

ATTHE EXPENSE OF OTHERS?

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

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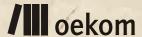
Preface by

Ulrich Brand,

Barbara Muraca

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Wissen



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On emission offsets see also the infobox on page 82.

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CONTENTS

48	Education and knowledge	5	Preface
	for they know not what they do?		by Ulrich Brand, Markus Wissen and Barbara Muraca
	Knowledge, education		
	and the imperial mode of living	6	Introduction
			An everyday catastrophe
60	Food and agriculture		
	Eating like kings	11	Historical overview
			A short history of the imperial mode of living
77	Mobility		
	Fast, faster, imperial	18	Digitalisation
			The laboratory of dreams and of nightmares
89	Summary and outlook		
	From the imperial mode of living towards	28	Care
	a good life for all		Who cares?
95	Glossary	38	Money and finance
			The price of money:
98	Bibliography		the impact of finance on our everyday lives
118	The Project and the authors		
118	The Project and the authors		

INFOBOXES

An overview of the imperial mode of living

The dream of a green economy

Global care chains

Fossil food – we are eating oil

Humankind and animals – "Humans are animals that have forgotten that they are animals"

Agrofuels – food for tummies or for tanks?

Emissions trading and offsets – the problem with market-based measures of environmental protection

82

Freedom of movement

PREFACE

emocratically minded and socio-ecologically conscious individuals are currently transfixed by the troubling developments on the right wing of the political spectrum. Nationalist aspirations, racist ideologies and authoritarian forms of rule are gaining influence. Neoliberal capitalism has lost its aura; there suddenly now seem to be alternatives. Numerous emancipatory initiatives and concrete approaches have made other options possible. We have witnessed the Arab Spring, the occupations of city squares in many countries, left-wing alternative parties (e.g. Podemos in Spain), protests against TTIP and CETA, as well as against the mining and burning of coal or against major projects (e.g. Stuttgart 21), local movements such as Transition Towns, urban gardening and repair cafes, as well as proposals to improve social infrastructure, for a decentralised and democratic energy transition and for public transport. And the list is by no means exhaustive.

It was against this backdrop that a group of academics and political activists met in 2016 for a writing workshop they called "The imperial mode of living: structures of exploitation in the 21st century (I.L.A.)". The term "writing workshop" and the project's unwieldy name make it hard to truly grasp the energy and dynamism this project unleashed, as well as the scope of the expertise it managed to unite. However, a quick glance at the resulting text, in which the I.L.A. presents the outcomes of this workshop to a broader public, instantly gives you an idea of the great minds at work on this collaboration.

One of the key findings of the project has been that there is not necessarily a link between the current crisis and the rise of the conservative right with its false solutions lacking both solidarity and answers to the true problems and crises. Moreover, there are indications that we can stop the rise of the right. We have progressive alternatives to halt such movements, and it is possible to confront the existing form of capitalism with its increasingly damaging social and environmental impacts. As much as we will need courage and dedication, we also require in-depth analyses. By setting out to dissect the imperial mode of living, i.e. patterns of production and consumption that are built on an unlimited

global appropriation of nature and labour and which produce both tremendous wealth and extreme misery and destruction, this publication provides the latter.

With a wealth of detail, this text identifies and vividly explores the underlying mechanisms. As the following chapters make clear, many people - particularly in the Global North—live by and profit from the imperial mode of living. At the same time, however, this mode of living exerts a certain degree of coercive power that is hard to evade. Changing consumption patterns at the individual level to be more socially and environmentally compatible—although an important strategy—is not enough. The imperial mode of living entails both promise and pressure. It simultaneously expands and limits people's opportunities. And even in the Global North, an individual's social status remains an important factor. Class, gender, and race all define the balance between opportunities and pressure. Car ownership rates as well as the frequency with which people fly or eat meat all highlight this fact. High-income (and, frequently, environmentally conscious) groups generally also consume the greatest share of resources and

This publication mainly focuses on how these and other complex issues affect various aspects of our lives. But this is not purely an analytical text. It also explores the true potential of alternative approaches and concepts. Across the world these ideas are gaining ground and providing an emancipatory dimension to people's justified anger over social injustices, environmental degradation, and a purported "post-political" lack of alternatives. This book is thus directed at all those who are fighting for energy democracy, food sovereignty, a transformation of mobility, and liveable cities - whatever their background or motivation. Next to prudent analysis, readers will find plenty of inspiration for their activism. We therefore hope this fascinating text will be shared widely and would like to thank all of those involved, in particular Thomas Kopp for his enormous contribution to the project.

Berlin, Oregon and Vienna, March 2017 Ulrich Brand, Barbara Muraca, Markus Wissen

INTRODUCTION

An everyday catastrophe

Whereas

in 2010,

388 people

owned as much

as the poorest

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population,

by 2017 this

figure had

dropped to just

eight men.«

hen you open the morning paper, it's hard to avoid that sinking feeling. We are undoubtedly living in difficult times. Bad news follows bad news: financial crises, hunger crises, thousands of people dead in the Mediterranean, climate change and natural disasters, insecure jobs and cuts to social services, and the rise of reac-

tionary and right-wing forces in Europe and the US. At the same time, we are witnessing growing social inequality and an increasing divide in society. Even though the global economy has grown rapidly over the past decades, 766 million people still live in extreme poverty. Whereas in 2010, 388 people owned as much as the poorest half of the global population, by 2017 this figure had dropped to just eight men.

Seemingly unrelated bad news appears to rain down upon us. This text aims to highlight and analyse the links between a diverse

set of concerns and alarming tendencies. Moreover, we want to find out what we can do to counter these worrying developments. Where must we apply pressure to achieve a good life for all instead of a better life for a few? And why is the struggle for a socio-ecological transformation towards a just and sustainable future proving so arduous?

A life at the cost of other people

The rise of right-wing movements and parties shows that many citizens across all social classes have lost their faith in parliamentary democracy. Right-wing populists around the globe have exploited people's fear of being left behind and stoked feelings of insecurity. Simple answers to complex questions are gaining traction. A nationalist revival, stricter border controls and faster deportations of immigrants are to bring security and wealth.

These simple answers, however, do not do justice to the complexity of the problems. But some of the explanations proffered by the left, who simply blame corporations, banks and the 'one percent', are also too simplistic. Instead, we need to carefully analyse whether these diverse concerns share common causes and clarify which structures provide the basis for the injustices of the current system. Our analysis has enabled us to pinpoint a root structural cause of the multiple and connected crises: the *imperial mode of living*. According to Brand and Wissen³ it is *imperial* because this mode of living steadily expands, suppresses other forms of living, excessively exploits nature and human labour and thereby causes inequality of opportunity and unequal access to natural resources. We have chosen mode of

living because this system completely permeates our everyday lives. It is a common thread that runs through our processes of production, laws, infrastructure, behaviour and even our thinking patterns. We expect supermarkets to sell exotic fruits from spring to winter and can have practically any product delivered to our doors at the click of a mouse thanks to Amazon, Zalando,

foodora and other websites. We do not need to worry about where these products come from and how they are produced. We expect a stable currency and easy payments. Many countries and regions can only sustain such conditions by implementing the harsh austerity policies dictated by the World Bank and the International Monetary Fund. We can no longer imagine our lives without a smartphone even though this product is often produced in places where exploitation and state repression are rife. We also expect that someone will take care of our elderly relatives. Care work, how-

ever, is mostly provided by migrant staff working under dreadful conditions. Those who have the opportunity continue to receive qualifications in a process of lifelong learning that allows them to actively participate in our career-oriented society; seldom do they question our fundamental societal structures. These traits, which are inherent to our everyday lives, are part of a global economic system that produces severe injustices and ecological damage. It is based on permanent exploitation: of humans by humans, as well as of nature by humankind.

The imperial mode of living ...

... is based on an unjust distribution of resources

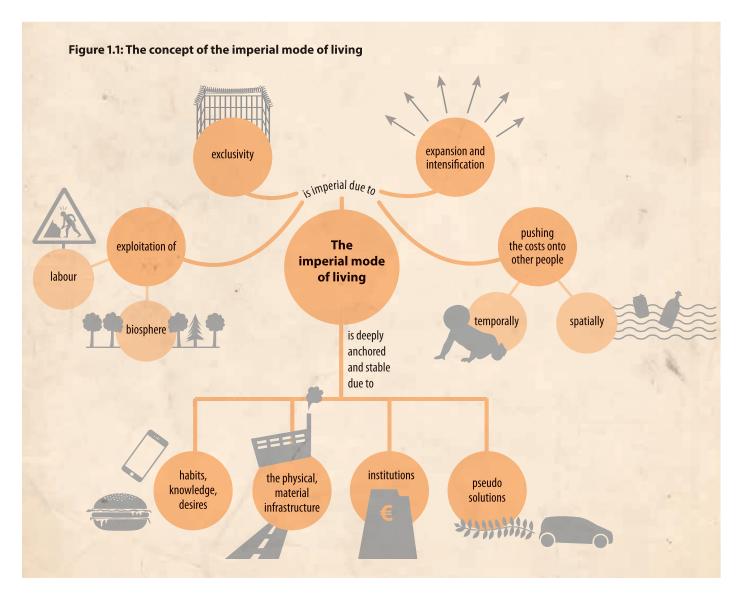
People in the Global North, i.e. those living in the economically strong industrialised countries, consume a disproportionately large share of global resources. The rest of the global population has only limited access to land, water, food, and fossil fuels. Yet also within societies, both in the Global North and in the Global South (GLOSSARY), the high levels of consumption among the wealthy and the vast amount of resources this entails increase their country's ecological footprint (GLOSSARY), whereas people in low-income groups contribute to a far lesser degree. We therefore speak of a transnational consumer class (GLOSSARY), i.e. a global upper and middle class that excessively consumes resources and which increasingly also includes people from the Global South.

... relies on inhumane labour

The imperial mode of living of this class of consumers is directly related to an imperial mode of production and exploitative labour relations. Extremely cheap products are not purely the result of increasing technological efficiency, but are also mainly the result of global imbalances and hard, poorly paid, and insecure work. Such harsh conditions are also faced by people in Germany, for example, those working in slaughterhouses or restaurants. In Turkey and Bangladesh, entire mines and factory buildings collapse with workers still inside. The low social and environmental standards in many places ensure consumer goods stay easily affordable for a middle and upper class growing throughout the globe. The same job pays significantly less in the Global South than in the Global North. People in the Global North therefore have access to significantly more hours of work—in the form of produced goods—than people in the Global South: working one hour in the Global North allows me to buy a product that would require me to work significantly more hours in the Global South. Many citizens of Europe and North America therefore have the entire world at their disposal, and this is also true when it comes to travel (e.g. applying for visas). In contrast, people in the Global South are often literally penned in by border fences (see infobox on "Freedom of movement").

... exploits nature

The overexploitation of natural resources is a further injustice that we not only commit against our fellow human beings but against the natural world. 'Nature' has an intrinsic value and is not merely a resource for human needs or a dumping ground for waste. It is becoming ever clearer that our modes of living and production, which are based on infinite economic growth, are not feasible on a finite planet. Current extinction rates are around one thousand times higher compared to the time before human influence, and the number of species lost is set to rise.4 Since the year 2000, an area of tropical rainforest the size of Germany has been cut down every five years.⁵ Various estimates predict that by 2050 around one billion people could become displaced as a direct result of climate change.⁶ From a historical point of view, human-caused climate change is a product of the Global North's imperial modes of living and production, a fact we will consider in more detail in the following historical overview. Mobility in our societies is extremely car-centred, every household owns numerous high-energy appliances, and resource-intensive industries, such as steel production and the aviation industry, are heavily subsidised—all of this contributes hugely to global warming. A substantial share of the emissions these activities cause is no longer attributed to the Global North. This is not only because the



INFOBOX

An overview of the imperial mode of living

The imperial mode of living

Our hypothesis is that one of the root causes of our current problems is the global expansion of a profit- and growth-based economic model. However, the global economic system is not a separate, independent structure that exists somewhere 'out there'; it is deeply embedded within people's lives.

The imperial mode of living is built on the ideal of a comfortable and modern life based on the permanent availability of consumer goods. In order to make this dream a reality, people around the world have to work hard, mine natural resources and slaughter animals — and they have to do it on a scale that pushes the earth to its ecological and social limits. The consequences are outsourced: to the Global South, future generations and marginalised groups in societies everywhere.

Nonetheless, the desire for and practice of this mode of living is spreading from the North to ever-greater parts of the world, together with its inherent ecological problems and social injustices. We consider the imperial mode of living a norm. It is borne by deep-rooted notions and ideas of what is desirable (i.e. 'growth' as a personal and economic policy goal), our physical, material infrastructure (motorways and coal power stations) and *political institutions* (the European Central Bank, the International Monetary Fund or free trade agreements).9 It is clear that multiple elements are at play here, which is why we refer to the phenomenon as a mode of living (as opposed to an individual consumption habit or the general relations of production).

Its multiple layers and the tacit but active approval by many people stabilise the imperial mode of living. This results in false solutions for real problems such as climate change (one example is increasing technological efficiency; see infobox "Green economy"). However, there are just as many varied approaches to realising a socio-ecological transformation. People everywhere are politicising everyday life by renouncing their consumption habits or uniting in initiatives, unions, and alliances to fight for the democratisation of institutions and modes of production.

The imperial mode of living: key phrases

The concept of the imperial mode of living creates a link between the individual, the economy, and global problems.

The imperial mode of living is imperial because it grants certain groups an disproportional share of other people's labour and the biosphere at a global level and outsources the impacts.

The imperial mode of living is on the rise globally.

The state, the economic system, and social consensus consolidate the imperial mode of living.

Mode of living describes a complex web of relationships between individual actions, business, and political institutions.

A socio-ecological transformation has to tackle the imperial mode of living at every level.

imperial mode of living is spreading, but also because the production of many goods is outsourced to countries in the Global South (GLOSSARY: virtual emissions). The goods may be produced elsewhere but that does not change whose consumption habits and profit margins the lion's share of greenhouse gases are being emitted to feed.

... and divides society

Certain people are disproportionately affected by these injustices. Those who have little money or who are discriminated against on the grounds of gender or race suffer more from unjust working conditions, environmental degradation and climate change.7 Here the dividing line does not only lie between a wealthy Global North and an exploited Global South: the fault lines also exist within societies. There are those in the societies of the Global South who profit from globalisation as much as there are 'losers' in the Global North. Poverty or unhappiness caused by pressure to perform at work, hypermobility, or fine dust pollution are by no means rare occurrences.

Our internalised imperial mode of living

The imperial mode of living does not stop at our doorstep either; it culminates in many people's desire for permanent self-optimisation. This is true not only with regard to people's careers - making more money and moving up the ladder—but also in terms of enhancing efficiency at work and leisure time as an end in itself. The prevailing belief that responsibility lies exclusively with the individual, and not with businesses or the state, drives this trend. Unjust forms of business conduct can then, for example, be blamed on the unethical choices individuals make when they go shopping. People are not sick because they suffer from occupational diseases (or have simply had bad luck), rather it is their own fault because the food they eat is not sufficiently healthy, or because they have not meditated enough or done enough exercise (e.g. to recover from work).

The imperial mode of living as an attempted explanation

The concept of the *imperial mode of living* can help explain why, in spite of increasing injustices, progressive alternatives have so far been unsuccessful. It tries to understand why a *socio-ecological transformation* (GLOSSARY)—i.e. a fundamental change in our society and economy to achieve a good life for all and for future generations—is being blocked. The term was coined a few years ago by the sociologists Markus Wissen and Ulrich Brand.⁸ This text attempts to illustrate how the concept applies to different areas of our everyday lives: our food and mobility, our education system, private finance, care, and the digital world. We ask how the imperial mode of living manifests itself in these spheres and try to ascertain what its stabilising factors are.

Change in sight?

Profit-oriented globalisation (GLOSSARY) reveals and perpetuates itself in our everyday lives, our work, our consumption habits and our 'normal' activities and ways of thinking. Only when we become conscious of our problems and their causes can we effect true change. Among many people in both the Global North and South there is an increasing awareness of the problems mentioned.¹⁰ However, it is the classes with the highest incomes and best education that contribute the most to the destruction of the biosphere and the exploitation of people (MOBILITY, and EDUCATION AND KNOWLEDGE).¹¹ Whereas many in this group tend to buy ecological products, their high income means their levels of consumption are also higher than average.

We are witnessing a significant increase in so-called 'solutions' based on consumption. One example is the steadily increasing market share of fair trade products. ¹² Or when people pay to offset the CO₂ emissions caused by their flights as well as car or bus journeys. For only a few euros, the company Atmosfair offers 'CO₂ neutral' flights. ¹³ The developers of the Fairphone strive for production to be as "fair as possible", ¹⁴ which means trying to avoid as far as possible resources from crisis zones and not exploiting employees. ¹¹

The approaches these solutions are based on, however, often focus too narrowly on consumption and their scope is limited. People can now decide for themselves whether or not to buy coffee produced through worker exploitation, but exploitation nonetheless remains the norm. In many cases the suggested solutions simply represent forms of greenwashing, as in the case of CO2 offset payments (see infobox on "Emissions trading and offsets"). An example of one such pseudo solution are Western nations' attempts to repair the damage caused by their own agricultural policies by providing development aid, for example, food relief. The political strategy behind green growth (see infobox "Green economy") is also to reduce the impacts of our economic system without fundamentally changing the system itself. The basic structures that pave the way for and promote injustices remain untouched. In most cases, therefore, governments and international organisations

INFOBOX

The dream of a green economy

The green economy (green growth) suggests that we need only make our economy 'green' to solve our environmental problems; reducing our levels of consumption isn't necessary. Proponents of the approach in fact argue the opposite, claiming it will even drive economic growth. To break the link between economic growth and the consumption of natural resources, our fossil fuel-based industry is to be successively replaced by bio-based forms of production. Petrol will be replaced by agrofuels (see infobox on "Agrofuels"), coal by hydro power, and so forth. Market instruments such as emissions trading are a key element in such concepts (see infobox on "Emissions trading and offsets"). Moreover, controversial technology-based solutions such as geoengineering and carbon capture and storage are to 'neutralise' unavoidable emissions. The green economy is backed by a powerful alliance of organisations such as the OECD (Organisation for Economic Co-operation and Development), the UNEP (United Nations Environment Programme), the World Bank, some of the major environmental organisations, green parties and several corporations and banks. By taking on the role of 'green pioneers', these firms hope to increase their competitive opportunities.

However, it is unlikely that such a green economy can actually be realised. The necessary increases in efficiency go far beyond our capabilities and we are unlikely to witness such rapid technological progress. The presumed dematerialisation, i.e. the focus on a purportedly emissions-free services sector, ignores the sector's dependency on a physical infrastructure and energy requirements. In any case, these efficiency gains would — according to the dominant (neoclassical) economic theory — not only reduce emissions, but also, due to lower product prices, increase consumption (see *rebound effect* in the GLOSSARY). In the GLOSSARY).

are merely treating the symptom rather than the cause.¹⁵ Still, these strategies ensure the veil is not lifted and that we feel safe. After all, something is being done.

The contradictions between an increasing awareness that there is an issue on the one hand, and the growing problems on the other are obvious. Vaguely, we feel that climate change could pose a serious threat and that the unfair production conditions in agriculture and the textile and electronics industry are untenable, i.e. that something is not okay with our current mode of production. However, this does not lead to new progressive policies or attempts to cut down on or fundamentally change our living standards.

Even more problematic is the success of simplistic yet false narratives and projects from the right wing, and with them the rise of right-wing populist forces. One explanation is that many people are aware of the problems we face and feel a certain degree of uncertainty. As part of their nationalist rhetoric, right-wing populists use the crisis to promote isolationism and secure the imperial mode of living for their own nation. The mainstream parties are also reacting to this social climate with increasingly isolationist tendencies. While

i Since its market launch, 111,000 Fairphones have been sold, a figure dwarfed by the 219 million iPhones Apple managed to sell in 2016 alone (DIGITALISATION).

the established parties, unions, and industry associations speak of change and sustainability, their policies are characterised by a continuity that cements and escalates current socio-ecological problems.¹⁹ This fact is reflected, for example, in the austerity measures the EU imposed on Greece (see the chapter on Money and FINANCE).

Deeper and more inclusive projects of transformation that aim for a more socially just and ecological transformation have so far not been able to win people over to the same degree. One reason is that they often use complex and esoteric language. Moreover, they are often vague and, at the same time, far more complex than the simple solutions offered by the right. People are therefore uncertain as to how a socio-ecological transformation would change their everyday lives. It also does not seem to be clear how a transformation of production structures and modes of living could work in practice at the local, regional, and global levels.

This publication aims to offer a more detailed analysis of why hardly anything is changing as well as explore which stakeholders and structures in specific parts of our everyday lives are standing in the way of a transformation towards a society based on solidarity. Finding answers to this question is a necessary and first step to overcoming injustices. We shall then subsequently show how a socio-ecological transformation could be driven forward.

Our approach: an overview of At the Expense of Others

The following chapter provides a historical overview of how the current situation developed. We show how imperial modes of living came into being throughout the course of various economic and social developments that took place between the 16th century and today, and how they were able to spread and take hold. Based on six thematic fields, we then analyse how imperial modes of living permeate different spheres of our everyday lives and pinpoint the ways in which human labour and the environment are exploited in these areas. Moreover, we reveal the stakeholders and conditions that stabilise them.

Nearly all of us own a smartphone and actively participate in the digital world. The third chapter on digitalisation focuses on how resources from conflict regions and neocolonial economic relations allow us to buy and use smartphones, how our lives are becoming increasingly digitalised and what consequences this has for our social fabric and our economy. Our lives are based on and reproduced by the care work provided by the people who take care of others. At whose expense the current organisation of care in our societies comes and the stakeholders that help maintain this system are the focus of chapter four. To maintain our daily lives, we need money. How this and the other apparent norms of our money and finance economy connect us with global injustices, indebtedness and exploitation is the theme of chapter five. We have all enjoyed certain levels of education and acquired knowledge. The sixth chapter analyses how our education inculcates the imperial modes of living within us, represses other forms of knowledge and how Western knowledge production leads to the exploitation of nature and other epistemologies. The food we eat also severely impacts people and ecosystems elsewhere. Chapter seven highlights the links that exist between the food we eat and global hunger, climate-damaging agriculture and the market power of food corporations. A further important precondition for imperial modes of production and living is our mobility—whether it's the miles we travel for our holidays or those covered by the T-shirts in our wardrobes. The impacts and contradictions of the accelerated, oil-based transport system is the focus of chapter eight.

These spheres of our everyday lives are select examples that represent key realities for a large share of the global upper and middle classes. They allow us to vividly show how the imperial modes of living are at work in our everyday activities. Moreover, our analysis reveals why nothing is changing and we ask which concrete concepts, policies, and infrastructures strengthen and stabilise the current system. Chapter nine provides an overview of the results of the preceding analysis and reveals points of leverage and strategies to overcome the imperial mode of living. Whereas alternatives to our imperial modes of living will require large-scale shifts in the modes of production and our everyday lives, they do not necessarily imply a loss of quality of life. On the contrary: community-based and cooperative forms of living, working, caring, doing business and living together are possible and already exist. We could expand them, create networks and turn them from an exception into the rule.

Endnotes

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HISTORICAL OVERVIEW

A short history of the imperial mode of living

Where did the imperial mode of living originate and how did it develop? This chapter provides a historical overview from a European perspective, revealing a history that is as much characterised by inventiveness, material expansion and emancipation as by repression, exploitation and violence.

he imperial mode of living, i.e. the essentially unlimited access to labour and resources on a global scale, developed over the course of the last 500 years. At first a luxury afforded only to the European and North American elites, it eventually became the norm for the middle and upper classes. Initially, global political and economic relations of power were manifested in explicitly despotic forms of rule (colonialism and imperialism). But eventually these were replaced by more subtle forms of exploitation (dependency on and mediation by the global market). Today, the imperial mode of living is supported by a broad social consensus and often appears quasi natural. This system maintains dependencies and social constraints and thereby effectively blocks the road to a socio-ecological society.

Colonialism:

the early stages of the imperial mode of living

Following the transition from the Middle Ages to modernity, European expansion took hold in the late 15th and early 16th centuries. Different factors encouraged this development. Economic power had grown in the late Middle Ages, and banks and large trading companies had developed. Reformation provided a further boost to the economy, as many highly qualified individuals were no longer bound to the church and could take up secular occupations. This promoted administrative, technological and scientific innovation. Christian missionary zeal provided European expansionism with its readiness for violence and bloodshed. In particular, the kingdoms of Spain and Portugal, where the drive to "subjugate the world" originated, had long been warring with Muslims and Jews. Reformation then created a schism within Christianity and led to a series of religious wars. In the course of these and other military conflicts, many of the smaller kingdoms were subjugated and absorbed into larger dominions. Increasingly, absolutist regimes began to appear in Europe that depended

on large sums of money to maintain their expensive symbols of power and finance numerous wars. The combination of technological innovation in the fields of sea travel and weaponry, the need for money, a culture of violence and a missionary zeal created an explosive mixture that was about to be unleashed on the rest of the world.

Europe expands ...

Portugal and Spain were the first to go forth in search of new roads to the riches and markets of the East, thereby venturing into uncharted territories, particularly the 'New World'. Other European nations, among them the Netherlands and England, soon followed suit. In these faraway places, the political situation often favoured European expansion: power vacuums in certain regions provided opportunities that

European powers could exploit. This was also the case in South-East Asia, where China, the dominant power, had only recently cut its external ties and disbanded its huge fleet.3 Europeans were also often able to take advantage of local and/or transregional conflicts. In other parts of the world, such as in the Americas, one of the main reasons they were able to quickly assert their dominance was because of the diseases they brought, such as influenza, which soon decimated the indigenous populations. Most importantly, however, was the fact that Euro-

Following the transition from the Middle Ages to modernity, European expansion took hold in the late 15th and early 16th centuries.«

pean invaders had more advanced military technology, particularly in terms of firearms (cannons being just one example) that enabled them to brutally rise to the top in many, yet by no means all, regions of the world (the powerful Ottoman Empire remained a feared opponent until well into the 17th century). European powers also posed no serious threat to the Chinese empire or the Indian Mughal emperors.4 Technologically, scientifically and economically, Europeans lagged behind in many areas. A key factor of European expansionism was its reliance on violence and the ruthless exploitation of humans and the natural world.5 Indigenous peoples — in particular, from Africa — were forced into labour and enslaved, worked under catastrophic conditions and perished by the thousands. The colonial masters met resistance with brutal force and exterminated numerous tribes and ethnic groups. As late as the early 20th century, German troops committed genocide against swathes of the Herero and Nama in German South West Africa.

Up to the 18th century, the British textile industry continued to copy the Indian model and Europeans only managed to make porcelain around 900 years after China. Before that, during the Middle Ages, Europeans used techniques to produce silk, paper and gunpowder that they had learnt from the 'Middle Kingdom'.

State and private actors collaborated closely to force the world into submission. The monarchic or oligarchic governments of colonial states created incentives, provided the framework conditions, and gave legitimacy to treaties or action to protect their 'enterprises', using military force where necessary. In exchange they received important revenue, e.g. through taxes. Private and semi-private actors, such as businesses, governors and stock companies — the British East India Company is one famous example - in turn financed colonialism and were often in charge of the 'dirty work'. They (and their shareholders) received a large share of the profits gained through exploitation. States granted their large national trading companies monopolies, and empowered them to wage war and execute "punitive measures".6 Soon shares and bonds were financing this expansion. We practically owe our modern system of stock exchanges and central banks (see Money and Finance) to this structure created to finance exploitation,7 which has also been described as "war capitalism".8

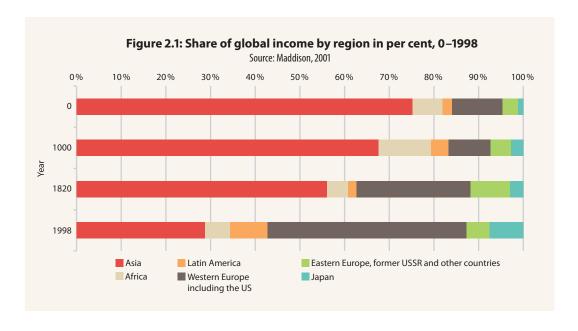
... and gives birth to the first global market

With their heavily armed ships, European traders "shoved competitors off the field and [...] quite literally hunted for workers".9 They took over existing international trade routes and created new ones. A gigantic trade system dominated by European powers and maintained by armed force developed. The first global market came into being and it was shaped by a European elite hell-bent on preserving their interests. On one occasion, the Dutch East India Company murdered an estimated 15,000 people — nearly the entire population of one island group - in order to gain control of the profitable nutmeg trade¹⁰ before establishing a slavebased plantation economy. To secure an exploitive system that benefited a small elite, Europeans established such 'extractive institutions' everywhere in their colonies. In many countries of the Global South, the legacy of these institutions continues to have a destructive effect on economies and political systems. For

the colonial masters, however, this not only provided a means to stabilise and expand their hegemony, it also increased their profits from trade and exploitation, and hence their access to ever more goods from all over the world. The global market thus became the backbone of the imperial mode of living during this early phase. In exchange for the silver they had robbed from the colonies and the 'profits' reaped from the slave trade, European elites were able to buy sought-after goods in Asia (predominantly China and India), such as tea, metals, precious stones, porcelain, silk and cotton fabrics. And America provided them with tobacco, sugar and other goods.11 Tellingly, while sugar production was concentrated in Brazil and the Caribbean, the commodity itself was almost exclusively consumed by people in Europe and North America. Sugar was cheap enough that it was even affordable to the lower classes, for whom such luxury goods were entirely out of reach and who were often no better off than the indigenous peoples in the colonies. Until well into the 20th century, the access to goods from around the world was a privilege that remained unattainable for large parts of the European population.

