

Chapter 10

Conclusions

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In this concluding chapter, we first briefly summarise the main arguments from previous chapters, focusing on key issues related to the (im)possible connection of environmental care and social progress in the context of adult, vocational and academic or higher education and governance. Second, we compile key concerns expressed by our team, acknowledging both shared perspectives and more controversial viewpoints among us. In the third section, we reflect on lessons learnt during our process and offer a few recommendations for various audiences and for future research.

Arguments About the (Im)possibility of Connecting Environmental Care and Social Progress

In his chapter, ‘Social Progress and Environmental Care: Lessons Learnt from the IPSP’, Lorenz Lassnigg concludes that the framing of social progress in the agenda of IPSP (International Panel for Social Progress) aims to develop a positive alternative to the end of history and critical and de(con)structive postmodernity. This requires moving beyond linear models of Western capitalist ‘modernisation’ and revising the ‘third-way’ modernisation. It necessitates an encompassing, flexible and multifaceted set of values and principles that provide a compass for the assessment of progress. These include values and principles that establish human rights, justice, the rule of law, the renewal of democracy, and a thorough consideration of the future of capitalism. Civil society should be mobilised through participation in societal processes, the privileged and powerful forces should be challenged, regulations should secure a progressive use of the market mechanism, and production should be exposed to societal and political influences.

Instead of following ideas of degrowth in its analysis, IPSP suggests that economic growth and environmental care can be reconciled through the development and implementation of appropriate actions and policies. Social progress is seen as achievable when defined and politically and socially staged within established values and principles. While IPSP mentions education as a provider of competencies and ‘human capital’ for economic purposes, engagement and democratic citizenship, its focus on formal education overlooks vocational and adult education. It also neglects the interplay between formal and informal education and learning, which

fundamentally influences the potential and limits of formal institutions. The overall argument does not give proper consideration to citizenship, and the attribution ‘an important role in the cultural and political discourse’ to teachers is not elaborated. Lorenz himself argues that in a framework of ‘human flourishing’, education could contribute to social progress when ‘educational goods’ are systematically related to wider non-educational goods, choice processes, just distribution and political processes.

Nasrin Jahan Jinia, Golaleh Makrooni and Samya Saeed highlight the importance of interpreting social progress and environmental care within a contextual framework and comparative perspectives. Their chapter, ‘Integration and Employability in the Global North and Global South’, indicates that the escalating number of refugees and displaced individuals due to personal, economic, political and environmental reasons has elevated the global significance of migration. These individuals have been compelled to leave their native environments and homes for a better and more sustainable livelihood, stability and security. Addressing their diverse cultural backgrounds and societal environments is crucial when preparing vocational and adult education and training programmes to ensure their effectiveness and applicability. This fosters trust among immigrants from cultures in which gender and family hold a significant role. However, it is found that Finnish vocational adult education is designed mostly from the perspective of the Global North, which fits well with adults of the Global North. As a result, it has not been efficient in attaining the desired outcomes for diverse immigrants coming from the Global South, particularly for immigrant women who hold significantly lower employment rates than women with Finnish backgrounds. It is imperative to develop curricula and training programmes that align with the contemporary demands of the job market while scrutinising market needs. It requires comprehensive policies and culturally sensitive programmes to support the integration of immigrants into work life. Due to the diversity of employers, strategies such as sustainable language training, recognition of qualifications, networking development and interculturality should be considered.

Equally, in the Global South, curricula should address the specific requirements of both women and men. The development and training of skills that promote reshaping their perspectives and capabilities are essential to empowering women to overcome familial and material dependencies. This involves comprehending their roles within the socio-cultural system, norms and traditions. Curricula must incorporate fresh perspectives on women’s roles in society, which are equal to men’s roles, encompassing concepts of citizenship, equality, and social justice.

