisis is fundamental to capitalist production by definition^{viii} and pathologically produces other crises (notably environmental, as this book demonstrates), disasters increase whilst preparedness and emergency response are starved of resources. At the same time, the rich are adopting their own form of private preparedness (Billionaire Bunkers –Wainwright, 2012) - the biggest UK market for private residential bunkers is Kensington and Chelsea, the site of Grenfell Tower (Preston, 2019, chapter 1).

Is 'public pedagogy' too vague and all-encompassing to be of theoretical use?

The extensive review of the literature provided in Sandlin et al. (2011) has led those authors to question, following Glenn Savage (2010, 103), whether the wide-ranging applications of the concept of 'public pedagogy', used in mythologizing and 'totalizing' ways, has diminished 'its usefulness as a sensitizing concept for researchers interested in learning and education outside of schools' (Sandlin et al. 2011, 358), adding that throughout their review, the meaning of

‘public pedagogy’ ‘became increasingly vague because of a general lack of clarity among many authors regarding how they are theorizing the term’ (Sandlin et al. 2011, 359). Given that their review referred to the state of play a decade ago, and, as demonstrated in this Introduction, the literature has expanded even more since then, is there even more of a case to be made that the concept has become even more overloaded, a possibility that has occurred to me in my own writing on public pedagogy?

Perhaps the best response to this question is provided by Italian neo-Marxist, Antonio Gramsci, a quote from whom is cited by Sandlin et al (2011, 343): ‘every relationship of “hegemony” is an educational one’ (Gramsci, 1971, 350). Underlining the universal significance of public pedagogy and its importance in class struggle, what Gramsci meant by this was that educational relationships:

should not be restricted to the field of the strictly ‘scholastic’ relationships by means of which the new generation comes into contact with the old and absorbs its experiences and its historically necessary values and ‘matures’ and develops a personality of its own which is historically and culturally superior. This form of relationship exists throughout society as a whole and for every individual relative to other individuals. It exists between intellectual and non-intellectual sections of the population, between the rulers and the ruled, *élites* and their followers, leaders ... and led (Gramsci, 1971, 350).

Gramsci’s concrete explication distances his version of public pedagogy from mythologizing, while from a non-relativist, anti-postmodern Marxist perspective, ‘totalizing’ is to be welcomed. As Peter McLaren (personal correspondence, 2007, cited in Cole, 2008, 70) once said, ‘Always totalize’. This is not to deny diversity and subjectivities (present-day socialists are cognizant of and committed to eradicating *all* forms of oppression – see chapter 3 of this book) but to insist that there is a fundamental and prerequisite duality in capitalist society based on social class that can only be resolved by the replacement of capitalism with (eco-) socialism.

It is also important to stress that Gramsci did not interpret ‘intellectual’ in any genetic or inherited sense. On the contrary, he believed that we are all intellectuals, that everyone has intellectual and rational faculties, but that in capitalist societies not everyone has the social function of being an intellectual (Gramsci, 1971, 9). This has important implications for public pedagogy’s progressive potential. Schooling, or in French neo-Marxist Louis Althusser’s terminology, the Educational Ideological State Apparatus (ISA), serves to reproduce the class structure of capitalist society, albeit massively contested, in various ways. However, ‘outside of schools’ public pedagogy, particularly *focused* anti-capitalist, ecosocialist public pedagogy

can act as a counter-hegemonic force; hence the very purpose of writing this book. If we are all intellectuals, we are amenable to public pedagogy, of varying degrees of complexity and sophistication, throughout our lives from early to senior years, whatever hegemonic effect the education ISA has had on us.

This is not, of course, a one-way process, but a dialectical one that can lead to public pedagogical dialogue and the formation of counter-hegemonic organic intellectuals (those who are organically aligned with the working class) who, in turn, can contribute to the creation of further counter-hegemonic organic intellectuals, and so on and so on. In the course of developing Gramscian theory, Deirdre O'Neill and Mike Wayne (2017) have identified two groups of such intellectuals: those who are middle class and have distanced themselves from the ruling class, but do not democratise their practices and retain a stamp of elitism; and those who develop from *within* the working class, but who resist assimilation and neutralisation within the established institutions. The role of public pedagogy in the creation of such organic intellectuals, particularly the latter, is a further vindication of its relevance and importance.