Colonial knowledge shapes the world

Legitimised not least by blatant racism, violent exploitation provided the imperial mode of living's intellectual basis. 'Wild' indigenous peoples were allegedly more animal than man, and could therefore be treated and exploited as such.¹² From the Middle Ages came the deep conviction that non-Christian religions had to be opposed. Europeans interpreted their great success in subjugating, massacring and pillaging other peoples as a heavenly blessing. It also led the colonial powers and elites to invest in the technologies and sciences that their increasing wealth, success and capacity to exploit the world relied on.¹¹ The colonial 'success story' and imperial mode of living are therefore deeply inscribed in the practice and theory of Western science and continue to inform our understanding of sensible



Such as engineering, earth science, land surveying, shipbuilding and nautical science, as well as, in particular, weapons and military technology or the considerable collection and organisation of encyclopaedic knowledge on the different parts of the world.

and rational ways of dealing with the world. For subjugated and exploited peoples, the strength and wealth of their foreign masters were often seen as proof of the 'objective correctness' of their worldview and methods. Thus success could only be brought about using the same approach. This devalued non-European cultures and their knowledge—to the benefit of Western concepts (see Education and knowledge).

Industrialisation and imperialism

Europe's global dominance only developed in the wake of a second wave of colonial expansion in the 18th and 19th centuries, and in the 20th century, this then led to the division of the world into 'developed' and 'underdeveloped' nations.13 For centuries, it was non-European countries such as China, India and a few others (today referred to as 'developing nations') that held the largest share of global income (Figure 2.1).14 This, however, changed quickly. Competing European colonial powers expanded their grip on global resources—land (see FOOD AND AGRICULTURE), labour (forced servitude or slavery) and raw materials - and violently divided up the world between them. This era, when Europe subjugated and suppressed most of the world, has become known as the Age of Imperialism. Imperialism fundamentally altered international relations and its effects continue to be felt in many aspects of life today. Whereas the countries of the Global South still controlled around 63 per cent of global income at the beginning of the 19th century, this share had dropped to a mere 27 per cent by the middle of the 20th century.¹⁵

Industrialisation and its colonial dimension

Agriculture had long been the dominant sector, yet over the course of the 18th and 19th centuries, industry, business, trade and transport gradually took over. These sectors now drove economic growth and the development of society.16 Increasingly, mechanisation and the steam engine's rhythmic hissing drove production and ensured the growing productivity of the emerging factories. Mechanical looms, for example, meant cloth could be produced faster than ever before, while steamships and railways could transport people and goods at unprecedented speed. New technologies and fossil fuels — predominantly coal at first — liberated production from natural constraints. Production could take place where there were large pools of workers. This was the beginning of the fossil era.17

All too often the West interprets these developments as the logical consequence of superior Western inventiveness and entrepreneurial spirit. However, such a perspective overlooks the fact that European industrialisation was by no means solely the result of technological innovation. Globally, it was the work of millions of slaves, forced labourers, and coolies (day labourers) who helped bring about the economic rise of the imperial powers. They also provided the cheap raw materials for Western industries.18 The official abolition of slavery did little to change this.iii In many cases, European technology was based on the knowledge that

Europeans appropriated from other peoples. The British textile industry—the ultimate symbol of industrial capitalism — spied on the then leading Indian textile producers and copied many of their techniques and patterns19. Whereas the key goods during the initial phases of colonialism were silver, sugar, tea and spices (see above), industrialisation created a growing demand for cotton (for the textile industry), rubber (for wheels and car tires) as well as iron ore, nickel and other metals (e.g. to produce steel), particularly over the course of the 19th century.20

Europe's new class society

Industrial capitalism led to a social order fundamentally characterised by salaried labour and new social inequalities. A small and ever wealthier bourgeoisie that owned capital and the means of production, such as factories, was faced by a rapidly growing number of salary-dependent workers who had little more than their own labour.21 Men, women and children worked under the harshest conditions in factories - often between 12 and 16 hours per day, without healthcare or pensions—all for a pittance. Hard physical labour was the harsh reality for Europe's lower classes, much like for the people in the colonies. Often, people were left with no other choice than to work in the factories. In the United Kingdom, the nobility drove large parts of the rural population from common land to use it for the more profitable production of wool.²² As a result, many living in rural areas could no longer feed their families and so moved to the cities to earn at least a meagre salary in the expanding factories. For women, this led to a double burden. Not only did they work in textile factories, or in private households, for a salary that was significantly lower than that of their male colleagues, but they still had to perform household chores, which were considered the natural domain of women, i.e. it was work that was neither remunerated nor valued (see CARE).23

The early stages of the growth society

From the 18th century onwards, the population and the economy both grew rapidly, with one factor driving the other. Between 1700 and 1800 alone, the European population nearly doubled.24 This development contributed to the spread of the imperial mode of living not least due to the important migratory wave it caused. Seeking economic success, or simply fleeing repression, millions of people migrated from Europe to other parts of the world and spread Western forms of thinking and Western economic habits. Population growth in Europe also provided industrialists with a huge pool of labourers in search of work. It also drastically increased the pressure to improve the infrastructure and provide affordable food, which promoted innovation in agriculture. The improvement or introduction of novel forms of cultivation, fertilisers and agricultural crops (such as maize, potatoes and pumpkins from North and South America) helped stimulate further population growth and boost agricultural

The same applies to the 4th Industrial Revolution (see Digitalisation).

Figure 2.2: Timeline

productivity. Towards the end of the 18th century, a revolution in transport also took place. The construction of transportation canals boomed—first in the UK, and later in continental Europe and the US. An increasing number of goods from regional and global trade were transported on inland waterways, providing links between the new urban centres. During the second half of the 19th century, railways revolutionised the transport of people and goods as they freed transport from its dependence on river courses.²⁵ Both from an economic and military point of view, this was highly important, and so states overwhelmingly supported the development of this new infrastructure, even going so far as to implement measures against local resistance. More often than not, the necessary capital for these investments stemmed from the exploitation of the colonies. Towards the end of the 19th century, railway construction had become the largest economic sector in Europe and North America — and therefore a driver of industrialisation in two ways: whilst it created brand new means of communication, logistics and transport, it was also a booming economic sector in its own right. The price for the industrial age was paid for dearly by large segments of the population and ecosystems, as this new-found productivity and mobility relied heavily on large-scale exploitation and fossil energy—at first, coal and then mainly oil in the 20th century.

Fordism: Wealth for everybody?

During the early stages of industrialisation, it was almost exclusively members of the elite, such as factory owners, who profited. However, over time unions won higher salaries and shorter working days for labourers in fierce struggles. The emerging welfare state also significantly owes its existence to the strength of the organised interests of the wage-earning population. At the same time, technological innovation and improved workflows (such as assembly line work) increased productivity, leading to lower unit costs and therefore also lower prices. ²⁶ For many companies, state market regu-

lation was acceptable as long as it still facilitated higher profits. Furthermore, towards the end of the 19th century, the new advertising industry promoted a culture of consumption that over the course of the 20th century took hold among most of the population.²⁷

A salient feature of this new consumer society was that it was no longer merely the economic, political and religious elites, but rather the "majority of the population that had access to these new forms of consumption".28 Large swathes of the working class in the Global North enjoyed an imperial mode of living and gained a share in the new wealth which continued to rely on the global appropriation and exploitation of labour and resources. Take cars, for example. At the end of the 19th century, they were an exclusive means of transport reserved only for the upper classes; by the 20th century, they had become a mass product. This period of mass production and mass consumption is called Fordism, a name derived from the car manufacturer Henry Ford. iv As this period also saw workers become consumers too, some speak of the "emancipation of the proletariat," ²⁹ whereby relatively poorer individuals were able to accept the imperial mode of living in spite of the inequalities that persisted.

The downside of new wealth

However, the fruits of these developments were reserved mainly for the white population. Particularly in the US, the 'new top dog' of the global economy, the struggle for equal rights became a defining factor in the everyday lives of black people. Moreover, traditional gender roles initially remained almost fixed. Care remained the domain of women and was not recognised as real work. Often, the social market economy is seen in a positive light; however, it could only function—and this fact often goes unmentioned—"at the expense of women's independence and their opportunities for progress". Until 1977, married women in Germany were barred from signing an employment contract without first obtaining permission from their husbands. In many cases, activists had to fight for



Allegedly, his workers were able to afford one of his cars after only a few months of work.

women to be granted the right to vote, study at university or even run a marathon.

Even though Fordism helped generalise the imperial mode of living to a certain degree, by and large this trend remained restricted to the former colonial powers (the USA, the UK, Germany, France, the Netherlands, Belgium and Japan). Following World War II, many societies of the Global South were occupied by their battle to gain independence from these countries (in particular, from France and the UK). These struggles against persisting injustices went more or less unnoticed by broad segments of the German population during the postwar period—Germans were fixated by the idea of growth-based wealth for all.

Growth as the central goal of economic policy

In the 1950s and 1960s, Germany experienced what came to be known as the "elevator effect"31: Overall, inequality did not decrease, but economic growth led to a situation where people of all social classes gained increasing material wealth — as a whole, society was elevated to the next level.32 Extreme mass poverty, which characterised the early phases of industrialisation, was almost entirely eradicated. For this reason, economic growth remains the highest economic policy goal in Germany and most other societies and is still a widely accepted objective; it created new demand and led to a belief in the need for permanent growth.³³ In some of the earliest nations to become industrialised, the imperial mode of living became a mass phenomenon: nearly everybody gained the purchasing power to buy goods and services and thereby, mediated by businesses and global markets, acquired access to the labour and ecosystems of the countries of the Global South. Following independence, neocolonial trade regimes often developed on the global markets, reducing the countries of the Global South mainly to providers of resources, food and labour for the Global North.34 Most of the former colonies developed industrialisation strategies to achieve similar levels of wealth as the countries of the Global North. Yet the rules of the global economy were still being written by the former colonisers. Since the 1960s, the difference in the degree of industrialisation between countries of the Global North and South has effectively decreased. However, large discrepancies between these countries persist in terms of income.³⁵ It was only as the dominance of Fordism began to wane in the 1970s that the "limits to growth"36 entered public debate. The consequences of highly resource- and emissions-intensive mass consumption and mass production became too evident. Mobility continued to rely heavily on oil, in particular, but also coal. Moreover, an increasing number of products were being made from plastic. Cement, steel, sand and gravel were also needed for the rapidly developing road infrastructure, which, compared to railways, required nearly ten times as much area. Under Fordism, the transport sector therefore became the greatest energy consumer, ranking even ahead of industry.37

The means for growth, for example, the industrialisation of agriculture, relied on monocultures, an excessive use of pesticides and chemical fertilisers that destroyed soil fertility and biodiversity. These new methods often also led to rural exodus, impoverishment and, increasingly, the destruction of non-industrial, regional and ecological forms of farming (see FOOD AND AGRICUL-TURE).38 Following the 1960s and 1970s, this led to the spread of new social movements that searched for alternative forms of consumption and production that did not burden people and the environment. However, these ideas never took hold on a global scale.

Neoliberal globalisation

The 1980s wave of globalisation (see GLOSSARY) made it possible for the broad mass of the world's middle and upper classes—even beyond the former colonial powers—to enjoy the imperial mode of living. Most everyday commodities, such as sports shoes, computers or supermarket food items, were now no longer standard products produced by a single business, but derived from a complex network of supply and production that spread across diverse locations throughout the



Regarding the manufacturing industry's share of GDP.

world. Not only was this change linked to a process of relative deindustrialisation in the Global North, and China's rise to become the 'workbench of the world', it was also accompanied by global markets dominated by a handful of transnational corporations and the widespread acceptance of a new economic policy ideology: neoliberalism (see Glossary).

Influential politicians such as US President Ronald Reagan or British Prime Minister Margaret Thatcher became the symbols of a political and economic doctrine that placed the freedom and efficiency of markets at the heart of every political agenda and also largely dominated academic thinking (particularly in terms of economics) and civil society (see EDUCA-TION AND KNOWLEDGE).39 Even social democratic parties, who had previously appeared to defend the interests of the wage-earning population, followed the new trend: privatisation, deregulation and scaling back the state's responsibilities (especially regarding welfare provision) were now seen as the medicine to all economic ailments. Instead of promoting democratic control over markets, which had, to a certain degree, characterised the Fordist era, neoliberal theorists advocated the 'market-conforming democracy'. Following the breakup of the Soviet Union and Real Socialism, this concept made its breakthrough in the 1990s.40

'Development' - but for whom?

Convinced of the market's self-regulating capacities, influential providers of financial assistance, such as the International Monetary Fund (IMF), the World Bank or the G8 (Group of Eight), implemented so-called structural adjustment programmes as a form of 'development aid' during the 1980s and 90s. 41 They aimed to open up economies for the private economic benefit of transnational corporations, promote an export-oriented agriculture (see Food and agriculture) and decrease the state's involvement in spheres

such as healthcare and education (see CARE). Moreover, since the 1990s, to institutionally anchor this trend and grant private investors enforceable rights, numerous international free trade agreements have been concluded.vi For the countries of the Global South, many of which had only very recently freed themselves of the colonial yoke, neoliberal policies led to new dependencies - on international donors in the form of huge unpayable debts (see Money and finance), and also on the fluctuations of global markets. In many cases, this crippled entire sectors of local economies. 42 Many people, in particular those from rural areas, were forced to leave their homes and seek new prospects for themselves and their families - taking on precarious jobs as migrant labourers on the fields, as well as in the factories or the households of the globalised world (see FOOD AND AGRICULTURE, DIGITALISATION and CARE).

Over the past 30 years, this 'globalisation from above' has exacerbated global income and wealth inequalities, which are today greater than at any time since

World War II. Since the 1990s, inequality has particularly increased within most countries, as much in the Global South as in the Global North.⁴⁴ Overall, the global economy has grown, mainly due to the emerging middle and upper classes in countries such as China, India and Brazil who emulate the imperial mode of living of the Global North. Growth, however, does not necessarily lead to wealth, especially not for everybody. Instead of benefiting the entire global population, as the dominant economic theory predicted, globalisation has increased the power of elites and impoverished and wrought precarious conditions (see GLOSSARY) on large swathes of the population in many countries of the world. 45 Today, the richest one per cent of the global population owns nearly half of the total global wealth.46

The (daily) rule of the market

These increasing inequalities are attributable not least to the rise of financial markets. Neoliberal globalisation policies not only 'unleashed' global trade, but also led to business models where more and more corporations generally take decisions based on how they will affect a company's share price, and are increasingly involved in financial markets themselves.⁴⁷ For

the wealthy, investments in the real economy, and thus jobs and salaries, are mostly less profitable and less attractive, creating an incentive to invest in innovative financial products (see Money and Finance). Since the crisis of Fordism and the breakup of the system of fixed exchange rates at the beginning of the 1970s (the so-called *Nixon Shock*), finance has morphed from a 'servant' of industrial production to the sector calling all the shots on the global economy.⁴⁸

Since then, the logics of (financial) markets have come to dominate more and more aspects of our lives. Having access to labour and resources, which is the basis of

the imperial mode of living, this shift has, in particular, increased the depth of this logic's penetration and its versatility. Whether it is education, family life, leisure time or our relationship with nature, nearly all spheres of our lives are today based on a logic of profit and organised through markets.⁴⁹ Critical voices therefore speak of a 'market civilisation'.50 Hundreds of thousands of young people today leave university shouldering a debt that they will need years to repay (see Money AND FINANCE). Pension funds turn into institutional investors that speculate on food (see FOOD AND AGRI-CUTURE) and we are made to believe that CO2 emissions have a monetary value that we can simply 'pay off' each time we fly (see MOBILITY). It is almost impossible to elude the grip of the market. Money has even seeped into the most fundamental areas of life, such as providing care for our loved ones (see CARE).

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vi In 1991, for example, the establishment of Mercosur created a Latin American internal market, followed by the North American Free Trade Agreement (NAFTA) in 1994 and in 1995 the World Trade Organisation (WTO) was established as the global political free trade institution.

History is made by us

Already this short overview of the history of the imperial mode of living highlights how closely-knit exploitation and innovation, growth and inequality, wealth and violence are—even today. This historical overview not only provides important background information for the analysis of individual elements that now follows, it is also key to developing a perspective for a future worth living for all mankind. Even the wealth that has been accumulated in the past endangers any truly sustainable society due to the large amounts of resources required to make it happen. Globally, industrial mass

production is expanding and could grow even further in the not too distant future thanks to industry 4.0 (see DIGITALISATION). But in spite of these gloomy predictions, a transition to a different, social and ecological global society is nonetheless possible. The historical injustices described here were always unacceptable, and people have consistently fought to improve their lives, achieving enormous progress and leaving their mark on global history (the abolition of slavery being just one example). Ultimately, history is the outcome of human acts, struggles and discussions. History is made. By us.

Endnotes

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3	Frasch, 2008, pp. 273-274; Kleinschmidt, 2017; Reinhard,		Steinert, 2008, p. 20
	2016, pp. 56–58	28	König, 2000, p. 8
4	Feldbauer & Lehners, 2008	29	Steinert, 2008, p. 22
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8	Beckert, 2014	34	Nkrumah, 1965, p. 19; Nunn & Price, 2004,
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14	Nayyar, 2013, p. 11	39	Harvey, 2007
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16	Kruse, 2012, p. 17	41	Stiglitz, 2004
17	Malm, 2013	42	Ziai, 2007
18	Tappe, 2016	43	Ponniah & Fisher, 2003, p. 11
19	Beckert, 2014	44	IMF, 2014
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22	Thompson, 1991	47	Huffschmid, 2007; Windolf, 2005
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The laboratory of dreams and of nightmares

Everyone knows the feeling. That urge to 'go online'.
A yearning to delve into the instantly updated digital
world, keen not to miss a single thing. One in
four people now has a Facebook account. Skype
manages 150 million calls daily, Twitter 800 million
tweets and Google processes over four billion
search queries. #welcometothedigitalworld

igitalisation is a mega-trend that took flight at the dawn of the 21st century. It has become the buzzword, and we are noticing its advance into ever more areas of our lives. "Global connectivity" seems close to becoming a reality. Many believe the internet of things is the future: more and more objects—from electronic devices to clothes—are being equipped with sensors and connected through the internet, giving rise to a new digital environment. With a single mouse click, we can control our 'smart' houses, factories or even entire cities. For

large (international) business associations and political institutions, the case seems clear: digitalisation is not only 'smart', it also promises progress and wealth.² This builds on the hope that digitalisation will once again deliver the growth rates of past decades and bring an end to economic stagnation. The figures reveal the undeniable potential of the digital sector. Gone are the days in which fossil fuel corporations and banks were the world's most valuable companies; they have been replaced almost exclusively by high-tech and internet corporations (Figure 3.1).3 For others, digitalisation holds the promise of a commons-oriented life that places numerous spheres firmly out of reach of the commercial market.4 More pessimistic observers see the advent of a "smart dictatorship" that makes full use of the opportunities for surveillance and control offered by digital networking. Today digitalisation appears as much a laboratory of dreams as of nightmares.

Blind euphoria for digital progress, as much as the damning condemnation of all things digital as potentially totalitarian surveillance technologies, is not good enough. What is needed is a nuanced and differentiated

Figure 3.1: The billion-dollar digital industry Source: Statista, 2016a, 2016b; World Bank, 2016 **BILL GATES MARK** LARRY PAGE **ZUCKERBERG** €37 billion €51 billion €62 billion €74 billion **ALPHABET APPLE** apitalisation (GOOGLE) MICROSOFT **AMAZON FACEBOOK** €542 billion €503 billion €423 billion €344 billion €337 billion



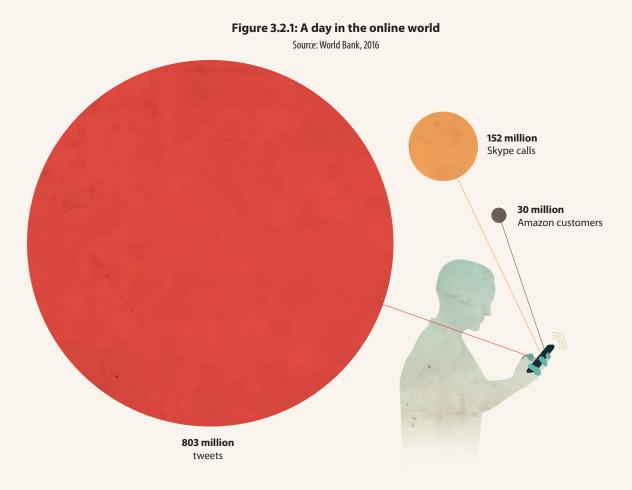
analysis. This is the aim of this chapter. We begin by asking what the new normality of the digital age is like for various stakeholders. Secondly, in an attempt to provide an analysis of the material basis for digitalisation, we examine the origins of the components that make one very common device: the smartphone. How does the digital global economy work? Who profits and who loses out? In the third part, we consider these questions prior to, finally, looking at the mechanisms and opportunities digitalisation offers for a socio-ecological transformation of society. We will also discuss how and in what ways digitalisation has so far blocked such a transition. As we will see, global inequalities and power imbalances are closely tied to the dominant imperial modes of living and production. They are also one of the fundamental reasons why we are currently experiencing increasingly severe crises in spite of digital technologies offering us more opportunities for a better life than ever before.

Digital normality

We live in a world where digitalisation has already penetrated multiple aspects of our lives; we need only consider the impact that an extended internet blackout would have to grasp this fact. The water supply and traffic networks would grind to a halt, as would communication, payment and production systems. But digitalisation has also become an integral part of our everyday lives on a smaller scale.

For example, life without a smartphone would be unthinkable for most of us. But these mass-market products to which we have become so attached, such as the iPhone, have not been around that long. Apple began selling its first model in 2007. Now two thirds of the German population own a smartphone, and this share rises to over 90 per cent among younger people.6 For today's smartphone generation, accessing the internet primarily through mobile devices has become second nature.7

Mobile phones are more than a mere technological status symbol. They are a practical tool to access the world, a medium that conveys experiences and shapes our views and beliefs. Smartphones are the gateway to social media networks, where we establish contacts and communicate with our friends, as well as share the latest news.8 To many, they are the essence of modern life: a digital tool for connected people to organise their lives. Smartphones organise us temporally and spatially (calendars and satnavs), offer endless opportunities for entertainment and consumption (from instant messaging to delivery services) and provide us with knowledge of the world (breaking news, news portals, Wikipedia



and Google). We can now access nearly every service 'online'. All this means that people in Germany now whip out their smartphones, on average, every 10 to 15 minutes — the equivalent of 60 to 90 times per day.9 Yet, whose 'new normality' is this?

Globally, the rapidly growing trend towards digital networking is neither evenly spread nor socially inclusive. Rather, the digital world is the arena of the urban middle and upper classes. Around 60 per cent of the global population — especially those on a lower income and women in particular - have no access to the internet.10 They are still living in an 'analogue world', mainly in the Global South. And yet, despite being excluded from the digital world, they are nonetheless affected by digitalisation. Smartphone production reveals the intricate links that exist between the analogue and digital worlds, as well as modes of living and production. Our elegant smartphone touchscreens reflect the promise of progress through technology, and seem to represent the key to an immaterial future, where a mere swipe of the finger moves the world and lets dreams come true. Whilst they may be beautiful, if we figuratively scratch beneath the spotless glass surface, we will see the social and environmental costs of the virtual world of smartphones.

Digitalisation's material costs: the smartphone

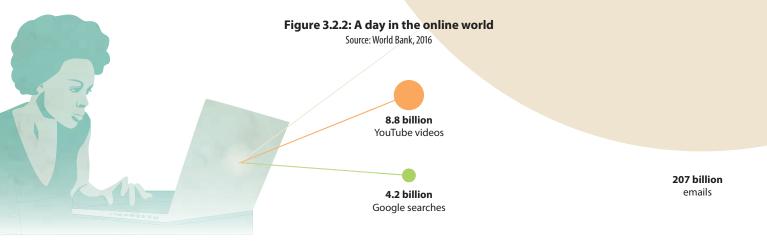
The smartphone market is booming. In 2010, 300 million units were sold globally; just five years later, this figure increased to a staggering 1.4 billion. Sales annually generate a €380 billion turnover. A handful of large corporations, in particular, Apple and Samsung, dominate the profitable business and jointly hold a 40 per cent market share. By investing heavily to perfect its corporate image, Apple managed to reap over 90 per cent of the profits in the sector in early 2015. This means that the company is able to charge high prices in spite of relatively low production costs. Although an iPhone costs several hundred euros, Apple spends less than a third of the overall cost on production and salaries, netting nearly 60 per cent as gross profit (before

expenses in US) whilst another 10 per cent goes to suppliers in Asia, Europe and the US (Figure 3.3).¹⁴

Apple can do this because the company does not operate its own factories. Instead, the company organises iPhone production through a complex network of global value chains with next to no regard for the hightech industry's promise to usher in an era of wealth and progress. Contrary to the narrative we are encouraged to believe, the economic dynamic that fuels the smartphone boom is not solely built around the smart ideas of business gurus like Steve Jobs. Rather, it results from comparatively cheap raw materials (if we consider the retail price) and the low wages of factory workers. Nowhere else is the imperial character of the digital lifestyle demonstrated more clearly than in the materials required for smartphone production.

Raw materials for a smart world ...

Smartphones require around 60 different elements. Alongside plastic, glass and ceramic, these include around thirty different metals. Although touchscreens, batteries, circuit boards and cameras contain only tiny amounts of most of these materials, current production levels of around 1.4 billion phones per year are putting a huge strain on resources.¹⁵ Mobile end devices, such as smartphones or tablets, are lightweight and therefore do not seem to require large amounts of materials. However, 14 iPads contain roughly the same amount of tin as a single car. 16 The production of mobile devices thus currently requires significantly more tin than the global automotive industry. Moreover, the sector growth is significantly higher. Tin is therefore just one example of the massive impact our digital normality is having on populations seemingly uninvolved in the digitalisation process. One third of the tin currently found on global markets is sourced from the Indonesian islands of Bangka and Belitung. Tin mining destroys the livelihoods of the local island population: forests are cleared, toxic tailings pollute the marine flora and fauna, and soils become infertile.¹⁷ However, tin is not the only industry to see an increase in demand and, with it, the social and environmental impacts of extraction. ii 18



i In autumn 2016, Apple fans queued up in front of stores in London, Berlin and New York—camping in tents or paying other people to queue for them—to be the first to get their hands on the new iPhone 7 ahead of the official launch.

ii The digitalisation of industry, dubbed Industry 4.0, is set to increase the demand for lithium, rare earths, tantal and many other raw materials.

According to the United Nations Environment Programme, the extraction of primary resources has increased threefold over the past 40 years - although we already know that such an increase in consumption by far exceeds planetary boundaries.¹⁹

... and their neocolonial fundaments

Yet, who profits from this ruthless exploitation? Raw material extraction and trade reveal the continuities of global structures of exploitation that have grown out of the historical legacy of 500 years of European colonialism (see HISTORICAL OVERVIEW).20 Whereas some regions, particularly in the Global South, depend on the export of primary resources for the global markets, the consumption of higher-end products is concentrated mainly in the Global North. In the richer countries of Europe and North America, the average per capita consumption of resources is ten times greater than in countries with significantly lower purchasing power.²¹ Under the current conditions of the international division of labour, countries such as the Democratic Republic of Congo, Bolivia and South Africa are limited to providing the raw materials to sustain our information and communications technology (ICT).²² As the world's largest importer of raw materials, a great deal of responsibility for the current situation rests with the EU, an organisation that actively advocates the interests of European industries to acquire raw materials from the countries of the Global South at the lowest possible price.23 To achieve this goal, both the EU and the German government's raw material strategies focus on a mix of trade agreements and economic pressure.24 Critical voices call this neocolonialist because it sees wealthier nations consciously exploiting their power to perpetuate these relations.²⁵ This is not only about gaining access to cheap raw materials to produce digital technologies and machinery.

