

I.L.A. Kollektiv



AT THE EXPENSE OF OTHERS?

How the imperial mode of living
prevents a good life for all

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Wissen

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Suggested citation:

Thomas Kopp, Maximilian Becker, Samuel Decker, Jannis Eicker,
Hannah Engelmann, Ia Eradze, Franziskus Forster, Stella Haller, Magdalena
Heuwieser, Maja Hoffmann, Carla Noever Castelos, Christoph Podstawa, Anil Shah,
Anne Siemons, Therese Wenzel, Lukas Wolfinger, 2019: At the Expense of Others?
How the imperial mode of living prevents a good life for all. Munich: oekom.

© 2019 oekom, Munich

oekom verlag, Gesellschaft für ökologische Kommunikation mbH,
Waltherstraße 29, 80337 Munich

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Podstawa, Christoph; Shah, Anil; Siemons, Anne; Wenzel, Therese; Wolfinger, Lukas.

Project initiative and lead: Thomas Kopp

Project running organisation: Common Future e.V. (charitable organisation)

Support: Karin Walther

Editing and copy editing: Katharina van Treeck

Stylistic editing: Severin Caspari

Layout, illustration, cover design: Sarah Heuzeroth

Typesetting: Reihs Satzstudio, Lohmar

Print: Friedrich Pustet GmbH & Co. KG, Regensburg

ISBN: 978-3-96238-156-1

Bibliographic information for the Deutsche Nationalbibliothek:
the Deutsche Nationalbibliothek lists this publication in
the Deutsche Nationalbibliografie; detailed bibliographic data
are available on the Internet at <http://dnb.dnb.de>.



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the Blauer Engel (RAL-UZ 14). The paper chosen for the cover is also made out of 100% recycled
material with FSC® approval. All the CO₂ emissions caused by this publication are compensated
by investments in a Gold Standard project. The additional costs for this are covered by the publisher.

Bibliographic information of the German National Library: The German National Library
has registered this publication in the German National Bibliography; detailed bibliographic
information can be found online at: <http://dnb.d-nb.de>.

On emission offsets see also the infobox on page 82.

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... for they know not what they do? Knowledge, education and the imperial mode of living

Modern Western education and 'white' knowledge play a problematic role in expanding and maintaining the imperial mode of living, whilst diverse forms of exploitation exist in knowledge production. At the same time, though, education can contribute to solving these problems.

Education is held in particularly high esteem. Since the Age of Enlightenment, it has been tied to personal growth and self-realisation: it is considered to be the ideal of the mature, cosmopolitan citizen. Education can be both critical and emancipatory and open up new perspectives and fields of action. For some, it represents the ultimate fix: the cure to all ills. Measures to expand and improve education are enthusiastically discussed at all levels—from municipal policy right up to the United Nations. It is also highly influential: the things we learn at school—and some of us at university—inform our worldviews and ways of thinking. Education lays the foundation for the rest of our lives. This makes what and how we learn crucial to understanding and explaining our way of life.

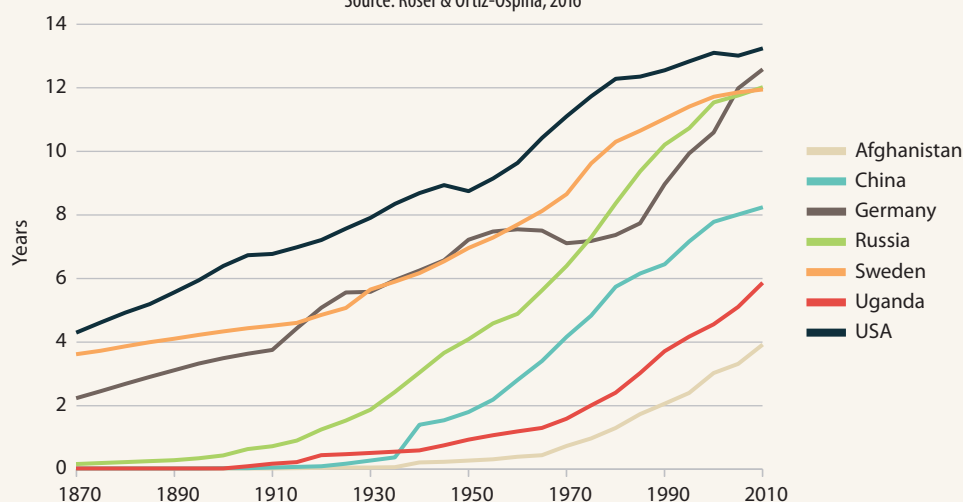
Education plays a fundamental role in society. More and more people spend ever-longer phases of their lives in educational institutions and the global trend clearly

indicates a further expansion of formal education (Figures 6.1 and 6.2).¹ Decision makers in politics and business usually hold advanced degrees. Yet, in spite of the spread of high levels of formal education, multiple social injustices persist and environmental crises are worsening, whilst nobody seems capable of providing solutions. In light of this apparent contradiction, we must ask whether education actually fulfils its promise. Why do we, in spite of our high levels of education and although modern societies even describe themselves as 'knowledge societies', still have to contend with these problems? How should we interpret analyses that conclude that our modern societies have a particular "power to ignorance"² that allows us to simply turn a blind eye to global patterns of exploitation?³ Do we face the problems we face *in spite of* or rather *because of* our education? And why is education still important?

This chapter focuses on these and related questions, and analyses the relation between education, knowledge and our mode of living. First, let's examine the two most important institutions of education: schools and universities. The importance of these institutions is highlighted by the fact that we usually measure someone's level of education by the leaving certificates/degrees they hold.⁴ Hence, this chapter deals *not* with the vast pool of knowledge that exists about our world nor the entirety of experiences that have long been passed on from one generation to the next in cultures throughout the globe, but with *historically European* ('Western')

Figure 6.1: Average years spent at school, 1870–2010

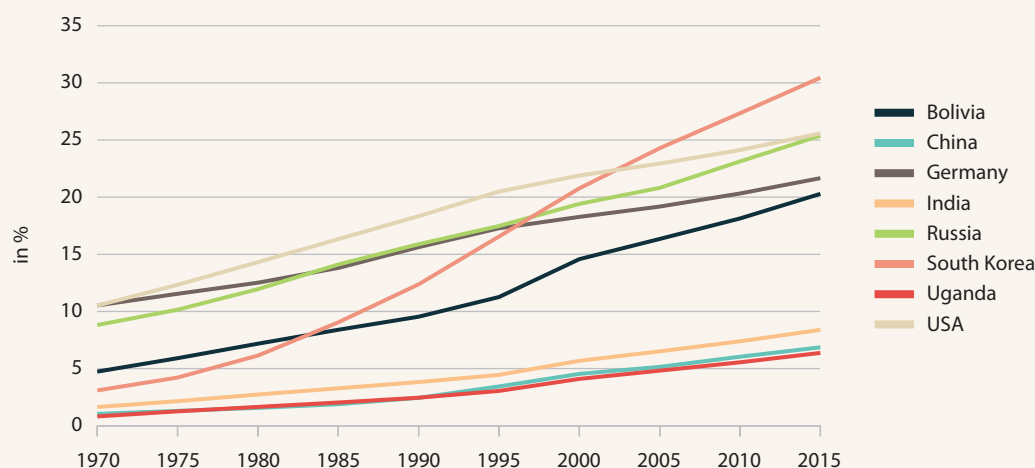
Source: Roser & Ortiz-Ospina, 2016



i In order to be considered educated, society generally expects an individual to hold a formal school leaving certificate (in accordance with the European standard model) and, ideally, a university degree. People who do not fulfil these requirements are widely considered uneducated, irrespective of the amount of knowledge they may have. This narrow view of education explains why people from other parts of the world are considered to be 'lacking' in education and why education and development programmes are so heavily focused on alleviating this alleged 'deficit'.

Figure 6.2: Percentage of those aged 15 and over who hold a university degree, 1970–2015

Source: Roser & Nagdy, 2016



formal education and the ‘white’ knowledge (GLOSSARY) it transmits.

School education, as much as academia and science, evidences elements of a global expansion and consolidation of specifically Western social relations. Our initial question therefore is whether school/university education and academia should be understood *as training in the imperial mode of living*. We then take this analysis one step further. The knowledge spread by institutions of education is neither an inevitable natural fact nor neutral — this knowledge is created by people in a process that develops within fundamentally unequal structures. Our second question therefore explores the extent to which exploitation is inherent to the production of knowledge. To deepen our historical understanding of structures that today often appear natural to us, this analysis makes repeated references to past developments that have influenced our current mode of thinking. Such an approach also serves to highlight that there are always alternatives. Education ultimately holds great potential for change, and the final parts of this chapter highlight this by presenting various initiatives and approaches.