In their chapter, 'Technologisation as the Planetary Solution for Environmental Care and Social Progress? Critical Questions to Vocational and Adult Education', Shafiqul Alam, Anja Heikkinen and Gabriele Molzberger consider it impossible to reconcile concepts of environmental care and social progress as long as they are dominated by technologisation imposed by the Global North. However, they recognise the need for diverse local approaches to technologisation in governance, adult, vocational and higher education. They argue that technological ethos has become the spirit of current global capitalism and has led to the exploitation of human and nonhuman environments. Only human beings can take the ethical responsibility for compensating for the harm of environmental degradation, earth-economic inequalities and injustices among human and nonhuman earthlings. However, humans holding economic and political power in the Global North carry the main responsibility for the capitalogenicttechnologisation process by reducing the exploitation of seemingly 'cheap' human and nonhuman work, the human-centred energy and material flows, and extraction of earth's resources.

In order to deconstruct the technological setup of 'progress' and 'development' in the Global North, the perspective of nonhuman earthlings should be included in the aims and functions of education. It implies unlearning 'progressive' values and virtues, competencies and skills oriented towards capital accumulation and competition in the appropriation of 'nature'. Addressing the 'ecological debt' involves more than raising awareness through 'eco-social education' and tagging educational activities according to their response to the UN SDG targets. The care for both human and nonhuman environments cannot only depend on moral education, which focuses solely on intellectual values, virtues and cognition. The process of unlearning requires concrete alternative techniques in material action. Shafiqul and others regard universities as bearing a distinctive moral obligation to collaborate with vocational and adult educators in inventing techniques for environmental care, to minimise social metabolism and to respect the historical wisdom of diverse local livelihoods. This requires local and planetary historicising studies between the Global South and Global North about the role of governance and education in the process of technologisation.

Aka Firowz Ahmad and Mohammed Asaduzzaman argue in their chapter, 'Integrating Governance and Education for Environmental Care: Values and Virtues in Perspective', that a certain form of 'social progress' is possible, building on classical theories of values, virtues and wisdom, both in the Global North and the Global South. They emphasise that

humans are the target of governance and education since they are responsible for the colonialist damage to humans and the environment. Therefore, human values and virtues are critical for progress and environmental care in governance and education. Governance needs to be cultivated from the very early stage of human life because it is a particular form of behaviour that consciously shapes, directs, uses and controls human behaviour to achieve particular objectives. Family, society and the entire education system play vital roles in exercising collective governance.

A coherent or integrated system of education and governance with due emphasis on the values and virtues along with the technical capabilities is essential in healing the damages of colonial exploitation, managing discipline, upholding peace, preserving cultural heritage, institutionalising democracy and ensuring sustainable development. Education without values and virtues is incomplete and unable to change human behaviour. Similarly, incomplete education cannot promote governance or good governance. Finally, the authors believe that the interconnectedness of education, governance, values, virtues and their potential to create a positive impact on behaviour, particularly in terms of promoting ethical conduct and environmental sustainability, is imperative. As a result, they recommend that academia should place greater emphasis on conducting in-depth research concerning the integration and fostering of the classics of values and virtues within the realms of governance and education.

In her chapter, 'Wisdom: Reflections and Problems of Current Theoretisation: Injustice of Value-Based Hierarchies', Eeva K. Kallio assumes that social progress is possible and needed in current crises if it is interpreted as human progress towards ethics and wisdom. As artificial intelligence and other evolving technologies will fundamentally change our relationship with knowledge, there is a need for wisdom that cannot be handled mechanically but through contemplative self-education and self-cultivation of values and aims. Differences between cultures must be more carefully considered with respect to values and wisdom. Western-biased developmental level thinking cannot be regarded as a comprehensive answer. Constant discussion about values, both within poly- and multicultural contexts, are essential for the future. Values form the axiological base of wisdom, which extends beyond mere knowledge-level information. Wisdom includes emotions, perspective-taking abilities, ethics and values. Thus, it is a more complex construct than pure 'informative' cognition.

There is a fundamental change in society in the midst of technological advancement, environmental collapse and global political contradictions.

A totally new approach should be developed in education to address these challenges, as it seems that old tools are not enough. Instead of hierarchical and vertical thinking, which put different views on an order-based scale, democratic lateral thinking should be encouraged, which also makes it possible to understand ‘Other’ as equal to oneself. It is a matter of self-understanding and gaining deep insight into one’s motives. Eeva suggests psychological and philosophical reflection for self-education, delving into the reasons behind our actions that contribute to the destruction of life on Earth.

