

The Anti-Ecological University

Morini, L

Published PDF deposited in Coventry University's Repository

Original citation:

Morini, L 2020, 'The Anti-Ecological University', *Philosophy and Theory in Higher Education*, vol. 2, no. 2, pp. 45-66.

ISSN 2578-5753

ESSN 2578-5761

Publisher: Peter Lang

Open access under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0). For details go to <http://creativecommons.org/licenses/by/>

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.



3. The Anti-Ecological University: Competitive Higher Education as Ecological Catastrophe

LUCA MORINI
Coventry University

Abstract: The article aims at critiquing the current competitive framing which is shaping higher education policies and discourse at an international level. The argument initially takes an historical and genealogical approach to trace the roots of this framing to ideological misinterpretations of evolutionary theory and ecology, and to the influence of eugenics in the framing of educational policy. The article then uses a systems theory lens to articulate the negative impact of competitive dynamics in global education on an ecosystemic level, focusing on a “deecologization” of the two dimensions of time and space in the lives of university students and staff. Finally, the article concludes suggesting the necessity of an imaginative reecologization of thought as a precondition for any sustainable change in Higher Education philosophy and policy.

Keywords: ecology, competition, Higher Education, anti-ecological

Introduction—Plural Discourses of “Ecology”

In this article, I adopt an ecological lens to discuss the epistemological roots of Higher Education (HE) transformations in the last decades, tracing competitive framings to outdated ideas of ecology, and outlining their impact on the social environment.

To contextualize this argument and its epistemological framework, the usage of the central term “ecology” requires unpacking. In common parlance

it refers mainly to environmentalist movements, and while of course it defines a scientific field of studies, it also has a specific background within the field of Higher Education studies. The discourse of ecology as related to HE has a long if sparse history, including, among others, Hall,¹ who coined the phrase “Anti-Ecological University” to summarize his critique of reductionist disciplinarity, and systems thinkers Churchman,² Morin,³ and Fornasa,⁴ all in the context of a discussion of HE reform.

Recently, this framing has been elaborated upon by Barnett,⁵ drawing on the discussion of ecological registers proposed by Guattari.⁶ Barnett discusses earlier incarnations of the university, e.g. the metaphysical university and the research university, but also the current, hegemonic “entrepreneurial university”, with its impact expressed as economic capital. Among alternative ways of “being-possible”, Barnett focuses on the ecological university, one that “takes seriously both the world’s interconnectedness and the university’s interconnectedness with the world”, and fosters “a concern for the world and an awareness of its interconnectedness”. Barnett asks:⁷

Is [the university] releasing or making possible new energies in societies that work across the whole of society, aware of its own embeddedness in wider ecologies—of society and of persons? Or is it just a competitive system, with each university seeking only to maximise its own interests and extracting value from society instead of adding to it?

I argue that this “competitive system” is itself shaped by a specific ecological discourse: a pseudo-Darwinist framing of existence as universal competition. That is, while for Barnett “the ‘ecological’ becomes a metaphor that can be stretched into yet further domains”,⁸ I intend to recover its literality and groundedness in ecological systems science.

My intent is not therefore to critique Barnett’s ‘metaphorical’ framing, which indeed provides the rhetorical basis for my argument, but to highlight

¹ Ross H. Hall. “University education and the natural environment: are they compatible?.” *International Journal of Environmental Studies* 2.1–4 (1971): 47–52.

² C. West Churchman. “Perspectives of the systems approach.” *Interfaces* 4.4 (1974): 6–11.

³ Edgar Morin. “The reform of thought, transdisciplinarity, and the reform of the university.” *Transdisciplinarity. Theory and practice* (2008): 23–32.

⁴ Walter Fornasa, “Università e Sostenibilità”, in *Formazione e Sostenibilità* (Milano: FrancoAngeli, 2007), 15–36.

⁵ Ronald Barnett. *The ecological university: A feasible utopia*. Routledge, 2017.

⁶ Félix Guattari. *The three ecologies*. (London: Bloomsbury Publishing, 2005).

⁷ Ronald Barnett, *Thinking and Rethinking the University – The Selected Works of Ronald Barnett* (London: Routledge, 2011), 73.

⁸ Ronald Barnett. *Being a university*. (London: Routledge, 2010), 142.

the articulation of terms such as “ecology” and “ecosystem” within the field of systems science, systems thinking and complexity theory, in particular referring to Bateson’s works on the epistemological unity underlying evolution, communication and society.⁹ “Ecology” in this framing refers to the study of the interactions of contexts, living systems, technologies, and, ultimately, ideas, examined through a systemic lens.

Relying on this epistemological framework, I argue that a misconstrued framing of ecology, steeped in nineteenth-century social hierarchies, still constitutes the epistemological root of twenty-first-century HE policy discourse. To articulate this argument, I discuss the development of “social Darwinist” perspectives, highlighting their links to modern educational policy and global spread through HE networks. This is a mirror to the ecological university, the “Anti-Ecological University”, a framing of HE that rejects interconnectedness to favor competition, and therefore transforms universities and the world into places hostile to life.

The Natural Political History of Competition

To understand the ideological implications of ecological theories, I will explore common sense framings of ecology as connected with the “natural” world, keeping in mind Biesta’s warning: “Nothing is more political than declaring what is ‘natural’ and what is not”.¹⁰ My argument moves from how, particularly in Western industrial and post-industrial contexts, ecological dynamics are preponderantly framed in terms of predator/prey relationships, or of competition of the multitudes for limited space and resources.¹¹

This article certainly does not intend to deny Darwin’s contribution toward understanding nature. However, to obscure the situated genesis of his work and its interpretations would diminish our understanding of how evolutionary theory is built and interpreted through the repertoire of metaphors then available. As Marx wrote:

*It is remarkable how Darwin rediscovers, among the beasts and plants, the society of England with its division of labour, competition, opening up of new markets, ‘inventions’ and Malthusian “struggle for existence”.*¹²

⁹ Gregory Bateson, *Steps to an Ecology of Mind* (Chicago: University of Chicago Press, 2000).

¹⁰ Gert Biesta, “Interrupting the Politics of Learning”, Keynote for the BERA Conference, October 5, 2017.

¹¹ Karl Gunnar. “The Malthus delusion.” *European Review of Economic History* 12.2 (2008): 165–173.

¹² Karl Marx, letter to Engels, June 18, 1862. *Gesamtausgabe III*.