Our education: indoctrination in the imperial mode of living – are schools institutions that perpetuate our imperial habits?

Schools are institutions that have a profound impact on our lives — in Germany, Europe and, increasingly, around the globe. We all share memories of typical classrooms, with their boards and rows of tables and chairs. Once established, schools, next to families, soon become one of the central institutions of socialisation (see GLOSSARY). School exams grade the capabilities of all young people and school reports significantly shape a pupil’s future. Yet, how do schools promote the expansion and consolidation of the imperial mode of living?

Schooling societies

Not only political and economic structures change over time. Our concepts of knowledge and the beliefs we hold as truths, the people who transmit them and the

means by which this is done are not natural givens — they are products of history. Even a brief look at history reveals that knowledge and its transmission are woven deeply into the fabric of power and domination. Schools were also always institutions of discipline in society and key to the development of the nation state, industrialisation and imperialism. The proliferation of schools, the “schooling of society was a European-North American initiative from the early 19th century that over time became a central pillar of state policy across the world.”⁴ In parallel to the spread of schools in Europe, the European colonial masters, missionaries and public servants exported their form of schooling to the colonised territories.⁵ Schools aimed to reorient colonised societies radically based on a European blueprint by giving the younger generation a completely new type of knowledge and understanding of the world. The policies of institutions such as the Canadian ‘Residential Schools’ (the last such school was only closed in 1996) specifically sought to uproot children from their traditional environment.⁶

» We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect.«

(Baron Macaulay, 1835)

While superficial changes have taken place, the fundamental ways in which schools work in society remain the same. Today, countless TV series and films spread the appeal of the lifestyle of the European and North American middle classes to households globally. School education is a cornerstone of this ‘developed’ way of life. Official development policy remains based on Western values and practices.ⁱⁱ Accordingly, organisations ranging from the German armed forces (the *Bundeswehr*) to UNICEF build schools around the world.

The life courses of people across the globe today thus emulate the Western model, beginning with school,

ii Publications by the *Berliner Entwicklungspolitische Ratschlag* and *glokal e. V.* vividly illustrate how the organisations and structures of ‘development aid’ and/or ‘development cooperation’ are based on white, Western values and concepts.

and aim to prepare pupils for abstract salaried work on labour markets. To us, this may appear normal, yet merely 200 years ago, even in Europe, having access to this way of life was a novelty. This is even more true for other global regions. There too, children lived in very different structures and learnt a different kind of knowledge; today, however, they often go to school—sometimes enthusiastically and of their own volition, sometimes simply because education is compulsory. Many years ago, this was the case for the children of the indigenous peoples of Great Turtle Island (North America). Today, the UN programme ‘Education for all’ promotes compulsory education, for example in India and Nigeria. These children learn a lot at school, yet generally not the kind of knowledge that would allow them to share the traditional lifestyles of their families or communities. Whilst this education (ideally) grants them access to the labour market, schooling also closes the door to other, different lives. After leaving school, their qualifications potentially allow them to earn a living through salaried employment and to consume commodities: they become consumers. Where employment opportunities are lacking, however, they fall into poverty.⁷ Privilege and a good degree allow some of them to become part of the global middle and upper classes that, even in the countries of the Global South, are beginning to establish an imperial mode of living.⁸

Our ‘developed’ society, and its schools, are expanding into all corners of the globe and thereby promising ever more people a professional career, a certain degree of social mobility and a share in global commodity production. When we speak about the human right to education, however, we tend to overlook two key issues. Firstly, the lifestyle that we export lacks social and environmental sustainability. Secondly, it drives back functioning traditional lifestyles that could well soon disappear entirely as a result of compulsory education. Schools are spreading globally and this is related to a certain social order of which the imperial mode of living is a part. So, how do schools strengthen the status quo in places where they have been established?

What is taught, how and to what effect?



For long, I have been thinking about how we could use schools to prevent the spread of socialist and communist ideas.

Primarily, schools should lay the foundations for a healthy attitude towards society and the state by fostering patriotism and a fear of God.»

(Wilhelm II, German Emperor, 1 May 1889)

Schools have always been an instrument to steer how social relations are formed and consolidated. Although this has a stabilising effect, it also reproduces the problems of the past in each new generation and makes implementing fundamental change more difficult.⁹ Young people today learn hardly anything about how their lifestyles are linked to numerous societal and environmental problems and how this again relates to the increasing threats to their immediate livelihoods. Moreover, former colonies continue to feel the effects of (at least formally) old imperial regimes: knowledge and the structure of the school systems in these countries continue to rely on a blueprint from the Global North.¹⁰

Schools also shape aspects of socialisation by incorporating certain elements into the official syllabus: at school, pupils not only learn facts—the school setting itself is part of their education. Teachers call children forward to present the correct solution to a homework task. The pupil’s classmates listen and may correct any mistakes they notice. The structure of this process itself teaches pupils a great deal about how we cooperate in society, the degree of power particular individuals hold and the kind of behaviour that society rewards. They learn to listen to teachers who will tell them what they are expected to know. Schools teach pupils that it is not right to help a friend to solve a problem and encourage them to correct each other. They learn that everybody is expected to strive for the best mark, but that only a few will achieve it. By understanding these workings, pupils develop an image of themselves, the world and their relationships with others: they learn to be focused on achievement, competition and hierarchy.¹¹ Whilst there are different forms of group work that encourage

Figure 6.3: Recognisable in spite of the differences: a typical classroom setting



collaboration, these too eventually result in individual grades thus leading pupils to see themselves in direct competition with each other.

No institution actively plans the transmission of this implicit knowledge, at least not since the end of direct colonial rule. However, it is also by no means accidental. Countless details of our everyday interactions in education point towards overarching tendencies. School curricula and educational forms are closely tied to the relations of power in society and economic structures, which they support and perpetuate without the need to refer to them explicitly. These implicit messages seep in through the methods teachers apply and the structures of schools themselves, and this process is almost always invisible and takes place regardless of educators' intentions. Researchers call this the "hidden curriculum".¹²

» ***At the heart of all disciplinary systems functions a small penal mechanism.***«

(Foucault, 1977, p. 230)

In the hidden curriculum, the disciplining of pupils is a key element. The philosopher Michel Foucault analysed this process.¹³ Many elements are evident in the typical class test scenario:¹⁴ each pupil sits at their own desk. Under the vigilant eyes of the teacher, all pupils concentrate on fulfilling their tasks and aim to use the available time as efficiently as possible. Depending on their performance, the teachers will then grade pupils. Grades fulfil a dual function. First, they aim to motivate by either rewarding or punishing pupils: the fear of receiving a bad grade is accompanied by the hope for improving marks through increased effort. This helps ensure a minimum level of compliance with the institution that boosts its appeal by claiming to offer pupils opportunities to advance in society. Secondly, grades indicate an individual's place in the class hierarchy and in relation to what is considered 'the norm'. Pupils develop an image of themselves as individuals embedded within a hierarchy: what is to the benefit of one pupil comes at another's cost. Pupils learn in order to increase their chances of gaining a good position on the labour market later on in life. Sharing the competencies and grades they earn is impossible. School education allows an individual to develop his or her capabilities, but also isolates them from others.¹⁵

'Education for work': how schools produce a workforce

Historically, schools were built to raise compliant subjects for state and industry. The modern understanding of abstract work and abstract time, which was, and remains, essential to time-optimised forms of industrial production, was neither normal nor widely spread at the time. Schools and workhouses thus helped educate people to be industrious, show time discipline, be orderly and capable of getting up early and slowly established these 'virtues' as 'the norm'.¹⁶ In the colonial context too, the motto was "education for work": it was not unusual for the colonial masters to combine school education with forced labour.¹⁷

Today's established school system serves numerous purposes. Individual pupils may well find the system fulfilling, enriching or eye opening, but be that as it may,

one thing is for sure: education makes economic sense.¹⁸ Teaching fundamental skills such as literacy, numeracy, adherence to abstract schedules or communication skills would definitely overstretch the vocational training capacities of companies, who therefore rely on the state to organise and transmit the fundamental basics.¹⁹ The requirements of the market are therefore mirrored in the skills obtained by successful pupils. Doing well in class requires being able to sit still and listen, speak in front of a group, adapt to the daily structures of school life, be punctual, as well as have a willingness to learn and work. The parallels between schools and companies are evident. Company hierarchies, rigid schedules and permanent competition will come as no surprise to school leavers. The regular activities and attitudes of pupils are therefore adapted to capitalist modes of production;²⁰ the system does not emphasise critical thinking skills and an understanding of global relations of exploitation: it is geared towards turning people into successful participants in the labour market.