Hannes Peltonen assumes in his chapter, ‘On Belief, Virtue and Education in the Midst of Climate Change’, that social progress and environmental care may be connected if people can be motivated to pursue a certain kind of happiness in their lives. He considers that affecting knowledge and beliefs has proved insufficient to lead actions to combat climate change and its effects. He finds Aristotle’s notion of happiness as living and acting well over a lifetime as a good candidate to motivate actions needed to mitigate climate change, not referring to consumerism and materialism. Since virtues guiding how to live and act well are socially learned and exercised, political communities encouraging certain behaviour should promote formal virtue education, although it faces opposition for reasons that are myths.

Concerning opportunities for virtue education, Peltonen refers to personal teaching experiences. While virtue education happens inadvertently, it may not require precise teaching from individual teachers because the impact of good teaching, focusing on transferable skills, is uncertain. In his course, he has included many themes concerning living and acting well over a long period of time. If teaching helps students improve their critical thinking, the future may be less bleak than it now seems.

Björn Wallén considers in his chapter, ‘Asymmetrical Power Relations in Digital Citizenship and Popular Adult Education’, that social progress and environmental care can be reconciled through eco-socially sustainable popular adult education. Nevertheless, since the preservation and development of democracy is the social ethos of popular adult education, it is challenged by the agenda of digital citizenship in Finland, as elsewhere in the Global North. While active and democratic citizenship grows from learning communities and communal learning, digitalisation has a double-edged impact on citizenship since it both enables and excludes from learning and participation.

Björn is convinced that skills (know-how) and content (know-what) will not solve the asymmetrical dilemma within popular adult education, nor

will media literacy, critical information evaluation and continuous fact-checking. It is a moral dilemma that needs ethical reasoning and formation (know why) on the core values of digitalisation. He assumes that the new roadmap heading at 2030, adopted by popular adult education organisations in Finland, provides an alternative that is also applicable to the Global South-North framework. It includes three interlaced paths of change: eco-socially sustainable, recognised and validated, and flexible and emergent popular adult education. Digital citizenship should build on the core values of equity and equality that are promoted by the values of universalism, self-direction and benevolence.

In their chapter, ‘Confronting Environmental Care and Social Progress in Academic Journeys: Duoethnography’, Larissa Jögi and Anja Heikkinen focus on the issue of the potential of academics to mobilise to address the challenge of connecting social progress and environmental care. They consider academia to be an essential part of the capitalist world system, where work is increasingly complex. Therefore, academic experiences, intellectual, ethical and emotional concerns and passions are part of the experiences of living in such a system. Being academic is not only a structural position but also involves values, beliefs and continuous sense-making of experience. Academic capitalism, coupled with the internalisation of a competitive, individualist and calculative ethos by academics, restricts the space and time available for meaningful encounters across various social and professional positions. This hinders the possibility of truly open discussions and dialogues. Larissa and Anja find duoethnography to have therapeutic and empowering potential as a research method. Concerning the understanding of ‘academic experience’, it is demanding to create an immersive dialogue among academics, who seem too busy and multitasking to read and think about each other’s writing. This indicates difficulties in focusing attention and thinking due to the constant acceleration, fragmentation and mediatisation of information flows in academic life.

They conclude that companionship and engagement in joint activities are critical for developing ways of navigating and coping in academia according to ethical principles that integrate intellectual, political, individual and social aims. Sharing everyday academic work, such as the workshop and writing process around environmental care and social progress, supports ‘anti-hegemonic’ action and change in academia.

Shared Concerns About the (Im)possibility of Connecting Environmental Care and Social Progress

We share a concern about the *hegemonic interpretation of progress and development* in discourses and practices related to social progress and environmental care. This impact extends to vocational, adult and higher education, as well as diverse forms and scales of governance. The

interdependent concepts and discourses of psychological, social, economic, political and ethical progress and development have historically played a vital role in reinforcing inequalities among humans and nonhumans across the globe, limiting their capacity to address the root causes of the environmental crisis. Historically, social progress and development have been intertwined with colonisation and the creation of diverse forms of economic, cultural, social and value hierarchies. Therefore, it is vital to recognise the colonisation of minds through cultural, ideological, religious and intellectual programming, which also shapes concepts, discourses and practices related to social progress and environmental care.