Outline of the chapters

Chapter 1 is in two parts. In part 1, I discuss the relationship between capitalism and planetary destruction and in part 2, the role of activism in fostering climate change emergency, while underlining why declaring climate change emergency is urgent. I begin with a brief summary of the agreement made at the 2015 United Nations Climate Change Conference in Paris. I then consider, from a Marxist perspective, the relationship between capitalism and planetary destruction, focusing on the role of certain capitalist world leaders. Next I address the Paris climate change accord four years on: the Madrid 2019 Climate Change Conference (COP 25), suggesting that we may be on a trend for total planetary catastrophe. I conclude this part of the chapter with a look forward to Glasgow 2020 (COP 26), taking place five years after Paris, and suggest that we have a mountain to climb.

In the second part of the chapter, after briefly outlining climate change awareness's long history, consideration is given to Greta Thunberg, and movements inspired by her example, as well as Extinction Rebellion. While the struggle against climate change extinction is, for the overwhelming majority of humankind, self-evidently to be lauded, the case is made that a climate change *emergency* needs to be declared worldwide, citing a number of factors that account for this urgency that seriously threaten the survival of our planet. Next I consider the

relationship between climate change and gender before concluding the chapter by stressing that it is not just the existence of humankind that is at threat, but also around a million other species.

I then lay out, in **Chapter 2**, also in two parts, the wide-ranging dimensions of what has become known as The Fourth Industrial Revolution (or 4.0 or 4IR) - the fusion of technologies that is blurring lines between the physical, the digital and the biological. In part 1, I briefly consider the trajectories of the First Industrial Revolution; the Second Industrial Revolution; and the Third Industrial Revolution, before moving on to the specific features of the Fourth. I next address the arguments of Klaus Schwab that 4IR is a progressive capitalist force. I go on look at Schwab's nod both to Trump's nationalist populism and to 'the "Greta Thunberg" effect, all in the space of a year.

In part 2 of Chapter 2, I present a Marxist critique of 4IR (more appropriately, Capitalism 4.0: *4IR under global capitalism*). The case is made that pro-capitalist public pedagogies fail to address the reality of what is actually occurring and likely to occur in the immediate and long-term future. The explanatory power of Marxist critiques of capitalism is that they are structural and systemic and point to historical processes and trends that over-ride in significance the actions of individual capitalists and their apologists, however benign their intentions. In the course of the chapter, I consider Marx and his conception of value theory and technology that encompasses the tendency of the profit to fall. This has the potential to create ongoing and intensifying crises for capitalism as technological innovations advance. I move on to a consideration of Capitalism 4.0 and gender. I conclude the chapter with a look at Amazonization, at how Amazon micromanages, exploits and diminishes its workforce; at the role of Alexa, Amazon's virtual assistant; at the way Amazon is transforming the public into mini-entrepreneurs; and at the high-tech surveillance by the state facilitated by companies such as Amazon. I conclude Chapter 2 with a look at how Amazon workers are fighting back.

Sustainability is not just environmental balance, but also includes economic and social factors. Given the inherently predatory nature of capitalism, with its primary and ultimate driving force the accumulation of surplus value, it is, as an economic and social system, fundamentally incompatible with ecological survival. In the light of the seemingly insurmountable problems that I have identified that are caused by capitalism, I turn, in **Chapter 3** to ecosocialism, as an alternative to Capitalism 4.0. I begin by looking at nineteenth and twentieth century socialism, taking the Paris Commune of 1871 as an instance of the former, and the Russian Revolution of 1917, as an example of the latter. In my overview of events following 1917, I include a