Assigning people their place in the pecking order

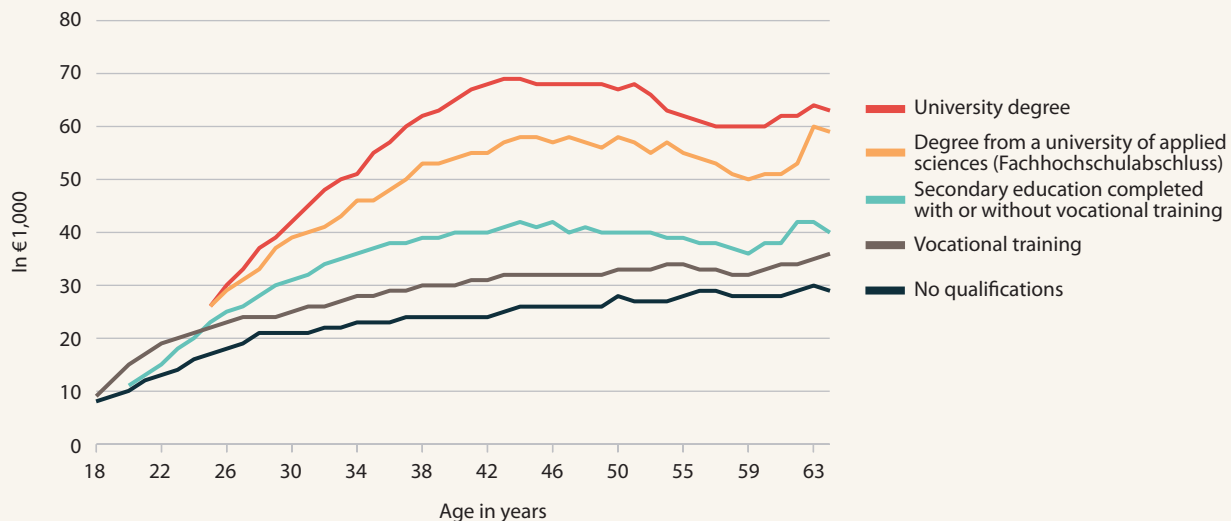
A characteristic feature of our society is its division of labour and to maintain this, each generation needs to assign people to the different positions: from psychotherapists to food delivery riders. A young person's success in the education system defines the opportunities they will have, affecting their later income and social status. The education system creates hierarchies and eventually leads the average annual incomes of middle-aged employees to vary between €25,000 (without training) and €68,000 (with a university degree) (Figure 6.4).²¹ School studies, such as PISA, reveal how closely family background is tied to success at school both in Germany and around the globe. Not only do the children of academics have access to a greater number of resources to help them cope with the demands of school, teachers and parents also often base their decision on a child's choice of school both on grades and on the child's family background.²² Grades and reports maintain the privileges enjoyed by some social classes and children learn early on whether they belong to those 'on top' or rather to those 'at the bottom'. By believing that schools simply reward effort and performance, we ensure that our faith in fair competition continues to conceal social inequality.



At an even more fundamental level, competition for the best grades seemingly justifies social inequality: those on the bottom rungs should simply have worked harder at school. In the midst of our concerns over our own position in this race, we often obviate the fact that the system is structured so that not everybody can come out on top. A fair distribution of education opportunities throughout the globe thus cannot alter

Figure 6.4: Average gross annual salary by age and highest level of qualification in Germany

Source: Schmillen & Stüber, 2014, p. 3



the existence of social inequality. Rather, the root cause of inequality lies in the social hierarchy itself—not in the details of how this hierarchy is managed.²³

The education system mirrors society

Disciplinary societies of the past made social exigencies explicit and sanctioned resistance directly. Today, these mechanisms have become internalised and function more at the individual level. As sociologist Zygmunt Bauman writes, society has increasingly replaced the older external pressure to adapt by “a fear of personal inadequacy.”²⁴ Self-optimisation—greater diligence, fitness and more motivation—seems to be one possible answer. And schools have become places that convey this message and, as a consequence, the pressure to perform increases.

School education opens new horizons and fills pupils with hope of greater opportunities in life. However, it also creates the elite and installs hierarchies, disciplines ‘human capital’ and educates people for competition. As an institution of socialisation, it monitors young people for up to one and a half decades. The system creates certain attitudes: mentalities, body postures and perceptions of oneself and the world. In the modern school system, these attitudes aim to ensure that a person functions at work and in a consumer-based society, not reflecting critically on its imperial structures. Moreover, schools constantly reproduce the idea that this is ‘normal’ and that there is no alternative. As an institution, schools thus promote and consolidate the imperial mode of living.

Education as a means of educating people for an imperial mode of living: science – objective knowledge?

To what extent then are not only schools but also the modern institutions of science places to teach an imperial mode of living? Science and the Enlightenment’s model of knowledge generally demand that scientific

investigation be objective, neutral and valid, a quasi-rational “gaze from nowhere”²⁵ (FOOD AND AGRICULTURE).ⁱⁱⁱ Science thus occupies a distinct space separate from myths and ideologies that do not meet formal ‘scientific standards’. Non-scientific perspectives are subsequently viewed as ‘irrational, emotional, prejudiced and politicised’.²⁶ Knowledge, however, is not a “collection of findings that we could categorise as true or false, precise and imprecise. Rather, it is a historically situated mesh of institutions, practices, production apparatuses, popular culture and general (social) understanding woven into the fabric of power.”²⁷ This power, however, is not distributed equally. Scientific knowledge is therefore neither neutral nor objective and only reflects the perspectives of privileged scientists and academics within a particular historical and social context. The relations of power enable the dominance of ‘white’ knowledge: European standards are globally recognised and accepted in science, and any non-European form of knowledge is measured against Western standards.²⁸ This results in a hierarchy between Western science and other forms of knowledge.

Historically, this claim to universality reaches far back. After the European Age of Enlightenment, the expansion of systems of education and knowledge went hand in hand with the colonisation of the world. Beyond merely introducing their political and economic standards in the colonies, the white masters went so far as to declare their specific knowledge to be universally valid. In the 18th century, European scientists thus classified all known animals and plants within systems that remain in place to this very day. “The 19th century formalised this rule of knowledge by effectively conquering and exploiting space.”²⁹ The field of geography, in particular, aided and abetted this imperial expansion. If you open an atlas today, you still see what is essentially the outcome of European colonisation, the arbitrary drawing of borders and renaming of regions based on European notions.³⁰ The *zeitgeist* demanded that the most

iii This is still how most of the academic community sees itself and presents itself to the public, although this is obviously no longer the case for some humanities and social sciences.

influential figures in European philosophy ‘rationally’ legitimise European supremacy based on pseudo-scientific theories of race. Traditional and/or indigenous concepts of the world were derided as pure superstition.³¹ In many cases, the conquerors and explorers purposefully wiped out traditional knowledge, consciously destroying entire social structures.³²

During the colonial age, the imperial powers established not only school but also university systems in the colonies. The aim was to nurture an academic elite to satisfy the need of the colonial masters to staff their administrations and train the “new forces of modernisation”. The curricula were drawn from the ideas of Western academic centres and only those who had studied in the powerful Northern metropolises were considered truly educated. This is why universities and university graduates were and are in many cases alienated from local social conditions and forms of living.³³ We could describe this establishment of ‘white’ knowledge as the norm as a “colonisation of intellect”.³⁴ As the “bearers of intellect”, colonial masters had the duty to “humanise the rest of the world”.³⁵ This illustrates the connection between the notions of ‘development’, ‘progress’ and ‘modernisation’ and European feelings of superiority. Colonialist continuities persist. We need only look to development policies that are based on the idea that the ‘independent experts’ of ‘developed’ countries possess superior and relevant knowledge that enables them to solve the problems of countries in the Global South (often involving ‘technology transfers’).³⁶ Far from being objective or neutral, science is simply the globally dominant system of knowledge.