New technologies and products that combine raw materials in completely new ways lead [...] to a dramatic increase in the demand for economically strategic raw materials that are indispensable to the high-tech industry, such as iridium for flat screens, lithium for batteries or germanium for fibre optic cables.«

(Johanna Wanka, Federal Minister for Education and Research, 2016)

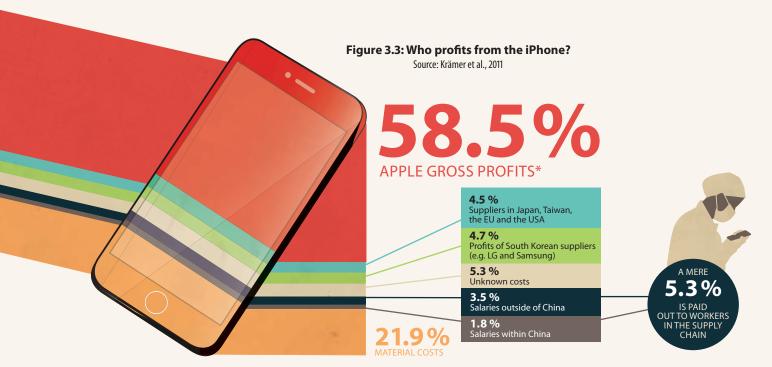
The existing international division of labour sees raw-material intensive industries, and the nations housing them, actively pushing the enormous costs, including social and environmental burdens, of their activities onto other regions and populations. The number of conflicts over social and environmental issues between transnational corporations and local communities has mushroomed, particularly in countries of the Global South.²⁶ Often these conflicts arise because transnational corporations (see GLOSSARY) and the world's middle and upper classes are trying to satisfy their insatiable appetite for raw materials, and it is local populations who have to pay the price, sometimes with their livelihoods. This is frequently linked to the violent repression of local protests at the hands of national 'security forces' or paramilitary militias.²⁷

Efficient, but by no means sustainable

Even though the worlds of politics and business are keen to portray modern ICT as a means to reduce society's environmental impact, at present these technologies are actually driving the reckless exploitation of raw materials, and subsequently causing tremendous damage to communities and the natural environment. The picture is equally bleak in terms of energy consumption and CO₂ emissions. The rebound effects (see Glossary) are similar. Internet energy consumption is increasing rapidly and will continue to rise because the gains in energy efficiency cannot keep pace with the speed at which the hunger for data grows.28 The internet consumes around five per cent of total global energy, in spite of the fact that less than half of the global population has access to it. End device production and use, however, are not the only factors driving this massive increase in energy consumption. Data and data processing centres are also part of the equation. It thus comes as little surprise that in 2012 Apple and Samsung's combined greenhouse gas emissions were greater than the total amount emitted by Slovakia.²⁹ The environmental costs are irrelevant because international agreements to protect the climate, which are already weak, concern governments and do not apply to transnational corporations. Moreover, states provide significant subsidies to reduce the cost of energy (see Mobility). According to estimates, the expanding industries of the ICT sector are already responsible for around three per cent of global greenhouse gas emissions. Regardless of the environmental impact, the sector is set for further strong growth.³⁰

iSlaves in invisible factories

Smartphone production also serves to illustrate how digitalisation has accelerated the processes in many sectors. In recent years, the delivery and production time for these devices has dropped significantly (see MOBIL-ITY). Whereas in 2007 it still took about six months to produce an iPhone, just five years later, Apple had slashed this to under two weeks.31 This is indicative of the amount of pressure Apple must be applying to production chains — pressure that invariably goes hand in hand with abuses of labour and human rights standards. The most obvious example is Foxconn, an Apple supplier that came to prominence following a string of suicides at its plant in 2010. Foxconn has over a million employees and is by far the world's largest electronics company. Together with lesser-known companies, such as Pegatron, Flextronics, Jabil Circuit, Sanmina and Celestina, Foxconn controls around 80 per cent of all brand products in the electronics sector.³² While these companies are the ones actually producing our electronic devices, they usually remain invisible, hidden behind the brand names under which they sell their products. It was only after the media reported on working conditions at Foxconn that civil society began to voice its concern, leading these companies to become more widely known and forcing them to 'improve' labour conditions in factories, at least to a certain degree. For example, in recent years the basic monthly wage at Foxconn was increased from 135 to 285 euros. The company has also implemented a working hours cap of 60 hours per week and in the factory's dormito-



Gross profits refer to the revenues Apple retains after deduction of all payments that occur outside the company. Apple still pays research and development, marketing, as well as other indirect costs from its gross profits. No data is available on these costs.

ries, 8-bed rooms have become the norm. Rising wage and production costs, however, led Apple to switch to Pegatron, a cheaper competitor. A 2015 survey revealed that working more than 60 hours per week is the norm at Pegatron and over half of all employees accumulate 90 or more hours of overtime per month. The majority of employees (most of them female) state that they 'voluntarily' work overtime because the basic wage does not cover the local cost of living.³³ Of the billions Apple makes, less than five per cent go to the workers that produce Apple products.34 Of course, Apple is not the only company that operates in this way. None of the large electronics corporations (such as Microsoft, Samsung or Sony) guarantees a living wage to employees across their value chain. One reason for this is that even when labour rights, such as the freedom to unionise and collective bargaining, formally exist, they are largely ignored by suppliers.35

Unfortunately, such severe worker exploitation is not limited to the electronics industry. There are also reports of 'invisible mines' or electronic waste dumps where people (in many cases children) work under slave-like conditions (modern slavery, see Glossary), mine raw materials or recycle them from waste products. The digital age, therefore, far from being immaterial, relies on access to raw materials and labour gained often through the use of violence.

The digital economy: a battle over a land of plenty?

The digital economy's material consumption alone promotes exploitation. At a more general level, it also facilitates an imperial appropriation of external labour and resources (also in the form of data) that are readily available anywhere and at any time, increasingly becoming part of our digital normality. The digital economy provides unexpected new opportunities, in particular due to its own unique logic and specific features. Once

online, users can copy and forward digital data, such as music files, software programmes or pictures, endlessly and at next to no cost. The more often people use a specific digital application, the better it frequently tends to become. Unlike a smartphone, which only a small number of people can share, if at all, applications such as Google or AirBnB tend to become better and have greater appeal the more people use them. Often, this is described as positive *network effects* (see GLOSSARY). From an economic point of view, the digital economy is a paradise where scarcity no longer plays a great role and abundance reigns. This is but one reason why internet services are so attractive to millions of people.

For profit-oriented businesses, however, the capacity to endlessly copy and share data and software is a problem. If digital goods and services are (in principle) available for free, opportunities for profit-making become scarce. Data access and ownership—the 'gold of the digital age'—is therefore a key battleground. Large corporations, banks and investors realised this fact long ago.³⁷

Finance capital instinctively understands that 'data' offers future opportunities to earn unbelievable amounts of money. This is the reason for the exorbitant market capitalisation of corporations such as Google, Facebook, Apple, Amazon and others.«

(Theodor Weimer, spokesperson of the board of HypoVereinsbank)

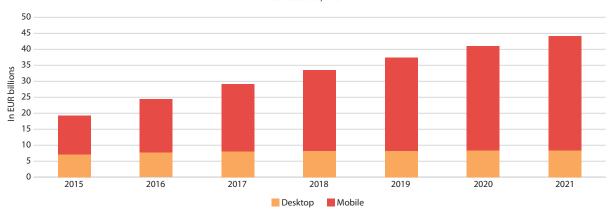
Internet corporations' profits are largely built on their ability to collect the rapidly increasing amounts of data and 'mine' (data mining, see GLOSSARY) this resource for valuable information on a huge scale. However, obtaining a profit from data depends on the ability to artificially manufacture scarcity, which translates into finding ways to restrict access to information, software or, more generally, to the use of digital technology.ⁱⁱⁱ Commercialisation of the internet and doing business

iii

Their capacity to do this results not least from the insufficiently clear legal status concerning who owns and who may use data. (Some regulation does not sufficiently incorporate the interests of individual users.)

Figure 3.4: Estimated global turnover of social media advertising in EUR billions, 2015–2021

Source: Statista, 2016f

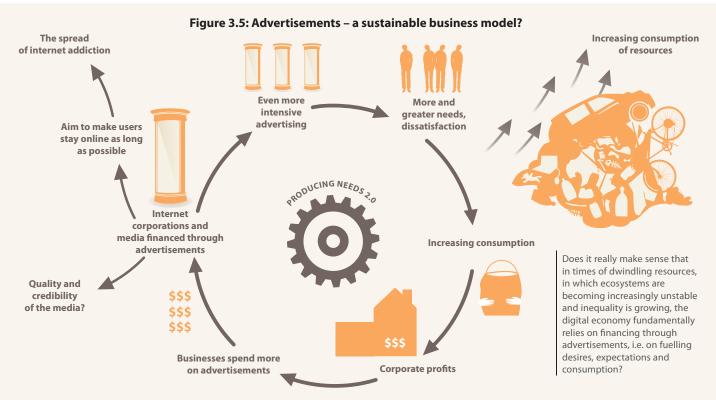


with data

At a first glance, services such as Facebook, Google or Amazon appear to be free. However, users 'pay'³⁸ for them through the data they produce, which these services then turn into a profit, for example, to market their products or by selling this data to third parties. To minimise risks (and, ultimately, costs) insurance companies, for example, eagerly buy sensitive data from businesses selling mobile end devices such as smartphones or fitness trackers. This allows them to adapt health insurance policies ever more accurately to their clients' personal risk profiles. For the sick and those whose lifestyles do not meet the requirements of the insurers, finding affordable coverage becomes hard or even impossible.

This example highlights the degree to which internet corporations and digital applications are becoming entrenched in ever more aspects of our lives. As the analysis of the material costs of digitalisation revealed, the lifestyle of the world's middle and upper classes is based on the appropriation and exploitation of the work and resources of others. In the digital economy, however, large swathes of the alleged 'winners' are finding themselves under increasing pressure. What is more, as potential sources of data, they are also being 'exploited'.

The fact that people still generally do not perceive the appropriation of private data and the digital intrusion into ever-wider spheres of their lives as problematic is related to a further pillar of the business model used by internet corporations: advertising. For these corporations, advertising is a key source of income. As data can be copied endlessly, the internet now allows advert reach to be significantly expanded. And through big data analysis, corporations can tailor advertisements to specific target groups with increasing accuracy. This turns internet advertising into a highly lucrative business. Advertising in social media alone generates billions in turnover, and growth prognoses predict a bright future (Figure 3.4).39 In addition, advertisements generate active and passive social approval of the current private property-based and profit-oriented digital economy model, making it appear as the only available option. As an analysis of the so-called sharing economy (see GLOSSARY) reveals, however, the dreams and tempting offers advertised by internet corporations frequently promote the unilateral appropriation of resources and labour.



Imperial aspects of the sharing economy

As the name suggests, this sector is purportedly about sharing. People use internet platforms to offer ride shares or a place to sleep. This highly popular form of sharing provides many people with a feeling of community and a sense of meaning. Evidently, organising the efficient sharing and use of goods through digital media platforms makes a lot of sense, particularly from an environmental point of view. Many profit-oriented internet platforms have, however, also jumped on the bandwagon and now use the sharing rhetoric to further their business interests, which have very little in common with sharing and co-operation. These platforms generate profits from operating fees and commissions, as well as from selling advertisements and data (see above). Compared to non-internet-based service providers, they offer significant advantages. Through their international reach, for instance, they can reap profits globally and take advantage of the network effects mentioned above. In recent years, we have repeatedly witnessed such platforms rapidly upending entire industries, e.g. Airbnb and Uber have respectively shaken up the tourism sector and the taxi industry. As they neither have nor need a large physical infrastructure, they can react very flexibly to local developments and conditions. They resell resources and services that other people provide — mostly for free. These companies use our data, cars, flats, labour and, most notably, our time. 40 In today's sharing economy, sharing is often only a oneway street, as internet pioneer Jaron Lanier knows all too well.⁴¹ Furthermore, these companies often develop in new and therefore unregulated environments.

> ...the idea that we create a Sharing Economy in which normal people are expected to share and the few corporations at the heart of the system reap the entire profits is not sustainable.«

> > (Jaron Lanier, internet pioneer)

Thus, they are able to avoid paying taxes and evade anti-discrimination legislation or regulations designed to protect workers' rights, enabling platforms to quickly become the dominant force in a market or even develop into monopolies. Those individuals and businesses who want to sell products over the internet thus feel substantial pressure to sign up to the most common platforms, which again strengthens the established networks and contributes to their further growth. Individual users, consumers and service providers also feel similar systemic pressures if they wish to take advantage of the opportunities offered by the digital world.

Smart exploitation and crowding out?

Beyond the sharing economy, internet platforms are also generally becoming increasingly popular, whether it is platforms for food (Deliveroo), clothes (Zalando) or consumer products, e.g. smartphones (Amazon). For customers, free of charge home delivery is fast, convenient and often cheaper. Hardly anybody sees ordering

online as a problematic practice or as a form of imperial appropriation. Nonetheless, it should be self-evident that if these services are so cheap, somebody must be paying the difference. Digital anonymity greatly helps to conceal the conditions under which these services are provided, and products produced and transported. People who click-buy their new smartphone or a €5 T-shirt cannot see the inhumane working conditions or environmental damage caused by global production and supply chains (see MOBILITY). And although ordered goods can only be delivered free of charge because working conditions at Amazon logistics centres and parcel service providers rely on temporary employment contracts, as well as wage and social dumping, the consumer has no obvious way of knowing this when they place their order. Such conditions are, however, widespread among these new 'smart platforms'. Often, the growth of these platforms goes hand in hand with the spread of precarious employment conditions. Current talk of the "return of the servants" 42 is by no means accidental. The social standards regulating other branches often do not apply to jobs on such platforms, in part because legislators are permanently playing catch up to these businesses and their practices.

Yet it is important to note that digital information and communication systems also facilitate the monitoring of work processes. Does a particular worker at Amazon take longer to walk a certain distance in one of Amazon's warehouses? Or is an employee not using her computer for longer than expected because she is chatting with a colleague? By using smart tracking systems, cameras and microphones, companies can visually and even acoustically monitor employees in real time. Digital networks thereby allow companies to exploit labour more extensively, and to contain resistance more effectively. Identifying and replacing insufficiently productive workers, or those who fight for fairer working conditions, has become easier than ever.

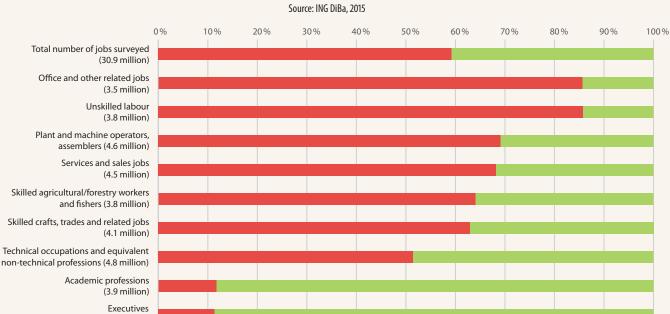
Consequences of the digital economy: more winners and fewer losers?

Evidently, the growth of the new digital economy is not solely built on exploitation and monitoring. And it is also not just limited to sharing-economy businesses predominantly in the services sector and internet platforms. Industry associations and politicians are dreaming of another Industrial Revolution. The German government is pushing an agenda, dubbed Industrie 4.0, to actively promote such a revolution. 'Intelligent factories' are to produce self-driving cars or solar panels for the energy transition. Digital logistics are already at the heart of global production and supply chains. Now, however, digitally networked production lines and logistics systems will have the power to self-organise without human intervention. The further automisation and networking of industrial production will undoubtedly generate significant boosts to productivity. But in an economic system such as ours, one that is so centred on wage labour, it remains unclear how people can expect to earn a living in the future and how we

iv Particularly important for people with little leisure time or money.

v These companies are not only always one step ahead of legislators. The anonymous, often international and not socially integrated crowd finds it hard to come together to demand changes to working conditions (Felstiner, 2011; International Transport Forum, 2016; Schwab, 2015, pp. 100–108).

Figure 3.6: Jobs threatened by digitalisation (estimates)



Secure jobs

can fairly share the benefits reaped from the productivity increases generated by the digitalisation of production. Society could invest in increasing leisure time or improving the material wealth of broad segments of the population. Currently, efficiency gains serve mainly to increase exploitation and reduce human labour in what appears to be an attempt to cut wage costs to zero. Such forms of 'intelligent production' promote a redistribution to the benefit of the ever-smaller circle of people who already profit most. 44 This has severe consequences not only for the future of work but for people's opportunities to participate in society. The labour market pits a very small group of well-paid and highly qualified people against an ever-greater number of labourers in precarious employment who are either 'poorly qualified' or whose qualifications digitalisation has made redundant.45

At risk jobs

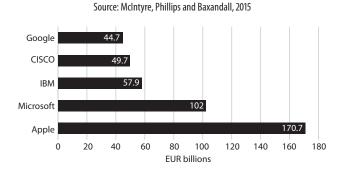
(3.9 million)

Even the sternest proponents of digitalisation estimate that over the course of the next ten to twenty years, around 50 per cent of all jobs will become automated across all countries in the Global North (Figure 3.6).⁴⁶ As it allows them to axe jobs and therefore save substantial costs, this is a highly welcome development for businesses and the owners of capital. For large segments of the population, however, the picture is very different. In future, they could very well only have the choice between having a precarious job, for example, delivering food for Deliveroo or parcels for Amazon, or no job at all.

Tax evasion: we all pay the price

But where is the new wealth generated by the digital economy going? We know one thing for sure: it certainly isn't going into public investments for the public good. For the pioneers of the digitalisation revolution, 'tax evasion' has become the norm. Five large US internet corporations have hoarded over €420 billion in tax havens (Figure 3.7).47 This is no coincidence: digitalisation and global networking—the tech industry's core fields of expertise - provide huge potential for tax avoidance and evasion. 48 Companies can move and hide money anywhere in fractions of a second, register accounts and offices in tax havens in little to no time and easily declare profits in those countries offering the lowest tax rates.vi Far from being the only ones, tech firms have particularly taken advantage of the new opportunities offered by such practices, which also contributes to the inequality generated by digital networking.

Figure 3.7: Sums deposited in tax havens by US tech companies in EUR billions based on 2014 data



vi Corporations can also do this particularly well because of the difficulties of objectively establishing the value of digital products, software or algorithms. This enables inflated write-offs and promotes strategies to avoid taxes. Political instruments against such corporate practices, which effectively involve the illegitimate expropriation of states, are still lagging behind.

A socio-ecological transformation in times of digitalisation?

The degree to which the digital age fails to fully realise its potential is downright absurd. Digital technology abundantly provides socially produced goods, services and information at unbelievably low cost. Brand new opportunities have also arisen, such as the possibility to reduce employees' workload or efficiently share goods in a way that benefits communities and the environment. Society, however, cannot tap into this potential, mainly because a web of monopolies, banks and governments is attempting to continue the current economic model, which is based on growth and private profits, into the digital age.⁴⁹ Digitalisation is thus merely accelerating the speed at which capital, data and power are being concentrated in the hands of a few. The financial markets also complement this new dynamic to create global property and dependency relationships that benefit a tiny elite (see Money and Finance). This development is reminiscent of the era of feudalism, and thus also referred to as re-feudalisation (see GLOSSARY).⁵⁰

Back to pre-democracy with modern means?

Increasing inequalities are causing mounting social and economic tensions around the globe and leading to greater instability. To sustain the current property and power relations that work in their favour, the beneficiaries of the established system are increasingly turning to digital 'structures of security'. In addition to comprehensive monitoring programmes, this includes digitally controlled combat drones and robots, automated border protection facilities and cyber weaponry. Whereas the implications of these developments for democratic societies may seem less problematic at first, the picture is different internationally, particularly regarding authoritarian regimes and tendencies.

Could we not make more sensible use of the potential of digitalisation than we currently do? Bound into a broad socio-ecological transformation, digitalisation could provide key contributions to a sustainable and solidarity-based future economy and mode of living. If digitalisation is to unleash its full positive potential, three aspects are of particular importance:

1. Developing different approaches to labour and resource use

Digitalisation currently does not lead to a sustainable use of resources. Rather, it leads to increasing energy and raw material consumption. In the long term, earth's ecosystem cannot bear the excessive burdens placed on it by industrialised nations; a world in which every nation adopts the same lifestyle as the Global North must thus be avoided at all costs. In the face of such large sections of the global population who have yet to profit from digitalisation but whose livelihoods and labour are often affected by it the most, there can be no justification for today's excessive consumption of raw materials. A socio-ecological transformation will require finding the means to reduce raw material and energy

consumption in absolute terms. Particularly, countries of the Global North will need to act.52 Simply focusing on technological solutions or on increasing efficiency will not solve the problem. Strategies to increase service life or shared use (and not only of electronic appliances), improving reparability and recyclability, or even a circular economy, are undoubtedly important elements of a transformation. ICT, in particular, can help to efficiently develop and implement such a transition. A more realistic factoring in of the actual environmental and social costs - and correspondingly raising, for example, energy prices - would also be an important step forward. Ultimately, however, we will have to abandon the growth paradigm (see rebound effects), as only this will allow true change to occur. As much as the conditions of industrial production will need to change, so too will our social values. Something has clearly gone wrong when our economic system provides incentives for the greatest number of people to buy a new smartphone as often as they can.

Forced, precarious and degrading forms of labour, which are currently an inherent feature of the global (digitalised) economy, have no place in a sustainable economy. It is simply unacceptable that a large percentage of those who produce goods and create value receive only a fraction of the profits in exchange, while multinational corporations and their owners earn billions that they then deposit in tax havens. Society (globally) needs to redistribute the profits of digitalisation for the benefit of everybody. Taxing automated work could be an option, as well as the consistent taxation of multinationals. Importantly, we need to reduce people's dependency on (precarious) salaried work and show greater appreciation for other forms of social activity (see CARE). Digitalisation-based boosts to productivity could be used to introduce a 20-hour working week at full salary or to fund an unconditional basic income scheme.

2. Developing an economy of sharing

In the battle to gain control over the world's new promised digital land, large corporations earn money with data by artificially limiting the access to and opportunities to work with digital information. However, the potential is there for the digital economy to be organised very differently. Instead of accepting the exclusive use and control rights imposed, for example, by Microsoft and Mac OS, we could opt for an open source OS such as Linux that encourages a community of users to further develop the system. Here the goal is not sales figures but improving usability. Many only use the software passively, but some voluntarily and actively contribute to its development.53 Unlike in hierarchical (also state-owned) companies, in these set-ups, user-generated rules take the place of rigid command structures. Efforts are not focused on the production of goods and services to maximise profits, but rather on shared contributions, usage and participation.⁵⁴ This is a typical feature of commons (see GLOSSARY), a non-market and non-state form of organisation and production.

vii The link between digitalisation and security policy has been a key element from a very early stage. In the US, for example, the ICT industry largely evolved out of the military-industrial complex. The information leaked by Edward Snowden revealed the extent of government surveillance programmes and the close collaboration of the secret service community with corporations.

But such economic forms have now progressed far beyond simple small-scale experiments: 90 per cent of the 500 fastest supercomputers already run on the free Linux operating system.⁵⁵ And the principles of an inherently commons-based economy can not only be found in operating systems and in software: not-forprofit property, organisational and production structures exist in many spheres of life. In the food sector, for example, community supported agriculture is taking shape (see AGRICULTURE AND FOOD), and shared cargo bikes are appearing in cities (see MOBILITY). Digital technologies can provide a key boost by connecting and organising these different approaches. They even hold the potential to arrange the distribution of goods and services in completely new ways: they can identify, coordinate and satisfy needs away from the commercial market. Digitalisation could become a building block to construct an economy that supersedes the "logic of money and exchange".56

3. Democratising digitalisation

The trends towards a greater concentration of markets and power, as well as of control, are not compatible with democratic constitutions and values. It is important to point out the authoritarian tendencies of digitalisation and to show that we can develop more democratic approaches to this phenomenon. Networking with people from all over the world is already possible through the internet. For years, groups have also been testing out and developing new forms of decision-making and organisation online in the hope of finding ways to supplement democratic institutions. The problem we need to solve when it comes to digitalisation is therefore not technological but social. If today around 70 per cent of all those accessing news portals do so through digital monopolies, such as Facebook or Google, this poses a serious threat to democracy. All the more so when we consider that most of the media outlets that provide us with information are increasingly financed through advertisements. A prerequisite for a functioning democracy, however, would be the capacity to free ourselves from such dependencies. With enough political will and sufficient social pressure, we could define central digital services, i.e. social networks or search engines, as public services and develop them democratically.⁵⁷ Our new Facebook would thus have the potential to no longer be a profit-oriented corporation led by one of the richest men on earth, but a transparent foundation under public law. Further useful approaches could include the control of algorithms by independent commissions or caps on the size of (multinational) corporations.58

Discussing and implementing such measures will quickly provoke the resistance of those profiting from the current developments. However, whether or not digitalisation turns into a nightmare for the majority of the global population will depend largely on how we as a society harness the potential digitalisation offers. The digital age undoubtedly provides opportunities to develop an economy of sharing based on cooperation instead of competition, common ownership instead of property and common good instead of profit.

Do you agree?

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

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Who cares?

Care work is essential for society but remains mostly invisible. On care workers and the need for a care revolution.

hat would happen if womenⁱ in Germanyⁱⁱ suddenly gave up care work? The events that took place in Iceland in 1975 can maybe give us an idea. On 24 October the country's women staged a strike: 90 per cent of them stopped working and they brought Iceland to a standstill for one day. Schools, hospitals, shops and fish factories closed, and fathers suddenly found themselves overburdened and unable to go to work as they had to handle household chores and were left to care for children and elderly relatives, tasks that were and are—mostly without people even recognising it—usually left to women.¹

Care work remains invisible and is often unremunerated; yet, for society as a whole, it is indispensable. In 2013, people in Germany dedicated around one third more of their time to unpaid care work than to paid work.2 According to estimates by Germany's Federal Statistical Office, if priced at the usual market rates, non-remunerated care in 2013 would have cost Germany around €826 billion — roughly one third of the country's gross national product.3 Free care, however, is not included in national accounts. It is invisibilised work, which is not adequately valued by society. Even the majority of those employed in the salaried care sector are women - and their employment situation is often precarious (see GLOSSARY). The low status of care work particularly affects migrant women. In Germany, many Eastern European women work providing athome care under harsh employment conditions.

Care work's role in society is an issue that encompasses more than simply discussing questions such as fair pay or opportunities for a good work-life balance. Rather, we must ask how care work is structured and how society values care—issues that are directly linked to the question of a *good life* (see Summary and outlook): What kind of work do we as a society assign value to? Which gender roles are implicit in the way care work is organised in our society? How can we build solidarity across borders and classes? How can we organise work better and more justly?

This chapter aims to highlight how and why our society devalues care work and allows exploitative structures to develop in the sector. We will point out prob-

lems and highlight why solving them is proving so hard. As will become clear, the current organisation of care work is an integral part of the imperial mode of living (see Introduction) and based on deeply engrained gender stereotypes and racist *concepts*. An *infrastructure* of private actors maintains this structure, acting mostly outside of state control. Moreover, state *policies* and the legal framework of the social and healthcare sectors ensure that care work continues to exist in this form.⁴ But like the women of Iceland, many social groups are standing up against this broadly accepted framework and developing effective alternatives.

Figure 4.1: Hours spent per day on unremunerated care by gender in Germany, 2013



Care: more than simply work

What exactly is care work? Care work, also called reproductive work,5 includes all the daily tasks that people engage in for their own well-being and that of their community.6 Care work is therefore reproductive work that generally maintains society. It is a prerequisite for human labour. Care work can be unremunerated - in particular, within a private, family context—but also take the form of remunerated employment.7 In the care sector, this includes jobs such as domestic workers, nursing staff and carers, cleaners and educators.8 Private care work comprises, for example, cooking, cleaning, childbearing, parenting, providing emotional support to friends and caring for relatives.9 All of these activities increase people's physical and mental well-being and ensure their capacity to work now or in the future. As such, they are not only fundamental ingredients for a positive social environment, but also an indispensable part of any functioning economic system.¹⁰

i We use 'woman' not as a term for people with particular biological sexual characteristics but as a socially constructed category that encompasses particular lived realities and experiences.

ii This is a complex issue. We shall therefore focus mainly on the German system of care.

Care is work with people

Like remunerated employment, caring for our grandparents, cleaning the bathroom or taking our kids to school costs us time and energy. Building on a long feminist tradition, care work is often discussed in this context, i.e. a type of work which is provided mostly invisibly in households. The concept aims to increase the visibility of such care and to generate greater political debate around the issue.11

Care work is certainly a special form of work. Our general understanding of work today is that of a remunerated form of employment which produces goods and services. We often assume that work does not depend on

Care work

is thus

considered

an unlimited

resource that

we can access

at very low

cost—or even

for free.«

a particular person, e.g. it makes little difference who carries out a particular task on the assembly line. We also believe in our capacity to indefinitely increase labour efficiency, i.e. that we will be able to produce equal or even better results in ever-shorter timespans and at ever-lower cost.12 These familiar concepts, which build on our usual understanding of work, however, fundamentally contradict care work. Work with people follows a set of rules different to those that apply to work that produces goods.13 Care work is not

simply about maximising the efficiency of a morning shower, but also about giving people the feeling that somebody cares for and values them as they grow old. The human relationship between carers and care recipients, empathy and allowing carers sufficient time are important factors that determine the quality of care work.¹⁴ We cannot subject care to our desire to increase efficiency and economic gain. We thereby use the term care work for two reasons: First, because we wish to highlight the important role care plays in society. And, secondly, because we hope to broaden the definition of work. 'Work' includes more than wage labour and goes beyond the efficient production of goods and services.

The development of Germany's model of care

Unlike other forms of economic activity, care work does not add monetary value like a production process and therefore often does not produce a financial profit. For the most part, care work is in fact a financial burden on society.¹⁵ Reproductive costs, however, are not accounted for in the public budget and are not included in companies' cost-benefit calculations.¹⁶ These costs are shifted to the private realm. In the industrialising nations, women have been tasked with this private labour (see HISTORICAL OVERVIEW) since the 19th century. Bourgeois modernity separated the public and the private sphere along gender lines: it reserved the public sphere to men, and considered women to have the qualities required for work in the private sphere such as care.17 Ever since, remunerated employment and the household have been treated as two entirely separate fields, and we only view the former as economically relevant.18 Care work is thus considered an unlimited resource that we can access at very low cost - or even for free.19

In the early 20th century, following Bismarck's social legislation, care work came to be seen as a public responsibility. A remunerated care sector with paid care services developed. Yet, the labour market continued to reproduce the same gender division. Even today, the majority of remunerated care workers are women, and they often work under precarious conditions and are badly paid.20

During the last quarter of the 20th century, conditions in the remunerated care sector underwent a marked change. A neoliberal (see GLOSSARY) restructuring of the welfare state led to the privatisation of the remunerated care sector - with catastrophic consequences for care workers and care recipients. Squeezing a private sector profit out of the needs of care recipients became the primary concern.²¹ Since that time, markets

> for care work and welfare services have been developing; in care, this trend is evidenced by the increase in private nursing care providers.22

Migrants to close care sector gaps

Even today, women remain largely responsible for care work. However, many women now also work in salaried employment. This shift was one of the achievements of the women's rights movement, but it also partly resulted from the spread of precarious employ-

ment and the subsequent decrease in the household income, which was traditionally earned by the man and served to feed the entire family. Particularly in the Global North, these developments have created gaps in care.²³ Increasingly, the world's upper and middle classes therefore satisfy their care needs by relying on people from poorer regions: precariously employed migrants now make up the shortfall.24

What forms of gender- and class-based inequality, as well as inequalities based on an individual's culture or origin, are inherent to Germany's current system of care? And what structures of exploitation does this lead to?