Theory necessarily develops within an ecology of ideas, and bears the marks of context and contingency. Countering a vision of existence framed on a Victorian backdrop, Gould explores the contributions of the nineteenth-century's Russian school of evolutionary biology,¹³ who, while recognizing the same dynamics, interpreted them through a cooperative lens, due to the context of their observations (a hostile environment where cooperation and conflict avoidance are key to survival) and a more communal cultural repertoire:

If Kropotkin overemphasized mutual aid, most Darwinians in Western Europe had exaggerated competition just as strongly. If Kropotkin drew inappropriate hope for social reform from his concept of nature, other Darwinians had erred just as firmly (and for motives that most of us would now decry) in justifying imperial conquest, racism, and oppression of industrial workers as the harsh outcome of natural selection in the competitive mode.

Echoing the Russian line of inquiry, Margulis and Fester's work on symbiosis¹⁴ and Axelrod and Hamilton's studies on the evolution of cooperation¹⁵ have disrupted the scientific understanding of ecology as a wholly competitive affair, with mutualism recognized as a driving force of ecosystems. However, while these theories have influenced environmentalist movements,¹⁶ they have not scratched the broader common sense, nor the centrality of "competitiveness" in policymaking.

The most immediate misinterpretation of Darwin's work into the domain of policy is Spencer's famous formulation of "survival of the fittest", directly deployed to justify exploitation, e.g. opposing land reform, labor regulations and compulsory education, on the grounds that they violated "the laws of life".¹⁷ This warped "Darwinist" interpretation, widespread in the second half of the nineteenth century, became increasingly marginalized and untenable due to its imperialist and racist overtones. However, this unintended interpretation of Darwin's competitive description of nature left an enduring mark in the field of education policies, through the influence of the eugenics movement.

¹³ Stephen Jay Gould, "Kropotkin Was No Crackpot," *Natural History* 7, no.97 (July 1997): 325–339

¹⁴ Lynn Margulis and Rene Fester (Eds.), *Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis* (Boston: MIT Press, 1991).

¹⁵ Robert Axelrod and William Donald Hamilton, "The Evolution of Cooperation," *Science* 211, no. 4489 (March 1981): 1390–1396

¹⁶ Uhlin, Graig. "The Anthropocene's Nonindifferent Nature." *JCMS: Journal of Cinema and Media Studies* 58.2 (2019): 157–162.

¹⁷ Herbert Spencer, *The Man Versus the State* (London and Edinburgh: Williams and Norgate, 1884), 109.

Eugenics, defined as “the science of improving racial quality” through purposeful selection, was founded one year after Darwin’s death by his cousin Galton,¹⁸ and grounded the work of influential educators, e.g. Thorndike. Particularly relevant is the debate on vocational education hosted in 1914 by *The New Republic* between Dewey and Snedden. The latter supported eugenics for “social efficiency”, arguing for a tiered system, where “the favored classes”, “those with the time and inclination”, would pursue a liberal education, while “the rank and file of youth” was to be oriented toward “education for the pursuit of occupation”.¹⁹ Dewey’s reply was forceful:

I am utterly opposed to giving the power of social predestination, by means of narrowing training, to a group of fallible men. [...] The kind of vocational education in which I am interested is not one which will “adapt” workers to the existing industrial regime; I am not sufficiently in love with the regime for that. It seems to me that the business of all who would not be educational time-servers is to resist every move in this direction, and to strive for a kind of vocational education which will first alter the existing industrial system and ultimately transform it.

Dewey cuts to the core of the eugenicists’ ecological fallacy: he questions the necessary character of the environment, in this case the labor market, and reincludes it within the historicity and contingency of its context, as something itself amenable to change. Still, only a few years later, the U.S. government passed still influential reforms in the Smith-Hughes Act (1917)²⁰ and the Cardinal Principles Report (1918),²¹ both written by Snedden’s students, enshrining education’s purpose as Malthusian competition: to make students “fit” in the scarce spaces provided by society. As a consequence, while Dewey remains a key figure of educational philosophy, the epistemology underlying most current educational policy can be traced to eugenics and its narrow interpretation of nature, itself mirroring the socioeconomic structure of Victorian society.²²

¹⁸ Francis Galton, *Inquiries into Human Faculty and its Development* (London: J.M. Dent Company 1883).

¹⁹ David Labaree, “How Dewey lost: The victory of David Snedden and social efficiency in the reform of American education,” in *Pragmatism and Modernities*, ed. Daniel Trohler, Thomas Schlag, Fritz Osterwalder (Rotterdam: Sense Publishers, 2010): 163–188.

²⁰ Copy of the Smith-Hughes Act, accessed September 20, 2018, <https://www.loc.gov/law/help/statutes-at-large/64th-congress/session-2/c64s2ch114.pdf>

²¹ Copy of the Cardinal Principles Report, accessed September 20, 2018, <https://files.eric.ed.gov/fulltext/ED541063.pdf>

²² James A. Mangan, “Social Darwinism and upper-class education in late Victorian and Edwardian England.” In *Manufactured Masculinity*, ed. James A. Mangan (London: Routledge, 2014), 98–117.

Having traced the naturalization of competition into modern education policy, I will not dwell on the recent history of neoliberalisms' encroachment on public goods and spaces. The eugenicists' competitive vision of ecological systems influenced neoliberal perspectives (through Hayek, Mises, and Rothbard), but also their mainstream counterpart, Keynesianism. Both dominant theories of twentieth-century economic policy, although superficially divorced from ecological thought, are therefore rooted in the same ecological premise: that the "natural state" is one of universal competition, with Neoliberalism pragmatically embracing it, and Keynesianism trying to temper it. My attempt is to go beyond this debate, as by explicitly relinking policy and underlying ecological theories both positions' fundamental premise may be questioned.

Competition in HE as Ecological Catastrophe

Having presented the rooting of current educational policies in a specific framing of ecological systems, I will now focus on how that competitive vision shapes global HE systems, and how in turn HE framed as competition influences broader global ecosystems. As Postman and Weingartner indicated,²³ educational institutions reflect societal values, but should also be places of awareness, reflection and regulation: education should act as an "anti-entropic" negative feedback loop for society, like the governor of a steam engine keeps the whole system within a viable range of parameters. This formal metaphor, reliant on ecosystemic theoretical frameworks, depicts how education systems should work to moderate inequality and avoid stagnation, and they are central to the broader set of negative feedback loops that constitute democracy. As Meadows explains:

This great system [democracy] was invented to put self-correcting feedback between the people and their government. The people, informed about what their elected representatives do, respond by voting those representatives in or out of office. The process depends upon the free, full, unbiased flow of information back and forth between electorate and leaders. Billions of dollars are spent to limit and bias and dominate that flow.²⁴

As competition, by way of Snedden's legacy, becomes naturalized within educational institutions as networked as HE, it pushes away from engaging

²³ Neil Postman & Charles Weingartner, *Teaching as a Subversive Activity*. (New York: Dell, 1969), 8–9.