“Knowledge is power”:

academic policy within foreign policy

Attributed to Francis Bacon, a pioneer of the Enlightenment, this dictum has lost none of its resonance. To remain economically and militarily competitive, the modern capitalist state has always relied on knowledge and technology.³⁷ As early as the 19th century, scientific policy was systemically incorporated into the state’s scope of activity and the ties between science, war and imperial expansion became ever more entwined (HISTORICAL OVERVIEW).³⁸ During the Cold War, scientific curiosity, for example, was not the sole driving force behind the development of space flight. The permanent increases in productivity and output would have been equally unthinkable without research into engine and combustion technologies or Taylorist scientific management. Whereas the state and the military secure the framework conditions and the supply of raw materials, industry provides the funds. Companies provide over two thirds of the total annual German budget for research and development (€84 billion in total).³⁹ For many years, the share of third-party funding in the budgets of German universities has been increasing; in 2012, 20 per cent of these funds came from private businesses.⁴⁰

The German government’s current ‘High-Tech Strategy’ perfectly exemplifies the close ties that exist between business interests and power politics with the aim of maintaining a global imperial resource order that is beneficial to the Global North.⁴¹ The strategy emphasises that “future technologies” with the potential to “expand

the position of Germany as a research location” will depend on “economically strategic resources for the high-tech sector” that Germany must largely import (DIGITALISATION). State-funded research and development in Germany, as well as vocational training and training of foreign elites in close cooperation between researchers, industry and the state thereby plays a “key role”.⁴² Should the need arise, the German armed forces (the *Bundeswehr*) would be ready, according to statements, to “prevent or solve” raw material supply “blockages”.⁴³ A further example is the German government’s ‘raw materials strategy’, which equally emphasises the value of foreign students who receive grants and other funding to study in Germany and eventually return to their home countries. As the strategy explains, “their stay in Germany is likely to have opened their minds to German interests”.⁴⁴ There are plans to step up the amount of money offered to foreign students with the aim of winning them over to Germany’s cause and permanently securing the supply of raw materials to the German economy.⁴⁵

Moreover, in 2011, Germany spent €892 million on university education as part of its development education budget of €1.3 billion. The country thereby spent €690 million towards the study costs of students from countries of the Global South in Germany.⁴⁶ In 2013, four times as many foreign students studied in Germany than in the 1980s. As a policy that promotes open-mindedness in Germany and enables people to forge links with foreign cultures, this can be viewed as a positive development. Yet, far from being straightforward student exchange programmes, the aim of these schemes is to influence foreign elites during their formative years, i.e. at an age when they are choosing their career path. In other words, this is also about global competition.⁴⁷ As these examples show, science and research have become key areas of foreign and development policy and the internationalisation of the university system serves strategic interests. Education has been turned into a vehicle through which Western culture can be spread (based on old, tried and tested ‘methods’) and which can help sustain an imperial order that enables as well as politically, legally and military secures an imperial mode of living.⁴⁸

Economic sciences and the link between university courses and the imperial mode of living

One tenet of the political strategies mentioned above is that universities shape the thinking of students, who, as the future elites, will go on to take important decisions in key social areas at later stages in their lives. It is thus crucial that universities convey the right ideas and concepts. Although we could make the same case for other courses of study, we will illustrate how this approach is executed in the field of economics. This subject area is so central because it provides the ideological basis for economic policy.

At most universities, *neoclassical economics* (GLOSSARY) forms the theoretical core of economic sciences. Within the framework of this theory, there is little to no room for a critical perspective on our current economic system. Based on simplified models that dismiss key environmental and social aspects of production, issues concerning inequality and inherent power struc-

tures, the theory attempts to provide a sound basis for our economic system. However, the aspects the theory does not account for are precisely those with an imperial function that are based on exploitation and related to economic crises. The role of politics and institutions such as central banks, the International Monetary Fund or financial markets are deliberately ignored.⁴⁹ Around 70 per cent of economics professors at German universities primarily teach neoclassical economics, but over 92 per cent believe that teaching other approaches could also be beneficial, at least in theory. “For lecturers, it is potentially risky to deviate from the standard curriculum. In extreme cases, students demanding to be tested in the prescribed subjects could take them to court.”⁵⁰ This makes it difficult for other, so-called *plural* approaches to be considered. Often students are not even aware that they are studying merely one of many different theoretical approaches and such teaching methods do not adequately prepare students for the nuanced reality of socio-economic problems.

But why are neoclassical theories so dominant in the economic sciences? Neoclassical economics has particular institutional clout. For economists who represent this school of thought, opportunities for publication, third-party funding and professorship positions are much more accessible than for their *plural* colleagues. They have more established networks and are seen to define what is good and right in economic sciences. Take the Royal Economics Association, for example, which officially excludes economists from other schools of thought.⁵¹ Important academic journals that focus on neoclassical economics usually do not accept articles based on diverging, *plural* approaches.⁵² A further pillar that helps cement the dominance of neoclassical economics is that one-sided courses lead students to accept and internalise neoclassical theory. By preventing a critical discussion of the structural mechanisms of our economic system, and the problems it causes, the teaching of dominant neoclassical economics helps consolidate the imperial mode of living. Graduates then gain influential positions without having understood the fundamental realities of our economic system. After studying in the Global North, some return to work at universities in their home countries or go on to lead research institutes. They thus bring the values and concepts that they have studied back to their societies where they are then shared (the same also applies to other academic fields). Ultimately, this also promotes the spread and acceptance of an imperial mode of living in the Global South.

Institutional, ‘white’ science therefore was always and remains tied to vested interests and power in multiple ways and, in most cases, remains far removed from its purported ideal of objective neutrality. Science and academia play an important role in the spread of the imperial mode of living and tend to stabilise our lifestyle instead of offering opportunities to question it.

The exploitative structures in knowledge production

Western school education and academia are therefore neither problem-free nor objective, and they are not easily applicable at the global level. They structurally spread and prepare people for an imperial lifestyle. Remember that earlier on we defined the core of the imperial mode of living as the systematic and theoretically unlimited appropriation and exploitation of labour and the biosphere at a global scale by legal and military means.⁵³ iv The following section therefore analyses the exploitative dimension of the imperial mode of living. How does the ‘production’ of knowledge lead to exploitation? How is knowledge itself exploited?

The modern worldview...

Regarding Western education and modern European knowledge, it is crucial to ask what the dominant, and therefore constantly reproduced, worldview is. The advent of the European Enlightenment period paved the way for a worldview that the sociologist Max Weber described as the “disenchantment of the world”. Our fate was no longer determined by divine and supernatural powers. The conviction took hold that science and technology could essentially serve to rationalise our world: to understand, predict and ultimately control it right down to the finest detail.⁵⁴ Medicinal plants were no longer thought to possess magical healing powers: thorough chemical analyses would eventually reveal their active substances. This new worldview also placed mankind front and centre. Humans alone were (and still are) thought to possess reason and are therefore superior to an abstract ‘nature’, which is fundamentally separate from and inferior to man (a concept known as anthropocentrism). All non-human forms of life and phenomena thereby became passive objects for science to study. By reducing the world to soulless matter, humankind gained the limitless right to appropriate the world for its purposes.⁵⁵ Our modern understanding of knowledge was therefore use-oriented, thus mirroring the relationship between those who constantly produced this new information and the world around them.⁵⁶

... and how it is applied

Our modern worldview perceives the world as a place full of predictable and controllable objects that serve as personal reservoirs of resources to be used for our progress. From the early modern period onwards, this notion was combined with power politics and an expansionist drive (HISTORICAL OVERVIEW), as well as the dynamic of perpetual growth that has come to characterise European modernity, with the result that there were no longer limits on what was not only conceivable but possible. Modern science and its subsequent technological developments thus aim to achieve ever-greater control of the planet and strive to bend it to the will of humankind.⁵⁷

The approach itself is not necessarily problematic, for example when progress in medical research provides a deeper understanding of illnesses. Of course,

iv As it is almost impossible to pinpoint direct forms of labour exploitation in academia and the school system in a global North-South context, we have chosen to omit this aspect, although precarious employment conditions in science (and increasingly also in schools) are certainly worthy of critique.

there is also critical research that highlights negative social developments, as well as non-use-oriented 'exotic' courses of study. These are, however, not the research practices being referred to here. Scientific findings become an issue when they merely provide new methods to control nature and violently, excessively and recklessly appropriate and exploit the biosphere. Engineers design oil rigs and coal excavators; geologists provide expertise for mining and fracking projects. Fisheries science optimises fishing methods to exploit maritime 'resources' with greater efficiency and material science analyses the best uses for inanimate matter. Economics establishes that infinite growth on a finite planet is desirable and, most worryingly, possible, and agronomics researches methods to increase the productivity of factory farming. Modern science thus systematically enables an imperial grip on the living natural world.^v

We continue to evaluate scientific and technological progress based on how far it pushes such boundaries and increases our knowledge and thus ability to control and exploit nature. However, we can only separate research from its applications and the results it produces if we accept that research does not have to recognise any limits, operates 'free of values' and only produces 'objective' data and facts.⁵⁸ International competition among scientists and researchers implies that ethical limits or a democratic control of research automatically translate into competitive disadvantages.