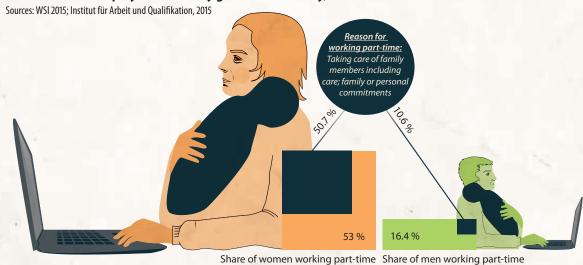
The numerous inequalities in care

Private care is usually considered 'women's work'

Care for family members is a field that clearly reveals the unequal distribution of care work between the genders. People spend a substantial number of hours providing private care. According to rough estimates, individuals spend a total of up to nine billion hours annually caring for a family member. That is the equivalent of around 3.2 million full-time positions.25 Carers do not receive a salary for their work, but are instead offered a care allowance. However, this allowance is not calculated to ensure the care worker a living wage, but depends solely on the degree of care the recipient requires. Even when all additional supplements (hardship cases) are considered, the maximum care allowance remains below €900, which is not enough to cover the needs of those providing care. According to a survey by German health insurer DAK, nine out of ten of those caring for relatives are female.26 This lopsided distribution is problematic for a number of reasons.

Many women who care for relatives feel overburdened and are more likely to fall ill.27 Moreover, the strains of care work mean that women generally have less time for remunerated employment. Many therefore





work part-time or not at all. Women are also far more likely than men to forego career opportunities for the sake of their families (Figure 4.2).28 Consciously or not, women thereby adhere to traditional roles that prevent a more equitable distribution of care work. The fact that women earn, on average, less than men probably reinforces the unequal distribution of care and remunerated employment. A woman's decision to sacrifice her career for the good of her family not only hampers her professional development; it can also have disasterous consequences later in life. Germany's pension system (see Money and Finance) does not adequately recognise the time women spend on care, so their pensions are generally significantly lower than those of men, which means women face a greater risk of old age poverty (Figure 4.3).²⁹ Ironically, when women themselves eventually become old, they have less money to pay for their own care. Frequently, if they have a partner, they remain economically dependent on their partner for their entire lives.

Poor working conditions in care particularly affect women

The overwhelming majority of workers in the remunerated care sector are female. Globally, 83 per cent of those working in households are women.³⁰ In Germany, too, the majority of formal care work, whether in kindergartens, cleaning or care, is provided by women (Figures 4.4, 4.5 and 4.6).31 Employers in these sectors aim to cut costs to increase the profit margin. Mainly, they achieve this through low salaries and standardised work practices. Nursing care professionals across Germany, for example, earn 10.6 per cent less than the average skilled worker. Moreover, care institutions pay women less than their male colleagues: the average gross hourly rate for professional female nurses is 9.4 per cent lower; and for those working in elderly care, the rate is around 4.5 per cent lower.³² The picture for kindergarten educators is very similar.³³ However, it is not only low salaries that create adverse working conditions. Faced by high levels of competition, organisations in the welfare sector establish temporary employment companies as subcontractors to employ nursing staff more flexibly and outside of collective bargaining agreements, i.e. at lower cost.34 For permanent nursing staff, this creates additional pressure, as they fear that temporary staff might make them redundant.

Such employment conditions mean that nursing is not a particularly attractive profession. Society, how-

Figure 4.3: Number of people over 65 at risk of poverty in Germany (by gender), 2013 Sources: Eurostat, 2016; Statista, 2015

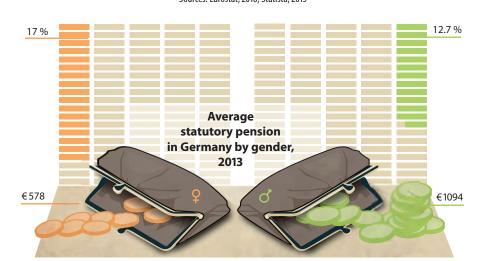


Figure 4.4: Outpatient carers by gender in Germany, 2013

Source: Destatis, 2015

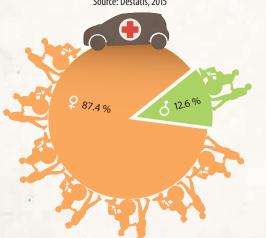


Figure 4.5: Kindergarten teachers by gender in Germany, 2013

Source: Destatis, 2014b 4.9 % 95.1%

ever, is ageing, and there is a lack of nursing homes and care workers. To adequately look after the increasing number of people requiring care and establish decent working conditions for care workers, society urgently needs to boost the numbers working in the care profession. Already in 2005, Germany was short of 39,000 nurses; by 2025, this figure is set to triple.³⁵ Nonetheless, private care providers continue to reduce staff in an attempt to cut costs. They instruct employees to be more efficient. Concepts such as robots providing care and the collection of patient data are, furthermore, indicative of the determination to increase care efficiency (see DIGITALISATION).36 These trends lead to catastrophic conditions for care workers - and entail dire consequences for those in need of care. The reported number of cases of burnout among care workers, who work for weeks on end without a break, are rising. Ever more frequently, care workers are documenting services they do not actually provide and conditions in inpatient care facilities are becoming increasingly inhumane.37 With less and less time available to care for an ever increasing number of people, the quality of care and the health of care workers are suffering (Figure 4.7).38

The global structures of care are based on numerous forms of discrimination

When care gaps develop in regions of the Global North, care is redistributed—not between women and men in the Global North, but among women from other social classes and regions. The world's upper and middle classes are tapping into an external reservoir of care workers. Women from economically disadvantaged regions and households, in particular, specifially migrate to places with a market for care workers. This can take them from rural to urban regions and across borders (see infobox "Global care chains").39 As the association Women in Exile highlights, irregular and precarious employment in care sector jobs (for example, as poorly paid cleaners in private households) are often the only jobs available to female asylum seekers or undocumented women in Germany. 40 Different relations of exploitation begin to reinforce one another: not only is the

labour offered by a particular gender overly exploited, people of higher economic and social standing also demean the work of care workers because of their country of origin, residency status and social class.

Relying on care workers from economically poorer countries has become the norm in many parts of the world.41 In Germany, Switzerland and Austria many, in particular, Eastern European women, work as housekeepers and carers in private households, mostly under irregular employment conditions. According to the German Trade Union Confederation (DGB), there were 250,000 registered household employees in 2012 - not including the estimated 150,000 to 300,000 irregularly employed housekeepers from Eastern Europe. 42 Many of these women work in so-called live-in arrangements, which means that they live in the household of the person they provide care to and are therefore available 24 hours a day. Working conditions that include being permanently on call, low pay, a lack of privacy and social isolation are



When care gaps develop in regions of the Global North, care is redistributed, yet not between women and men in the Global North, but to women from other social classes and regions.

unacceptable. According to reports by the not-for-profit research centre corrective, some of these women are also subjected to racist insults, sexual abuse and violence.⁴³

Figure 4.6: Cleaning sector employees by gender in Germany, 2012 Source: Destatis, 2014a 30.8 %

As we have seen, by shifting the burden of care onto families, where care work by women is taken for granted and appears to exist as a limitlessly available free resource, our system outsources care-related costs to the greatest possible extent.

When families are unable to provide care, people in precarious employment, who in many cases have left their countries of origin, are the ones who bear the costs. The system satisfies the care needs of the world's upper and middle classes and shifts the shortfall in care to other, poorer regions. To describe this practice, the sociologist Christa Wichterich coined the term "transnational care extractivism". Much like natural resources, a social capacity—the capacity of poorer regions to

Figure 4.7: Conditions in the care sector

Source: Pflege am Boden, 2017

Conditions for carers

in Germany have deteriorated continuously over recent years. Our daily challenges are further complicated by staff shortages, poor wages and little social recognition. These conditions make our work ever more physically and mentally draining. We are exhausted. Poor working conditions also mean that jobs in the care sector are increasingly less attractive to young professionals at a time when they are so desperately needed. We have less and less time to care for more and more people. Increased demands to document the care we provide robs us of precious minutes we should be spending on patients. This leaves us with too little time to care for people in need.«



provide care — is exploited and a relationship based on neocolonialism is perpetuated (see DIGITALISATION).49

How can such conditions persist, even when they cause the suffering of so many people? And why do they continue, despite the fact that they reinforce, and even deepen, existing extreme inequalities?

Grievances abound – but no change

The current organisation of care, replete with its many elements rooted in discrimination, is part of the imperial mode of living. It is imperial because this mode of living exploits the labour of women, both locally and abroad, which is provided at (almost) no cost.⁵⁰ Moreover, this form of organising care work is spreading and becoming a marker of social distinction: the world's middle and upper classes outsource care and employ people of lower social standing in their households, partly to boost their social position.⁵¹

Care is currently structured around deeply engrained gender stereotypes and discriminatory thought patterns. An infrastructure of profit-oriented stakeholders supports this system, whilst state policies attempt to safeguard its existence.⁵² By looking at individual aspects of these questions, we hope to demonstrate this clearly. We also aim to highlight the framework conditions which the current system of care depends upon - and the levers we could apply to press for change.

Stereotypes and clichés make exploitation seem normal

Unlike other countries (for example, in Scandinavia), Germany's long-standing tradition is for the family to take primary responsibility for care work. The state should only intervene if there are no other options.⁵³ Many who are in need of care, and their relatives, have expressed a strong desire to receive care at home, and see nursing homes only as a last resort. In 2015, nearly

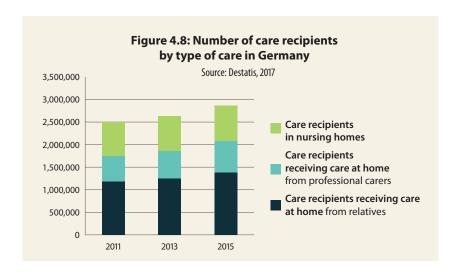
half of all those in need of care received care at home that was provided solely by their relatives. Including those who additionally relied on professional care services, nearly three quarters of people requiring care in Germany were cared for at home. This trend towards receiving care at home has actually grown slightly in recent years (Figure 4.8).54 Government care policies are also guided by this principle.55 The ideal of care as a family duty, however, generally translates into care as a duty for women. Traditional role models of the caring housewife and mother and the male breadwinner remain dominant. According to a representative survey by the Institut für Demoskopie Allenbach, the majority of Germans believe that women's increasing focus on work and career comes at the expense of the family and, in particular, children—with negligible differences



Such deeply engrained family and role models normalise the unequal distribution of care between the genders. They make it harder for society to even think about different ways of organising care.«

between the answers given by men and women. A clear majority strives to live in a family where the woman is mainly or entirely dedicated to child-rearing and the household.56

Such deeply engrained family and role models normalise the unequal distribution of care between the



genders. They make it harder for society to even think about different ways of organising care, thus preventing real change for those women who suffer under today's care structures.

Deep-rooted stereotypes also normalise the exploitation of foreign care workers: media reports or clichéladen TV series featuring Eastern European care workers reflect certain stereotypes: Not only are these women always friendly, patient and sacrificial—they seem to have no needs of their own. And they never complain, even though their working conditions would appear unacceptable to most other people.⁵⁷ No wonder companies are so keen to hire them.

Cultural stereotypes also permeate the field of politics. They help legitimise and normalise the recruiting of foreign care capacities.⁵⁸ In a model project, the Federal Ministry of the Economy justified recruiting care workers from Vietnam by stating: "Culturally, Vietnamese workers have traits that qualify them for employment in the care sector: a high level of motivation, as well as a sense of duty and ambition. In Vietnamese culture, the elderly are considered the keepers of tradition and knowledge and thus enjoy a great level of respect."59

Care is becoming increasingly privatised, largely outside of public control

An extensive network of private agencies organises the exploitation of foreign care workers, connecting Eastern European women with German families. They advertise their services by offering 24-hour care for periods lasting several weeks at discount prices. In the countries of origin, they tend to hire unemployed women with no formal care-related professional training.60

Grey markets for care have developed, in which the borders between formal and informal care have dissolved.61 In Germany, these women work as posted workers, and — according to EU law — the German minimum wage and working hour regulations should apply.⁶² Agencies tell women that they will be in regular employment and that the minimum wage will be respected,63 but fail to inform them of their rights as posted workers. Their contracts also generally lack the corresponding clauses. Maximum working hours are often exceeded, not least because these women sometimes live in the

same room as the care recipient and are asked to perform all kinds of care work and household chores.64 According to reports, agencies charge the families of care recipients up to €2,500 per month,65 yet, with some of these women earning between €800 and €1,400 (net) per month, care workers are not even earning the minimum wage - and the agency keeps the rest as commission.66

Public employment agencies could also take responsibility for placing these carers in employment, but the state chooses to leave this task to private agencies. These private agencies have created a shadow economy that exists across borders and is hard to control. For the EU, responsibility lies with the member states, whilst the German government holds the customs office responsible. Here the latter is, however, toothless. Checks of private households require a court order and are therefore extremely rare.67

In recent years, care has become a field that increasingly attracts private sector investments.68 According to care statistics from the Federal Statistics Office, 42 per cent of inpatient and outpatient care facilities were in private hands.69

Between 1999 and 2015, the number of beds in privately run nursing homes increased from 20 to 40 per cent.⁷⁰ There is, however, only a very small number of large private providers. The largest such provider in Germany and Europe grew out of mergers between various nursing home chains and recorded an annual growth rate of nine per cent in 2015.71 Competition with privately run



INFOBOX Global care chains

In 2000, Arlie Hochschild coined the term global care chains, i.e. "a series of global personal ties between people based on paid or unpaid care".44 The term describes the phenomenon whereby women migrate to economically more affluent countries or regions to seek employment in care. Other women (domestic workers or female relatives) then take their place.45 Such chains can cross several regions or countries. Figures on the extent of this migration do not exist because in many cases such migration is irregular. However, there are certain patterns, e.g. a large number of care workers migrate from South East Asia to the Arabian Peninsula, from Latin America to the US and from Eastern to Western Europe. 46 These migrants play a key role for the economies of their countries of origin because they send back a portion of their salary to their families as remittances. Governments therefore attempt to strengthen the bond of migrants to their home countries, for example, through prizes for the best migrant household worker.⁴⁷ Often these women pay a high price for their economic contribution: as Human Rights Watch has documented, they not only leave their families but also suffer exploitation and human and labour rights abuses.48

nursing homes increases the pressure to raise efficiency and cut costs. Consequently, nursing homes cut back on the most important cost factor, which, in care, is staff expenses.⁷² Many privately run homes ignore the stipulated staff to patient ratios, which already fall too short and are in need of updating, and vacant positions can remain unfilled for an extended period.⁷³

The state also insufficiently monitors private nursing homes. To prevent problems in care and grade care services, the Health Insurance Medical Service (MDK) conducts regular quality assessments, which have re-

peatedly been criticised for their lack of validity and misleading gradings.74 This is because care system stakeholders - health insurers, nursing homes and welfare associations - individually decide what to monitor.75 This is compounded by the fact that there is essentially no federal level regulatory authority or complaints body to deal with abuses in care facilities. Munich is the only city in Germany to have established a complaints body for geriatric care.76 Helplines, often run by volunteers, exist in some other cities,⁷⁷ but the care system is basically left to manage itself, and there are no centres where people can turn to if they need help. These circumstances make it extremely difficult for both care recipients and care workers to draw

public attention to the dire conditions in the sector.⁷⁸

Politics contributes to current care system inequalities

Care in Germany is therefore currently organised around an unequal distribution of care work between genders and social classes, as well as forms of exploitation that rely on cultural stereotypes as a justification. These structures are effectively reinforced by the state. German care insurance, for example, is based on a model of shared costs. Families are thus expected to contribute towards the cost of care. Those with greater purchasing power can afford to pay for professional and inpatient care, whereas less affluent families are forced to depend on cheaper alternatives, such as foreign domestic workers or care provided by relatives.⁷⁹ Politicians have also adopted measures that strengthen private forms of care within families in the field of childcare. Germany has introduced a €150 childcare supplement for parents willing to care for their children at home instead of taking them to a day care centre. This provided a cheap alternative to expanding the number of day care places, yet this supplement does not adequately compensate the care work parents provide. It has promoted private care and prevented the labour market participation of carers, most of whom are women.80

Politicians have also done little to prevent the exploitation of Eastern European women in Germany's care sector. 24-hour outpatient care would entail huge formal care costs that households could not cover alone. In this regard, the German care system requires a complete overhaul and a shift towards a design whereby the total costs of long-term care are met, combined with a significantly higher public budget for care to cover the current contributions made by private house-

holds.⁸² However, as political decision makers do not seem interested in taking this approach, they are effectively helping to sustain current forms of exploitation. For example, when Germany ratified ILO convention 189 concerning decent work for domestic workers in May 2013, the German government introduced a special clause that exempted 24-hour care.⁸³

Perspectives: a change in care?

Economic profit

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principles.«

The concerns outlined here reveal the need for a fundamental re-think of care. Care work is crucial

to society and therefore worthy of recognition. But an entirely new framework is needed. Economic profit should not be the focus and key criterion to define the value of work. Rather, solidarity and tolerance need to become society's guiding principles. Achieving this would require society to shift its attention more towards people as well as their needs and capabilities. More concretely, this would mean greater gender justice and emancipation from engrained gender roles, equal rights and opportunities for all people regardless of their origin, as well as publicly funded care that provides everybody with the basic elements they need to lead a decent life. Social scientist Gabriele Winker

has coined the term *care revolution* to describe such an approach.⁸⁴

Getting there is going to be arduous. Deep-rooted thinking patterns, the present infrastructure and private stakeholders, as well as policy decisions, all serve to safeguard the current form of care. In other words, the system cannot be changed overnight. However, numerous suggestions have been made as to how the conditions for care work can be changed and how support can be offered to those who are already fighting to make these changes happen.

Increasing appreciation for invisible care work

Currently, society only recognises market-based wage labour as work. Yet, care requires time, energy and money and is of fundamental importance to the functioning of society. Society therefore needs to increase the visibility of non-remunerated care work, for example, by including this work in economic assessments. This would automatically generate a debate on the gigantic proportions and huge significance of such invisible work. Greater recognition for care work, however, would not imply having to pay for all private care work currently being provided free of charge. Rather, we need framework conditions that ensure recognition for private care work in families and allow its organisation. This could include a benefits scheme similar to today's parenting allowances for people who care for relatives, even when they are not in employment that is subject to social security deductions. Moreover, the state should guarantee that relatives providing care enjoy social protection and, crucially, have health insurance cover.

Redistributing work

We need to reorganise the way in which society distributes care work and salaried work between women and men. Only when women can freely set the amount of time that they will invest in remunerated employment can they have equal career opportunities. This would require changes to the labour market: a general reduction in working hours, for example, would grant everybody sufficient time to care for themselves and for others. Beyond being merely a theoretical idea, parttime employment would have to become a practical option for everybody. At the political level, one potential approach could be to provide long-term benefits to parents who both agree to reduce their working hours (for example, additional benefits that go beyond current allowances for parents).85 A general reduction in working hours to a 30-hour week would not only create space to redistribute care work, it would also free up additional time for social commitment and other activities. How would you make use of your extra leisure

Misdirected state incentives that reinforce traditional gender roles, such as Germany's child care subsidy (Betreuungsgeld), should be abolished. The compatibility of employment, family life and care needs to increase and employment should not be conditioned by the requirements of high mobility and unlimited availability.86 State incentives and alliances of employees, mediated, for example, through the unions, could contribute to a shift in German business culture and lead such jobs to become the norm.

Moreover, an unconditional basic income (see Money and finance) could free up time and energy for those who receive it, allowing them to dedicate time to caring for others and themselves. Traditional gender roles, however, could also mean that both a basic income and a reduction in working hours would not lead us to fundamentally question the current division of labour between women and men; these measures could even see such structures becoming further entrenched.87 It is thus key that we develop a care work model that goes beyond traditional gender roles and identities. Such a shift would actually be in everybody's interest and would require commitment from the whole of society.

Providing a social infrastructure for everybody

It would be a tremendous step forward if the state provided everyone, irrespective of their financial means or residency status, with the necessary funds for a decent life. This would have to be built on a social infrastructure that actively tackles inequality, not just by providing money but by offering publicly funded institutions and services.88 A more rigorous approach against tax evasion could finance such an infrastructure (see DIGITALISATION). When the state privatises the public infrastructure of care, quality care increasingly becomes a privilege for the wealthy and moves further outside of public control. Public decision makers thus need to halt this development and again democratise our care infrastructure. This will require public investments into community- and solidarity-based projects, such as parent-organised kindergartens, housing community projects or collectively organised neighbourhoods or health centres.

Through a comprehensive social infrastructure, the state could guarantee care, and everybody could have the freedom to decide how such services are organised. For example, children in Germany are already legally entitled to a place in a day care centre, but the necessary infrastructure needed to make this a reality is still lacking.

Humane care (work) for everybody

Good care work requires good labour conditions. People's needs have to define the rhythm of work, the salaries of care workers have to be sufficiently high so that they have the time to dedicate themselves fully to care recipients. Only such an approach can guarantee dignity, not just for carers but for those reliant on the help of others: children, people with disabilities or those who are old or sick. Moreover, care work needs to take greater account of the rights of those receiving care to self-determination and offer people opportunities to decide on the kind of care they wish to receive.89

More specifically, good working conditions would also mean improving the care worker-to-care recipient ratio nationwide, establishing a collective agreement across Germany for the care sector that ensures care workers are paid above the minimum wage, as well as enforcing compliance with German labour legislation independent of a person's nationality. The state needs to close legal loopholes that enable the exploitation of migrants. Not least, ILO convention 189 must also apply to 24-hour care work. Establishing complaints bodies to protect rights that have been hollowed out would be a vital first step.

In addition to changes to the institutional and legal framework, society must also challenge racist (see GLOSSARY) thought patterns: we cannot continue to tacitly accept that the upper and middle classes make up for shortfalls in care work by exploiting migrants.90 This requires an in-depth public debate on the state of Germany's care system and the people who are made to bear its burdens.

Care activism

One of the reasons why care workers usually do not get involved in labour struggles is the particular 'work ethos' that dominates many social professions and care work in particular.91 Going on strike is difficult if such action directly impacts the well-being of care recipients. Society is also largely critical of carer strikes.92 Care workers in institutions funded by church welfare organisations are even forbidden to strike.93 Migrants who work in 24-hour care often lack opportunities to organise or simply do not have the time.

Nonetheless, there are people struggling at many levels for better working conditions and a greater recognition of care work in society. In May 2015, educators called for a nationwide strike in day care centres, and in the summer of 2015 the nursing staff at Berlin's Charité hospital also striked for better working conditions. In March 2014, activists founded the network Care Revolution, a movement to unite the demands and political strength of care workers and those receiving care.

The Pflege am Boden alliance was founded to change care work. The regular activities and networking meetings of both of these organisations promote the goal of decent conditions in care work. In Switzerland, Polish care workers founded the network Respekt@vpod together with the public service union VPOD to inform migrants of their labour rights as well as enforce and legally fight for employment conditions that conform to Swiss regulations.94 In Germany, respect, a political solidarity network for the rights of migrant household employees, follows similar goals.95 In the context of the Faire Mobilität project, the German Trade Union Confederation (DGB) too has established multilingual advisory centres to inform posted workers of their labour rights and support their struggles for fair employment.96 However, greater efforts ideally need to be made to support migrants in their attempts to (self-)organise autonomously. Such initiatives are highly important, but in order for them to gain greater prominence in society, they require support. And we would all benefit if the situation for care workers improved: things would be better for those providing care and those receiving it. Through these struggles, care work is becoming a contested sphere, where alliances between people from multiple social backgrounds

become possible, and this holds a great potential for actual change.97

A care revolution is possible. To increase its potential impact, the movement for decent care needs to link the conflicts surrounding poor working conditions, precarisation and gender inequality in care to similar struggles in other sectors.98 Often the causes are similar: public services are privatised and considered primarily with regard to profitability. This exacerbates social divisions because then not everybody has equal access to humane care and fair working conditions. Jointly considering care sector, migration policy, as well as gender and social political grievances and demands is a promising approach. Initial steps in this direction show how difficult this might prove.99 We should nonetheless attempt to join forces and apply pressure wherever exploitative practices in care work take hold. If society were able to appreciate and organise care work differently, this would alleviate the pressure on many people who are forced to sell their capacity to care under the most testing con-

Care work can become the starting point for a struggle to achieving a good life for all. It is a fundament of society: care concerns us all.

Do you agree?

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



Endnotes

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19	Biesecker, Wichterich & von Winterfeld, 2012	69	Destatis, 2017
20	Klinger, 2012	70	Haufe, 2016
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22	Klinger, 2012	72	Krenn, 2014
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26	DAK, 2015	76	Stadtportal München, 2017
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31	Destatis, 2014a, 2014b, 2015b	81	Krenn, 2014
32	IAB, 2015	82	Lüngen, 2012
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12		94	
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CARE 37

MONEY AND FINANCE

The price of money: the impact of finance on our everyday lives

"Money frees social actors from their dependency on local resources and opens the door to a world where anything is possible. [...] The only problem with money is: you have to have it." (Deutschmann. 2000)

magine what would happen if you suddenly ran out of money. Or, although there was still technically money in your account, all of sudden you were unable to withdraw it. For an indefinite length of time.

When in early July 2015 the Greek government limited ATM withdrawals to €60 per day, this was the situation faced by many Greeks.¹ Some ATMs did not even permit this small amount. This was because the European Central Bank (ECB) had cut its supply of fresh cash to Greek banks. The move was triggered by the Greek government's refusal to implement further harsh austerity measures in exchange for further bailouts. The ECB subsequently froze lending to Greece and left the country teetering on the edge of economic collapse. Even though a majority of 61 per cent rejected the new austerity measures in a referendum held on 5 July 2015, the Greek government eventually bowed to creditor pressure.

This example demonstrates how heavily dependent capitalist society is on money.² Yet it also highlights money's fundamental role in our societies as a means of exchange.³ Supermarket shelves may be stacked high with countless products, but even in affluent societies⁴ such as Germany, there are people who are unable to access these goods. Every day supermarkets throw away tons of food instead of giving it to the needy, simply because they lack the money to buy it. In this sense, supermarkets, often considered the "epitome of affluence",⁵ are institutions of scarcity because, like markets in general, they organise the distribution of goods based on people's capacity to pay.⁶

Most people in our society take money and markets as a given. Cash, current accounts, credit cards, insurance policies—they are all an accepted part of our lives. We put a good salary and personal savings above other goals in life and believe this is normal. Often, we think that people who cannot make ends meet with what they earn have somehow personally failed. To service debts, many believe it is legitimate for nations to cut back or even eliminate essential public services.⁷

Considering the crises regularly triggered by our money and financial system, the degree of naturalness with which we treat the system could well come as a sur-

prise. We need only think back to the financial and 'euro crisis', or consider social issues such as poverty and inequality, to be reminded of the current structure's failings. Moreover, money and finance are key elements of the imperial mode of living. They link the lives of individuals to an economy based on profit and growth. Money and finance are deeply rooted in our everyday lives and consolidate a mode of production that relies on the unlimited access to labour and nature, as well as, increasingly, on the "entirety of life and the world".

As this chapter illustrates, a transition to a more just and sustainable society will depend on deconstructing the apparent normality of money and finance and their role in society. In the first section, we focus on the ways that money not only forms our perception and shapes our attitudes, but also guides our actions, interpersonal relations, as well as the way we approach nature. The second section then analyses how debt penetrates everyday life and how it structures global balances of power. The third section focuses on financial products. Taking the example of capital-based pension schemes, we illustrate how deeply the capitalist logic is embedded in our political institutions, preventing them from concentrating on fulfilling human needs. The final section considers our options to overcome these problems.

Money defines everyday lives

Only a society with a monetised economy can reach the stunning conclusion that work is scarce and therefore desirable.«
(Luhmann, 1994)

We tend to think that money and finance ensure the smooth functioning of the economy and optimise resource allocation. Yet since the 2007 financial crisis and the bailout of various banks with taxpayer money, more and more people have begun to wonder what the money in their accounts actually does. This, however, is only half the problem: it is just as important to ask what money 'does' to us and to those connected to us through our financial system.

Economists generally consider that money is simply a neutral agent.¹¹ Beyond this function, however, money influences both social interaction¹² and the way society treats the environment (biosphere):¹³ people's income is a crucial factor in defining their imperial hold on labour and nature (Figure 5.1).¹⁴ People who earn a lot tend to fly and consume more, and therefore play a disproportionately larger role in exploiting people and nature, particularly in the Global South. This is not so much related to higher 'direct emissions', but rather to the fact that they buy many products whose produc-

tion is labour- and emissions-intensive (Mobility and FOOD AND AGRICULTURE).15

Even among particularly environmentally conscious people, this effect is observable, 16 and it just goes to show how difficult it is to elude the 'imperative to consume'17 in a society defined by money.¹⁸ Yet monetary societies are a relatively recent phenomenon. As the HISTORICAL OVERVIEW describes, even countries that industrialised early, such as Germany, only developed consumption and (wage) labour societies during the age of Fordism in the 20th century, when wage labour successively replaced earlier self-sufficiency-based forms, i.e. the subsistence economy.¹⁹ This helped establish the imperial mode of living as a mass phenomenon. In monetary societies, earning money and being able to consumeⁱ is not only essential, it even appears as the only possible form of 'wealth'. Accordingly, work in a monetary society is seen less as a means to satisfy human needs21 (see CARE), or as a source of meaning, and primarily as a source of income.²² Essentially, money pits us against each other as competitors on the labour market:23 if another person offers the same work for less, then your income is threatened. Mediated by the advertising industry, learning and education, our attitudes towards money and consumption have become deeply rooted in our everyday understanding of life.²⁴ For this reason, we tend to measure and evaluate the world in terms of money, i.e. quantitatively instead of qualitatively; purely in economic instead of social or environmental terms. It makes it easier to remain blind to the devastating consequences.²⁵

Hidden costs

The less information we have about the products and services we consume, the easier it is to dismiss their impacts. Generally, we consider prices our most important source of information. Frequently, however, the price of a product or service says nothing about the actual costs it 'entails', rendering such judgement problematic. It conceals the fact that many of the things people do, such as booking a flight (MOBILITY), eating a meatbased product (FOOD AND AGRICULTURE) or employing a 'housemaid' (CARE), are actually part of a global imperial structure.