Some of us emphasise the dominance of agendas of social progress and development by powerful political and economic actors in the Global North, recognising that the meanings for people and policymaking in the Global South differ. The Global South is forced to accept and adapt to environmental and social challenges and forced migration and to accept prescriptions from the Global North regarding technologisation, efficient labour market and integration measures for migrants, as well as the shaping of individual consciousness and the promotion of civic participation. Avoiding the addressing of root causes underlying environmental crises perpetuates historical epistemological, ontological and ethical hierarchies, reinforcing the domination of the Global South by the Global North.⁴¹⁶ Obviously, this is not an easy task and requires the reconstruction of hegemonic concepts, policies and practices of progress and development.⁴¹⁷

Some of us perceive the *concept of social progress as fair, relevant and useful as an immediate adaptation to unequal consequences of environmental degradation*. Furthermore, they view it as promoting the social and economic sustainability of people and places affected by unequal impacts of environmental degradation. While the causes and impacts of environmental crises are neither universal nor abstract, they

⁴¹⁶Moore, J. (2022). Anthropocene, Capitalocene & the Flight from World History: Dialectical Universalism & the Geographies of Class Power in the Capitalist World-Ecology, 1492-2022. *Nordia Geographical Publications*, 51(2), 123–146. <https://doi.org/10.30671/nordia.116148>

⁴¹⁷Though such a process might as well be considered as “improvement”, some of us would rather call it “terminal care” of humankind, where measures are taken to make its gradual decline less painful. Yet, like the seemingly positive progress and development caused unwanted negative consequences, the process of deconstruction might have unintended positive impacts like wellbeing and happiness in human lives.

cannot be addressed through universal and abstract measures. The challenges posed by cultural, linguistic and environmental diversity, along with social, economic and gender inequality, related to forced migration, cannot be effectively addressed without contextualising agendas of social progress and environmental care in governance and education.⁴¹⁸ For example, women often have limited opportunities to raise their voices in their family, community and nation. These issues are perpetuated through generations and rationalised by social expectations, political administrations, legal decrees, cultural norms and religious practices. By valuing women's work and education, alternative socio-cultural norms and values can be developed. Consequently, women could also change their status by themselves as they reframe their role. Education could play an important role in reducing discrimination against women.

Another shared concern is the perception of *technologisation as the solution to both social progress and environmental care*. As the 'spirit' of capitalism, technologisation has progressed in tandem with the development of the Global North and become the paradigm followed similarly in economy and industry, governance and education. Many of us emphasise consumerism as the root cause of the environmental crisis and the driving force behind capitalist expansion. However, the technologisation argument emphasises the production, distribution and trade of commodities and services and the role of humans as producers and distributors as critical components of capitalist political economy or ecology. The technologisation in economic, political and social spheres cannot be separated, nor membership and participation in economic, political and environmental collectives or communities, due to the rapid expansion of digitalisation and artificial intelligence (AI). While lacking the benefits of technologisation, no politics has addressed the original causes of the challenges of the Global South. On the contrary, governments in numerous countries across the Global South, such as Bangladesh, have introduced ICT or digital security acts that are targeted at journalists and activists aligned with opposition political parties. Consequently, concerns about digitalisation and AI should include citizenship and governance, work and industrial relations, as well as other spheres of life, such as education, consumption and social interaction.⁴¹⁹

⁴¹⁸Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (2022). *Methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services*. <https://www.ipbes.net/the-values-assessment/>

⁴¹⁹ Hari, J. (2022). *Stolen focus - why you can't pay attention--and how to think deeply again*. New York: Crown.

Technologisation affects the whole earth system and the metabolic relation of humans with nonhuman nature.⁴²⁰ However, diagnoses about the role of natural and technological sciences are controversial. For example, many blame them for justifying hierarchical human-centred interpretations of psychological, moral, social and economic progress and development. However, paradoxically, the awakening of humans, as well as their potential to stop and turn the anthropogenic condition of the earth system, depends on findings from natural sciences and technology and their connection to the expansion of capitalist economies and societies of the Global North.