Life as a resource of knowledge

Penetrating, controlling and exploiting the world at ever-deeper levels is not only the purpose but also the means of modern forms of knowledge production. This, too, is not necessarily bad. It can, however, lead to problems if daily research practices and methods are fundamentally based on exploiting and appropriating the natural world. The knowledge of natural phenomena and living beings then not only allows for them to be controlled and optimally exploited; further knowledge is squeezed out of them — sometimes even violently.

Living beings and organisms may, for example, become objects and 'resources' for life sciences. Among the more well-known biotechnological procedures are projects to modify plant and animal genes such as cloning or the genetic engineering of seeds. Animals are also frequently being exploited as a knowledge resource. This applies to zoos (first established during colonial times), allegedly set up as educational institutions, to natural history museums and experiments involving animals carried out in schools and research institutes. Animals are captured, put on show, their bodies dissected, eviscerated, preserved and exhibited. Researchers extract data using laboratory animals. In 2015 at least 2.8 million animals were used and killed in animal experiments in Germany alone, around 1.1 million of which had been genetically modified.⁵⁹ The Bavarian State Collection of Zoology boasts a collection of 42,000 boxes containing 12 million framed butterflies from all over the world — and the number of specimens continues to grow.⁶⁰ The US military is

conducting research on particular migratory birds that are capable of flying for several days without rest, a capability which would prove hugely advantageous to the armed forces.⁶¹ Such practices are grounded in the mechanistic worldview that to properly understand a problem, one must extract it from its context, destroy, disassemble, systematise it and extract isolated information or 'data'.⁶²

Nevertheless, in medical research, for example, the benefits to humankind may well be sufficiently great to at least discuss the legitimacy of appropriating living beings to extract knowledge. In other cases, however, research is clearly primarily motivated by industry interests. But public debates on such issues only take place in a rare number of cases, and when they do occur, the scientific community once again presents itself as unbiased, neutral and not bound by ethical considerations.

Research and the exploitation of peoples deemed 'exotic'

It isn't only animals and plants: human beings too — in particular, indigenous peoples — have repeatedly become objects of research and exploitation for 'white' science. Scientific research is closely linked to the 'worst excesses of colonialism'; as Linda Tuhiwai Smith writes, "the word itself, 'research', is probably one of the dirtiest words in the indigenous world's vocabulary."⁶³ Academic disciplines such as ethnology, anthropology, oriental studies, archaeology, tropical medicine and, later, economics were closely intertwined with exploitative colonial practices. They plundered and expropriated the material belongings of indigenous peoples (and sometimes even body parts) to fill Western museums and collections, much of which has still not been returned. In the colonies themselves, the colonisers applied this new colonial knowledge to better 'conquer, govern and exploit' people.⁶⁴ Theories of race and race biology measured and classified human bodies; scientific studies such as long-term medical experiments on children in Canadian residential schools and indigenous communities were by no means exceptional.⁶⁵ Most recently, indigenous communities had to fight against the Human Genographic Project, for which IBM and the National Geographic Society provided \$40 million to collect, store and analyse DNA samples from over 100,000 indigenous people in ten research institutes around the world.⁶⁶

The imperial grasp on knowledge: white-collar pirates

We therefore exploit and open up the world both through and for the purpose of the extraction of knowledge. Scientific research also plays a fundamental role in the exploitation of indigenous peoples, their countries, cultures and knowledge.⁶⁷ Even traditional knowledge is being appropriated and exploited for scientific and commercial ends. Companies in the pharmaceutical, agricultural, chemical, cosmetics and biotechnology sectors in particular, as well as research institutes

»  In 2015 at least 2.8 million animals were used and killed in animal experiments in Germany alone, around 1.1 million of which had been genetically modified.«

v This tradition also predominantly includes even those disciplines that purportedly focus on tackling environmental issues, but actually only aim to solve the problems that we ourselves have caused (i.e. cars and combustion engine technology versus climate research). From resource management and sustainable development to ecosystem services and the Anthropocene, academic disciplines and scientific concepts simply promote the same expansionist logic, along with the domination and anthropocentric use of nature.

in these fields, are interested in gaining specific knowledge on animals, plants and microorganisms and the relevant 'genetic resources'.

Here too, the parameters of the imperial mode of living apply: as capitalist markets only function based on private property and legally secured property rights, as early as the 19th century the nations of the Global North introduced intellectual property rights, implementing the necessary political and legal mechanisms. After industry associations had exerted considerable pressure, numerous international agreements and regulations to 'protect' intellectual property rights became globally streamlined in the 1990s through the TRIPS agreement. Regulated by the World Trade Organisation, TRIPS sets out binding minimum standards, corresponding sanctions and the introduction of patent legislation. This also applies to 'genetic resources' that were previously impossible to patent. Subsequently, many countries of the Global South were forced to introduce a framework for intellectual property rights (including patents for living organisms).⁶⁸

International patent law thereby became universally applicable, even including biological resources, and abetted practices that were soon criticised as biopiracy (Figure 6.5).⁶⁹ Critics argued that intellectual property rights provided a legal basis for the exclusive appropriation of traditional knowledge through 'biological resources', i.e. animals, plants, seeds and their properties. This includes so-called bioprospecting, i.e. the systematic search for genetic resources in areas of great biodiversity in countries of the Global South. Western businesses or development organisations⁷⁰ invest millions in these countries and organise targeted visits by local research partners to traditional rural communities to acquire their knowledge — also taking with them potentially valuable 'resources'.⁷¹ Companies can apply for 'biological patents' once they have scientifically catalogued or biotechnologically modified the extracted genetic material. The goal is economic valuation: the marketing of patents, licensing fees or the development

of corresponding products can lead to substantial profits for businesses.⁷²

Because they have the necessary technological and financial means, businesses and research institutes in the Global North reap the profits from these imperial practices. The transnational consumer class also profits from cheap and effective medicines, cosmetics and other products that are often too expensive and therefore not (or not easily) accessible to the original keepers and users of this biological knowledge.⁷³ Often such practices are related to a loss of animal and plant biodiversity, threaten traditional modes of living and worsen the social position of women.⁷⁴ Although the Nagoya Protocol regulates an 'equitable sharing of benefits' as part of the UN biodiversity convention, these rules are seen as contentious. Ultimately, they are indicative of a conflict over diverging concepts of knowledge. Resistance against Western ideas of individual intellectual property rights, the exploitability of knowledge and nature, as well as patenting norms or property rights on life are therefore set to continue.⁷⁵

Western education and research cannot therefore be considered innocuous, environmentally harmless and immaterial 'services', especially where human and animal rights are concerned. The normal everyday practice of knowledge production often relies on the privileged and theoretically unlimited appropriation and exploitation of people, other living beings and the entire biosphere, as well as of specific knowledge. We can therefore speak of imperial knowledge production.

Human capital strikes back: opportunities to overcome imperial education

Our dismantling of European ideals of education and science must seem irritating. While our education does subject us to power structures, does it not also provide us with the means to criticise these imbalances?



Figure 6.5: The Who's Who of Biopiracy

Sources: ETC Group, 2006, 2008; SynBioWatch n.d.

The Captain Hook Awards for Biopiracy have been awarded by the Coalition against Biopiracy at the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) since the year 2000. This is a small selection of winners in different categories.



Education and knowledge certainly do have emancipatory potential. Their crucial contribution to the expansion and consolidation of the imperial mode of living highlights their capacity for socio-ecological transformation. We will thus conclude this chapter with a few examples of positive developments as well as the necessary steps to be taken in the systems of education and research.

Knowledge: a commons or a commodity?