We call this structure 'imperial' because it promotes an externalisation of costs (see externalisation in the GLOSSARY). Instead of costing just \$4, calculations estimate that the real price of a hamburger should be around \$200.26 A sum of money, however, will never adequately express animal suffering, life or the purposeful destruction of biodiversity and future generations. Although internalising the entire external costs and reflecting them in a corresponding price is impossible, the resulting harm is real and pushed onto other people.27 Women, migrants and the precariously employed (GLOSSARY) in particular pay for our low prices or the high salaries of those such as managers (CARE). Money—in this case, in the form of a price—hides these exploitative conditions.²⁸

What does my current account really cost?

Products that are advertised as free of charge reveal this particularly clearly. In Germany, the trend is towards cost-free current accounts, and banks even offer up to €120 to customers who open one.29 Banks, however, operate current accounts at a loss. Their aim is to attract new clients, not to make a profit. They thereby speculate that clients will overdraw their account at some point, which means they can then charge them high fees. Moreover, banks assume that once customers have a current account, they are more likely to use their bank when they need other financial products, for example, a credit card, instant access accounts or a loan. Profits from these financial products must thus cross-finance the bank's current accounts. Consequently, current accounts are linked directly to other business divisions that—as we will see—frequently promote exploitative and destructive practices.

Current accounts are only one element in the system of cashless payments. The digitalised age is increasingly seeing the role of cash diminish; German discount stores, for example, are now experimenting with mobile payments.30 The 'transparent customer' is thus becoming a reality. Whereas providers today mainly collect data via searches, news content and online payments, in future they could easily register every financial transaction. Money is now becoming more and more entwined with our everyday lives as not just material products, but also immaterial commodities, such as access to spatial or non-physical goods (for example, a beautiful city park) can be automatically transferred from a digital account via micro pay applications - at least, if the person has sufficient credit. Of course, this is still some way off from becoming reality. Yet even today, our lives are already criss-crossed by an invisible net of both analogue and digital payments to the extent that we could speak of a 'financial mode of living'.

Economism blocks solidarity

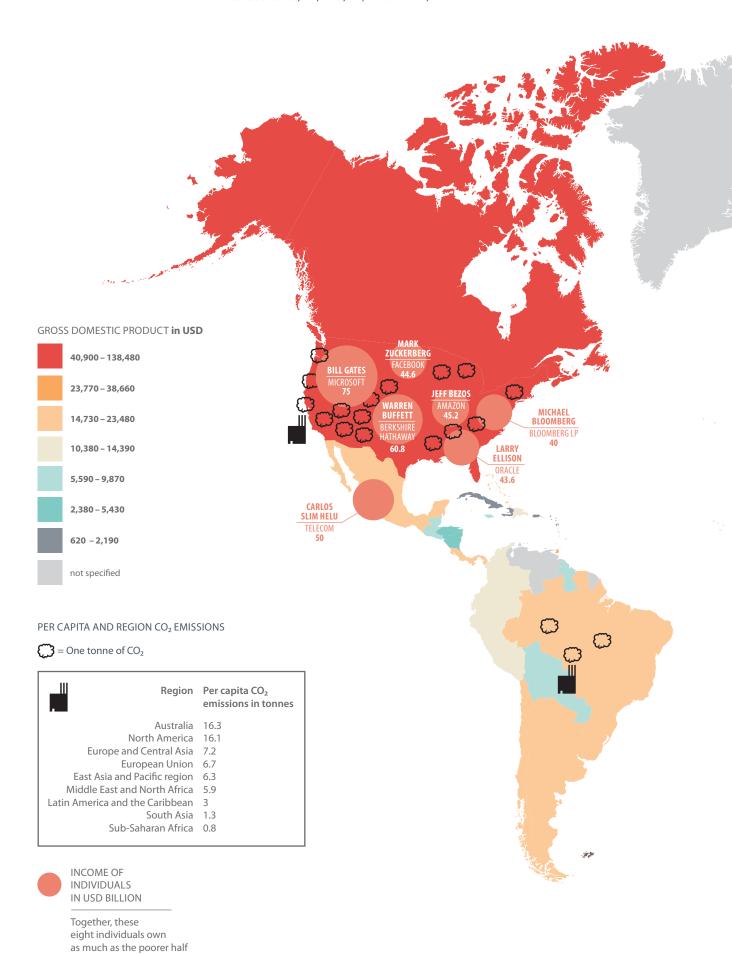
Our financial mode of living forces us to buy products and services as we do not (or no longer) produce them ourselves. This leads to a dilemma. We want everybody to be able to live off their salary and goods to be produced in a way that does not destroy the environment. However, due to our dependence on goods produced by other people and the economic logic described above, we tend to assign greater importance to low prices than to showing solidarity with others.31 While many people feel that wage dumping and dangerous conditions in the textile industry are unfair, buying T-shirts at the lowest possible price nonetheless remains their top priority. The relationship between T-shirt shoppers and the people who produce the item is a social relation, albeit one which is not evident in the T-shirt itself. The commodity form in place here objectifies, and thereby de-politicises, the social relation.

Whereas money hides certain facts concerning production, it has the opposite effect when it comes to consumption: the number and kind of goods and services

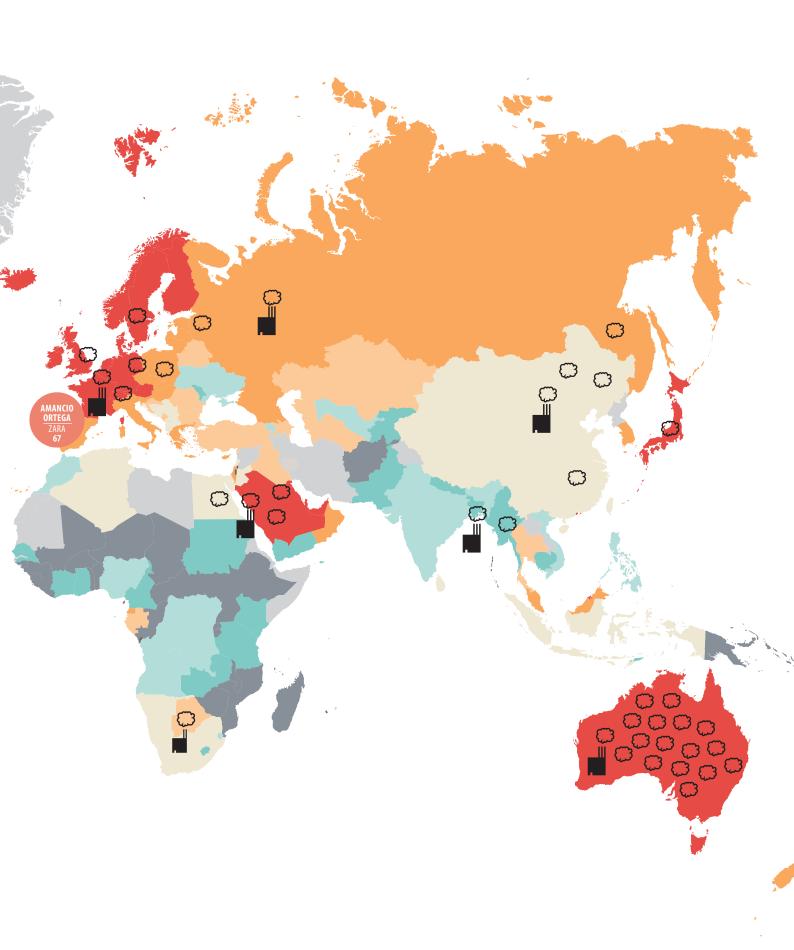
According to estimates, up to six per cent of the population (in the US and Germany) suffers from a 'compulsive buying disorder' (Bierhoff, 2016, p. 3; Mann, Fauth-Bühler, Seiferth & Heinz, 2013, pp. 551-552), which can lead to debts (Rose & Dhandayudham, 2014). Digital technologies are increasing the number of cases (Griffiths et al., 2016 and DIGITALISATION).

Figure 5.1: Where there is money, there is CO₂

Source: Credit Suisse, 2017; Forbes, 2017; World Bank 2017a, 2017b



of the global population.



we can afford indicates our social status. Driven by advertisements, we aim to distinguish ourselves from others—a system that only works due to the uneven distribution of money and wealth in society. If everybody could afford an iPhone, they would no longer be seen as a status symbol. This subtle and often unconscious vying for status shows the degree to which the money logic drives us as consumers and workers.³²

Our fixation with money not only exists at the individual level; our political institutions are also affected. For example, politics is legally bound to base its policies on gross domestic product (GDP). GDP, however, says little about the wealth of a particular society because while "war, crime and environmental destruction" increase GDP, "many useful activities such as household or voluntary work" do not. GDP nonetheless remains the central category to measure wealth and we subordinate other goals, such as climate protection, to GDP growth. Moreover, the state, through creating money via the central bank and safeguarding property rights, provides the very framework that allows our monetary societies and our profit-based economies to function.

In conclusion, money is not a private issue, but rather a central part of a wage labour- and consumption-based mode of production and living that goes hand in hand with creating inequality and exploitation. All people whose lives are based on (earning) money are tied into this effect even if they do not consider themselves beneficiaries of the system. As we are all involved, questioning the structure of ownership mediated by money appears unthinkable. However, as we will see towards the end of this chapter, such a step could be essential for a socio-ecological transformation. Money and financial products are intertwined with the exploitation of people and nature, and this fact becomes even clearer when we take a closer look at debt.

Systemic debt

If you owe your bank a hundred pounds, you have a problem. But if you owe a million, it has.« (John Maynard Keynes)

To update Keynes' quote, we could even say: "If a bank owes a million euros, then it has a problem. But if it owes a trillion euros, the global financial system has."

Let us take the example of Deutsche Bank. As one of the 30 'systemically relevant' banks,³⁵ the financial institution has accumulated a debt of approximately €900 billion with other banks. The estimated one trillion euros that Deutsche Bank has, in turn, lent to other banks roughly evens out this gigantic sum. Nonetheless, the bank still poses a risk to the global financial system.³⁶ Should Deutsche Bank fail, this would lead to losses at banks across the world—with unknown consequences.

The interconnectedness of the banking sector—the debts banks owe to other banks—is thereby only the tip of the iceberg of a global web of credit and debt that connects companies, banks, states and individuals. Since 1980, the ratio of global financial assets (includ-

ing equity, bank deposits, private and public debts) to global GDP has increased from around 100 per cent to 393 per cent in 2007. Before the global financial crisis, the figure stood at \$194 trillion. Counting only credit assets, global debt in 2007 amounted to \$142 trillion. Subsequently, in the second quarter of 2014, instead of decreasing, this amount had risen to \$199 trillion.³⁷

What do banks do?

How are these astronomic sums and the investment divisions of major banks connected to the average employee or worker? If you are with a universal bank, 'your bank' is likely to be active in various fields. To finance things such as a university degree or a new house, people save and receive loans from their bank. Usually, the interest a bank pays on savings are far lower than interest rates on loans, and this difference constitutes a vital source of income. There are, however, other ways for banks to make money. They can invest their customers' deposits and other external capital in shares, bonds and other securities.38 Banks are profit-oriented and earn their revenue by creating credit and arranging capital transactions. Former head of Deutsche Bank Josef Ackermann infamously demanded bank employees ensure a '25 per cent return on equity' - a 25 per cent profit on capital invested.

To grow the money they have, banks sometimes invest in risky deals. Banks' customers are thus indirectly involved. Let us look once again at the example of Deutsche Bank. Although the bank adopted a guideline forbidding investments in cluster munitions in 2011, it nonetheless maintained business relations with eight of the world's ten largest weapons manufacturers and therefore has a stake in the production of nuclear weapons systems and the export of arms to crisis regions. Without the 'tacit approval' of bank customers and the public in general, maintaining such business practices would be far more difficult, not least because some banks refrain from investing in arms or, for example, from speculating on food, for ethical reasons.³⁹

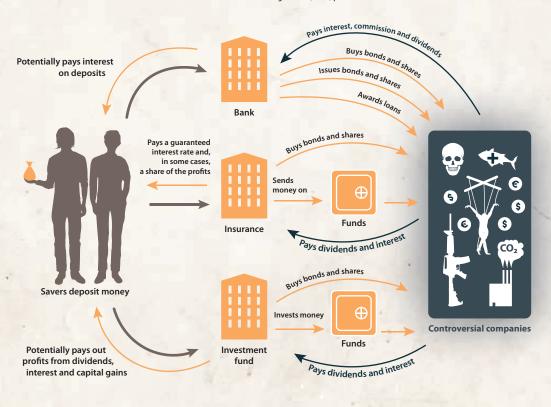
Nevertheless, we need to go beyond a simple critique of banks. Investing to make a profit is not a privilege reserved to banks but a general structural trait of the capitalist economy. Banks award expensive loans primarily to maintain the fundamental functions of the economic system and not because they are 'greedy'. But how does this work?

How are debts created?

According to mainstream economics, i.e. the dominant school of thought taught at schools and universities, the answer is clear: banks convert savings into credit. Seen within the context of the overall economy, this means that without deposits saved in banks, there can be no investment.⁴⁰ However, in an academic article published in 2015, this hypothesis was contradicted by none other than the Bank of England. The article described how, by awarding loans, banks effectively create debt—and hence money—'out of thin air'.⁴¹ Contrary to what people often assume, the deposits of bank customers are not the main source of capital for underwriting loans; the bank simply notes the funds owed by the borrower and adds the credit to its balance sheet.

Figure 5.2: What happens to my money?

Source: based on Facing Finance, 2017, p. 5



In this way, banks create money themselves. Borrowers (typically companies) produce goods and services with this money. By selling these, they produce capital and wage income, which again is used to pay for the consumption of goods and services, and service debts. Credit therefore drives a kind of 'perpetuum mobile', a self-reinforcing cycle, which stands at the centre of the capitalist growth economy.⁴²

It is therefore credit creation (and interest as a form of income), and not the conversion of existing deposits into credit, that is the primary concern of banks. Savings deposits also play a role in issuing loans and banking operations, but the creation of fiat money by far exceeds the assets banks hold. As natural as it may sound, the notion that 'debts have to be paid back' is actually based on a questionable assumption. A debtor (for example, Greece) has not consumed an amount of money that it now must pay back. Instead, by requesting a loan, the borrower has created debt and a source of income for the creditor. 'Rescue loans' primarily aim to service old debts, i.e. to sustain the income of the financial sector. To avoid systemic adjustments — debt relief, capital levies or the nationalisation of banks—this 'debt machine' has to be kept going, even if this implies, as is the case with the euro area 'bailout of Greece', that the root causes for economic problems are not dealt with.⁴³

Debt as fuel

In our perpetuum mobile, debt is seemingly a neutral lubricant. In fact, debt actually functions more like a kind of fossil fuel: it will eventually run out. Debt drives the growth of the economy for a certain time because it allows creditors to buy goods and services.

But after a certain point, these loans must be repaid. This means a reduction in the economic system's solvency. As described in the HISTORICAL OVERVIEW, economic growth during recent decades has mainly been fuelled by a steadily growing debt mountain. By slashing the tax on capital income (less revenue), and cutting back on social services, states and consumers came to depend increasingly on credit to finance their spending. This will work as long as banks and investors trust that people will pay back their loans and therefore continue to issue new credit.44

In the 2007/2008 financial crisis, faith in the global debt economy, however, suffered a severe blow. First, mortgage lending in the US collapsed. Because banks securitised mortgages — i.e. converted them into tradeable securities — and then re-sold them, financial institutes around the globe were suddenly left sitting on worthless bonds. They contained debts that borrowers could no longer service. Governments then indebted themselves to 'buy' effectively worthless bonds from the banks. 45 This is why it is misleading to separate 'private' from 'public' debt. To protect the global financial system that the system of permanent private debt depends upon, the allegedly 'private' debts of banks were morphed into public debt during the financial crisis. The stability of national currencies and economic regions—and therefore of the mode of living—hinges on maintaining the debt spiral. Our Central European mode of living is intrinsically tied to the debt crises currently plaguing southern Europe and the countries of the Global South — and the link goes far deeper than it might appear at first glance.

Debt organises the international balance of power

An important structural cause of Greece's refinancing difficulties is the country's foreign trade deficits. 46 A country with a foreign trade deficit imports more goods and services than it exports. There are also surplus countries, such as Germany, that accumulate financial claims vis-à-vis other countries. Because an important part of the demand for goods and services, as described above, is the result of debt, Germany's export boom is built on the debts incurred by foreign private households and nations. Export surplus countries absorb the demand of other countries and are, in this sense, at least partly responsible when these countries end up in economic difficulties.

The euro crisis exemplifies how complicated and intertwined exploitation has become in the 21st century. On the one hand, you have a country like Germany, the 'global export champion', that is indirectly responsible for Greece's economic woes. The jobs and income of many people thus rely on the exploitation of other countries. On the other hand, Germany's export boom is also built on its own domestic low-wage sector and therefore precarious forms of employment. Structurally speaking, German employees and workers exploit the Greek economy, but only as their level of exploitation also increases. This dual nature — profiting from an exploitative structure by increasing one's own exploitation — is typical of the imperial mode of production and living.

A study by Attac Austria of the two initial bailout programmes for Greece in 2010 and 2012 reveals how little the 'rescue packages' had to do with charity.⁴⁷ According to the study, 49 per cent of the cred-

its provided by the IMF (International Monetary Fund), the European Central Bank and the European Commission flowed directly to the creditors of the Greek government and not to the Greek state. Whereas 22.5 per cent (around \in 46.6 billion) went towards the Greek budget, 16.7 per cent (around \in 34.6 billion) was used to pay interest on loans to cred-

itors. From the current third economic adjustment programme, Greece will use around 62.5 per cent of the promised €86 billion to repay and service older debts.⁴⁸

The 'development aid' provided to the countries of the Global South is also worth analysing more closely. Measures of debt relief and payments to fight migration and terrorism are included in development budgets, even though they are not single direction financial transactions—i.e. flows of money exclusively from North to South.⁴⁹ Development aid also includes bilateral credits and publicly guaranteed export credits as well as multilaterally funded development funds. These money flows are loans that the recipient countries must pay back and are tied to interest obligations and specific economic policy conditions. Since 2001 repayments to creditors have exceeded the initial loans: 'development loans' therefore take more money from the recipients of 'development aid' than debtor countries initially receive from 'donors'. Overall, multilateral development agencies export around \$10 billion in capital from the Global South to the Global North.50

Any description of the global architecture of money and finance, and its imperial features, must also consider the US dollar and its role as a 'global currency'. During negotiations held in Bretton Woods in 1944 on the design of a postwar financial architecture, the British economist John Maynard Keynes proposed the introduction of an international unit of account for international financial transactions. In the end, however, the strong position of the US prevailed and the US dollar became the international reserve currency. In 1971, the US cancelled the direct convertibility of the dollar to gold and the pegging of other currencies to the dollar (the system of fixed exchange rates). Nonetheless, the dollar has maintained its dual function as a national and international reserve currency. Technically, this implies that the US can indebt itself unlimitedly in its own currency. The national debt of the US currently amounts to around \$20 trillion.51 This debt and the nation's gigantic foreign trade deficit pose no threat to the US as they would a country like Greece. A large share of international trade is conducted in US dollars and the foreign exchange reserves of central banks across the world, i.e. the foreign currency they hold, are often in USD.52 The stability of the international economic and financial system hinges on the assumption that the solvency of the US will never be fundamentally questioned. As Nixon's treasury secretary put it: "It's our currency—but your problem."53

Whether it is the extortion of the Greek government by the ECB or the unlimited liquidity of the US central bank, the Fed (Federal Reserve System), money, currencies and debt are political constructs and define global relations. Individual lifestyles are thus not only

directly linked to the global system of money and finance (for example, by people having a current account), but also indirectly. The financial activities of private individuals rely on stable (national) growth and currency areas. As the above examples show, this *inner* stability is, to a certain extent, ensured by skimming off aggregated demand from *foreign*

savings and interest payments. Such an 'imperial' grasp on the economic productivity of other global regions is a structural effect that is difficult to discern. Simple arguments, such as that the European 'states in crisis' or 'developing nations' are themselves responsible for their economic plight, are far more readily accepted. Evidently, this does not mean that they are necessarily true.

Financial products – the world becomes a commodity

Our currency,

(John Connally,

Treasury Secretary to Richard Nixon, 1971)

your problem.«

So far, we have highlighted how money and debt bind the lifestyles of individuals to the (global) economic context and the negative implications related to this process. Money and debt, however, are not the capitalist economic and financial system's only building blocks. Financial products are also an important vehicle. People invest in these products to generate capital income. Increasingly, in an attempt to develop new sources of income for investment-seeking capital, public and private life is being designed to be market-driven and subject to the will of the financial markets. Pub-

lic services, healthcare, social security, public infrastructure and even the biosphere are being systematically opened up to private investment and reorganised to serve their desire for profit. Meanwhile, accident, life insurance and pension fund policies, as well as building society contracts, have turned millions of people into financial market stakeholders, sometimes without these individuals even being conscious of the fact or aware of the implications.

Private pension funds – the investor pensioner

Pension schemes highlight this fact. Up to the beginning of the century, the experience of the pre-war Great Depression had left an indelible mark on German pension policy, which focused on maintaining the independence of people's savings from financial markets and securing their standard of living at later stages of life. Following numerous reforms, the Agenda 2010 policy, implemented by the social democratic (SPD) and Green Party coalition government, represented a paradigm shift. Cuts to government spending and a focus on individual responsibility aimed to reduce (non-wage labour) costs and create a basis for capital-based private pension schemes. The Riester-Rente (Riester pension scheme) became the face of this sea change in policy.

In 2001, the

average pension

stood at 53 per cent

of the average gross

salary. Since then, this

figure has dropped to

47.6 per cent, a trend

which threatens

to continue.«

Introduced in 2002, Riester pension schemes established a low-risk, and hence highly attractive, market for banks and insurance agencies. State subsidies for these private pension schemes ensured the signing of 16 million Riester policies. However, the state neither committed banks and insurers to a minimum rate of return, nor to inflation adjustment, and did not define a ceiling for administrative costs. Germany only expected banks to guarantee the sum of deposits and subsidies. The majority of these contracts still do not

produce the estimated average four per cent yield, while the administrative costs often exceed the calculated ceiling of 10 per cent of deposits made.

For those with only small incomes, private pension schemes could easily incur a loss, and this could have potentially disastrous consequences. Since the introduction of Riester pension schemes, pension levels have dropped worryingly in Germany. In 2001, the average pension stood at 53 per cent of the average gross salary. Since then, this figure has dropped to 47.6 per cent, a trend which threatens to continue. Particularly discomforting is the way in which politicians legitimised and implemented this paradigm shift based on questionable demographic trend data. Even Germany's current government refutes the estimates made at the time and is now expecting the population to develop stably, yet it continues to promote capital market-based pension schemes.

Since the advent of the euro crisis, and the ECB's and other central banks' subsequent implementation of low interest rate policies, government bonds have produced only meagre returns. As a business model, capital-based pension schemes have now reached their limit.54 Should government bonds and other investment vehicles significantly lose value during a future financial crisis, this

would also threaten the provisions people have made for their retirement. It is thus not only pension schemes that are now dependent on financial market stability.

Capital valorisation by any means

Like hedge funds, life insurers and pension funds belong to the group of 'institutional investors'. There are also private investors, such as investment banks, but also state funds. Capital funds thereby all work according to the same principle. They pool money from diverse sources and invest it in shares and property. Income (e.g. rent) and capital gain (e.g. rising property prices) provide the basis for profit. In this respect, shares and property titles are legally ensured claims to the future profits of companies, states or individuals. Moreover, funds exploit the short-term fluctuations on currency and commodity markets, as well as bet on the development of share prices through derivatives called futures. Currently, there is more investment-seeking capital than there are profitable investment opportunities. On financial markets, this translates into price bubbles and, subsequently, rising rents, resource and food prices. Whenever these bubbles burst, financial markets are forced to seek new investment opportunities.⁵⁵

Land grabbing is a phenomenon that shows this particularly clearly. Since the financial crisis, the large-scale

> buy up of land by investors has increased sharply from around 2 million hectares in 2007 to 30 million in 2009 (Food and Agri-CULTURE).56 When the US mortgage lending market collapsed, investors began to seek new safe and long-term profitable investment opportunities.⁵⁷ Often, these massive land grabs serve to produce food for export, which is then processed industrially (for example, bioethanol or meat). Today, land grabbing is no longer restricted to the Global South; it also takes place in the US,

Europe and Australia. State funds and institutional investors - pension funds among them - participate in these deals.58

By depositing money with institutional investors or investment banks, many people are indirectly involved in this imperial hold on nature, which green grabbing takes to extremes. The concept encompasses the largescale surveying and marketing of nature. Not only agricultural land, but also so-called ecosystem services are offered as investment opportunities. Here a 'service' can be the reduction of CO₂ emissions. These savings — mostly in the Global South — are sold as climate certificates (see infobox on "Emissions trading and offsets"). For consumers, this offers opportunities for 'carbon neutral' shopping or flights to holiday destinations. However, these projects, allegedly designed to absorb CO2, are often large-scale activities that entail substantial environmental and social costs. Whether such projects actually reduce CO₂ emissions and the degree to which they effectively help protect the climate are contentious issues. However, this has not slowed the trend towards financing climate protection and adaptation through green finance, i.e. green investment products.⁵⁹

It would be hard to overstate the implications of these developments. Whereas the system has so far limited itself to turning 'only' land, resources and animals into a commodity, and subduing them to the cycles of capital, it has since taken hold of the entire biosphere—primarily, in its function as a sink for emissions and waste—making it fit for the market and converting it into an investment opportunity. This is only superficially about environmental sustainability. In reality, this shift aims to stabilise a form of production, which is dominated by financial markets, by granting investment-seeking capital new sources of profit.⁶⁰

Financial investments intertwine the mode of living in the Global North, and of the urban upper and middle classes, with this form of production. While the average employee does not contribute significant levels of capital directly, unlike 'high net worth individuals' (those with investable levels of wealth), a generalised interest in stable currency areas and growth regions nonetheless exists. Should the banking system collapse or capital funds run out of investment opportunities, not only managers would lose; a crisis would also threaten the deposits ordinary people have saved at banks and in pension funds. For solidarity-oriented policies that aim to privatise not only profit but also losses, cancel debt that negatively affects communities and protect life and nature from the grip of financial markets, this represents an obstacle.

Is a transformation of the monetary and financial system in sight?

During the 2007 financial crisis, calls grew louder for stricter controls on money and, in particular, finance. After the initial optimism and push for change had subsided, these demands came to nothing and brought no significant changes.⁶¹ However, more people now seem interested in sustainable investments and financial products.⁶² 'Ethical' banks such as Germany's GLS Bank, the Umweltbank and the EthikBank, or the Dutch-based Triodos Bank, have significantly grown their customer base.⁶³ Nonetheless, they remain a niche market in the banking sector. Moreover, it is questionable whether changes to consumption patterns at the individual level can really induce a shift within the overall economy.

Whether alternative buying and investing strategies effectively contribute to change remains contested. For ethical consumption patterns to have an effective impact on the structure of the economy as a whole, the participation of a large number of people would be required. Such an approach faces two main problems. Firstly, many would have to act against their short-term interests. Moreover, finding products that have been verified as environmentally friendly, socially just and economically affordable is not easy.⁶⁴ We still need to learn how to 'consume sustainably'.65 Such a shift would depend on changes to the education system, the media and advertising.66 The second obstacle for consumption-based approaches to transformation is structural. Generally, markets do not standardise, they differentiate. Environmentally friendly consumption and investment opportunities create niche markets for a wealthy and very specific customer base. As long as there are poor people, not everybody can 'afford' to consume ethically.

To reach a critical mass, changes to consumption patterns thus need to build on prior changes in other areas. State policy plays a key role here. Through legislation, the state can create binding standards for individual behaviour. Often, however, civil society must first begin the lengthy process to force state institutions to adopt the corresponding laws. Even then, lobby groups can water down the new legislation, pick it apart or even have it repealed. Since 2011, the financial sector has been lobbying (successfully) against the introduction of a financial transaction tax.⁶⁷

One approach mainstream politics is gradually beginning to consider is the idea of a universal basic income. The concept would give everybody a right to have basic material needs fulfilled and to social participation⁶⁸ and is therefore highly popular as a means of combatting poverty.⁶⁹ For modern pension policies, this approach also represents a paradigm shift. The pressure to sign annuity contracts backed by financial products would vanish. A basic income is an interesting approach for other reasons too. Feminist concepts such as the *care revolution* (CARE) also embrace the idea because "[while] economic security alone cannot ensure emancipation, it does provide a positive framework⁷⁰."⁷¹

If combined with a socio-ecological transformation of society, a basic income would certainly be capable of improving the quality of life and increasing economic efficiency. Outside of such a framework, however, it could just as well exacerbate the exploitation of labour and nature in the Global South. A basic income is also not the right tool to solve the economy's myriad structural problems, such as extreme wealth and income inequality and public and private household indebtedness. The positive effects of debt relief for over-indebted economies has been a topic of discussion since as far back as the 1980s. As the second segment of this chapter (Systemic debt) describes, debt relief does not cancel out wealth that would exist outside of creditor/debtor relationships. Without debt, there is no credit. Instead of a benevolent act of 'debt cancelling', we should rather see debt relief as a necessary regulatory intervention to correct a situation in which the conditions of credit (interest, austerity policies) undermine an economy's overall functioning and prevent it from fulfilling its role as a welfare provider.