Consequently, our major concern revolves *around ethics – values and virtues, wisdom* – underlying the hierarchical and anthropogenic concepts of social progress and environmental care in governance and education. Many are concerned about the internalisation of consumerist and materialist values across the globe, reflected in the contradiction between knowledge and behaviour in the face of the environmental crisis. Some emphasise more values related to technologisation and metabolic alienation, referring to human and nonhuman activities in production, distribution, and trade. From a secular, scientific perspective, transforming the universe and planet Earth does not follow anthropocentric ethical principles and values, such as doing good or justice. Therefore, paradoxically, only human beings can take the ethical responsibility for ‘compensating’ the harm of environmental degradation, earth-economic inequalities and injustices caused among humans and between humans and nonhuman earthlings.

Despite differences, we consider the integrative wisdom approach a potential means to reconcile the conflicts related to development and progress between policy sectors, spheres of life, fields and forms of education, humans and nonhumans. Nevertheless, the difficulty lies in the integration of psychological, philosophical, political-economic or ecological interpretations, as well as individual and collective perspectives of wisdom. We define wisdom as virtuous governance and education, encompassing self-edification, character education, the cultivation of

⁴²⁰ Metabolism can shortly be defined as flow of energy and materials in and between human and nonhuman entities and systems: social metabolism refers to flows through human societies, earth metabolism to flows on the whole planet earth; relations between entities/systems in metabolic processes can be called metabolic relations, see for example González de Molina, M., Toledo, V.M. (2014). Social Metabolism: Origins, History, Approaches, and Main Publications. In *The Social Metabolism. Environmental History*, vol 3. Springer, Cham. https://doi.org/10.1007/978-3-319-06358-4_3

values and virtues, critical thinking and the ability to concretely reduce social metabolism in work and industry. Framed as an ethics of care for the human and nonhuman environment,⁴²¹ wisdom implies justice as the will to enable other earthlings to experience what is good for them. It involves the internalisation of an ‘other-regarding duty’.⁴²² In the era of the Anthropocene or Capitalocene, it could indicate the duty of the most guilty humans to compensate for the ecological and economic ‘debt’ of harming other human and nonhuman earthlings.

Obviously, our concerns about the *relation of governance with adult, vocational and higher and academic education* to the (im)possibility of connecting environmental care and social progress reflect the gap between the Global North and the Global South. Although the institutions and activities of adult, vocational and higher education are critical in the formation of citizenship, democracy and participation in (political-economic) communities, their mutual relations are diverse with complex historical and cultural ties. Many of us consider ethical and character education most important in promoting wisdom in governance and in finding a connection between social progress and environmental care. The ethos and methods of (Nordic) popular adult education in promoting democracy and good governance might play a vital role when updated and extended to include all earthlings of the planet. However, some emphasise the dialectic of action and consciousness in the integration of education and governance. Good intentions (values), mindsets and mental virtues are insufficient for ethics of care for human and nonhuman environments; they must materialise in concrete actions and changes in ways of life. For example, from the perspective of adaptation to environmental degradation and its impacts, the focus on employability and integration in adult, vocational and higher education is helpful for migrants to cope with a new culture and the labour market in a new society. Similarly, promoting the transfer of technological innovations into the Global South may be necessary for balancing global economic and social inequalities and

⁴²¹Brennan, A., Norva Y. S. Lo (2022). "Environmental Ethics". In *The Stanford Encyclopedia of Philosophy* (Summer 2022 Edition). Edward N. Zalta (ed.).

<https://plato.stanford.edu/archives/sum2022/entries/ethics-environmental/>;

Giambartolomei, G. (2022). *Caring-with People and Nature: Exploring social-ecologically just transformations through a lens of feminist and democratic caring*. Coventry University.

https://pure.coventry.ac.uk/ws/portalfiles/portal/54610252/2022_G_Giambartolomei_PhD.pdf

⁴²² Von Wright, G. (1963). *Varieties of Goodness*. London: Routledge and Kegan Paul.

addressing urgent humanitarian and environmental catastrophes. However, such a narrow perspective may provide a justification for actors and institutions in education and governance to evade the analysis of the root causes of environmental crises and the meanings of social progress. It hinders the discovery of planetary solutions to address these issues both in the Global North and in the Global South.