Knowledge production is a collective process: individuals are not capable of achieving major discoveries alone. A growing movement today recognises this fact and defines knowledge as a commons (SUMMARY AND OUTLOOK). This was the basis for Wikipedia and open source developers provide open access to the source code they write. Open access journals and databases, as well as open education projects provide access to academic debate for everybody and creative commons licences ensure free access to books and pictures, whereby it is the authors who define the conditions of this use—for example, by limiting it to non-commercial use (DIGITALISATION). This form of cooperation that aims to enable knowledge to be made available globally is incompatible with the concept of private intellectual property, a process that artificially creates a scarcity of knowledge.

Whose knowledge is valued?

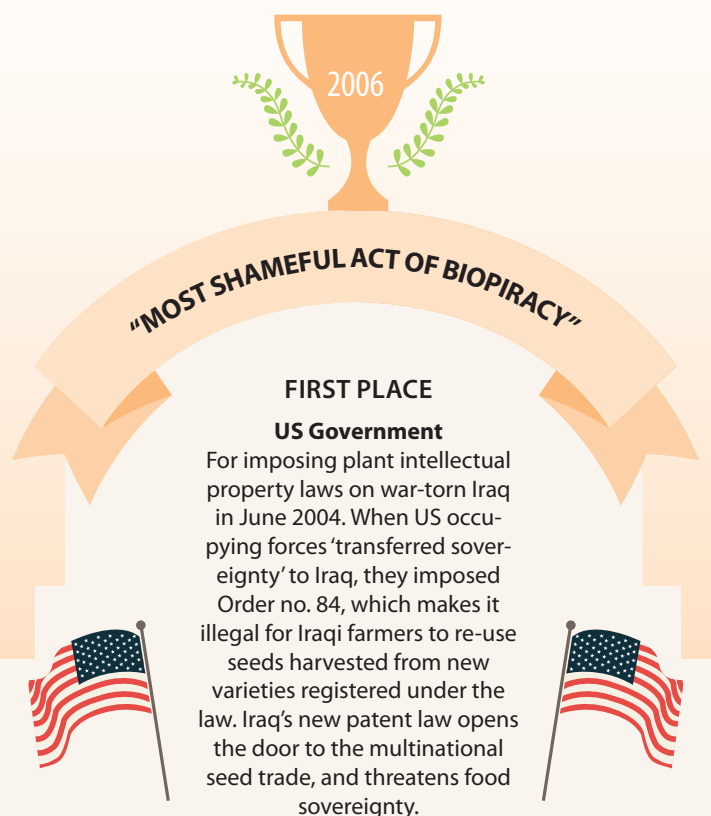
» *The world can only ever be as equal as the knowledge it is built upon*
(Kehinde Andrews)

Global justice depends on knowledge justice. This requires recognising the fundamental equality between diverse forms of knowledge, decentring our ‘truths’ and

worldviews and questioning allegedly universal “white patterns of thinking”.⁷⁶ Contrary to the customary logic of development, industrialised nations have a lot to learn from other knowledge systems—not by stealing or exploiting this knowledge, but by being open and willing to change our non-sustainable ways. Globally, and in explicit opposition to the monoculture of Western knowledge, alternatives are being discussed, in particular a growing international community of indigenous academics that builds on indigenous knowledge traditions and is developing independent research programmes and methods, including their own journals.⁷⁷ Within this context, we are therefore able to question an international development agenda that is by no means value-free and universal. For example, literacy remains one of the tenets of international development efforts, regardless of the fact that rich oral traditions have always thrived without the need for writing.⁷⁸

New values for science

Currently, our ‘business-oriented universities’ rank research projects based on the extent of third-party funding and number of publications. They could just as easily be focused on other aspects, which leads us to a number of vital changes: (self-)critical teaching and research should be promoted and, on the whole, academia must be ‘decolonised’. Inter- and transdisciplinary approaches need to be strengthened and science needs to comprehensively analyse important questions from a socio-ecological perspective that transcends disciplinary boundaries far from academia’s ivory tower and reveals interdependencies. The resulting issues should then be discussed with the rest of society. Moreover, academia should (or should be obliged to) evaluate its performance based on ethical and democratic standards. Research could and should be guided by emancipatory goals and instead of hiding behind pseudo-neu-



tral doctrines, researchers should need to explicitly state their demands and interests.⁷⁹ Queer and postcolonial studies, for example, have already developed such approaches, and important principles are also reflected in the Charter of Decolonial Research Ethics.⁸⁰ Thanks to critical students, academics and civil society organisations, 23 universities have, in spite of lucrative funding opportunities, introduced clauses that prevent them from participating in arms research.⁸¹ The renowned Tyndall Centre promotes a research culture that is more conscious of its CO₂ emissions and criticises academic flight hypermobility (MOBILITY).⁸² Human ecology, researchers with a background in sustainability studies or critical human-animal studies are investigating a socio-ecological transformation. Even neoliberal economics is being met with resistance from the Network for Pluralist Economics and its learning platform Exploring Economics.

Educational content and approaches that could lead to a more sustainable future

» *What good is a rigorous research agenda if you don't have a decent planet to put it on?*«

(Orr, 1992)

What should be the aim of education? Are efficiency, competitiveness and self-optimisation the core competencies for the future? Or do young people instead need to be offered a perspective that focuses on taking care of themselves, others and the planet? It is up to us to create the conditions that allow them to pave the way for a sustainable, socio-ecological transformation. One

thing, however, is clear. Just providing more education and knowledge, i.e. more of the same, cannot lead to change. Both the form and content of education have to change. What direction, skills and educational content do young people in the 21st century need?

Goals such as justice, cooperation, solidarity, empathy and self-determination are often mentioned in this context, as are the organisation of the commons, food production or skilled crafts and trades. Independent thinking, the ability to question the status quo and courage to resist are further key ingredients. All of this, however, will come to nothing if we fail to provide a basic understanding of our natural world and society's place within it, as well as how this is related to global crises, why there is urgent need for change and how we can switch to a socio-ecologically responsible and mutually beneficial lifestyle.⁸³ We must implement such environmentally conscious forms of education at all schools and across all study courses. So far our initial attempts to put such practices in place have been tentative at the best.^{vi} Clearly, this requires changes to curricula as well as to teacher training.

But who is it that writes the curricula? And when asked about the aims of education and society, wouldn't students give a more intelligent answer than performance and growth above all else? Schools, universities and research institutes should therefore be more heavily democratised. This concerns decision rights concerning fundamental questions (SUMMARY AND OUTLOOK) but also the forms of teaching being practiced. Why, for example, can't schoolchildren ask their own questions instead of being forced to learn the answers to other people's questions? If children could take part in the

vi Education for sustainable development (BNE), for example, is a completely inadequate and problematic approach for numerous reasons (Danielzik, 2013), but could be critically reformed.



development of their school, they would learn lessons in democracy at a very early age and see the effects of their actions. Examples from around the world involving reform pedagogical concepts and other projects show that such a culture of learning can work.⁸⁴ And would young people, if they had the power to decide, really be in favour of a school system such as the one in place in Germany, where children at a very young age are separated into one of four different types of secondary school (from academic-based to vocational education)? Since the adoption of the UN Convention on the Rights of Persons with Disabilities, inclusive schools are no longer a utopia but the standard that must be achieved.

In today's world, however, such projects are practically doomed to fail due to the immense pressure teachers and pupils face at schools. Democratisation, inclusion and a deeper understanding require either time or a very different approach to time and greater freedoms.⁸⁵ Ultimately, the de-formalisation of school edu-

cation holds great potential if it adheres to the belief that learning is not limited to schools and also not merely a cognitive process. Places of learning outside of the school environment, learn-scape elements or biography-based teaching methods relate subject matters to a pupil's everyday world: this could involve taking care of the school garden as a group, a biology course in the woods or finding out about the lives of their own grandparents. Learning that takes place outside the school walls, in the world and involving close interaction with others, with the social environment and the natural world, is not only beneficial for our children — it could also hold a promising future for us all.

Do you agree?

Then get involved! More information is available on our website www.attheexpenseofothers.org.

