

## Submissions Abstract Book - All Papers (Included Submissions)

0566

Mon 06 Dec 2021

12:55 - 13:15

Mon 06 Dec 2021

15:25 - 15:45

Decolonization and Sustainability Rationales in 'STEM' HE Curricula: A Critical Realist Research Agenda for the 'Curriculum-as-Lived'

Eliel Cohen<sup>1</sup>

<sup>1</sup>*Imperial College London, London, United Kingdom*

**Research Domain:** Student experiences (SE)

**Abstract:** With movements to 'decolonise knowledge' and 'educate for sustainability', higher education curricula are facing calls to promote what I call (social/environmental) 'justice rationales'. These justice rationales are rarely studied explicitly from the perspective of curriculum theory. In this paper, I present an agenda for research to address this gap, drawing on curriculum theories from Paul Ashwin's Bernsteinian sociology and Ted Aoki's critical phenomenology. I propose qualitative research into students' and teachers'/lecturers' experiences of curricula that have incorporated one or both of the above 'justice rationales'. The research agenda will help to advance understanding of the relations between justice rationales and other curricula rationales, and to support dialogue between universities, disciplines, academics, students and justice agendas.

**Paper:**

### Background and Rationale

Curriculum theory has been relatively underdeveloped in higher education scholarship, allowing an economic rationale for the curriculum to predominate (Ashwin, 2020). An important corrective to this elucidates curricula as providing students access to "transformational relationships" to "structured bodies of knowledge", i.e. disciplines, "that changes their sense of who they are and what they can do" (Ashwin, 2020: 13, 80). In the context of this paper, I refer to this as the 'knowledge access' rationale. The economic and 'knowledge access' curriculum rationales coexist, often uneasily.

Increasingly, higher education is also being called upon to incorporate what I refer to as a (social/environmental) 'justice rationale' for the curriculum. The two most prominent calls are to 'decolonise the curriculum' (Bhambra, Gebrial & Nişancioğlu, 2018) and 'educate for sustainability' (Cotton et al., 2016). These social/environmental justice rationales often include critiques of

academic knowledge and therefore “may appear to be in tension” with the ‘knowledge access’ rationale, provoking potentially “uncertain and painful” dialogues between academics and their students and disciplines (Ashwin, 2020: 138).

I argue that research is needed to better understand these tensions and support these dialogues. While these issues do not belong to any single discipline, they are arguably most pressing in STEM disciplines, which:

- often ignore decolonisation agendas, despite evidence of racism encoded in modern science and technology (Benjamin, 2019);
- are crucial to sustainability challenges (Walker, 2015);
- have been uniquely complicit in advancing and enacting Western ideals of ‘progress’ that many see as responsible for both colonial legacies and environmental damage (Prescod-Weinstein, 2021; Stein, 2019).

This non-empirical paper proposes an approach to this research agenda which draws on the work of curriculum theorist Ted Aoki, underpinned by the meta-theoretical framework of Roy Bhaskar’s critical realism.

### **Curriculum-as-planned vs. Curriculum-as-lived**

Although mainly influential in primary and secondary education, Tilley and Taylor (2013) show the value of Aoki’s blend of phenomenology, critical theory and postcolonial theory in exploring the “tensionality” (Aoki, 2005: 159) of bringing justice rationales into HE curricula.

Aoki’s (2005) key idea is that there is a difference between the ‘planned’ curriculum and the actually experienced or ‘lived’ curriculum; what he calls ‘curriculum-as-planned’ and ‘curriculum-as-lived’. Curricula are not static but emerge and evolve as they are ‘lived’ by teachers and students.

I argue that this calls for research which critically investigates students’ experience of curricula that aim to incorporate ‘justice rationales’ in some way, and how this experience is mediated by other factors, such as students’ personal identities and biographies, interpersonal relationships amongst students and teachers, and the disciplinary, institutional and wider social contexts of the educational situation.

Potential research questions include:

- How do students and teachers experience curricula that have incorporated one of the aforementioned ‘justice’ rationales (decolonisation, sustainability)?

Under this question, it would be relevant to explore: how teachers perceive the relation between the planned curriculum and the actually lived curriculum; what similarities and differences emerge between different students’ experiences of a curriculum; what factors emerge (e.g. personal identity, interpersonal relationships, discipline) as mediating/influencing the curriculum-as-lived.

- Can ‘justice’ rationales succeed amidst other curriculum rationales (economic, ‘knowledge access’) in STEM?

This guiding question would aim to get at practical (or praxis) issues, such as: whether decolonising rationales can succeed in promoting constructive 'dialogue' (Appadurai, 1996: 89) amongst students, teachers and disciplines; and whether sustainability rationales show signs of being able to mobilise 'knowledge, agency and collective action' (Cotton et al., 2016: 892) amongst students (and staff).

## Methodology

I would propose Bhaskar's (1998b) 'critical realism', as an appropriate philosophy of social science to underpin such a research agenda. Critical realism frames reality as open-ended and multi-layered or multi-levelled, and tasks social science with exploring and revealing structures and mechanisms that link the 'surface-level' reality of our experience to 'deeper-level' realities that shape this experience. This requires multiple levels of inquiry, including phenomenological (Bhaskar, 1998a). Aoki's (2005) phenomenological notion of 'curriculum-as-lived' aligns well with critical realism, as it is grounded on the idea that lived experiences are complex, multiply determined, and not always 'as-planned'. Aoki and Bhaskar converge on the need for research into how the curriculum-as-lived is shaped and mediated by a complex interaction of different factors and levels of reality.

## Methods

Movements to 'decolonise knowledge' and 'educate for sustainability' are rarely studied explicitly from the perspective of curriculum theory, and qualitative methods (e.g. interviews and/or observations), along with phenomenologically oriented analysis, would be the most appropriate approach to understand relations between justice rationales and other curricula rationales, and to support dialogue between academic curricula and justice agendas.

**References:** Aoki, T. (2005). *Curriculum in a New Key*. London: LEA.

Appadurai, A. (1996). *Modernity at Large*. University of Minnesota Press.

Ashwin, P. (2020). *Transforming University Education: A Manifesto*. London: Bloomsbury.

Benjamin, R. (2019). *Race After Technology*. Cambridge: Polity.

Bernstein, B. (2000). *Pedagogy, Symbolic Control and Identity*. Oxford: Rowman & Littlefield.

Bhambra, G.K., Gebrial, D. and Nişancioğlu, K. (2018) (eds.) *Decolonising the University*. London: Pluto Press.

Bhaskar, R. (1998a). 'Facts and Values, in M. Archer, R. Bhaskar, A. Collier, T. Lawson and A. Norrie (eds.) *Critical Realism: Essential Readings*. London: Routledge.

Bhaskar, R. (1998b). *The Possibility of Naturalism*. London: Routledge.

Cotton, D., Miller, W., Winter, J. Bailey, I., and Sterling, S. (2016). Knowledge, agency and collective action as barriers to energy-saving behaviour. *Local Environment*. 21, 883-897.

Prescod-Weinstein, C. (2021). *The Disordered Cosmos*. New York: Bold Type Books.

Stein, S. (2019). The Ethical and Ecological Limits of Sustainability: A Decolonial Approach to Climate Change in Higher Education. *Australian Journal of Environmental Education*, 35, 198-212.

Tilley, S. and Taylor, L. (2013). Understanding curriculum as lived: teaching for social justice and equity goals. *Race Ethnicity and Education*, 16, 406-429.

Walker, M. (2015). Imagining STEM higher education futures: advancing human well-being. *Higher Education*. 70, 417-425.