²⁴ Donella Meadows, *Thinking in Systems: A Primer*. (Hartland: The Sustainability Institute, 2008), 154.

with “the free, full, unbiased flow of information” and toward developing an expansive signaling structure,²⁵ not unlike a peacock’s tail, to adopt a biological metaphor. Like peacocks, HE is forced into a competitive race that requires shifting substantial resources and energy toward signaling, be it in the form of marketing campaigns or ranking games. Universities use rankings and performance assessment to signal their “excellence”, and how qualifications they award will in turn signal competitiveness. Pushed by national and institutional policy, the competitive signaling paradigm is entering everyday pedagogy, with “embedded employability”²⁶ becoming central to curriculum design, often with the explicit framing of making one’s CV rise above competitors.²⁷ This signaling element of education has been discussed by Caplan,²⁸ who argues that education doesn’t foster individual development, but merely enables signaling of preexisting attitudes and skills. Caplan sidelines the humanizing/liberating purpose of education, but it’s also true that HE is incentivized by policy to shift toward enabling students to signal themselves as more competitive on the labor market. This shift in feedback dynamics to pursue competition disrupts the whole societal ecosystem, as HE loses its regulatory function, and reverses it into an entropic, positive feedback system exacerbating global inequalities and systemic instabilities: the Anti-Ecological University.

An explicit application of this “Darwinist” policy discourse can be found in the memoir of former U.K. university minister Willetts, who laments how no British “mega-university” able to compete on the global market in terms of student numbers has emerged, despite this being a key objective of his competition-focused policy.²⁹ Such misapplications of evolutionary theory lead to conflict between universities for rankings, between and within departments for resources, between scholars for metrics, between students for employability. In this enforced conflict, participants are rewarded for their ability to signal high “ranking”, which in turn enables them to climb further.

²⁵ Emmanuel Mogaji, “Marketing strategies of United Kingdom universities during clearing and adjustment,” *International Journal of Educational Management* 30, no.4 (April 2016): 493–504.

²⁶ Lee Harvey. “Embedding and integrating employability.” *New Directions for Institutional Research* 2005.128 (2005): 13–28.

²⁷ Simon Marginson. “Global stratification in higher education.” *Higher education, stratification, and workforce development*. Springer, Cham, 2016. 13–34.

²⁸ Bryan Caplan, *The case against education: Why the education system is a waste of time and money*. (Princeton: Princeton University Press, 2018): 118.

²⁹ David Willetts. *A university education*. (Oxford: Oxford University Press, 2017), 317.

Again Meadows:

There are many positive feedback loops in society that reward the winners of a competition with the resources to win even bigger next time. Systems folks call them “success to the successful” loops. [...] Rich people give their kids inheritances and good educations; poor kids lose out. Anti-poverty programs are weak negative loops that try to counter these strong positive ones. It would be much more effective to weaken the positive loops. That’s what progressive income tax, inheritance tax, and universal high-quality public education programs are meant to do.³⁰

A problematic positive feedback loop in HE is indeed the current structure of access. Leaving aside the barriers imposed by tuition fees,³¹ even where “meritocratic” competitive measures are present, such as China’s GaoKao examination, favorable outcomes are skewed toward students residing in richer areas.³² On the academic side, another positive feedback loop pertains the distribution of research funding, where “elite” institutions, in the current regime of competitive bidding, are likely to obtain further funding, despite evidence of diminishing returns in research³³.

The impact of the Anti-Ecological University is widened by HE systems’ global networking and centrality to social reproduction³⁴. Competitive views of ecology and society shift from being descriptive (“this is what is happening”), to being naturalized (“this is how it is”), and most problematically to becoming pragmatically prescriptive (“this is how things work best”), even ethically prescriptive (“this is how things should be”), replacing contingency with necessity. An example of this process is, again, the history of discourses of employability in HE policy, moving away from its genesis as a conceptual tool for demand-side labor market planning in welfare states to a demand of individual competitiveness.³⁵ A shift transparent in this declaration from Layard,³⁶ Blair’s economic consultant:

In the very bad old days, people thought unemployment could be permanently reduced by stimulating aggregate demand in economy. [...]

³⁰ Meadows, *Thinking in Systems*, 156.

³¹ Sandy Baum. *Student debt: Rhetoric and realities of higher education financing*. (Berlin: Springer, 2016).

³² Liu, Ye. *Higher education, meritocracy and inequality in China*. (Berlin: Springer, 2016).

³³ Philippe Mongeon, et al. “Concentration of research funding leads to decreasing marginal returns.” *Research Evaluation* 25.4 (2016): 396–404.

³⁴ Pierre Bourdieu & Jean Claude Passeron, *Reproduction in education, society and culture*. (Thousand Oaks: Sage, 1990).

³⁵ Michele Dal Lago. “Supply-side education: occupabilità, formazione e mercato del lavoro nel dibattito contemporaneo.” (Bergamo: Bergamo University Press, 2013).

³⁶ Richard Layard, «Getting people back to work», *CentrePiece*, Autumn, 24–7, 1998, p. 36

The only way to address this problem is to make all the unemployed people more attractive to employers—through help with motivation and job-finding, through skill-formation and through a flexible system of wage differentials.

It's worth highlighting this framing's moralistic overtones: "the bad old days" are juxtaposed to "helping the unemployed with motivation", an echo of Victorian attitudes toward the poor.³⁷ Indeed, through the transnational positive feedback loops put in place by the HE ecosystem, Victorian England, mediated by the legacy of eugenics, has become naturalized as the implicit model to which the world *must* adapt or perish, the living diversity of global knowledge ecosystems compromised by the Anti-Ecological University.

The consequences of this ecological catastrophe are plural and far-reaching, and can be exemplified by the deecologization (that is, the obfuscation of context, historicity, complexity, and interrelatedness³⁸) of two dimensions: space and time.

Deecologizing Space: Decontextualization

Internationalization of HE is a relevant shift in its special dimension,³⁹ and core not only to the development of global HE systems, but to their survival. In English-speaking countries, international students constitute a substantial section of the student population, and attracting them through signaling grounds the income necessary for institutional sustainability under the current regime of market-enforced competition.

Most studies of internationalization focus on what happens within institutions, less so on the impact on surrounding societies and environments. It has been argued that global competitive rankings have fostered networking and outreach, and while this is partially true, internationalization is more closely patterned after territorial expansion rather than cooperation,⁴⁰ and is signaled as competitive advantage, "global employability", to students.⁴¹

³⁷ Elizabeth T. Hurren *Protesting about pauperism: poverty, politics and poor relief in late-Victorian England, 1870–1900*. Vol. 60. (London: Boydell & Brewer Ltd, 2015) p. 246.

³⁸ Edgar Morin. *La pensée écologisée: Pour une nouvelle conscience planétaire. Le monde diplomatique*, 1989, 32.