Endnotes

- 1 Roser & Nagdy, 2016; Roser & Ortiz-Ospina, 2016
- 2 Lessenich, 2016, p. 181
- 3 Lessenich, 2016, p. 180, referring to Rob Nixon's concept of imperial provincialism
- 4 Osterhammel, 2009, p. 1131
- 5 Adick & Mehnert, 2001, p. 33
- 6 Gordon & White, 2014
- 7 Rutayuga, 1998
- 8 Sachs & Santarius, 2005
- 9 Fend, 1980, p. 5; Vorholt, 2011, pp. 93, 96
- 10 For the French, Spanish and British colonies, Feldmann, 2016; and examples for Ghana and Ivory Coast, Quist, 2001
- 11 Fend, 1980, p. 6
- 12 Zinnecker, 1975
- 13 Foucault, 1977, pp. 181, 192
- 14 Foucault, 1977, pp. 238, 240
- 15 Foucault, 1977, p. 220
- 16 Conze, 1972; Thompson, 1967
- 17 Adick & Mehnert, 2001, pp. 33, 337; Conrad, 2008, p. 57
- 18 Reitz, 2015, p. 55
- 19 Fend, 1980, p. 14; Goodley, 2011, p. 144
- 20 Fend, 1980, p. 5
- 21 Reitz, 2015, p. 68; Schmiller & Stüber, 2014, p. 7
- 22 Ditton, 2010, p. 249; Muñoz, 2007; Neugebauer, 2010
- 23 Wigger, 2011, p. 33
- 24 Bauman, 2016, p. 60
- 25 Plumwood, 2002, p. 43
- 26 Dürmeier, 2012, p. 5; Plumwood, 2002, p. 43
- 27 Danielzik, 2013, p. 26
- 28 Selvaratnam, 1988, pp. 42–45
- 29 Herren, 2009, p. 128
- 30 Osterhammel, 2009, pp. 1160–1167
- 31 Farr, 2009; Piesche, 2009
- 32 Santos, 2014, called this *epistemicide*
- 33 Adick & Mehnert, 2001, p. 337; Alvares, 1993, p. 453; for the French, Spanish and British colonies, Feldmann, 2016; Selvaratnam, 1988, pp. 42–45
- 34 glokal, 2013, p. 12; Nandy, 1983; Wa Thiong'o, 1986
- 35 Farr, 2009 quoted in Bendix & Ziai, 2015, p. 164
- 36 Bendix & Ziai, 2015
- 37 Plumwood, 2002
- 38 Osterhammel, 2009, p. 1106
- 39 Research in Germany, 2016
- 40 Hochschulwatch, n.d.
- 41 Brand & Wissen, 2011
- 42 Federal Ministry of Education and Research, 2012
- 43 Federal Ministry of Defence, 2016
- 44 Federal Ministry for Economic Affairs and Technology, 2010, p. 18
- 45 Federal Ministry for Economic Affairs and Technology, 2010, pp. 18, 23
- 46 Federal Ministry for Economic Cooperation and Development, n.d.
- 47 Kleinwächter, 2014
- 48 Alvares, 1993, p. 453; Brand & Wissen, 2011
- 49 Ötsch & Kapeller, n.d., p. 17; Spash, 2012
- 50 Hans Böckler Stiftung, 2016
- 51 Dürmeier & Euler, 2013, p. 29
- 52 Dobusch & Kappeller, 2012, p. 1042
- 53 Brand & Wissen, 2011
- 54 Weber, 1919
- 55 Plumwood, 2002; Santos, 2014
- 56 Osterhammel, 2009; Rosa, 2016
- 57 Plumwood, 2002; Rosa, 2016
- 58 Plumwood, 2002
- 59 Federal Ministry of Food and Agriculture, 2016
- 60 Kölmel, 2016
- 61 Crary, 2013
- 62 Tuivai, 1981
- 63 Tuhiwai Smith, 2012, p. 1
- 64 Osterhammel, 2009, p. 1163
- 65 Mosby, 2013
- 66 ETC Group, 2006
- 67 Tuhiwai Smith, 2012
- 68 Delgado, 2002; Herren, 2009, p. 127f; Sanchez, 2012; Wuppertal Institut, 2005, pp. 115–124
- 69 ETC Group, 2006, 2008, SynBioWatch, n.d.
- 70 GIZ, n.d.
- 71 Sanchez, 2012; Wuppertal Institut, 2005
- 72 Delgado, 2002, p. 305; Herren, 2009, p. 127; Sanchez, 2012
- 73 Herren, 2009, p. 128; Sanchez, 2012, p. 18; Wuppertal Institut, 2005, p. 119
- 74 Wuppertal Institut, 2005, p. 118
- 75 Delgado, 2002; Sanchez, 2012; Santos, 2014
- 76 Danielzik, 2013; Santos, 2014, p. 207
- 77 Santos, 2014, pp. 205–211; pp. 236–240; Tuhiwai Smith, 2012, p. 4
- 78 Osterhammel, 2009, p. 1162; Santos, 2014, pp. 202–204
- 79 Plumwood, 2002
- 80 Decoloniality Europe, 2013
- 81 Braun, 2015
- 82 Le Quééré et al., 2015
- 83 Orr, 1992
- 84 Gribble, 2012; Von Reeken, 2001, p. 49
- 85 Hedtke, 2017

GLOSSARY

This glossary provides short explanations of some of the terms used in the text. However, the list is by no means exhaustive.

Agroecology describes a social movement, academic discipline and agricultural practice. They all share the notion of adapting agriculture to prevailing natural conditions, cycles and local needs. As an approach, agroecology combines traditional and local knowledge with modern scientific methods.

Biodiversity: biological diversity, diversity of species.

Biosphere: the earth's 'life zone', i.e. the totality of all organisms, living creatures and ecosystems on the planet. Often we consider terms such as 'nature' to be a realm entirely separated from humans, and words such as 'resources' implicitly view nature merely with regard to the benefits it provides to people. The term biosphere attempts to avoid these shortcomings.

Capitalism: under capitalism, the market principle largely defines the social fabric. The means of production are concentrated in the hands of a few, thus forcing the majority of people to work. Competition and profit orientation lead to an intensification of the global exploitation of people and nature.

Carbon Capture and Storage: the process of capturing and storing CO₂. The aim is to capture, liquefy and store underground the CO₂ from industrial processes—in spite of considerable risks and the fact that the technology still needs to be further developed.

Climate justice: a political concept that serves to highlight that the climate crisis does not affect all people equally. While the global upper and middle classes, in particular, contribute towards climate change, those who suffer its consequences most acutely tend to contribute the least to global warming.

CO₂: carbon dioxide.

Colonialism: the violent subjugation of foreign territories (in particular in the Americas, South and South East Asia as well as Africa) by European countries. The structures and relations of power that developed during this era persist until today (see also 'neocolonialism').

Commons: goods such as water, seed or software that are used by a community. It describes forms of property, organisation and production that are not based primarily on private or state ownership and competition, but on community ownership, co-operation and participation.

Data mining: the systematic statistical analysis of large amounts of data or 'big data'. The method aims to produce (economically exploitable) knowledge or predict future developments.

Ecological footprint: the space that would be required to maintain the lifestyle and living standard of one person (under the current conditions of production) for all of humanity permanently.

Externalisation: the process of outsourcing social and environmental impacts to other places, or leaving them for future generations to solve. For the imperial mode of living and production, this constitutes a fundamental process.

Food sovereignty: the right of all people to decide over the processes of food production, distribution and consumption. Key to this concept is the development of a socially just and sustainable form of agriculture.

Genetic engineering: the transfer of isolated DNA sequences across different species. Genetically modified seed has drawn criticism because of the way it affects biodiversity, the unknown impacts it has on health and the environment, its emphasis on monoculture production without reducing the need for pesticides and seed patenting instead of promoting free seed exchange.

Global North/Global South are not geographic terms and describe the distinct position of countries in the global political and economic order. The terms also highlight the different experiences with colonialism and exploitation that underpin today's order.

Globalisation: the age of globalisation describes the recent great increase in mobility of information, goods and people. While this mobility has existed for thousands of years, its intensity has increased sharply since the middle of the 20th century.

Good life for all: the realistic utopia of a peaceful and solidary society that includes all people living in harmony with the biosphere. Today, pessimism and fear rule, making the concept seem utopian. From the standpoint of civilization and technology, however, it is a realistic vision.

Indigenous peoples: the descendants of a region's original inhabitants. The term stresses the self-identification of culturally, socially and economically distinct groups in society that may even have their own language. Human rights specifically for indigenous peoples guarantee their right to self-determination and to land.

Industrial agriculture: aims for efficiency in production instead of caring for animals, the environment and people. Monoculture fields and mass production as well as the use of chemical fertilisers characterise the system. It promotes large agricultural corporations instead of smallholder farming. Often, instead of catering to regional demand, this form of agriculture is strongly export-oriented.