discussion of Stalinism; and the Soviet Union and ecology. I then turn my attention to ecosocialism in the twenty-first century. Now much more in the mainstream, I consider in detail Michael Löwy's 'great transition initiative' and the form that he believes it should take. I move on to Mary Mellor's critique of Löwy and other socialists for their neglect of gender and go on to make the case that ecosocialism must be ecofeminist, an ecofeminism that is fully inclusive and encompasses women of colour in the global south, as well as diverse women of all continents. By appropriating the public pedagogies of the pro-capitalist lobby that exalt the vast and very real potential gains that are heralded by the Fourth Industrial Revolution, ecosocialists can confidently make the case that lasting equality for humankind is becoming increasingly possible and achievable. Unlike many progressive theories, Marxism provides both a rigorous critique of capitalism and an emblematic vision for the future. It is of the utmost importance, however, that ecosocialist public pedagogies seriously and vigorously interrogate Marxism and socialism both historically and contemporaneously as both theory and practice (praxis), and in so doing, guard and warn against current and past distortions of the work of Marx and Marxists. I conclude the chapter with a consideration of whether we have arrived at a Gramscian moment^{ix}.

While the book focuses on the threats from climate change and the Fourth Industrial Revolution, and the case for an ecosocialist solution, fully informed by ecofeminism, there is another existential threat, however, as identified, in tandem with the climate crisis, by the Bulletin of the Atomic Scientists (2020). The book ends, therefore, with a **Postscript** that provides some brief words of warning about the perils of nuclear warfare and the ways in which the barometer of its likelihood is rising with the new technologies available in Capitalism 4.0. These apocalyptic weapons, I point out, are dangerously and recklessly promoted by US politicians. Individually or together, nuclear war and climate change are potentially civilisation-ending, and as the Bulletin concludes, immediate action is required in the form of the immediate, focused, and unrelenting attention of the entire world.

ⁱ The substantive part of this book was completed before the World Health Organisation (WHO) declared the Coronavirus, Covid-19 to be a pandemic in March 2020, and so its long-term effects are, as yet, uncertain.

ⁱⁱ *The genesis of the book is my Afterword (Cole, 2020a) in an edited collection on truth in the era of Trump (Agostinone-Wilson ed., 2020) and a keynote address I delivered at the 3rd International Conference on Critical Pedagogy' at the South China Normal University, Guangzhou, People's Republic of China, November 16-17, 2019.*

ⁱⁱⁱ For an extensive analysis of the complexities and multifarious varieties of the concept of public pedagogy, see Sandlin et al., 2011.

^{iv} Exceptions are Cremin, 1976; Ellsworth, 2005; Lacy, 1995; and Schubert, 1986). Although these writers do not specifically use the term *public pedagogy*, they ‘are widely cited in the public pedagogy literature and thus can be considered foundational texts’ (Sandlin et. al., 2011, 340).

^v There is one mention of ‘Marxian’, when they state that ‘Marxian perspectives on culture insist that all public policy, regardless of origin, is always shaped by the economic context of its production’ (Sandlin et. al., 2011, 352

^{vi} I make extensive use of WSWS articles in this book. I have reservations, however, about the writers on the site’s marginalisation of and sometimes hostility towards struggles and issues not directly related to social class. Neither do I agree totally with the WSWS’s blanket rejection of the official trade union movement, although I agree that many official and/or full-time union leaders are not to be trusted. Finally I am not happy with its wholesale denunciation of other left parties and organisations as ‘pseudo-left’.

^{vii} For an analysis, making the case that ‘preparedness pedagogy’ *should* be encompassed within ‘public pedagogy’, and that the conceptual links between the two should be strengthened, see Kitagawa, 2017.

^{viii} This notion of ‘crisis’ is further explained in the section on the tendency of the rate of profit to fall in chapter 1 {(pp???) of this book

^{ix} The crucial question of how the change from the present world (neoliberal) capitalist system to global ecosocialism might happen is outside the scope of this book, and is a much-needed endeavour. For an interesting discussion, see Harvey, 2009.