³⁹ Jos Beelen and Hans De Wit. *Internationalisation revisited: New dimensions in the internationalisation of higher education*. (Amsterdam: Centre for Applied Research on Economics and Management, 2012)

⁴⁰ Hans De Wit and Elspeth Jones, "Inclusive Internationalization: Improving Access and Equity," *International Higher education* 94 (Summer 2018): 16–18.

⁴¹ Jonell Sanchez, "Global Employability Competencies: The Ultimate Measure", 25th January 2016, <https://www.pearsoned.com/global-employability-competencies-the-ultimate-measure/>

Internationalization of HE doesn't therefore enrich the diversity that makes ecologies thrive but is currently deployed anti-ecologically. The above discussed competitive epistemology, institutionalized through global rankings,⁴² supports the hollowing out of the "placeful" materiality and historically situated character of universities.⁴³ This diminishes their plural histories, complexity and qualitative diversity into standardized, linear, quantitative indicators that can configure them as competitor in a global struggle, making it hard to remain grounded in their public context and their surrounding communities. The internationalized university takes then a role akin to that of an invasive species.

Local examples of this dynamic occur across the United Kingdom. While consistently ranked high, many British universities' relationship with local communities are uneasy. Although universities bring substantial income into local economies, and efforts have been made to link local communities and institutions, research, and press highlight conflicts between the institutions and the general public, and resentment toward universities "taking over the city",⁴⁴ foreclosing once public environments for exclusive use. Frequent points of contention, further highlighting the ecological dynamics at play, are student accommodation and garbage management, both of which tend to be simply abandoned during term breaks. Through these dynamics, the decolonization of the university assumes a literal meaning.

Moving beyond local dynamics, the global competition for international students not only alienates institutions but enacts an invasive and extractive pull. In an echo of colonialism, international students are both treated as consumers of deterritorialized, transactional training, extracting immediate monetary value in exchange for the promise to improve one's competitiveness as provider of labor, and pushed toward adopting a Eurocentric, colonial curriculum and outlook.⁴⁵ This can be seen not only in skewed global student flows,⁴⁶

⁴² Björn Hammarfelt, Sarah De Rijcke and Paul Wouters. "From eminent men to excellent universities: university rankings as calculative devices," *Minerva* 55 no.4 (December 2017): 391–411.

⁴³ Rikke Toft Nørgård and Søren Smedegaard Ernst Bengtson. "Academic citizenship beyond the campus: a call for the placeful university." *Higher education Research & Development* 35, no. 1 (February 2016): 4–16.

⁴⁴ Darren P. Smith, and Louise Holt. "Studentification and 'apprentice' gentrifiers within Britain's provincial towns and cities: extending the meaning of gentrification," *Environment and Planning A* 39 no. 1 (2007): 142–161.

⁴⁵ Stephen J. Ball, "Imperialism, social control and the colonial curriculum in Africa," *Journal of Curriculum Studies* 15 no.3 (1983): 237–263.

⁴⁶ Philip Altbach, "Higher education and the WTO: Globalization run amok," *International Higher education* 23 (2015).

but in the increasingly frequent opening of subsidiary campuses directly in low income countries. This dynamic, through its epistemic violence,⁴⁷ primes entire sections of the global population to enter the economy in a subordinate position within its naturalized hierarchy, again diminishing the biodiversity of the global knowledge ecosystem. There is a growing literature about the colonial character of internationalized university in general,⁴⁸ and in the African⁴⁹ and Asian⁵⁰ contexts in particular, with De Wit⁵¹ even arguing that HE in postcolonial countries needs deinternationalization to develop its own autonomy. While this remains a controversial stance, the competitive framing of HE contributes to the fraught nature of the issue by obscuring history and time as much as it deecologizes space.

Deecologizing Time: Outcome Orientation

Outcome orientation is central to the Anti-Ecological University, taking the guise of “customer transparency” linked to signaling: “a degree is an achievement signalling your competitiveness”. In doing this, it obfuscates the entrenchment of a transactional vision of teaching, learning and researching, a “banking model”⁵² evaluated not as ecological processes but only through specific outcomes both quantifiable and deemed relevant.

The notion of outcome is itself dubious from an ecosystemic perspective, as, similarly to the dynamics of industrial production, it diminishes the awareness of ecological processes and cycles, and of the generation of negative externalities.⁵³ In the Anti-Ecological University we can see the extraction/externalization dynamic in how students who adapt to the

⁴⁷ Savo Heleta, “Decolonisation of higher education: Dismantling epistemic violence and Eurocentrism in South Africa.” *Transformation in Higher education* 1 no.1 (2016): 1–8.

⁴⁸ Ines Sofia Zukowski, et al. “Reciprocity in international student exchange: Challenges posed by neo-colonialism and the dominance of the Western voice,” *Aotearoa New Zealand Social Work* 29 no.1 (2017): 77–87.

⁴⁹ Heleta, “Decolonisation of Higher education”, 1–8.

⁵⁰ Ka Ho Mok., “Questing for internationalization of universities in Asia: Critical reflections,” *Journal of Studies in International Education* 11.3–4 (2007): 433–454.

⁵¹ Hans de Wit., “The Bologna Process and the Wider World of Higher education: The Cooperation Competition Paradox in a Period of Increased Nationalism” in *European Higher education Area: The Impact of Past and Future Policies*. (Berlin: Springer, 2018): 15–22.

⁵² Paulo Freire. “Pedagogy of the Oppressed. 1968.” *Trans. Myra Bergman Ramos. New York: Herder* (1972).

⁵³ Thomas Princen. “Consumption and its externalities: where economy meets ecology,” *Global Environmental Politics* 1, no. 3 (2001): 11–30.

outcome-oriented paradigm of employability appear to be more inclined to commit unethical behavior such as plagiarism,⁵⁴ as qualifications take priority on learning itself.

At the curriculum level, outcome orientation deprives students of historical, theoretical, and critical awareness⁵⁵ while at the same time appearing unable to address economy-oriented goals (e.g. the contested notion of skills gap⁵⁶). That is, outcome-oriented education “clogs” knowledge ecologies by focusing students on decontextualized/dehistoricized descriptions of the systems they inhabit, with Tikly calling it “a roadblock to social justice”.⁵⁷

The dismissal of efforts that don’t produce “tangible outcomes” qualifying for the “top-flights” of the global competition affects the morale and health of everyone engaged with HEIs. In a series of blog posts about academic anxiety, Brady highlights the link between mental health in HE and the deecologization of time: *Anxiety, as I experience it, is a drastic orientation toward the future—it is a form of distressed expectation, and it produces a very fucked up temporality.*⁵⁸ Outcome orientation disables us from dwelling⁵⁹ on the present and the past, disengaging us from broader communities and excising the imperialist history of Western knowledge systems, as we rush toward the next outcome.