One concern behind our project is the *potential of academics to mobilise* voluntarily, related to the (im)possibility of connecting social progress and environmental care in the context of global academic capitalism and competition. The challenge of keeping the project going shows how profound the concern is. This becomes visible in our conclusions and recommendations, which are still rather abstract and universal, or in narrowing opportunities for mobilisation into the framework of our individual work.

Reflections, Recommendations and Questions for the Future

We find the critique of hierarchical concepts of progress and development fundamental in attempts to find alternatives to social progress and technologisation in tackling forced migration and challenges to democracy and citizenship. However, more comprehensive analyses are needed to differentiate *spatial and temporal scales and emergent (ontological) qualities of progress and development*. We should clarify what progress and development mean in terms of ontogenetic and phylogenetic changes in humans as species-beings, individuals and collectives, or as a ‘cultural-evolutionary’ change. Furthermore, it is important to recognise the ontological spheres and scales beyond humans – encompassing organic and inorganic earthlings – and acknowledge the embeddedness of planet Earth in the universe.

We emphasise the necessity to recognise *the legacies and continuities of colonisation* between and within the Global North and Global South when analysing the (im)possibility of reconciling (certain kind of) social progress and environmental care in governance and education. However, this recognition should better contextualise the relations of religion and gender to the nature, causes and consequences of political, economic, and environmental crises. This is vital because values, virtues and wisdom, which are linked to the (im)possibility of connecting environmental care to social progress, are deeply and historically integrated into distinct religious or secular worldviews and beliefs. We explicitly addressed gender only in the analysis of employability and integration measures of migrants in Finland (Global North) and the Kurdistan Region in Iraq (Global South). Their perspective on gender tends to repeat supranational

agencies' policies and discourses about women's empowerment and employment. Migrant women face distinctive challenges both in the Global North and the Global South, and solving them should receive special attention.

However, since gender is a relational category, the root causes and symptoms of gender inequalities in different contexts and across contexts should be considered in the framework of gender relations. These, on the other hand, are deeply embedded in the values, virtues and ethics of dominant worldviews and religions.⁴²³ Therefore, tackling gendered problems of forced migration and environmental degradation may not succeed without including men, gender and family relations in analyses and solutions. Without open, self-critical dialogue between researchers embedded in diverse contexts of the Global North and Global South, they run the risk of being captured by hegemonic (colonial) conceptual frameworks. This impedes the possibility of achieving a mutual, even temporary, understanding of underlying meanings and conceptions. Although locally embedded interpretations are necessary, in attempts to reconcile social progress and environmental care, dialectics between the local and planetary should be addressed and recognised properly.

We emphasise the *ethical critique of technologisation* in consideration of the (im)possible connection between social progress and environmental care. While values, virtues and wisdom are affected by the planetary standardisation of technologisation, we should also recognise the potential diversity in ethics of environmental care, linked to the historical intertwining of biodiversity with cultural and linguistic diversity. The alignment of work, industry and ways of life to earthly metabolism requires knowledge, understanding and skills that allow as low social metabolism as possible in diverse human–nonhuman communities or assemblages and fair interaction between them. Could the interpretation of technique as skilful interaction between humans and nonhumans, promoting sustainable social metabolism, be a constituent of virtuous, wise humanness?

Our project was triggered by the question of *how (local and planetary) governance and vocational, adult and higher education contribute to environmental care and social progress*. While higher education institutions are mainly responsible for educating leaders, professionals and managers in work life, educational institutions and governance, their

⁴²³ Jinia, N.J. (2016). *Microcredit and Women's Empowerment: Does microcredit promote the borrowers to participate in the household decision-making process in Bangladesh?* PhD thesis. Tampere University Press

values and virtues are most critical. The research and teaching of environmental ethics and wisdom are primarily targeted at children and youth and address humans as consumer-citizens. Although some emphasise the importance of moral education at the early stages of life for good governance, others remind us of psycho-physical changes and socio-economical structuration of life courses. Values, virtues and wisdom, or motivation to act well in the whole political-economical or -ecological sphere, have gained marginal attention in vocational, adult and higher education. Since adults are the main actors in production and distribution across diverse industrial sectors and work organisations, it may be considered unfair and escapist to place the hope for the salvation of planetary crisis solely or primarily in children and youth.