There are different approaches to debt relief. In recent years, for example, the IMF has been developing the 'Sovereign Debt Restructuring Mechanism'. Unfortunately, its focus is the interest of creditors to get the largest possible share of their credits paid back. A different approach is 'debt auditing'. An 'audit', a kind of 'investigative committee' that involves the pubic and civil society, endeavours to analyse the origin and history of a country's debt. Pressured by social movements, the committee investigates which loans were received under questionable conditions or were used for questionable ends. Any debt that falls under either of these categories is subsequently cancelled. This concept therefore focuses not on a charitable or regulatory act, but instead on the democratic monitoring of the state and the financial markets.73

An approach that proclaims to work "outside of the market and states" is *commoning*.⁷⁴ Its fundamental premise is that property is at the root of scarcity. People own goods without using them, thus making them

unavailable for others to use elsewhere. Commoning stands this logic on its head.⁷⁵ However, the idea is not for people to rent out their car whenever it is not in use; it is about enabling open (cost free), yet nonetheless regulated, access.⁷⁶ Making commodities available in this way could promote people's engagement in society as it would make people more dependent on each other and allow them to contribute instead of exchange goods, i.e. to work not to earn money but instead to do something meaningful, or essential, together. This idea is not really new. In certain times and regions, farmland was organised as a commons, i.e. the village community would work the land collectively (see HISTOR-ICAL OVERVIEW). A commons approach would depend on recreating such a vision of a shared use of the means of production. Moreover, feminist approaches expand the concept to include spheres outside of what is generally considered the economic sphere, for example, providing care work (CARE) through cooperatives.

As sensible as these alternatives are, they can only make up for the exclusion of the poor in a limited number of cases. Beyond these isolated scenarios, money-fixated economic forms continue to thrive. A transformation of the money and financial system will therefore require different integrated approaches at multiple levels. As a concept, ethical consumption can highlight

negative forms of production in our economic system and create opportunities to experiment with sustainable and fair methods of production. State policy can, if driven by public pressure, establish framework conditions for other forms of production and consumption. Yes, this will not tackle the extreme inequalities that currently exist on our planet: according to Oxfam (2017) eight men own as much as half of humanity (Figure 5.1). Broad social movements must fight for a structural transformation that curbs the power of financial markets, of investment-seeking capital and of debt. Commoning is an important approach if economic ruptures and systemic reforms are to lead to an alternative to our profit- and growth-based economy. The alternatives presented here—barter circles, universal basic income, debt relief or commoning—can only become realistic options if pioneering projects, social movements and institutional strategies implement and connect these different approaches.

Do you agree?

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

Endnotes

1	Diestelmann & Zacharakis, 2015	39	Facing Finance & Urgewald, 2016
2	Bose, 2008, p. 2	40	Keen, 2011
3	Binswanger, 2008	41	Jakab & Kumhof, 2015
4	Kellermann, 2017	42	Binswanger, 2009, pp. 3-5
5	Habermann, 2016	43	Attac Austria, 2017
6	Habermann, 2016	44	McNally, 2009
7	Graeber, 2011	45	Zeller, 2012
8	Seibert, 2015	46	Stockhammer, 2013
9	Kitzmüller, 2007	47	Attac Austria, 2017
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29	Tenhagen, 2016	67	Moritz, 2013; Neuhaus, 2014
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EDUCATION AND KNOWLEDGE

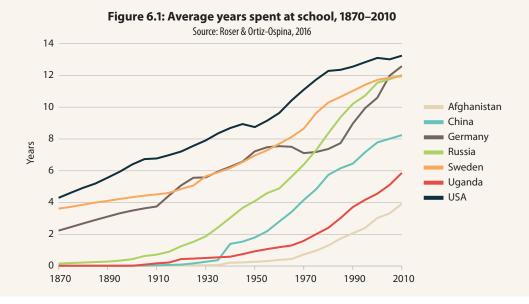
... for they know not what they do? Knowledge, education and the imperial mode of living

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.

ducation 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.

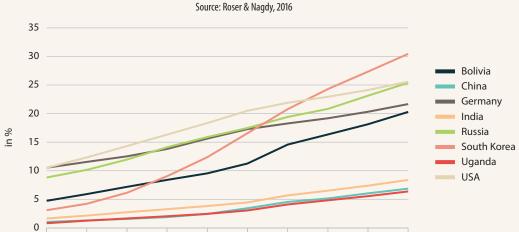
Education plays a fundamental role in society. More and more people spend ever-longer phases of their lives in educational institutions and the global trend clearly indicates a further expansion of formal education (Figures 6.1 and 6.2).1 Decision makers in politics and business usually hold advanced 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. 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')*



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



1995

2000

2005

2010

2015

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

1975

1980

1985

1990

1970

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.«

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,

(Baron Macaulay, 1835)

Publications by the Berliner Entwicklungspolitischer 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. 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'. 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. In

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.

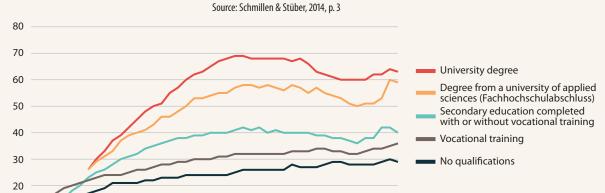
Assigning people their place in the pecking order

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.

of classification decisions were out of step with the actual abilities of the children concerned.
(Muñoz, 2007)

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



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

30

34

38

42

Age in years

46

50

55

59

63

The education system mirrors society

In € 1,000

10

0 r 18

22

26

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". 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 quasirational "gaze from nowhere"25 (FOOD AND AGRICUL-TURE). 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 metropoles 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 (HIS-TORICAL 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 hightech sector" that Germany must largely import (DIGI-TALISATION). 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 evergreater 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, dissemble, systematise it and extract isolated information or 'data'.62

of which had Nevertheless, in medical research, for been genetically example, the benefits to humankind may modified.« 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.

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2.8 million animals

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

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.



FIRST PLACE

CBD's Bonn Guidelines on Access and Benefit-Sharing

For creating the illusion that equitable benefit-sharing is being addressed while facilitating biopiracy and promoting intellectual property. "Capacity building" proposals for indigenous peoples would enable them to become partners in the piracy of their own resources.

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-



FIRST PLACE

Syngenta

For its Terminator-like patent designed to prevent potatoes from sprouting unless an external chemical inducer is applied.





"NOST SHAMEFUL ACT OF BIOPIRACY.

FIRST PLACE

US Government

For imposing plant intellectual property laws on war-torn Iraq in June 2004. When US occupying forces 'transferred sovereignty' to Iraq, they imposed Order no. 84, which makes it illegal for Iraqi farmers to re-use seeds harvested from new varieties registered under the law. Iraq's new patent law opens the door to the multinational seed trade, and threatens food sovereignty.



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.



"WORST SMOKES CREEN"

FIRST PLACE

The Public Research and Regulation Initiative (PRRI)

For tirelessly advocating and defending corporate biotech interests under the banner of publicly funded researchers.





"GREEDIEST BIOPIRATES"

– A TIE –

FIRST PLACE Coca Cola

For massively profiting from Stevia in their beverages while traditional growers, the Guarani groups living across Paraguay and Brazilian borders, make very little; and developing syn bio stevia with Evolva threatening the livelihoods of those farmers even further.

FIRST PLACE Clarins

For patenting African medicinal knowledge of the harungana tree, selling its product for US \$7000/kilo and paying \$2/kilo to African farmers for dried leaves (and then for calling it "Fair Trade").



CLARINS

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. 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

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FOOD AND AGRICULTURE

Eating like kings

Our steaks come from Argentinian cows and the teas we enjoy snuggled on our couch are handpicked by women in India. This is the reality of the imperial food system. Kings need subjects to exploit. But is this really what we want? Or might there be a better way?

icture yourself at your local supermarket. You fill up your trolley as you pass through the bountifully stocked aisles. Your shopping list is long; the variety of foodstuffs on offer appears endless. You feel spoilt for choice. But then ... you grab something. It's that new chocolate bar that you've seen in ads—you just have to buy it. On you go to the meat counter ... For more and more people in places around the globe, from Central Europe to South Africa and to China, this shopping experience is increasingly part of their everyday lives. They conveniently consume cheap food from all over the world. This form of eating, however, has an extreme downside: millions of people suffer from hunger.

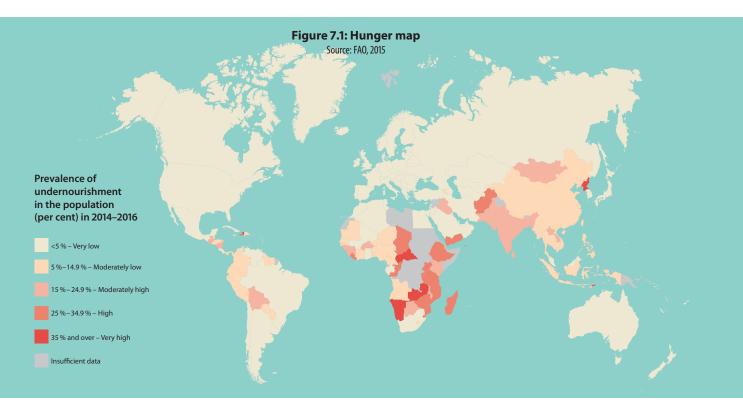
Hunger in spite of abundance – how can that be?

Even in the 21st century, hunger is a reality for 800 million people around the world (Figure 7.1). It may initially seem paradoxical, but whereas small-scale farmers produce around 70 per cent of the world's food, the

majority of those suffering from hunger are also farmers, farmhands, shepherds or fishers.³ At least in theory, the amount of food that is produced today could feed 12 billion people.⁴ In the face of a growing global population, however, the Food and Agricultural Organisation (FAO) nonetheless considers it necessary to further increase agricultural production as it believes only this will ensure global food security.⁵

This stunning dichotomy leads to several questions. How is it possible that while one part of the global population can effectively eat whatever it likes, the other regularly goes hungry or even dies of famine? Can the usual measures to ensure food security solve this contradiction between overconsumption, on the one hand, and hunger, on the other? Why is it that despite our food system being confronted with a conversion of multiple crises (for example, food crises, shortages of resources and ecological crises), nothing changes?

To answer these questions, we will apply the concept of the imperial mode of living to our agricultural and food system and show how the imperial food structure is connected to the industrialisation of agriculture and defines the global supply of food. We shall then look at the impacts of this food system on labour and the biosphere, before also examining meat consumption, supermarkets, as well as issues related to land and soil. Together, these fields reveal how deeply ingrained the imperial diet is in our attitudes and behaviour, and show the institutions and infrastructures that not only



make it possible but safeguard the status quo. The final section of this chapter then discusses the steps towards socio-ecological forms of food consumption that could set the wheels in motion for a completely new perspective: the idea of good food for everyone.

The road to industrial agriculture

As capitalism developed, agriculture became subject to increasing industrialisation, and this has had a deep impact on its social and environmental foundations. The sector's increasing consumption of oil plays a key role (see infobox on "Fossil food").

> Modern agriculture has become the art of turning oil into food.«

> > (Clark and York, 2008)

Thanks to fossil fuels and cheap transport (MOBIL-ITY), food can travel around the globe and still end up 'fresh' in our trolleys. Getting food from farms to harbours and airports and distribution centres in food industry hubs, and from there to supermarket stores, depends on a corresponding infrastructure that requires the necessary means of transport. 'Food mileage' increases further if we shop by car. To believe that locally produced food is always better in terms of lower CO2 emissions, however, would be a misconception. A locally sourced apple that has spent considerable time in a cold store can have a worse CO2 footprint than imported but freshly harvested fruit.10

Food production's considerable dependency on fossil fuels poses a significant risk to future food security. Fossil fuels are becoming scarcer, and when their prices rise (or become increasingly volatile), so too does the price of food. Geopolitical conflicts over oil and gas are also becoming more frequent.11

Formerly a closed loop system, the industrialisation of agriculture has led it to become a through flow system based on inputs and outputs.12 While the former system was adapted to local conditions and produced (or bred) its own energy, seed, fertilisers, fodder and animals, the latter now depends on buying most of such inputs from external sources. This approach increases the dependency of farmers on the companies that provide inputs, such as seed, fertilisers and fodder, as well as on those who buy farmers' produce for further processing and/or direct sale.

Ever fewer corporations control the food market

Farmers now 'externally' source their inputs for production from an anonymous (global) market. Food becomes separated from the conditions and location of production and appears to come from "nowhere".13 Free trade agreements further encourage these ties with the global market. A growing gap between farms that are export-oriented and those that produce for local markets develops. WTO-backed trade liberalisation has led to price dumping and rural exodus, which has destroyed the livelihoods of around 30 million smallholder farmers in the Global South.14

INFOBOX

Fossil food - we are eating oil

The expansion of industrial forms of production has transformed agriculture from an energy producing into an energy consuming system. The average amount of energy supplied to the agricultural industry has grown 50 fold over the past 60 years. The food sector currently consumes around 30 per cent of global energy⁶ and produces 40 per cent of greenhouse gas emissions.7 To produce one calorie of food, industrial agriculture requires an estimated 10 to 15 fossil fuel calories.8 Many people are therefore literally eating oil and this is driving climate change.

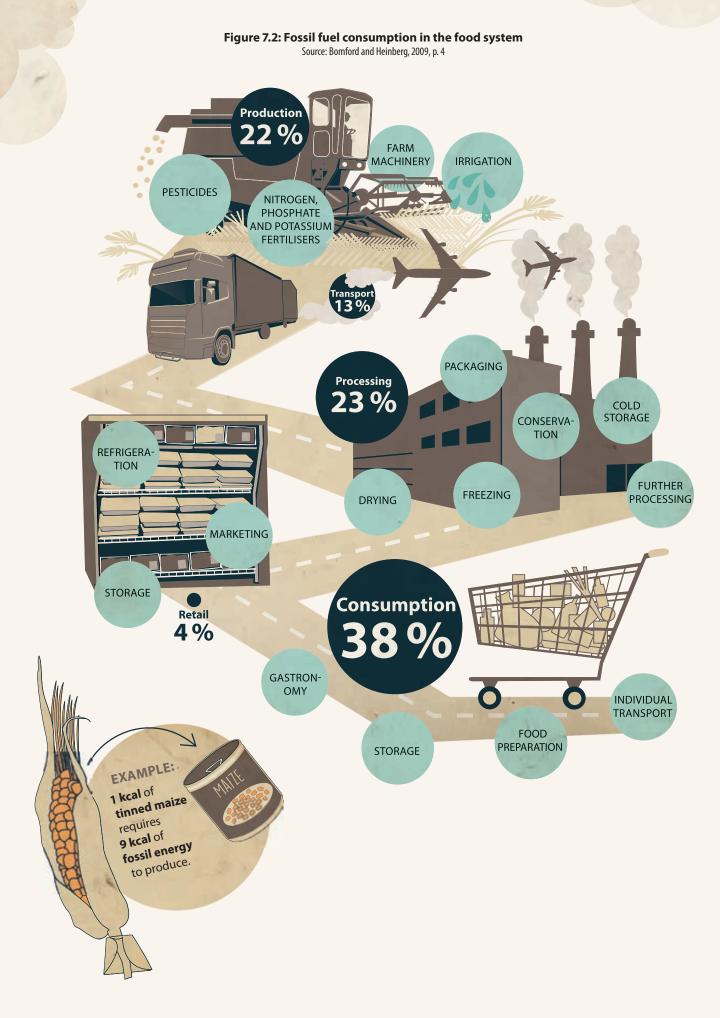
(Fossil) fuels are part of our food in numerous ways (Figure 7.2). Food processing (conserving, freezing or drying), packaging, storage, transport and preparation take up the largest share of energy in our agricultural and food system. Together, these processes account for around 70 per cent of the total energy input. Only around 30 per cent of fuel input actually goes to producing food.9

A highly opaque network of value chains is creating a significant concentration of power, leading an eversmaller number of stakeholders to dominate the sector (Figure 7.3).15 Global pesticide and seed production is controlled by a few multinational corporations. They produce nearly all genetically modified plants and own the majority of plant patents. Potential corporate mergers could now soon leave just three corporations in control of 60 per cent of the pesticide and seed market. The merger of Bayer and Monsanto would turn the conglomerate into the largest corporation in the sector, allowing it to preside over one third of commercial seed and one quarter of the market for pesticides. Having such power over the market also allows corporations to wield vast influence over legislation and politics.16 The powerful agribusiness, food and trade corporations thus push industrialisation in all areas of food production to serve their own interests. To them, the process's inherent logic of 'grow or die' is simply unavoidable structural development. This increases the pressure on farmers to expand, intensify production and increase their buying of external inputs. They become increasingly dependent on markets and their risk of indebtedness (Money and finance) rises.17

Increasing productivity: is more always better?

The market imperatives of competition, profit maximisation, growth and productivity define agriculture. Competition leads to permanent pressure to cut wages and production costs. The productivity gains made by industrial agriculture during the second half of the 20th century are historically unique. Total output (factor 2.6) grew faster than the global population (factor 2.4) while the share of workers in the sector around the globe dropped from 65 to 42 per cent during the same period.18 However, a narrow understanding of productivity provides the basis for these figures.

The development of industrial agriculture is a historical process that continues to this day. It is an open and, to a certain degree, contested development, which means that its course can be changed.



This is because the concept ignores the social costs, such as the impact of crowding out through competition or debt, and does not consider that - regardless of severe environmental impacts — industrial agriculture's productivity gains require resources and new technologies. In a report on the environmental food crisis, the United Nations Environment Programme (UNEP) highlights that the system has increased yields mainly by using more water and fertilisers. Agriculture today uses around 70 per cent of the world's available fresh water, three times more than 50 years ago.¹⁹ This mode of production poses new problems: since the 1970s, the productivity gains have slowed down significantly.²⁰ This is partly due to decreasing natural soil fertility (humus content).21 Current methods used in industrial agriculture (high-yield seeds, agrochemicals, monoculture production and irrigation) provide no answer to this problem. Fertilisers too have lost their capacity to boost growth further (Figures 7.4.1 and 7.4.2).22 Accordingly, the UNEP predicts that the area occupied globally as farmland will increase. Land, however, is already the source of numerous conflicts (see below).²³

The imperial aspects of our food

Industrial agriculture is expanding globally. In the name of progress, it is replacing other forms of production and thus destroying the livelihoods of millions of people. This process is closely tied to corporate strategies as well as economic, agricultural, trade and geopolitical policies. It is geared towards the needs of consumers with 'substantial purchasing power' (Figure 7.5)24 and linked to what they perceive as a 'modern' and 'decent' standard of living: meat has to be cheap and exotic fruit constantly available. Industrial agriculture provides the basis for imperial patterns of food consumption. It ensures the seemingly limitless variety of foodstuffs in our supermarkets as well as our freedom to choose what we want to eat, as well as when and where we eat it. Our society does not question the capitalist logic that underpins this system, nor does it consider the power structures that secure this mode of food consumption. By appearing to follow the mantra that unlimited and cheap access to resources and labour from elsewhere should be available as a matter of course, our current food consumption habits are undoubtedly imperial in nature.

Figure 7.3: Who controls our food?

Concentrations of power in the global value chain

Source: Public Eye, 2014, p. 3

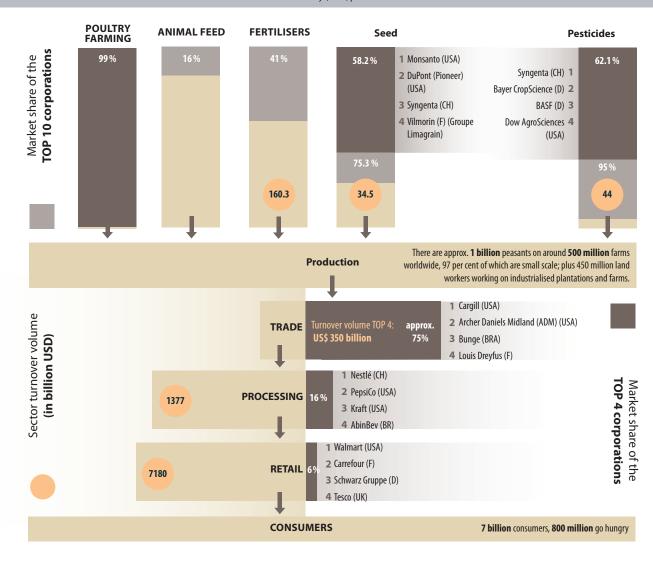


Figure 7.4.1: Global application of chemical fertilisers in millions of tonnes

Source: Alexandratos & Bruinsma, 2012, p. 129; Heinrich Böll Stiftung et al., 2015

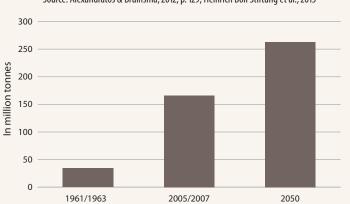
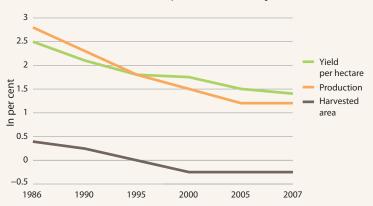


Figure 7.4.2: Yield and production growth in agriculture in per cent

Source: Alexandratos & Bruinsma, 2012, p. 129; Heinrich Böll Stiftung et al., 2015



Thirst for resources

As we have seen, industrial agriculture is a resource hungry, linear through flow system (see infobox on "Fossil food"). As such, a growing number of transnational consumers (GLOSSARY), who are consuming ever-larger quantities of meat, exotic fruit and processed foods, are inexorably leading global resource consumption to rise. And the impacts this is having on the environment are considerable.

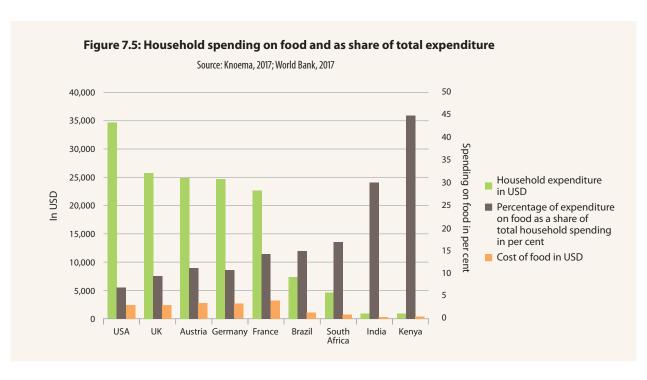
We are wasting food - and our planet

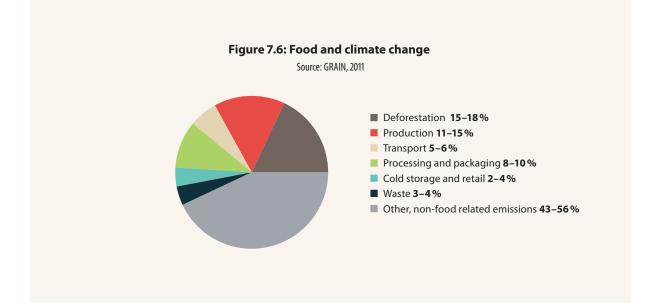
Livestock farming, and meat production in particular, reveal the scale of our thirst for resources and the subsequent control these industries have over farmland. As pastures have become scarce around the globe, further increases in meat production therefore depend increasingly on animal fodder. Fodder production, however, requires arable land. Most of the animals we raise today for slaughter eat more maize, soy, wheat and other grains instead of grass. At least 40 per cent of global cereal harvests and a large share of oilseed meals, in particular soybean meal, end up in animal troughs.²⁵ Wetlands, grasslands, woods and fallow lands are thus being turned into arable land. The calories that are lost by converting plants into animal products could feed 3.5 billion people.²⁶

The drastic amounts of food that are lost between farm and plate are a further problematic aspect of today's food and agricultural system. Estimates reckon that up to one third of the food produced globally is thrown away. According to the FAO, this amounts to a staggering 1.3 billion tonnes annually.²⁷ The resources and labour needed to produce this food are simply wasted.28

The true costs

Figures provided by the Intergovernmental Panel on Climate Change (IPCC) show that agriculture is currently a key contributor to climate change. Taking into account the aggregated impact of the sector on the climate (i.e. including the emissions from food processing, packaging, transport, storage and waste), between 44 and 57 per cent of global greenhouse gas emissions are food-related (Figure 7.6).29 For food production, this represents a significant challenge — the sector will have to reduce its emissions substantially, not least





because greater demand and changes to food consumption patterns are set to increase greenhouse gas emissions over the coming decades. The IPCC also considers that by 2050 the food security index will drop globally by 15-40 per cent due to a number of factors, including climate change.30

Those responsible often shift the burdens caused by their thirst for resources upon others. The same is true of the related environmental costs (Figures 7.7 and 7.8).31 'Other' people and 'other' natural environments bear the consequences. These externalised costs are excluded from overall pricing: food becomes artificially cheap.³² It also helps put the 'efficient' nature of industrial agriculture in a better light. The erosion and salination of soils, the excessive consumption of water or the loss of biodiversity are not considered factors. The same holds true for the growing toxicity of agriculture and increasing environmental degradation (chemical fertilisers, agrochemicals and waste).33 According to a study conducted by KPMG, our agricultural and food industry system entails environmental costs that are equal to 225 per cent of its profits—a feat unmatched by any other industry (Figure 7.9).34

A thirst for resources, the squandering of food and the impacts this has on the climate and environment illustrate that our imperial food system cannot be universally applied. Moreover, this use of resources does not benefit all people to the same degree. The enforcing of private property rights, the development of new markets and the market power of a limited number of corporations, who subsequently have almost sole control over our environment, reinforce this trend (for example, the issuance of patents for seed or privatisation of water and land rights). The imperial food system is insatiable and exclusive. Accordingly, the number of conflicts over the control of our natural resources will undoubtedly rise.

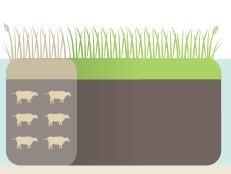
Cheap labour, but for whom?

The relaxing herbal teas we enjoy are the fruits of hard physical labour, picked by people working for hunger wages in India.35 Exploitation is integral to keeping the price of food in supermarkets low. In spite of agriculture being the sector that employs the highest number of people globally, labour conditions in the industry are almost never discussed. According to estimates pro-

38% of global land mass

is used for agriculture

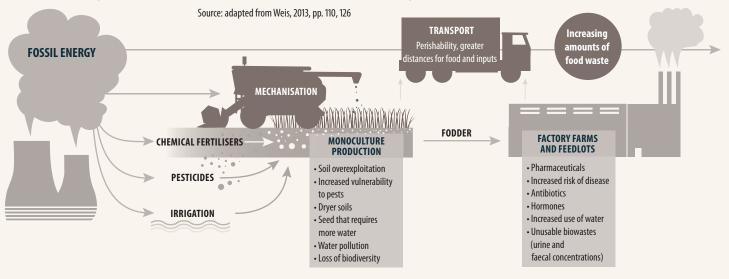
Figure 7.7: Global thirst for resources Source: FAO, 2016; Hoekstra, 2012; IAASTD, 2009a; Steinfeld et al., 2006



75% of crop diversity has been lost since the introduction of commercial uniform seed

33% of total arable land is used to produce fodder

Figure 7.8: The hidden environmental costs of industrial agriculture

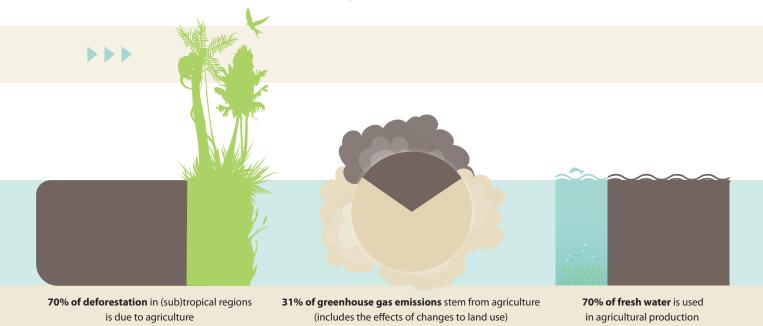


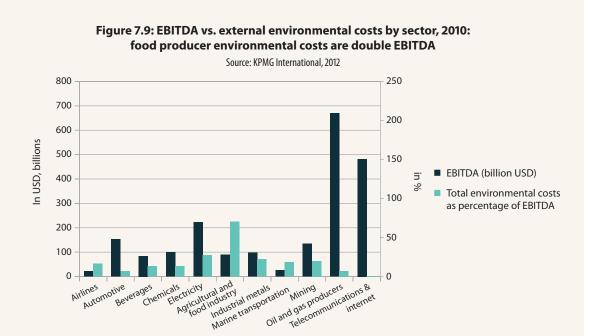
vided by the International Labour Organization (ILO), agriculture directly employs around 1.3 billion people, which is nearly half of all wage labourers globally.³⁶ If you include those who indirectly depend on agriculture (such as children and family members), this figure doubles.³⁷ A characteristic trait of the sector, however, is widespread *precarious employment* (Glossary) and the abuse of labour and human rights. While industrial agriculture has greatly increased labour productivity, many parts of the sector remain highly labour-intensive, for example, the production of vegetables and fruit or the slaughtering of animals. To cut costs, employers are increasingly turning to 'cheap' labour.³⁸

Cheap often comes at a high cost to workers

Banana and tea plantation labourers are a prime example of the true cost of 'cheap produce': 200 million of these workers are chronically malnourished.³⁹ Poverty and hunger are thus not simply related to low income, but are also the result of discriminatory and

exploitative labour conditions. Strict hierarchies on these plantations govern the relationship between workers and their superiors. Many work excessive overtime and are exposed to health hazards. There is an endemic lack of social and legal security because the standards in agriculture are not only particularly low, they are also hard to control. Moreover, unionisation is prevented, often systematically or even through the use of violence.40 Next to construction and mining, agriculture is among the most dangerous employment sectors. At least 170,000 workers in the agricultural sector die each year as a result of occupational accidents, in particular those involving machinery and tools. 41 One example are slaughterhouses. The highest number of accidents in any type of industrial operation occurs in slaughterhouse production lines. Here salaries are extremely low, work is physically demanding and the psychological stress is high.⁴² Furthermore, three to five million cases of pesticide poisoning occur annually, 346,000 of which are fatal.43





Modern slavery on the backs of migrants and women? The agricultural sector employs a particularly high percentage of migrant workers, for example, on plantations or in food processing.44 The inhumane working and living conditions in Almeria's 'sea of plastic', 45 where tomatoes are grown, or the orange plantations of Rosarno⁴⁶ are just two examples. 47 In the US, too, one million Latin American immigrants, 40 per cent of whom are undocumented, work in agriculture. 48 This is by no means a coincidence. As they have fewer and only weakly secured rights, an unclear residency status and are often the victims of racist discrimination, 49 undocumented migrants are easier to exploit. Often they have no other choice but to accept temporary, poorly-paid and health-damaging work.50 Many women too are systematically disadvantaged and discriminated against in agriculture.51 Their salaries are generally lower than those of men and they are often involved in unpaid tasks. In Asian⁵² and African⁵³ countries, in particular, women tend to receive less education and training than men and have only limited access to counselling and loans.54

Exploitative class and gender relations as well as racist discrimination are widespread in the food sector. A closer look reveals that these conditions are in fact a precondition for and support the imperial mode of production and living. Here work is considered a 'resource' that is apparently 'cheap' and available in unlimited supply. This is why exploitation provides the basis for 'our' affluent societies' tremendous wealth.