A concrete example of the inability to dwell is the heightened casualization of academic workforce, increasingly reliant on short term contracts, often linked to specific projects or to the hourly paid delivery of prepackaged modules⁶⁰. These precarious academics have to devote the entirety of their attention to specific tasks, being denied the opportunities of cross-fertilizations between separate projects, between teaching and research, even time for

⁵⁴ Tracey Bretag, et al. “Contract cheating: A survey of Australian university students.” *Studies in Higher Education* (2018): 1–20.

⁵⁵ Tamsin Haggis, “Pedagogies for diversity: Retaining critical challenge amidst fears of ‘dumbing down’,” *Studies in Higher Education* 31, no. 5 (2006): 521–535.

⁵⁶ Paul Krugman, “Jobs and Skills and Zombies”, *The New York Times*, March, 30, 2014, <https://www.nytimes.com/2014/03/31/opinion/krugman-jobs-and-skills-and-zombies.html>

⁵⁷ Leon Tikly, “A roadblock to social justice? An analysis and critique of the South African education roadmap,” *International Journal of Educational Development* 31, no.1 (2011): 86–94.

⁵⁸ Andrea Brady, “Bind Me, I can Still Sing”, July 4, 2018, <https://blog.stillpointspaces.com/2018/07/bind-me-i-still-can-sing/>

⁵⁹ Emmanuel Levinas. “The dwelling.” In *Totality and Infinity* (Berlin: Springer 1991): 152–174.

⁶⁰ Mariya P. Ivancheva “The age of precarity and the new challenges to the academic profession.” *Studia Universitatis Babeş-Bolyai-Studia Europaea* 60.1 (2015): 39–48.

“unproductive” thought separated by predefined outcomes.⁶¹ On the students’ side, a similar discourse of time-optimization underlies the proliferation of “employability enhancing” opportunities, as micro-credentials and badges should provide an “edge” within a labor market where “degrees are not enough”⁶².

Echoing Bateson’s remarks on “ecology of mind”,⁶³ the tipping point in the ecology of time in academia is highlighted by a rising mental health crisis among staff and students, due to the temporality of 24/7 availability, targets, and deadlines that outcome orientation entails.⁶⁴ Furthermore, most responses to the crisis don’t question the ecosystemic causes, and lead instead to a shift toward individual responsibility, fostering a cult of overwork and resilience.⁶⁵ This leads to a pseudo-Darwinian adaptation in staff and students. Again Brady:

*Too many senior academics feel entitled to subject more junior colleagues to the kinds of evolutionary violence they believe themselves to have survived; thus the system selects for those who can withstand damage and who therefore may be more likely to reproduce it.*⁶⁶

Again, the ecological damage lies in HE’s social reproduction role: the Anti-Ecological University’s networks work to globally naturalize acceleration⁶⁷ toward “outcomes” in the future workforce. Through both explicit pedagogy and hidden curriculum⁶⁸, it teaches deecologized time, so that students can be ready and willing to participate in the “natural” global struggle for existence 24/7/365, or perceive themselves as un-fit.

The global rise of “mindfulness” and other techniques, through which students and staff are made “fit” and “resilient” to the harsh outcomes of this

⁶¹ Loveday, Vik. “The neurotic academic: anxiety, casualisation, and governance in the neoliberalising university.” *Journal of Cultural Economy* 11.2 (2018): 154–166.

⁶² Michael Tomlinson. “‘The degree is not enough’: students’ perceptions of the role of higher education credentials for graduate work and employability.” *British journal of sociology of education* 29.1 (2008): 49–61.

⁶³ Bateson, *Steps to an Ecology of Mind*.

⁶⁴ Michael Richards, John Marsden, and Sean Creaney. “Suicides at record level among UK students.” *The Conversation* (2018).

⁶⁵ Rosalind Gill and Ngaire Donaghue. “Resilience, apps and reluctant individualism: Technologies of self in the neoliberal academy,” *Women’s Studies International Forum* 54. (2016): 91–99.

⁶⁶ Brady, “Bind Me I can Still Sing”

⁶⁷ Filip Vostal, *Accelerating academia: the changing structure of academic time*. (Berlin: Springer, 2016).

⁶⁸ Henry A. Giroux, and David E. Purpel. *The hidden curriculum and moral education: Deception or discovery?*. (San Pablo: Mccutchan Pub Corp, 1983):

struggle⁶⁹ only masks this emerging crisis, itself a mere symptom. Instead, we need to ask: what, in the epistemologies and systemic dynamics of our ecologies, makes lives unsustainable? And can we find the space and time to imagine alternatives?

Conclusions: Reecologizing Space, Time, Mind

While the article expounded a pessimistic stance, we shouldn't dismiss exceptions and resistances to the Anti-Ecological University's work, instances of reecologizing academic space and time, both in terms of philosophical approaches and pedagogical praxis, of which a full review of which would require another whole article.

In the context of this article's inspirations, in terms of space and locality it is important to mention Toft Norgard's and Bengtsen call toward academic citizenship beyond the campus,⁷⁰ and Ridley's manifesto for a municipally embedded HE system;⁷¹ in terms of time, it's important to mention Gildersleeve's discussion of laziness as a strategy for resistance and methodological exploration,⁷² and, closest to the ecological approach of this article, Ulmer and Lefebvre's appeal to incorporate "organic rhythms" in our writing.⁷³

While these examples (and many related works) share a critical view of neoliberalism, I argued that the misconstruction of competition runs deeper than economic policy, and its critique can find a deeper grounding in ecological considerations. What appears to be missing is, to quote Bateson, a "pattern that connects" the above mentioned experiments: an ecology of the ecological university, where Barnett's framing of "university-for-the-other" can become "university-for-the-whole". In seeking such a pattern, my argument indeed circles back to Barnett's discussion of imagination and "feasible utopias":⁷⁴

⁶⁹ Phil Arthington. "Mindfulness: A critical perspective." *Community Psychology in Global Perspective* 2, no. 1 (2016): 87–104.

⁷⁰ Rikke Toft Norgard, and Søren Smedegaard Ernst Bengtsen. "Academic citizenship beyond the campus: a call for the peaceful university." *Higher Education Research & Development* 35.1 (2016): 4–16.

⁷¹ David Ridley. *From Markets to Monopolies to Municipal Ownership*. 2019.

⁷² Ryan Evely Gildersleeve. "The neoliberal academy of the anthropocene and the retaliation of the lazy academic." *Cultural Studies ↔ Critical Methodologies* 17.3 (2017): 286–293.

⁷³ Jasmine B Ulmar. "Writing slow ontology." *Qualitative Inquiry* 23.3 (2017): 201–211.

⁷⁴ Ronald Barnett, The idea of the university in the twenty-first century: Where's the imagination. *Journal of Higher Education*, 2011, 1.2: 88–94.