Industry 4.0: the Fourth Industrial Revolution after mechanisation, mass production and automation. It aims to 'intelligently connect' digital technology and the physical systems of production. The German government, industry associations, unions and researchers drive this process forward.

Institutions: long-term established organisations that shape society such as parties, unions, churches, international organisations or education establishments. Some definitions will also include institutions with unique characteristics, for example, companies, the (mass) media, as well as parliaments, courts and ministries.

Land grabbing: a colloquial term for the heightened economic interest in agricultural land and the global increase in large-scale land buy-ups. Frequently, while legal, they lack democratic control over land access.

Market-based: according to economic logic or the fundamental principles of the market, i.e. driven by prices, supply and demand, etc.

Modern slavery: all forms of forced labour, human trafficking and debt bondage that (illegally) continue even over 150 years after the abolition of slavery. Globally, an estimated 30 to 50 million people work in slave-like conditions, in particular in agriculture, households and care, as well as forced prostitution.

Neoclassical economics: mainstream economic school of thought taught at universities since the middle of the 20th century. The concept is based on assumptions such as profit and utility maximisation, perfect competition and complete information. It omits or only insufficiently considers aspects such as questions of distribution, differing degrees of power, ethical concerns and environmental issues.

Neocolonialism highlights the economic and politico-structural dependencies that persist in spite of the formal independence of former colonies. Certain trade agreements, for example, force countries of the Global South into the role of suppliers of cheap raw material.

Neoliberalism: an ideology and economic policy model that purportedly promotes a 'free market' and insists that it is best for society to limit political interference in business and the economy as far as possible. Examples of neoliberal policies include demands for liberalisation, privatisation and deregulation. Originally, the term described ordoliberalism, the theoretical basis of the social market economy.

Network effects: an effect particularly prominent on internet platforms and in digital services whereby the attractiveness of a particular site increases with the number of its users (as seen with Facebook, Airbnb, Wikipedia and others).

Precarious employment: a job is considered precarious when the worker earns below a certain threshold, is not sufficiently protected and their salary does not allow them to participate fully in society. Gainful employment is also deemed precarious when it stops being meaningful, lacks social recognition and offers people no security to plan for their futures.¹

Privatisation: the transfer of community property (owned, for example, by the state, communities or indigenous peoples) into private hands (owned, for example, by individuals, companies or corporations).

Racism: a balance of power that exists within society globally that sees people differentiated and hierarchized based on physical and/or cultural attributes and/or their origin or nationality. Being 'white' and 'Western' is judged to be superior to being 'black/non-white' and 'non-Western'.²

Re-feudalisation: the global trend towards the unequal distribution of money and power that resembles feudal medieval societies in which only a tiny elite enjoyed a comparatively high standard of living.

Rebound effect: the phenomenon of absolute energy and resource consumption not dropping in spite of efficiency gains in production, management and logistics. When productive efficiency increases, this leads to goods becoming cheaper, potentially causing consumption of that good to increase.

Sharing economy: a broad term for a growing economic sector that emphasises the shared use of goods or services (either on or offline). For successful companies in this sector, profits and not sharing are the main goal.

Sinks: parts of ecosystems that people use as deposits, for example, the atmosphere, seas or the soil under landfills.

Socialisation institutions: the reciprocal and open process, which shapes people and turns them into members of a society that is, in turn, shaped by its people, is called *socialisation*. In many societies, this process begins in families and schools, which would in this case be *institutions of socialisation*.

Transformation, socio-ecological: a fundamental transformation of political and economic systems away from fossil fuels and the growth logic and towards an economy that ensures a decent life for all. This goes deeper than a reform, yet is less abrupt than a revolution.

Transnational consumer class: includes the global middle and upper classes that follow a consumption-oriented lifestyle. When considering this concept, it is important to remember that discriminating structures such as racism and sexism persist.

Transnational corporations: since the end of the 20th century, the largest and most profitable companies are no longer bound to a particular country. Rather, they act as a network and secure advantages in production (cheap labour and resources or lower taxes) on a global scale across numerous countries.

Virtual emissions: emissions produced in third countries that are ‘imported’ by importing goods from these countries for further processing or consumption. Whereas production-related emissions in the Global North have stagnated or even declined, the imported emissions from the Global South are rapidly increasing.

White and black do not describe the colour of a person’s skin but political and social constructs that underpin both discrimination and privilege in our racist societies. The term ‘white’ is mentioned here explicitly to underline its dominant position, which otherwise often goes unmentioned.³

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- 3 glocal, 2013, p. 10

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THE PROJECT AND THE AUTHORS

The I.L.A. Werkstatt, a project organised by the non-profit association Common Future e.V., began on 1 April 2016 and ended on 31 May 2017 under the leadership of Dr. Thomas Kopp. The I.L.A. Werkstatt is an interdisciplinary collective of 15 young researchers and activists. We jointly developed this text over the course of a year. As a group, we hold university degrees in economics, development and agricultural economics, political science, political economy, international relations, pedagogy, environmental sciences, sustainability studies, history and law. In addition to participating in the I.L.A. Kollektiv, we study and work at universities, in non-governmental organisations, social movements as well as in and alongside trade unions. We are part of a diverse set of emancipatory movements within the broader field of global justice. This text aims to make the concept of the imperial mode of living accessible to a wider public and contribute towards a community-oriented mode of production and living.

If you have questions regarding content, feedback on specific chapters or would like to request a speaker or arrange a workshop with us, any of the members listed below would be happy to help. Please direct your queries to ila_info@riseup.net. Further information is available at: www.aufkostenanderer.org.

Introduction:

Samuel Decker, Hannah Engelmann, Magdalena Heuwieser, Thomas Kopp, Anne Siemons

Historical overview:

Samuel Decker, Jannis Eicker, Ia Eradze, Anil Shah, Lukas Wolfinger

Digitalisation:

Anil Shah, Lukas Wolfinger

Care:

Carla Noever Castelos, Anne Siemons

Money and finance:

Samuel Decker, Jannis Eicker, Christoph Podstawa

Education and knowledge:

Hannah Engelmann, Ia Eradze, Maja Hoffmann

Food and agriculture:

Franziskus Forster, Stella Haller, Therese Wenzel

Mobility:

Maximilian Becker, Magdalena Heuwieser

Summary and outlook:

Samuel Decker, Jannis Eicker, Franziskus Forster, Magdalena Heuwieser, Maja Hoffmann, Thomas Kopp, Carla Noever Castelos, Anil Shah, Anne Siemons

ACKNOWLEDGEMENTS

There are a number of other experts whom we would like to thank for their valuable input over the course of the year: Christoph Bautz, Daniel Bendix, Ulrich Brand, Jana Flemming, Martin Herrndorf, Julia Otten, Sarah Schmidt and Markus Wissen. For their vital feedback and support, we would like to thank Emmanuel Florakis, David Hachfeld, Steffen Lange, Christa Wichterich, Paco Yoncaova and the Jugendumweltnetzwerk Niedersachsen (JANUN).

The translation of this book from the German original received generous financial support from the Rosa Luxemburg Foundation (Berlin, Germany).




Today it feels like everybody is talking about the problems and crises of our times: the climate and resource crisis, Greece's permanent socio-political crisis or the degrading exploitative practices of the textile industry. Many are aware of the issues, yet little seems to change. Why is this? The concept of the imperial mode of living explains why, in spite of increasing injustices, no long-term alternatives have managed to succeed and a socio-ecological transformation remains out of sight.

This text introduces the concept of an imperial mode of living and explains how our current mode of production and living is putting both people and the natural world under strain. We shine a spotlight on various areas of our daily lives, including food, mobility and digitalisation. We also look at socio-ecological alternatives and approaches to establish a good life for everyone – not just a few.

The non-profit association **Common Future e.V.** from Göttingen is active in a number of projects focussing on global justice and socio-ecological business approaches. From April 2016 to May 2017, the association organised the I.L.A. Werkstatt (Imperiale Lebensweisen – Ausbeutungsstrukturen im 21. Jahrhundert/ Imperial Modes of Living – Structures of Exploitation in the 21st Century). Out of this was borne the interdisciplinary I.L.A. Kollektiv, consisting of 17 young researchers and activists. Their goal: dedicating a whole year to the scientific study of the imperial mode of living and bringing their results to a wider audience.



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