How the imperial food system shapes our everyday lives

In the Global North, the imperial modes of living and eating have become a way of life. As we have seen, these are tied closely to the development of industrial agriculture. After looking at the production side of the imperial food system, we will now turn the spotlight on consumption. Why is it that in spite of rampant global injustices and environmental issues the system remains unchanged? Meat consumption highlights how the imperial diet and its associated privileges are anchored in our thought patterns and eating habits. Supermarkets are a good example of how institutions and stakeholders both enable and secure the imperial diet, and the issue of land shows how the infrastructures built by powerful stakeholders contribute to maintaining and generalising this mode of living.

The right to our daily steak

Per capita meat consumption has nearly doubled over the past 55 years. During this time, the global population has also doubled (Figure 7.10).⁵⁵ Global meat production has therefore quadrupled, going from 75 to over 300 million tonnes.⁵⁶ In 2012, 65 billion vertebrate animals were slaughtered, an average of 10 per person.⁵⁷ The global rise in meat consumption is linked to the deeply rooted conception that meat and animal products are somehow superior foods—that the proteins they offer are better than those available in plants. Cor-

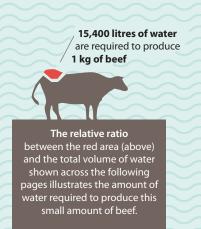
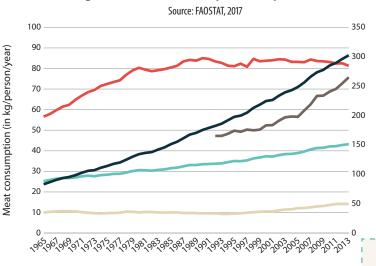


Figure 7.10: Meat consumption and production



Global consumption
Consumption
(48 poorest countries)
Global production
Global production
BRICS consumption
(Brazil, Russia, India,
China, South Africa)



respondingly, more and more people see eating meat as part of a 'better' and 'healthier' lifestyle (in accordance with Western standards).⁵⁸

Diet in general and meat consumption in particular function as social *status markers*. People's increasing consumption of meat suggests progress, the superiority of humankind over other living creatures and nature, as well as cultural and social power. Many societies consider eating mostly red meats a symbol of 'masculinity', of 'the beast' within.⁵⁹ Advertisements portray the man stood proudly over his BBQ as some sort of 'hero'. High-gloss magazines for 'men of taste' focus on male culinary pleasures, i.e. meat and alcohol. This gendered identification with meat is also evident in the fact that German men eat on average twice as many meat and sausage products as women.⁶⁰

This inequality in levels of meat consumption is a global phenomenon: in 2013 per capita meat consumption in Germany and Austria was 86 and 91 kilogrammes respectively and therefore significantly higher than the global average of 43 kilogrammes.⁶¹ Meat consumption remains high and constant in the US and Europe, and globally it is rising in line with per capita income growth. Mainly in the BRICS countries (Brazil, Russia, India, China and South Africa), but also in Asia, the consumption and production of meat is rapidly increasing.⁶² Just as there are poor and affluent nations, the gap between poor and rich also exists within societies, although it is harder to define. The upper and middle classes, in particular—a growing class of transnational consumers—are expanding their consumption of meat.63 However, on a global scale, this development is bypassing the poor.

INFOBOX

Humankind and animals – "Humans are animals that have forgotten that they are animals" 64

In our relationship with animals, there exists a characteristic contradiction. For our beloved pet dog, we buy premium dog food that contains lamb or veal. Whether we see an animal as a pet, food or as essential to research (Education and knowledge), or even exterminate it as a pest, depends solely on the context. Rabbits, for example, may fall into any of these four categories. 65 On the one hand, we identify with animals from a very young age: we read about them in children's stories and build emotional relationships with our pets (and occasionally with livestock animals too). On the other hand, we consider animals to be our exact opposite: they are in their natural state, instinct driven or viewed as the other. We use their names as terms of abuse — or see them as just a piece of meat on our plate. Industrial agriculture reduces animal bodies to a mere means of production, a fact that is closely tied to the development of industrial capitalism. Decades before Ford's Model T assembly lines, the slaughterhouse production lines in Chicago allowed managers to centrally control the speed of work (Historical overview).66 This development allowed for a dramatic increase in the volume and speed of meat production, and had a negative knock-on effect on workers and animals.⁶⁷ Fences and boxes ensure the permanent access to animal bodies that are controlled from birth right up to their death. Modern chicken slaughteries can kill and process several hundred thousand chickens per day.⁶⁸ This also makes the infrastructure of industrial meat production possible, which creates a spatial and hence emotional distance between (livestock) animals and people. It is no longer possible to know where the animal came from, what it ate and how it was held and slaughtered. For years, farmers and animal rights activists have argued over whether an animal-friendly approach to livestock farming is at all possible. The idyllic settings of meat advertisements and more and more labels promoting animal-friendly meat products suggest that everything is as it should be. But cheap and continuously available industrial meat products remain the norm in society.

We eat them every day — for breakfast, lunch and dinner.







Being able to consume meat is a privilege. People who eat greater amounts of meat and animal products, such as milk, eggs and cheese, also have a greater impact on the biosphere and contribute more to the exploitation of animals. Resource-intensive, environmentally damaging and exploitative, a predominantly meat-based diet is on the rise globally. Those who profit from the system seem to think it is somehow natural, or even their right, to claim a particularly large chunk of the cake for themselves, while many others go empty-handed. As consumers have this attitude so deeply ingrained in their consciousness, they are prone to be blind to the consequences of their actions.

What makes it onto the supermarket shelf? Supermarkets' role as gatekeepers in our food system

Supermarkets have become integral to our lives. But why? In our latitudes, they largely organise the sale of food to consumers. Yet, why do we think this is 'super'? Numerous promises make this model so attractive: commodity abundance, nearly permanent availability—even for 'people with little time'—the feeling of independence that 'free' choice affords; and, not least, cheap prices. Advertisements attract us with promising slogans such as "best price offers" and "the customer is king". People rarely ask who bears the real costs and whether, how and for whom supermarkets fulfil these promises. To answer these questions, we need to look 'behind' the façade of supermarket shelves.

Big eats small then bigger eats big.«
(Reardon et al., 2003)

Since the early 1990s, the *balance of power in our food system* has shifted consistently to the benefit of the food retail industry. Supermarkets today play an important role as 'gatekeepers' between producers and consumers. In many countries this has led to a corresponding concentration of markets and business power. In Germany, the five leading supermarket chains (Edeka, Rewe, Aldi, Lidl and Metro) control around 90 per cent of the market,⁶⁹ whereas in Austria, the dominant chains (Rewe, Spar and Hofer) control an 87 per cent market share.⁷⁰ These figures are linked to a key overall development: the saturation of food markets in the Global North (Figure 7.11)⁷¹ and, correspondingly, harsh competition over market shares.

To prevail in spite of competition, supermarkets have developed several strategies. First, they introduce an increasing number of (new) products onto the market. According to estimates, food retail businesses annually launch around 12,000 new products in the UK alone.⁷² Furthermore, they attempt to add 'new' meanings to products, presenting them in 'idyllic rural settings', or by linking them to 'health benefits' and 'well-being'. Moreover, product labels make claims to be particularly 'fair', 'CO₂-neutral' or 'environmentally friendly'.

Secondly, supermarkets fight hard price battles. The power supermarkets have in the industry allows them to set and cut prices—at the expense of workers,⁷³ farmers and the environment. Supermarkets also define the quality and kind of products they offer.⁷⁴ One example are supermarket own-brand products. Instead of depending on the brands of other stakeholders, supermarkets put what appears to be the same products on



the shelves but under their own brands. By doing this, supermarkets make suppliers dispensable, pitting them against each other. By means of this lever, supermarkets enforce conditions favourable to them. Moreover, they can interfere in the production process.⁷⁵

Thirdly, the liberalisation of trade and investments, as well as the deregulation of agriculture markets, permits the food sector to enter new markets (Figure 7.12 and Table 7.1). Foreign investments and the acquisition of smaller local super market chains often serve as a way in. Local chains usually already have an established position on the market and know local consumption habits. In many cases, the victims of harsh competition are local dealers and producers. Greater global market competition and price pressure on the global market means they cannot keep up with delivery, price and quality standards. New job creation can only partially offset the impacts. Hence, the large supermarket chains suck up regional value creation and, as a consequence, destroy the livelihoods of countless people.

Supermarkets today hold crucial sway over our food system. They provide the basis for and promote the imperial food system. Consumers get to choose between products only once they are already on the supermarket shelf, i.e. long after the key decisions have been taken. The imperial diet supermarkets offer is not built simply on consumer 'demand'. Corporations implement economic strategies and political actors often create the necessary framework conditions that secure advantages for food corporations. The increasingly powerful position of supermarkets is diametrically opposed to a just global food system.

How much soil do people need?

Soil is valuable. Without healthy soils, there can be no agriculture. Soil is therefore the basis of food production. Nonetheless, there are very different approaches to land and soil management. Andean culture, for example, traditionally considers land as a commons. Land is unsellable and should be responsibly used and maintained by the local people.⁷⁹ Land grabs, however, which turn land into private property, a commodity or object of speculation, are nonetheless a burgeoning global phenomenon. A diverse group of stakeholders aims to use the globally available arable land for their own interests. To make their claims irrevocable, they create an array of framework conditions and infrastructures, including the building of roads to remote areas (MOBILITY), creation of ownership regimes, or securing favourable conditions for investments in arable land (Money and finance).

As we have seen, due to the rising consumption of animal products, the imperial food system hinges on claiming ever greater swathes of agricultural land (Figure 7.13).80 Vast cereal and oilseed monoculture fields are typical for many regions today, speckled by islands of intensive livestock operations. A sophisticated transport network provides the necessary infrastructure, for example, to import fodder from South America to Europe and then deliver packaged pork to China.81 However, not only food and fodder production require land. Increasingly, energy crops (see infobox on "Agrofuels") and agricultural raw materials for industrial processing (such as cotton) are part of the mix.82 Naturally, this involves claims to land all over the world. Just to

Table 7.1: Branches of transnational supermarket chains in developing and emerging countries Source: Luig, 2014

	Walmart (US)	Carrefour (FR)	Auchcan (FR)	Metro (DE)	Tesco (GB)	
World	10,739	10,376	3,500	1,240	7,384	
Mexico	2,226					
Guatemala	213					
Costa Rica	216					S.
Chile	388					untrie
Argentina		521				tion co
Brazil	557	241				lestina
Senegal			4			s and c
Tunesia			82			npanie
South Africa	352					int con
Pakistan				9		ignifica
India	20	5		16		most s
Thailand					1,737	of the
Malaysia					49	ection
Vietnam				19		o a sel
Taiwan		69	48			mited t
South Korea					433	able lir
China	401	236	386*	78	134	Note: table limited to a selection of the most significant companies and destination countries.

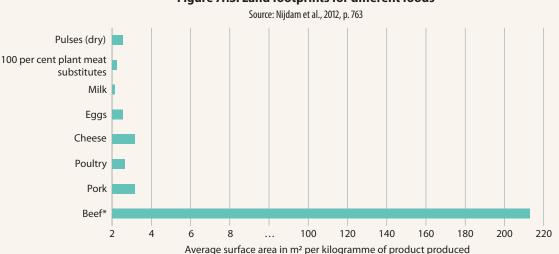
cover its demand for agricultural products, Europe alone 'imports' around 120 million hectares of land annually, an area greater than Scandinavia.83 Whereas the increasing concentration of land was a slow process up to the early 2000s, this has since developed into a global race for agricultural land. Seeking 'secure' investments and investment opportunities, a range of non-agricultural sector stakeholders, such as states, transnational corporations and banks, have ventured into agriculture. Today investment funds and banks offer land and agrarian products in their portfolios, often purely for the purposes of speculation (Money and FINANCE).84

The Land Matrixⁱⁱ project alone registers 323 cases in which 182 companies based in the EU are involved in land grabbing (GLOSSARY) in 52 countries outside of Europe. 85 This affects 5.8 million hectares (Figure 7.14). 86 Contrary to common assumptions, land grabbing is also a phenomenon in Europe. Moreover, in this part of the world, the extreme concentration of land in a very small number of hands is a problem.87 It has led to 3 per cent of the largest farms controlling 52 per cent of total farmland, whilst the smallest 75 per cent of farms work 11 per cent of the land.88

Land deals are often based on intransparent and unequal negotiations between investors, agribusinesses,

An independent initiative to monitor developments in the fields of land and investment, see: www.landmatrix.org/en/.





*Large variations (between 7 and 420 m² per kilogramme of product) depending on the type of livestock operation

governments and their local representatives, as well as with those who have been using the land to date. Investors make residents attractive offers such as a fixed salary as land workers, or promise to build schools and health centres. However, the lack of information or protection that investors and governments provide to those affected is problematic. In many cases, violence paves the way to land grabs.⁸⁹

The unlimited acquisition of land by diverse stakeholders often implies turning commons into private property. Mostly, this occurs in the Global South. The establishment of a land market, new property regimes and corresponding forms of usage require surveying and the registration of land titles (EDUCATION AND KNOWLEDGE).90 Even discourse on development policy sometimes portrays the private acquisition of land in a positive light. For example, when the state provides the poor with official land titles, a process which boosts the value of what had previously been 'unused' land by opening it up for private investment. Usually such measures completely ignore the consequences that arise at different levels for those individuals, communities and environments affected.⁹¹ In this vein, the nations of the G8 established the New Alliance for Food Security and Nutrition. Over 100 private stakeholders are invited to sit at the table where they can actively shape international aid according to their concepts and to their own benefit—a current development policy trend.92 The alliance receives billions in development aid, including from the EU, to fight rural poverty and hunger in Africa. Public-private partnerships INFOBOX



Agrofuels – food for tummies or for tanks?

Agrofuels promise a new, climate-friendly alternative to fossil fuels based on renewable resources. Moreover, investments in the sector offer profitable and apparently stable investment opportunities. According to estimates, European companies have already secured around 5 million hectares in the Global South to plant agrofuels — an area greater than Slovakia. 95

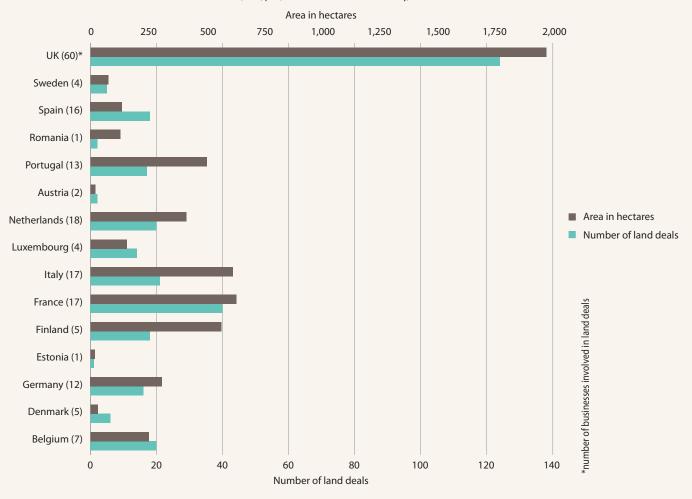
Most recently, this has been met with growing criticism. ⁹⁶ The agrofuel boom since the 2000s (Figure 7.15) ⁹⁷ has led to a further spread of industrial agriculture, driving deforestation, destruction of biodiversity and partially resulting in the expulsion of subsistence and smallholder farming. ⁹⁸ Moreover, studies indicate that the impact of agrofuels on the climate is greater than initially estimated. This is because agrofuel production requires fertilisers and agrochemicals, the production of which requires a great deal of energy. Frequently, this pushes the climate footprint of such fuels into the red. ⁹⁹ Secondly, forests or savannahs are turned into cropland to cultivate energy crops, thereby releasing gigantic amounts of carbon into the atmosphere. ¹⁰⁰

Published in 2008 and based on the state of policy at the time, the Gallagher Review calculated that EU and US agrofuel funding policies would depend on the availability of an additional 500 million hectares for agrofuel production by 2020. This is around one third of the farmland currently available. In African countries, India, Brazil, Malaysia and Indonesia new plantations are thus springing up every day to grow soy, rapeseed, oil palms, sunflowers, jatropha, maize, wheat and sugar — not to fill empty stomachs but to produce fuel.

We are still in the very early stages of research into less damaging and less land-intensive agrofuels, but so far no real alternatives have emerged. In spite of the potential for greater efficiency, the negative impacts of this protracted boom are likely to increase.

Figure 7.14: Land deals involving European corporations outside of Europe

Source: Borras et al., 2016, p. 14; The Land Matrix Global Observatory, 2017



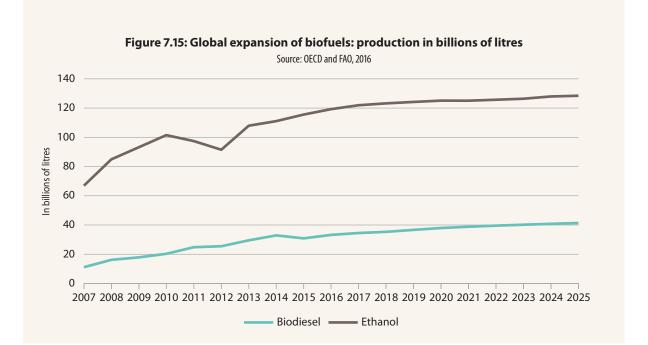
(PPPs) with agribusiness corporations such as Bayer, Monsanto, Syngenta and Yara, aim to create 'growth corridors' to modernise agriculture. These partnerships qualify smallholder farmer agriculture as backward and promote the industrialisation of agriculture as the way forward. PPPs are to provide 1.3 million hectares in Tanzania, Malawi, Burkina Faso, Mozambique and Ghana alone.93 Contract farming incorporates a few 'marketable' farmers into the project. The majority, however, faces expulsion and the loss of access to land and water. This approach increases poverty and hunger instead of fighting to overcome them.94

The imperial mode of living is thus affecting property regimes and land use. The appropriation of land exacerbates inequalities: governments and international

organisations create attractive framework conditions and an infrastructure that will have long-term effects and thereby pave the way for financially powerful actors. However, this robs millions of people of their livelihoods and forces them to offer their services to others for a pittance. Land grabbing also promotes the expansion of industrial agriculture. The conditions that could give rise to alternative modes of production and living are thus weakened.

Ways out of the food crisis

Just because we are producing an adequate volume of calories globally does not mean that our food security is guaranteed. As we have highlighted, the spread of industrial agriculture is pushing out the very people



who are vital to securing our global food supply: small-holder farmers and peasants. The imperial food system destroys alternative forms of production and robs millions of people of an opportunity to enjoy a decent and self-determined life. What this effectively means is that the true underlying causes of hunger are influenced by the *means by which* food is produced, distributed and consumed, the actors involved in each stage of this process, and any subsequent damage caused to people or the environment.

Neither fish nor flesh!

Many stakeholders are trying to find solutions to the current problems in our agricultural and food system. 'Climate smart' agriculture is the self-proclaimed goal of the Global Alliance for Climate Smart Agriculture (GACSA). The New Alliance for Food Security and Nutrition claims it can eliminate hunger in Africa. However, these alliances between transnational agribusinesses, governments and international organisations such as the FAO, the IMF and the World Bank do not aim to tackle the causes of today's problems and effectively offer pseudo-solutions, for example, by promoting industrial agriculture supposedly in order to prevent starvation and to feed the growing global population. By doing so, they are actually exacerbating the world's social and environmental problems and, as a direct result, hunger. Ultimately, these new alliances against environmental and food crises are thus simply

promoting a 'greenwashed' 'business as usual' approach (see infobox on "Green economy"). 103

There are also a number of solutions being discussed with regard to consumers. Supermarkets are increasingly turning to sustainability labels, supporting initiatives against food waste and offering a wide range of organic, regional and seasonal produce. Eco-friendly products are, however, by no means the norm and only a small fraction of the population can actually afford them. Yet, as the power of supermarkets continues to grow, their decisions are becoming ever more influential. We also mustn't forget the destructive consequences of harsh competition, the development of new markets and price pressure, which continue to spread.

Back at home, eating less meat is also becoming a 'must' among small groups of trendy, environmentally conscious consumers. This trend is spreading; new restaurants and special products help facilitate the transition to a (partially) vegan or vegetarian diet. Consuming less meat and eating a diet that is as eco-friendly and as fair as possible is undoubtedly key. But simply changing one's own patterns of consumption is not enough to overcome the structural issues of our imperial food system. These approaches fall short of the mark because:

 they do not question the underlying structures of power. The undemocratic control and make-up of the agricultural and food system remains unchanged.

- 2. they maintain the logic of unlimited, resource-intensive and competition-driven growth (Conclusion AND OUTLOOK). The food system continues to be market- and profit-oriented, instead of focused on actual needs, for example, the fight against hunger. Alternatives appear unrealistic.
- 3. they do not overcome the exclusive nature of the imperial food system. The excessive and non-sustainable appropriation of labour and our natural world remains the privilege of the few.

Against the current backdrop of multiple crises (GLOSSARY) it is absolutely essential to find an alternative to the imperial food system, especially when we consider the fact that industrial agriculture is itself destroying the very basis for future forms of sustainable food production. The imperial diet is, however, deeply ingrained in our everyday lives and appears normal to us. Framework conditions and infrastructures enable it; institutions and influential stakeholders secure it. So, how can we overcome it?

Good food for all!

Clearly, the specific developments in the agricultural and food systems are an obstacle to creating a good life for all. We cannot tackle problems and crises using means that do not fundamentally question their underlying causes but actually tighten their grip. If we wish to find our way out of this dead end, we will need to consider truly transformative approaches. There is no simple 'master plan'.

A transformation that aims to deliver a good life for all should focus on creating a 'world without hunger'. The demand is clear: we need good food for all! There are now numerous initiatives, alliances and movements happening throughout the globe that are fighting for a different, sustainable and just food and agricultural system. Central to these efforts is the struggle for food sovereignty (GLOSSARY). Here the La Via Campesina movement plays a key role. It brings around 200 million farmers, landless people, shepherds, farm labourers and fishers from all corners of the globe together and its goal is to create, strengthen and develop democratic models of control over food production, distribution and consumption that do not function at the expense of others.

Good food for all depends on our resistance!

Countless people across the world feel the negative effects of the imperial mode of living. These people are not simply passive victims. Many resist and have created their own alternatives. They organise protests, develop alternative projects and stand as a countervailing force. The livelihoods of millions of peasants are already at risk and are in urgent need of support. This requires providing political and legal framework conditions that benefit these stakeholders. In many cases, this includes resistance against the impacts of European Union policies or the (infrastructure) projects of corporations and governments from countries of the Global North.104 Approaches to stop global land grabbing built on voluntary commitments, for example, are not enough.¹⁰⁵ The situation requires legally binding commitments and

agreements that bolster and implement human rights and environmental justice globally.106 We will also need to debate (public) investment policies that are environmentally sustainable, comply with human rights standards and actually combat poverty and hunger.107 Our focus must be the defence or reclaiming of democratic control over land, water and seed. These struggles are already underway. One important example is the Brazilian landless movement (MST), which is fighting for socially and environmentally just land reform.¹⁰⁸

Live alternatives! Towards a democratic, solidaritybased and sustainable food system!

We cannot leave the socio-ecological transformation of our food system to others. Rather, we need to aim for a profound politicisation of our food system. Whether and how much meat we eat is a socially relevant issue with global repercussions. But the means of food production and the origin of our food are also crucial.

Cooperative and solidarity-based economic approaches based on ecological principles that encompass the entire value chain already exist. They highlight some of the elements a democratic system of food, one rooted in the needs and interests of all stakeholders, would have to include.109

One good example are food councils, where people from civil society, academia, business and politics decide on key questions concerning agricultural and food policy at the city and municipal levels. Then there are food cooperatives which bring members and producers together. Jointly they decide where to order which products, negotiate conditions and jointly purchase and distribute food items. Community supported agriculture projects go one step further. Farmers and consumers jointly decide what farmers produce. The financial means, risks and some areas of production are organised based on a concept of shared responsibility. Together with farmers that actively promote a different kind of agriculture, consumers are able to be a part of alternative modes of production and consumption. Such initiatives share the will to drive back the power of corporations, while awarding greater influence to new stakeholders and allowing farmers to regain their self-determination. This creates a countervailing force. The transformation of everyday living conditions and the democratisation of the agricultural and food system requires such processes of learning. We need spaces, time and a lot of energy to develop concrete and liveable alternatives and actively shape the future we hope for.

We want good food! Towards an agro-ecological transformation

A reorientation of our food system must be built on the recognition that we live on a finite planet. It also has to provide answers to today's social and environmental concerns. Here agroecology110 (GLOSSARY) plays a key role. The concept is based on closed regional cycles and networks, and, by ensuring peasants and land workers higher incomes, strengthens their collective self-determination and aims to maintain and make sustainable use of land, water and seed. Agroecology therefore counters the exploitation of nature and workers in the agricultural sector by providing an alternative based on

smallholder farming. This approach is increasingly gaining recognition as an answer to today's manifold crises. 111

If we do not take action to reduce the pressure on smallholder farmers and to democratise the food system, our struggle against hunger and poverty will not bear fruit. We will never be able to ensure *good food for all* without peasants and without breaking up the current structures of power. Individually, the possible solutions presented here will not suffice to achieve the

necessary transformation. But together their diversity and creativity could develop into a deep transformative power.

Do you agree?

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

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Fast, faster, imperial

When flights are cheaper than train tickets, Green Party voters rank top among frequent flyers and a single country like Germany boasts a significantly higher number of cars than the entire continent of Africa, something is definitely wrong. Nonetheless, our accelerated, energy-intensive mode of mobility remains firmly in the saddle. How can that be? And how can we change direction?

on't try to sell us hiking!"—this is the refrain of a sulking boy in a pilot's cap and a girl wearing a flight attendant's hat as part of an advert for the now-defunct Air Berlin. "Fly to Greece for just €60. The kids are happy, everybody's happy!" Sure. Why not spend your holidays on the beach in Greece? After all, flying to the Mediterranean coast is now cheaper than taking the train to the nearby mountains. Low-cost carriers only conquered the skies (and our hearts) a few years ago, allowing us to discover the world at affordable prices in spite of our limited time. This ability to fly cheaply has now become a key factor in many aspects of our lives, be it holiday planning, our work lives, our choice of where to live or even whether to commit to a (long-distance) relationship.

Nearly everything in our lives is 'mobile' and dependent on transport. By the time the cotton and thread for our T-shirts have found their way to the textile factory and, eventually, to our wardrobes, they will often have travelled tens of thousands of kilometres. Yet the item's €5 price tag reveals none of this to consumers. We simply take bargain-priced T-shirts for granted.

Mobility, movement, transport, traffic: what do these terms actually mean?

The term mobility describes the spatial and temporal movement of living beings, goods or information. Academic writing tends to define mobility in a broader sense and includes relocation, migration or even social and/or professional advancement. 4 This chapter, however, focuses on mobility as the transporting of people and goods, and the traffic this causes. See the infobox on "Freedom of movement" on migration, and the chapter Digitalisation on the movement of information.