The imagination will not be content in simply being critical; it will not rest simply in point to a “university in ruins” or “the crisis in the university”. Rather, it will seek to imagine, to create, new narratives of the fullest kind that may serve the university and take it forward. This is utopian thinking. And it is an injunction upon the imagination; to strive to form new ideas of the university that could represent the university—now in the twenty-first century—as it might be in the best of all possible worlds.

Mirroring Barnett, we can see how by deecologizing space and time, and by teaching the necessity of universal competition, the Anti-Ecological University forecloses imagined, possible worlds themselves. The Anti-Ecological University can then be framed as a “disimagination machine”⁷⁵, an institution aimed purely at the reproduction of an ecologically endangered socio-economic system, and thriving on the denial of imaginative and critical spaces, as directly visible in the progressive defunding of the humanities.⁷⁶

This prefigures the ultimate ecological catastrophe: not “just” the destruction of our physical and social environment, but the disappearance from the horizon of thought of all possible worlds and ways of living that don’t adhere to a narrow set of measurable, competitively oriented criteria.⁷⁷ Following Fisher’s argument that it’s easier to imagine the end of the world than the end of capitalism,⁷⁸ Bacevic adds that it’s easier to imagine the end of capitalism than the end of the university,⁷⁹ and that the crisis of the universities is a crisis of imagination. Even more core to my argument, due to the action of the Anti-Ecological University it seems easier to imagine the end of imagination itself than the end of competition. Here’s where the Anti-Ecological University ultimately resides: in this “gap” in collective ecopolitical imagination, which has given free rein to policymakers influenced by a misconstrued notion of ecology to bring it into actuality as a self-fulfilling prophecy.

To overcome this gap, reecologization could then be operated at (at least) three levels: curricular, reflective, prefigurative.

⁷⁵ Henry A. Giroux “The disimagination machine and the pathologies of power.” *symplokē* 21, no. 1–2 (2013): 257–269.

⁷⁶ Paul Jay, *The Humanities’ Crisis and the Future of Literary Studies*. (Berlin: Springer, 2014).

⁷⁷ Walter Fornasa and Luca Morini. “Is a “Social Ecology” Possible? Notes for a Story to be Written,” *World Futures* 68, no. 3 (2012): 159–170.

⁷⁸ Mark Fisher. *Capitalist realism: Is there no alternative?* (London: John Hunt Publishing, 2009): 1.

⁷⁹ Jana Bacevic, “Why is it more difficult to imagine the end of universities than the end of capitalism, or: is the crisis of the university in fact a crisis of imagination?”, October 11, 2018, <https://janabacevic.net/2017/10/11/is-the-crisis-of-the-university-in-fact-a-crisis-of-imagination/>

The curricular level includes the “simplest” steps: to include in all curricula and research training basic notions of ecology and systems thinking. Concepts core to ecological thought such as feedback loops, interdependence, and contingency, and the transdisciplinarity and cooperation required to attend to them, can build in academic communities a basic ecological literacy, and provide a formal grounding to critique⁸⁰. Such a proposal, while of course requiring substantial investment, doesn’t necessitate structural change, and could be perceived as timely and gain support in an historical moment where environmental movements are regaining momentum.⁸¹ However, a curricular approach does not, per se, challenge structural patterns of decolonization and competition, and could be itself subsumed into the competitive paradigm, as is already happening with the publication of rankings based on sustainable development goals.⁸²

The second step is therefore a reflective one: to build, through the above discussed ecological literacy, a contextualization of academic work in time and place. We can’t imagine how to change HE unless we reecologize this discussion within how we would change society, and we can’t imagine how to fundamentally change society unless we reecologize our thought away from the naturalization of competition that disallows us from rethinking the nature of life itself. I echo the words of educator and activist Fachinelli:

*Once a city council education officer told me: if we followed you it would not stop with schools: we should change cities! Well, that I believe, is the true stake of our action as educators.*⁸³

This means leveraging ecological literacy and imagination to ask questions of placeness and temporality about what change we incite beyond our institutions, for example:

- How is a given course/research project necessarily linked to its physical/socioeconomic/cultural environment? And how do they influence each other?
- What are the histories of competition and cooperation behind it? And what will be its intended and unintended consequences while it’s running? One year later? Ten? A century?

⁸⁰ David W. Orr. *Ecological literacy: Education and the transition to a postmodern world*. (Albany: Suny Press, 1992).

⁸¹ Philip W. Sutton. *Explaining environmentalism: in search of a new social movement*. (London: Routledge, 2019).

⁸² https://www.timeshighereducation.com/rankings/impact/2019/overall#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/undefined

⁸³ Elvio Fachinelli. *Il bambino dalle uova d’oro* (Milano: Feltrinelli Editore, 1974).

- How do we want it to change the city where it takes place? The country? The global ecology?

It's important to not ask these questions as a bureaucratic exercise, but instead highlighting desire and intentionality, the materiality of lived contexts, "our bodies teaching and being taught".⁸⁴ Which leads us to the third step: prefiguration, the act of reflecting the desired future into active practice. As an inherently political step,⁸⁵ any prefigurative act will push against the boundaries of the institution. To open prefigurative spaces where the logic of competition is suspended, we need to ask:

- How can a given course/research project be itself a model of the change we want to see in my city, my country, the global ecology?
- If it's unfeasible in the current conditions, what are the barriers? What is the institutional/local/global change that needs to happen?

Through these questions I contend that, to resist the competitive nature of the Anti-Ecological University, we need to imagine beyond the "now" and the "feasible", and even beyond the university itself. While remaining aware that, when dealing with complexity, "the path is made by walking",⁸⁶ we can build back from the future, through ongoing, imaginative, ecologized feed-forward, complementing and articulating Toft Norgard and Barnett's discussion of speculative design⁸⁷ with an appropriately ecosystemic epistemology and theory of causality.

To transform universities in reecologized spaces of/through prefigurative praxis will be an act of radical, cooperative, ecological imagination, reclaimed not as the pursuit of individual or institutional competitive advantage, nor as "disruption", escape or as alternative, but as the root of our active relationship with our environment.⁸⁸ The alternative is to let the Anti-Ecological University take all contexts, histories, and choices away from us.

⁸⁴ Riccardo Massa. *Educare o istruire: la fine della pedagogia nella cultura contemporanea*. (Milano: Unicopli, 1990).

⁸⁵ Darcy K. Leach "Prefigurative politics." *The Wiley-Blackwell Encyclopedia of Social and Political Movements* (2013).

⁸⁶ Mauro Ceruti and Gianluca Bocchi. *Educazione e globalizzazione*. (Milano: Raffaello Cortina, 2004)

⁸⁷ Rikke Toft Norgard & Ronald Barnett. Materialising the University as Feasible Utopia Through Speculative Design. *Reclaiming Study Practices Conference – Proceedings*

⁸⁸ Gianni Rodari, *Grammatica della fantasia* (Torino: Einaudi, 2001).