Addressing the question of how governance and education relate requires deeper long-term conceptual and empirical research on the *concepts of education and governance* by problematising and revisiting them collaboratively across localities in the Global North and Global South. In our reflections, we tend to consider governance and education as institutions (structures) instead of activities with distinctive intentions (functions). The parallel governmentalisation and pedagogisation of all spheres of life make it challenging to separate functional from institutional meanings. We agree that humans are co-inhabitants of the planet with other earthlings, and human societies and economies are constituents of the earth system and earth economy,⁴²⁴ but this also requires a radical revision of human-centred conceptions of governance and education and their functions as promoters of democracy and citizenship, equity and participation, well-being (happiness) and wisdom.

When meanings of power, folk (demos) and economy (oikos) are extended to local and planetary assemblages of human and nonhuman earthlings, interpretations about work, labour and occupations (division and integration of work), about social and political communities, and about knowledge and self-actualisation must change. Furthermore, technologisation is rapidly challenging conceptions about humanness – through digitalisation and artificial intelligence – and naturalness – through gene and cell manipulation and artificial life. This problematises the anthropogenic interpretations of governance and education. If we agree that human and nonhuman work mediate social and earthly metabolism, vocational education, which functions as a collective designer of work and industry, is existentially most critical for humans. The functions of

⁴²⁴ Latour, B. (2018). *Down to Earth: Politics in the New Climatic Regime*. Polity Press.

academic and higher education and different forms of adult education are also vocational when constituting, justifying and enabling certain divisions and integration of human and nonhuman work.

On the other hand, despite institutional settings, vocational, adult and higher or academic education share the function of shaping communities to educate themselves and manage their metabolic activities, potentially also promoting local democratic governance, linked to fair governance across localities. Should they follow the current agendas of eco-modernism, environmental justice, degrowth, planet or earth-political coordination (planet politics), anarchism or something else? Or could the reconciliation of the diverse inequalities and injustices inside and between the Global North and Global South start from metabolic solidarity, which recognises the dialectic of local and planetary conditions between diverse human–nonhuman collectives?

Our project was accomplished as part of our regular duties, without separate funding, time or other resources. Therefore, it was a challenge to maintain dialogue amidst of our diverse institutional and occupational positions, cultural and situational contexts, and disciplinary frameworks. Numerous discussions took place, and lessons were learnt, though not all of them could be documented in the current publication. Also, during the process, we experienced the challenges of the Covid-19 pandemic, the war in Ukraine, and various environmental hazards around our locations, which we were unable to fully reflect in our chapters.

Obviously, there are differences in our interpretations of the (im)possibility of connecting social progress and environmental care. These interpretations are rooted in both our professional and disciplinary backgrounds and our personal and cultural contexts. Initiating this discussion highlights the artistic essence and beauty inherent in this book. While we could have better exploited the multidisciplinary setting of our team in exploring conceptual, political and practical connections between governance and adult, vocational and higher education, we value the wide range of expertise held by the authors. It was challenging to break free from our own iron cages, traps or sticky floors of the ‘Capitalocene’. However, our utmost concern seems to be focused on what we can do in our positions and places in academia, education and governance, which are integral parts of our personal and collective lives in diverse communities of human and nonhuman earthlings. This situation reminds us of the persistent dilemma of reconciling ‘structure’ and ‘agency’ and the importance of clarifying where we belong as researchers and who the audiences of our discussions and arguments are.

The primary audience for our publication would be the agents of colonisation and the ‘Capitalocene’, and we hope they will be interested in reading it. However, the book is primarily an invitation to researchers across disciplinary boundaries, to professionals and practitioners in educational institutions and governance, and to inhabitants of local communities for collaborative research and transformative action between and within the Global North and Global South. Critical genealogical analyses are required to understand, at the local level, how human–nonhuman economic communities (assemblages) have transformed; at the national level, how human–nonhuman economies have transformed; and, at the global level, how local and national human–nonhuman economies have transformed on planet Earth. Moreover, such analyses may reveal lessons to be learnt from extinct or forgotten ways of life with lower social metabolism. These insights could be valuable when shaping governance and education for the future.