References

- Altbach, Philip. "Higher Education and the WTO: Globalization Run Amok." *International Higher Education* 23 (2015): 2-3.
- Arthington, Phil. "Mindfulness: A Critical Perspective." *Community Psychology in Global Perspective* 2, no. 1 (2016): 87-104.
- Axelrod, Robert, and William D. Hamilton. "The Evolution of Cooperation." *Science* 211, no. 4489 (1981): 1390-96.
- Bacevic, Jana. "Why Is It More Difficult to Imagine the End of Universities Than the End of Capitalism, or: Is the Crisis of the University in Fact a Crisis of Imagination?" October 11, 2018. <https://janabacevic.net/2017/10/11/is-the-crisis-of-the-university-in-fact-a-crisis-of-imagination/>.
- Ball, Stephen J. "Imperialism, Social Control and the Colonial Curriculum in Africa." *Journal of Curriculum Studies* 15, no. 3 (1983): 237-63.
- Barnett, Ronald. *The Ecological University: A Feasible Utopia*. London: Routledge, 2017.
- Barnett, Ronald. "The Idea of the University in the Twenty-First Century: Where's the Imagination." *Journal of Higher Education* 1, no. 2 (2011): 88-94.
- Barnett, Ronald. *Thinking and Rethinking the University: The Selected Works of Ronald Barnett*. London: Routledge, 2014.
- Bateson, Gregory. *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology*. Chicago: University of Chicago Press, 2000.
- Baum, Sandy. *Student Debt: Rhetoric and Realities of Higher Education Financing*. New York: Springer, 2016.
- Beelen, Jos, and Hans De Wit. *Internationalisation Revisited: New Dimensions in the Internationalisation of Higher Education*. Amsterdam: Centre for Applied Research on Economics and Management (CAREM), 2012.
- Biesta, Gert. "Interrupting the Politics of Learning." Keynote for the BERA Conference, October 5, 2017.
- Bourdieu, Pierre, and Jean Claude Passeron. *Reproduction in Education, Society and Culture*. Thousand Oaks, CA: Sage, 1990.
- Brady, Andrea. "Bind Me, I Can Still Sing." *personal blog*, July 4, 2018. <https://blog.stillpointspaces.com/2018/07/bind-me-i-still-can-sing/>.
- Bretag, Tracey, et al. "Contract Cheating: A Survey of Australian University Students." *Studies in Higher Education* 44.11 (2018): 1-20.
- Caplan, Bryan. *The Case against Education: Why the Education System Is a Waste of Time and Money*. Princeton, NJ: Princeton University Press, 2018.
- Cardinal Principles Report. <https://files.eric.ed.gov/fulltext/ED541063.pdf> (accessed September 20, 2018).
- Ceruti, Mauro, and Gianluca Bocchi. *Educazione e globalizzazione*. Milano: Raffaello Cortina, 2004.
- Dal Lago, Michele. "Supply-Side Education: occupabilità, formazione e mercato del lavoro nel dibattito contemporaneo". 2013. Università di Bergamo, PhD dissertation. *Aisberg*,

<https://aisberg.unibg.it/retrieve/handle/10446/28649/11572/TESI%20DOTTORATO%20Michele%20Dal%20Lago%20%2829046%29.pdf>

- De Wit, Hans. "The Bologna Process and the Wider World of Higher Education: The Cooperation Competition Paradox in a Period of Increased Nationalism." In *European Higher Education Area: The Impact of Past and Future Policies*, edited by Hans De Wit, 15–22. Berlin: Springer, 2018.
- De Wit, Hans, and Elspeth Jones. "Inclusive Internationalization: Improving Access and Equity." *International Higher Education* 94 (Summer 2018): 16–18.
- Elvio Fachinelli. *Il bambino dalle uova d'oro*. Milano: Feltrinelli Editore, 1974.
- Fisher, Mark. *Capitalist Realism: Is There No Alternative?* London: John Hunt, 2009.
- Fornasa, Walter. "Università e Sostenibilità." In *Formazione e Sostenibilità*, edited by Walter Fornasa and Mario Salomone, 15–36. Milano: FrancoAngeli, 2007.
- Fornasa, Walter, and Luca Morini. "Is a 'Social Ecology' Possible? Notes for a Story to be Written." *World Futures* 68, no. 3 (2012): 159–70.
- Freire, Paulo. *Pedagogy of the Oppressed*. Translated by Myra Bergman Ramos. New York: Herder, 1972.
- Galton, Francis. *Inquiries into Human Faculty and Its Development*. London: J.M. Dent, 1883.
- Gildersleeve, Ryan Evely. "The Neoliberal Academy of the Anthropocene and the Retaliation of the Lazy Academic." *Cultural Studies Critical Methodologies* 17, no. 3 (2017): 286–93.
- Gill, Rosalind, and Ngaire Donaghue. "Resilience, Apps and Reluctant Individualism: Technologies of Self in the Neoliberal Academy." *Women's Studies International Forum* 54 (2016): 91–99.
- Giroux, Henry A., and David E. Purpel. *The Hidden Curriculum and Moral Education: Deception or Discovery?* San Pablo: Mccutchan, 1983.
- Giroux, Henry A. "The Disimagination Machine and the Pathologies of Power." *symplokē* 21, nos. 1–2 (2013): 257–69.
- Gould, Stephen Jay. "Kropotkin Was No Crackpot." *Natural History* 7, no. 97 (1988): 12–21.
- Haggis, Tamsin. "Pedagogies for Diversity: Retaining Critical Challenge Amidst Fears of 'Dumbing Down'." *Studies in Higher Education* 31, no. 5 (2006): 521–35.
- Hammarfelt, Björn, Sarah De Rijcke, and Paul Wouters. "From Eminent Men to Excellent Universities: University Rankings as Calculative Devices." *Minerva* 55 no. 4 (December 2017): 391–411.
- Harvey, Lee. "Embedding and Integrating Employability." *New Directions for Institutional Research* 2005, no. 128 (2005): 13–28.
- Heleta, Savo. "Decolonisation of Higher Education: Dismantling Epistemic Violence and Eurocentrism in South Africa." *Transformation in Higher Education* 1, no. 1 (2016): 1–8.
- Hurren, Elizabeth T. *Protesting about Pauperism: Poverty, Politics and Poor Relief in Late-Victorian England, 1870–1900*, vol. 60. London: Boydell & Brewer, 2015.

- Ivancheva, Mariya P. "The Age of Precarity and the New Challenges to the Academic Profession." *Studia Universitatis Babeş-Bolyai-Studia Europaea* 60, no. 1 (2015): 39–48.
- Jay, Paul. *The Humanities "Crisis" and the Future of Literary Studies*. Berlin: Springer, 2014.
- Krugman, Paul. "Jobs and Skills and Zombies." *New York Times*, March, 30, 2014. <https://www.nytimes.com/2014/03/31/opinion/krugman-jobs-and-skills-and-zombies.html>.
- Labaree, David. "How Dewey Lost: The Victory of David Snedden and Social Efficiency in the Reform of American Education." In *Pragmatism and Modernities*, edited by Daniel Trohler, Thomas Schlag, and Fritz Osterwalder. Rotterdam: Sense, 2010.
- Layard, Richard. "Getting People Back to Work." *CentrePiece* (Autumn 1998): 24–27, 36.
- Leach, Darcy K. "Prefigurative Politics." In *The Wiley-Blackwell Encyclopedia of Social and Political Movements*, edited by David A. Snow, Donatella della Porta, Bert Klansmann and Doug McAdam (2013).
- Levinas, Emmanuel. "The Dwelling." In *Totality and Infinity*, Emmanuel Levinas, 152–74. Berlin: Springer, 1991.
- Liu, Ye. *Higher Education, Meritocracy and Inequality in China*. Berlin: Springer, 2016.
- Loveday, Vik. "The Neurotic Academic: Anxiety, Casualisation, and Governance in the Neoliberalising University." *Journal of Cultural Economy* 11, no. 2 (2018): 154–66.
- Mangan, James A. "Social Darwinism and Upper-Class Education in Late Victorian and Edwardian England." In *Manufactured? Masculinity*, edited by James A. Mangan. London: Routledge, 2014.
- Marginson, Simon. "Global Stratification in Higher Education." In *Higher Education, Stratification, and Workforce Development*, edited by Sheila Slaughter and Barret Jay Taylor, 13–34. Cham: Springer, 2016.
- Margulis, Lynn, and René Fester, eds. *Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis*. Boston, MA: MIT Press, 1991.
- Marx, Karl. Letter to Engels, June 18, 1862. *Gesamtausgabe III*.
- Massa, Riccardo. *Educare o istruire: la fine della pedagogia nella cultura contemporanea*. Milano: Unicopli, 1990.
- Meadows, Donella. *Thinking in Systems: A Primer*. Hartland: Sustainability Institute, 2008.
- Mogaji, Emmanuel. "Marketing Strategies of United Kingdom Universities during Clearing and Adjustment." *International Journal of Educational Management* 30, no. 4 (April 2016): 493–504.
- Mok, Ka Ho. "Questing for Internationalization of Universities in Asia: Critical Reflections." *Journal of Studies in International Education* 11, nos. 3–4 (2007): 433–54.
- Mongeon, Philippe, et al. "Concentration of Research Funding Leads to Decreasing Marginal Returns." *Research Evaluation* 25, no. 4 (2016): 396–404.
- Morin, Edgar. La pensée écologisée: Pour une nouvelle conscience planétaire. *Le monde diplomatique* 32 (1989).

- Morin, Edgar. "The Reform of Thought, Transdisciplinarity, and the Reform of the University." *Transdisciplinarity: Theory and Practice* (2008): 23–32.
- Orr, David W. *Ecological Literacy: Education and the Transition to a Postmodern World*. Albany, NY: Suny Press, 1992.
- Persson, Karl Gunnar. "The Malthus Delusion." *European Review of Economic History* 12, no. 2 (2008): 165–73.
- Postman, Neil, and Charles Weingartner. *Teaching as a Subversive Activity*. New York: Dell, 1969.
- Princen, Thomas. "Consumption and Its Externalities: Where Economy Meets Ecology." *Global Environmental Politics* 1, no. 3 (2001): 11–30.
- Richards, Michael, John Marsden, and Sean Creaney. "Suicides at Record Level among UK Students." *The Conversation* (2018).
- Ridley, David. *From Markets, to Monopolies, to Municipal Ownership*. <https://hemarketing.files.wordpress.com/2019/04/from-markets-to-monopolies-to-municipal-ownership.pdf>
- Rodari, Gianni. *Grammatica della fantasia*. Torino: Einaudi, 2001.
- Sanchez, Jonell. "Global Employability Competencies: The Ultimate Measure." January 25, 2016. <https://www.pearsoned.com/global-employability-competencies-the-ultimate-measure/>.
- Smith, Darren, and Louise Holt. "Studentification and 'Apprentice' Gentrifiers within Britain's Provincial Towns and Cities: Extending the Meaning of Gentrification." *Environment and Planning A* 39, no. 1 (2007): 142–61.
- Smith-Hughes Act. <https://www.loc.gov/law/help/statutes-at-large/64thcongress/session-2/c64s2ch114.pdf> (accessed September 20, 2018).
- Spencer, Herbert. *The Man versus the State*. London: Williams and Norgate, 1884.
- Sutton, Philip W. *Explaining Environmentalism: In Search of a New Social Movement*. London: Routledge, 2019.
- Tikly, Leon. "A Roadblock to Social Justice? An Analysis and Critique of the South African Education Roadmap." *International Journal of Educational Development* 31, no. 1 (2011): 86–94.
- Toft Nørgård, Rikke, and Søren Smedegaard Ernst Bengtsen. "Academic Citizenship beyond the Campus: A Call for the Peaceful University." *Higher Education Research & Development* 35, no. 1 (February 2016): 4–16.
- Toft Nørgård, Rikke, and Ronald Barnett. "Materialising the University as Feasible Utopia through Speculative Design." *Reclaiming Study Practices Conference—Proceedings*, edited by Benedikte Custers, Lavinia Martin, Jan Masschelein, Hans Schildermans, Maarten Simons, Joris Vlieghe, Gary Hin Kuen Wong, *Philosophy and Theory of Higher Education Society*, 2019, pp. 205–209.
- Tomlinson, Michael. "'The Degree Is Not Enough': Students' Perceptions of the Role of Higher Education Credentials for Graduate Work and Employability." *British Journal of Sociology of Education* 29, no. 1 (2008): 49–61.

- Uhlin, Graig. "The Anthropocene's Nonindifferent Nature." *JCMS: Journal of Cinema and Media Studies* 58, no. 2 (2019): 157–62.
- Ulmer, Jasmine B. "Writing Slow Ontology." *Qualitative Inquiry* 23, no. 3 (2017): 201–11.
- Vostal, Filip. *Accelerating Academia: The Changing Structure of Academic Time*. Berlin: Springer, 2016.
- Willetts, David. *A University Education*. Oxford University Press, 2017.
- Zukowski, Ines Sofia, et al. "Reciprocity in International Student Exchange: Challenges Posed by Neo-Colonialism and the Dominance of the Western Voice." *Aotearoa New Zealand Social Work* 29, no. 1 (2017): 77–87.