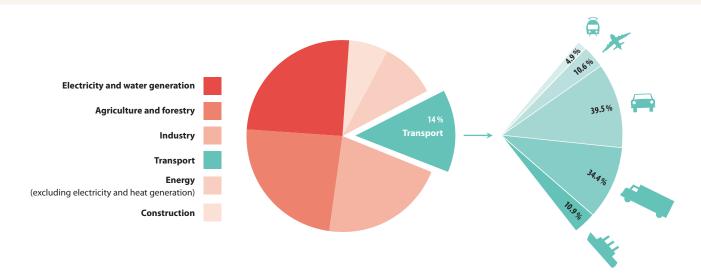
Within just a few decades, the means and speed of transport, as well as the distances covered, have multiplied. While 100 years ago the average travelling speed did not go beyond 90 kilometres per hour, today we travel nearly ten times as fast. While providing many benefits, an increasing number of problems overshadow this development: for instance, every 25 seconds somebody dies in a road accident,² while oil, over half of which is used for transport, fuels numerous geopolitical conflicts.3



Building one kilometre of motorway requires 40,000 tonnes of cement, steel, sand and gravel ... and roads need 10 to 15 times more space than railways.«

(Krausmann & Fischer-Kowalski, 2010, p. 52)

Figure 8.1: Global greenhouse gas emissions, 2010 Source: Intergovernmental Panel on Climate Change, 2014, p. 9; Miller & Façanha, 2014, p. 6



Despite vehicles' rising efficiency, the transport sector's emissions, and the negative impact they have on the environment, have grown faster in recent decades than those of any other industry. 25 per cent of greenhouse gas emissions in the European Union, and around 14 per cent globally, are transport sector related (Figure 8.1).⁵ As the IPCC warns, transport sector emissions could increase by over 70 per cent by 2050 (taking 2010 as a baseline).⁶ Accelerated, motorised mobility is not only highly energy-intensive, it also consumes large amounts of resources and space.⁷

Is this merely the collateral damage of an otherwise highly beneficial acceleration? After all, the achievements of the transport revolution allow us to travel almost anywhere whenever and as quickly as we want, just as we can buy products from all over the world with a single 'click'. But is everyone benefitting from these advances? A mere ten per cent of the global population are responsible for 80 per cent of motorised passenger kilometres.8 Due to a lack of financial means, harsh border controls and the limited awarding of visas, the majority of people around the globe are currently suffering severe restrictions on their freedom of movement (see infobox on "Freedom of movement"). The promise of mobility does not apply to everybody: the globalised economy ensures the mobility of goods and of people from Western societies, while denying it to the majority of other people. It wants cheap trousers from Pakistan, but not the immigration of Pakistani textile workers who earn starvation wages in their home country.

The dominant mode of mobility is highly exclusive and imperial. Its structure is built on the fact that those

who have permanent access to overseas products or are able to travel at high speed do so at the cost of others. It is a privilege that comes at the expense of the biosphere, people in low-income jobs, younger and elderly people, future generations and those in the Global South, who are already suffering the consequences of climate change. But what would happen if citizens in the Global South were to take up similar mobility habits? Now that the dream of accelerated mobility is coming true for millions of people in countries such as China and India, we are starting to realise that a form of mobility that cannot function as a globally applicable model is becoming universally accessible (Figures 8.2 and 8.3).¹⁰

We have long been aware of the social and environmental implications of our system of mobility. But why does nothing change? Why, in spite of growing contradictions and the availability of sensible alternatives, is the imperial form of mobility so firmly entrenched in our lives? This chapter tries to find answers. Based on two examples, we will first explore 21st-century mobility by looking at freight transport and air travel. We then analyse the factors that have helped establish a resourceintensive form of accelerated mobility as the norm and why it remains so dominant. Only by understanding such elements will we eventually be able to overcome the prevailing transport system. Possible starting points, strategies, as well as socio-ecological approaches to a transformation of the sector are the focus of the final part of the chapter.

Figure 8.2: A comparison of car density between Germany and the African continent

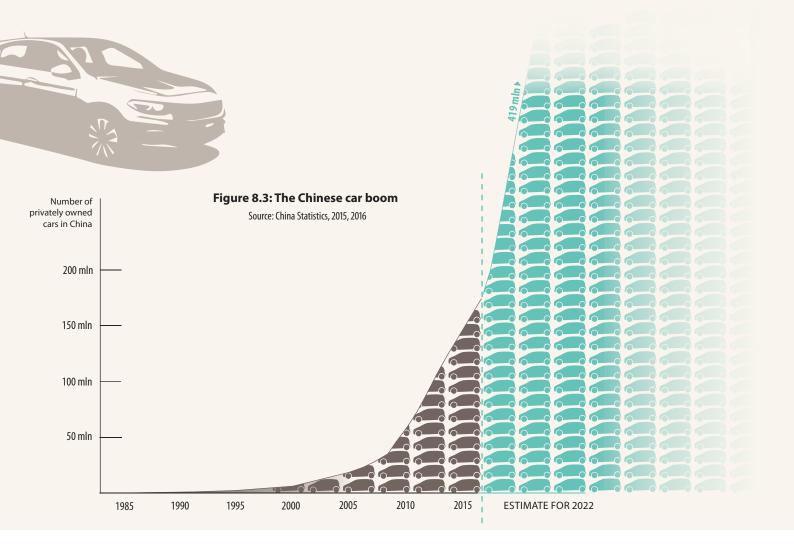
Source: OICA, 2017; Statista, 2017; Federal Statistical Office; UNDP, 2017



Comparison of area covered by Germany and the African continent

= 1 million cars

= 1 million people



Trade and logistics

Let us return to our example of the €5 T-shirt. The fact that the item can be sold for so little is not least thanks to the low costs involved in transporting the product (around 35 cents). It is not uncommon for T-shirts to travel around 20,000 kilometres before arriving on a shop shelf.11 Extremely cheap freight transport provides the basis for the bloated production chains of the global textile, IT and food sectors. During the early stages of industrialisation, transport costs factored in at around half of a product's final price; in today's textile sector, however, this has dropped to a mere seven per cent.¹² The products we buy frequently travel thousands of kilometres between production stages often purely for the purpose of exploiting cheaper labour and more lax environmental standards.

Yet, how can transport be so cheap? The obvious efficiency gains made thanks to gigantic container vessels and the digitalisation of logistics (DIGITALISATION) are just one piece of the puzzle. A greater role is played by the numerous direct and indirect subsidies provided to the freight transport sector. Ocean vessels burn heavy oil, a refinery by-product. Governments do not tax heavy oil, making it an extremely cheap fuel.¹³ The same applies to cargo planes that run on tax-free kerosene.14 Moreover, governments invest billions annually to build and maintain the necessary port, road and rail infrastructure. States charge transport carriers little to use this infrastructure, and these costs are a negligible factor in price calculation and final product price.15 One

example is the €100 million Germany annually spends on its ports in Bremen.¹⁶ If companies had to pay these infrastructure costs, this would considerably increase the price of transport.

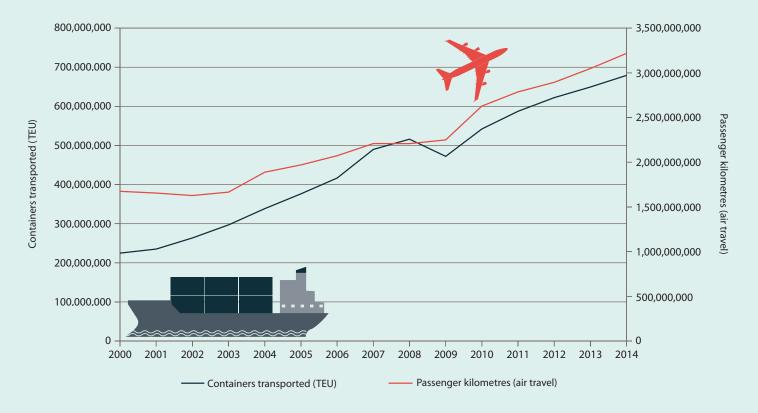
Flagging - the cheap way out

The exploitation of workers on container vessels is a further factor that contributes to low transport costs. The basis for this is the practice of using flags of convenience (FOC) whereby ships do not fly the flag of the country of their owners, but use the civil ensign of cheaper countries, i.e. where labour standards, taxes and environmental legislation are more lax. In Germany, the country with the fourth-largest shipping fleet globally, 89.9 per cent of ships fly the flag of a foreign country.17 The most important flagging countries are Panama (20.6 per cent of global tonnage), Liberia (12 per cent) and the Marshall Islands (10.1 per cent).18 The process frees shipping companies from the constraints of unionenforced minimum wages, maximum working hours or break time regulations. These exploitative labour conditions mainly affect people from the Global South.¹⁹ Often, taxes in the registering countries are lower or non-existent, which further reduces transport costs.²⁰

Transport costs can also be kept so low because the environmental impacts of its activities are externalised (see externalisation in the GLOSSARY) and therefore are not (and cannot be) reflected in the price. Today global shipping already accounts for three per cent of global CO₂ emissions, 13 per cent of sulphur dioxide, as well

Figure 8.4: No end in sight – growth of container shipping and air travel

Source: IATA, 2016; International Transport Forum, 2016b; World Bank, 2017a, 2017b



as 15 per cent of nitrogen oxide emissions. ²¹ Besides having a direct impact on the inhabitants of port cities, for example, by exposing them to high levels of sulphur pollution, ships running on heavy oil contribute to ocean acidification. ²² Studies already warn that further pollution of the oceans could destroy the foundations of life for many marine animal and plant species and severely threaten the balance of these ecosystems. ²³

Container vessels represent one of the world's fastest-growing markets (Figure 8.4). ²⁴ Between 2000 and 2015 alone the market tripled in size, and it is expected to triple again between now and 2050. ²⁵ The volume of air freight transport doubled during the same period, and rail transport increased, albeit more slowly, managing a sector growth of 20 per cent. As a result, each passing year sees the same products travel a greater number of kilometres before they finally reach stores. While the German government has been vocal about its aim to reduce transport intensity, all estimates point in the opposite direction. ²⁶

While the freight transport sector is itself an expression of the imperial mode of living, the sector's structures also promote this way of life. Low transport costs are the main reason for the existence of multinational production chains. That is why it is profitable for the North Sea prawn industry to ship their catch to Morocco for shelling and then transport the goods back to Europe in lorries (FOOD AND AGRICULTURE).²⁷

Air travel

Right now, at this very moment, around half a million people are in the air.²⁸ As a study, published in the renowned journal *Science*, revealed in 2016, the prob-

lem with air travel is that for each tonne of CO₂ emitted, we lose around three square metres of Arctic sea ice.²⁹ A return flight from Berlin Tegel to Kalamata in Greece destroys around four and a half square metres of Arctic ice.³⁰

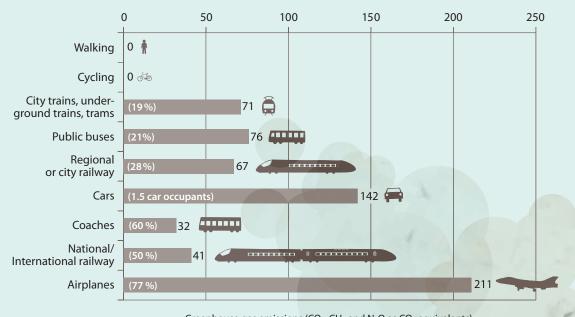
In Germany, 45 per cent of the transport sector's impact on the climate is flight-related, with cars contributing another 46 per cent, leaving a mere six per cent contributable to public transport, such as buses and trains (Figure 8.5).31 Around five per cent of manmade climate change is attributable to global commercial air travel, two per cent of which results from CO2 emissions.³² And this figure is set to rise: the International Energy Agency estimates that between 2005 and 2050 flight travel will increase four fold (Figure 8.4).33 By 2034 the number of passengers will probably have doubled; there are currently around 3.4 billion flights annually.34 But this does not mean that half of the global population flies. Estimates from the early 21st century calculate that only five per cent of the global population has ever set foot on a plane.35

Who flies and who can't? Injustice in the air

On 6 September 2016, a dozen "Black Lives Matter" activists blocked one of the runways at London City Airport. "Climate Crisis is a Racist Crisis" was their message. They protested the building of a new runway close to a London working-class neighbourhood. The residents, many of whom identify as black British African, earn significantly less than the passengers flying above their heads. In the UK, levels of fine dust exposure are 28 per cent higher for black British Africans than for white British citizens. Of course, this is also related to

Figure 8.5: Greenhouse gas emissions caused by different forms of transport

Source: Umweltbundesamt (Federal Environmental Office), 2016; Verkehrsclub Deutschland (Association for ecological Traffic), 2017



Greenhouse gas emissions (CO₂, CH₄ and N₂O as CO₂ equivalents) in gram per passenger kilometre based on average capacity utilisation (in brackets)

who can afford a flat in a less polluted area.³⁷ Moreover, the "Black Lives Matter" protest action highlighted the UK's significant contribution to the climate crisis, the effects of which the country hardly feels, while Africa has become the continent most threatened by global warming.38

Who is able to fly and who is impacted by the damaging effects of air travel is therefore also influenced by racist structures, as well as gender (according to industry analysts, men fly more frequently than women³⁹) and, in particular, social class. In Germany, the group earning the highest salaries flies 6.6 times per year on average, whereas the figure for the group earning the lowest salaries is only 0.6.40 This leads to the seemingly paradoxical phenomenon whereby those who vote Green (in Germany at least) are the voters who fly the most as they tend to earn higher salaries.41

How flights are made cheap

Due to the success of budget carriers, many low-income earners today can afford to fly more often, especially when a flight becomes significantly cheaper than a train journey to the same destination. How can that be? Governments heavily subsidize the most environmentally harmful form of travel—in Germany to the tune of around €10 billion annually. This is mainly because almost no country taxes kerosene. Furthermore, international flights are mostly exempt from VAT.⁴² Airports also usually do not pay property tax.43 Small regional airports only survive due to government cash injections.⁴⁴

For decades, civil society organisations have demanded the introduction of a tax on kerosene and the abolition of certain privileges enjoyed by the airline

industry. A new concept, however, has helped brush aside these old proposals. It is the promise that air travel could soon deliver green expansion. A closer look, however, quickly reveals the fundamental contradictions and flaws of this green economy strategy (see infobox on "Green Economy").

The dream of green growth: sustainable air travel?

Could aircraft fleets one day operate on hybrid or solar energy? Or could they be run entirely on agrofuels? CO2 neutral flights sound enticing. Over the past few decades, media and the aircraft industry itself have repeatedly discussed planned innovations in the sector. A 2016 study analysed the dominant discourses on technological innovation in air travel.45 The analysis concluded that a few years after such an announcement was made, the promises of 'green' air travel always turned out to be illusions or pipe dreams. Their implementation would require huge leaps in innovation, for example, lightweight energy storage systems or superconductors. Meanwhile even industry insiders admit that this technology is at least another 25 years away. As planes have a service life of around 30 years, our energy-intensive planes of today will be around well into the 2060s.⁴⁶

Airplane fuel efficiency currently increases by just 1.5 per cent annually, which is far below the rate at which the number of flights and subsequent emissions are growing. This is a typical example of the rebound effect (GLOSSARY).47 The plan to replace kerosene with agrofuels is unrealistic, not least due to the large volume of crops that would be required. Environmental organisations also criticise such projects as they would lead to less land availability for food cultivation (see info-

Emissions trading and offsets – the problem with market-based measures of environmental protection

Since the signing of the Kyoto Protocol, emissions trading has become a central instrument of climate protection and one of the core Green Economy (infobox on "Green Economy") strategies. It is based on the assumption that the same market mechanisms that caused the climate crisis can be used to tackle it. The idea is that states define caps on greenhouse gas emissions for individual economic sectors. They then issue a corresponding number of emission certificates to be distributed between industrial plants. Every year states then ratchet up these emission caps and reduce the number of available certificates. Factories that emit more CO₂ than they are allowed to (based on the number of certificates they hold) must then buy further certificates to continue polluting. Factories can buy certificates from others that still have certificates spare. This turns CO₂ and 'CO₂ equivalents' (such as methane) as well as global carbon sinks like forests into new products with fluctuating prices that are traded, speculated with and used to make a profit.53 Instead of leading to a restructuring of the economy and promoting new low-emission industries, this system effectively offers factories a cheap way to avoid taking responsibility and has, to a certain degree, in fact achieved the opposite.⁵⁴ Instead of purchasing emissions certificates, many emissions trading schemes also give industrial plants or airlines the option of investing in an offset project that purportedly reduces emissions (Figure 8.6).55

Mostly, these projects are located in the Global South and include hydroelectric power stations or wind farms, "clean" coal power stations with improved filters, risky Carbon Capture and Storage projects (GLOSSARY) or reforestation projects (including environmentally disastrous monoculture plantations). ⁵⁶ The REDD+ (Reducing Emissions from Deforestation and Forest Degradation) forest programme is set to become the biggest scheme for offsetting aviation emissions. ⁵⁷ Frequently, offset projects lead to human rights abuses and are not as beneficial to the environment or the climate as they claim. In many cases, REDD+ projects have limited the traditional use of forests by farmers and indigenous communities or actually led to their displacement. ⁵⁸ As a concept, offsetting also fails to recognise that at the current stage of the climate crisis an 'either-or' is no longer possible. We need to reduce emissions where they occur as well as protect forests and implement measures to reduce CO₂ emissions. As it legitimises the 'business as usual' approach, emissions trading can even be considered counterproductive. ⁵⁹

REDD is a threat to the rights of [indigenous] peoples, their territories, the balance of Mother Earth and the creatures that inhabit it. It does nothing to mitigate the injustice of pollution and over-consumption related to industrial capitalism.«⁶⁰

(CONAIE [the national indigenous federation of Ecuador] in a letter to Ban-Ki Moon, 2011)

Despite negative experiences and resistance, market-based mechanisms of climate protection such as these are spreading globally, not least because certain people are clearly profiting from them, as indicated by the example of airline industries. However, the concept has not only garnered support as a means of climate protection. Biodiversity offsetting is also becoming more popular around the world. The underlying principle is the same: the biodiversity lost at one location through the construction of an airport needs to be recreated elsewhere. Frequently, such arguments are used to override environmental concerns, legislation or resistance and implement harmful projects.

The mechanisms of climate and environmental protection that currently dominate are market-based and, as they outsource the impacts of projects (and the remedying of those impacts) to far-off places and people, integral to the imperial mode of living. For those who can afford it, getting trees planted in Brazil is a better option than flying less. Indigenous organisations and the climate justice movement have therefore dubbed these market-based climate and environmental protection measures 'green neocolonialism' (HISTORICAL OVERVIEW).

box on "Agrofuels"). 48 The study also highlights the fact that promoting such technology myths actually prevents the development of an effective climate policy for our skies. 49

In October 2016, the UN International Civil Aviation Organisation set up a global emissions reduction scheme for the aviation sector. However, this agreement does not include plans to curb flight travel as a measure to combat climate change or to reduce the sector's CO2 emissions. Instead, offsetting will be used to partially reduce planes' CO2 emissions. Offsets are projects to counteract the damaging effects of air travel, for example, by organising reforestation projects in the Global South (see infobox on "Emissions trading and offsets"). Under CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation), airlines can buy their way out of taking responsibility to reduce emissions. According to the aviation industry, "a simple carbon offsetting scheme would be the quickest to implement, the easiest to administer and the most cost-efficient".50 With CORSIA, they got what they wanted: a blank cheque for further growth. Offsetting is not the only reason why this agreement is questionable. It isn't expected to come into force until 2027 and many countries such as India or Russia are exempt from the agreement. Moreover, the scheme only applies to international flights and to CO₂ emissions.⁵¹ The climate impacts of other factors of aviation, for example soot particles or contrails, are at least double that of CO₂.52

Tell me the speed at which you travel, and I'll tell you who you are.«64 (Illich, 1974)

Figure 8.6: Offsetting $= CO_2 O_2$ $CO_2 \times CO_2 \times$



Bogged down: why a mobility transformation is proving so difficult

The analysis of these two spheres of mobility—freight and aviation—already highlights some of the injustices and contradictions related to our accelerated mode of living. We must therefore now turn to the question of why our imperial modes of mobility, despite their inherent problems and our recognition and understanding of these problems, is proving so hard to transform.

A privileged few

The reason our accelerated and resource-intensive form of mobility has not entered a state of crisis yet is mainly due to the fact that—so far at least—only a small fraction of the global population has access to such transport. If everybody were to drive a car and fly, this would very soon deplete the necessary resources. Our accelerated mobility is thus imperial in nature because only a few people enjoy the privileged access to the biosphere and cheap labour. It is also imperial, because this form of mobility is universally desired and, as we highlight below, there seems to be no alternative to it.

Nonetheless, this form of mobility continues to spread, putting pressure on, or even supplanting, other forms of mobility and lifestyles. Although it may seem paradoxical, the massive increase in the number of cars has meant that ever fewer people are actually mobile. The rise exacerbates social differences. Streets and parking spaces occupy ever more space that could otherwise be used for housing, parks, to ride bicycles, walk or be used by public transport.⁶⁵ As traffic jams illustrate, individual acceleration does not necessarily lead to an acceleration of society as a whole.

This fact underlines the complexity and contradictory nature of our imperial mode of living. Due to the global spread of an accelerated, energy- and resource-intensive mobility regime, even the less wealthy can now afford to fly or buy a $\[\in \]$ 5 T-shirt, and yet in spite—and precisely because—of this, exploitation, ruinous competition and ecological destruction are the result.

Out of sight, out of mind?

As most strikingly illustrated by climate change, we have outsourced the impacts of our mobility both spatially and temporally, and so far this has prevented the system from derailing. As mentioned above, flight corridors frequently pass over the poorer neighbourhoods of our cities and luxury apartments are only rarely close to the roads their inhabitants use. Destructive oil drilling or the mining of rare earths required for vehicle electrification (DIGITALISATION), agrofuel plantations (see infobox on "Agrofuels"), as well as the disposal of the (sometimes toxic) waste materials that result from car scrappage often take place in countries of the Global South.⁶⁷ Ultimately, being blind to the consequences of our actions helps stabilise our mode of mobility.

Increasingly, however, it is becoming clear that it is not possible to outsource all of the system's negative aspects. In cities in Asia, even the upper classes cannot escape the smog, which is mainly produced by cars. 68 Fine dust pollution is also a massive problem in European cities. The European Environmental Agency estimates that every year air pollution causes the premature deaths of around 467,000 people on the continent. 69 Environmental crises, however, are not the only problem caused by our fossil fuel-based mode of mobility, as highlighted by the high number of traffic accidents that

INFOBOX

Freedom of movement

Not all people are equally mobile. The privilege of being fast and mobile not only hinges on having the necessary financial means as well as the corresponding infrastructure. It is also a question of who has the right to be mobile. In 2010 Europeans were allowed to travel to an average of 62 countries without requiring a visa; for citizens of African countries, however, the figure is only 15. A study reveals that instead of helping the mobility regime to become more open, globalisation has in fact had the opposite effect: inequalities and restrictions have increased. Border regimes help maintain these privileges and keep them largely off limits to migrants. People are allowed to travel for leisure and business, but not to survive.

occur every day. Often, the victims of car accidents are pedestrians and cyclists. Less than half of road traffic deaths involve people in cars.⁷⁰

Something that cannot be outsourced easily are the health and psychological problems associated with traffic, traffic jams, noise pollution and a lack of parking spaces, but also more generally with our accelerated and peripatetic lifestyles. More and more jobs require a high degree of mobility. As studies indicate, long-distance commuters often suffer significantly poorer health than non-commuters. In particular, this affects those who are forced to commute, rather than those who do so voluntarily. As Stephan Rammler writes: "People's greater and ever more frequent mobility makes it hard to maintain that measure of stability in families and group relations essential to social cohesion. [...] Sustainable approaches to mobility policy should include strategies for social and cultural deceleration."

But as the following section highlights, the global trend seems to be going in the opposite direction.

"People who don't fly aren't normal"?

Fossil fuel-based forms of mobility are also imperial in nature as they present themselves as the only way to travel. People all over the world consider high-tech means of land and air transport as modern and a lifestyle based on fast and frequent movement as progressive. The idea that the permanent availability of all commodities is what characterizes developed societies has penetrated our everyday lives and thinking on a global level; it seems like the only desirable lifestyle. Alternative notions of society are lacking. Owning a car or flying is the norm; paradoxically, this is even true for the vast majority of the global population that is barred from this lifestyle and that is supposedly still 'underdeveloped'. Being fast and mobile is a reality for a few and an illusion for most — but nonetheless the norm for nearly everybody.

Participation in the accelerated mode of mobility is linked to numerous promises: individual freedom, flexibility, security (by means of the car and from cars), travelling the world, increasing one's knowledge, comfort, effective regeneration and status. Today the image of the well-travelled tourist or the hypermobile entrepreneur increasingly appears alongside - or, in certain urban circles, even replaces - the frequently used masculine status symbol of the car. The 'modern nomad' might be born on the outskirts of a German town, his wife and children live in France, and while waiting for his flight to New York he skypes with Bangkok. "This suggests that the 'nomads' postulated by researchers are freed from reproductive work and are therefore theoretically male. Female figures appear at the destinations and junctures of travel routes as wives, lovers, mothers, maids or sex workers."73 (CARE). Whether these hypermobile subjects are happy or not is a wholly different question. Even for our modern middle- and upper-class nomads, their permanent mobility may not be voluntary, but instead related to the demands of flexible and globalised labour.

It isn't only work that has changed but holidaying too (see above). Getting on a plane and 'jetting off to a beach' has become the mantra of an era in which no one seems to have time for slow travel. We aim to travel the greatest distance in the shortest possible time, indulge in complete relaxation and return to work with our batteries fully recharged. We no longer consider the physical part of getting to a destination as travel. In a brochure published jointly with Airbus, the president of the Green Party-affiliated Heinrich Böll Foundation wrote, "If you wish to discover the world and take part in the global conversation, flying is essential."74 That this only applies to a small fraction of the global population was not mentioned. Being able to travel anywhere at relatively low cost and with little effort is the very essence of the lifestyle and freedoms that even Green Party voters and hardcore anti-globalisation activists share. Many of the large environmental organisations therefore seem to be afraid to speak out against flying.

The fact that our current mode of mobility is anchored so firmly in our everyday lives, influences our desires and helps to fulfil our needs (which are often artificially created) is what enables it to remain so dominant and resilient. Flight or car advertisements (many of them sexist) stand proud on countless street corners. While spending your holidays in the mountains may have appeared perfectly normal and fine ten years ago, today it might feel like an abstention compared to today's easily accessible beach holiday in Greece.

Wrought in stone and cement: infrastructure

As described above, states provide the necessary funding to maintain or expand the airports that make travelling to Greece possible in the first place. Imperial mobility is therefore not only a question of psychological desire, it is also materially enshrined, enabled and consolidated by the physical infrastructure. In turn, the availability of infrastructure increases its use and thereby consolidates everyday practices and mindsets. 'If you sow streets, you'll harvest traffic.' This fact has been confirmed by numerous studies. 'Investments into new motorways, government regulations that force homebuilders to construct garages, and construction companies to build shopping malls away from town centres, are all measures that pave the way for car-centred modes of mobility for decades to come.

Building infrastructure makes possibilities a reality. It is another factor that explains the inertia surrounding our current transport system. Evidently, the dominance of our current mode of mobility is thus not built merely on consensus. If the local train no longer stops in your town, you have no other choice but to take the car—if you have one. If Germany stops running its night trains, taking a flight will be the logical solution for many. This was the situation in Latin American and African countries when, in the 1990s, respective governments began privatising and subsequently dismantling what had been effectively run passenger rail services.⁷⁶ In the US, General Motors was actively engaged in strategically dismantling public transport systems.⁷⁷ Behind any mode of mobility, there are thus stakeholders and interests at play that create the corresponding infrastructure and needs, secure the status quo and do everything in their power to prevent change.

Who is in the driver's seat?

In spite of the well-known implications, private and public stakeholders promote and stabilise the fossil fuel-based mode of mobility through transport, tax, austerity, resource and trade policies. States build and maintain the road network and, through commuter tax reliefs, scrapping premiums, incentives for electric vehicles and other subsidies, systematically grant priority to motorised individual transport and air travel. Ultimately, to secure their access to the resources needed to ensure their mode of mobility, the self-proclaimed 'democracies' of the Global North are ready to resort to military means. Wars over oil are also fought for the sake of our cars and planes.⁷⁸ Close ties exist between the automotive, aviation, oil and arms industries.⁷⁹ The world's two largest aircraft manufacturers are also arms producers. The Airbus Group makes 20 per cent of its turnover from arms sales; at Boeing, the share is 50 per cent. Both companies are large-scale exporters of weapons systems to Middle East conflict zones.80

The automotive industry, logistics companies, ports, airports and other transport sector related fields of activity are able to wield enormous power to defend the sector's continued growth. The air freight and container vessel industries are the backbone of capitalist globalisation. This partially explains why nations still refuse to tax the fuels used in these industries, and climate treaties largely ignore their emissions. Doing so would strike a blow to the heart of globalisation. Jobs are often used as the ultimate argument to put to bed any ideas of a possible socio-ecological transformation. For fear of losing secure and stable employment opportunities - a justified concern - unions also end up defending the status quo. We are regularly reminded that the automotive sector is one of Germany's key industries. Yet, according to Winfried Wolf (2009), the automotive industry has not created any new jobs for over 25 years in Germany. In spite of increasing production, corporations have actually slashed jobs due to the domination of just a few corporations and mechanised and digitised mass production (DIGITALISATION).81

Smokescreens?

Despite being aware of the problems inherent to the system for decades, the five reasons we have identified so far (exclusivity, opportunities to spatially and temporally outsource impacts, deeply anchored normative concepts and habits, inertia related to the existing infrastructure and the vested interests of powerful stakeholders) are not the only ones standing in the way of a transformation of our current mobility model. A further factor is the claim that 'green' technological modernisation and emissions trading can solve all of our problems. This illusion helps maintain motorised individual travel and flight mobility and ensures the further globalisation of the existing system of trade.

I am therefore excited about current transportation innovation. From the rollout of electric buses to the growing success of personal electric vehicles to advances in efficiency and new fuels. [...] We must view transport through the double lens of increasing human mobility and decreasing emissions, which means decarbonising transport.«82

(Christina Figueres, Executive Secretary of the UN Framework Convention on Climate Change [UNFCCC] in her opening speech at the International Transport Forum, 2016)

Often, this is merely a case of new wine in old bottles. Old concepts such as private mass motorisation become the basis of new technologies. But as long as resource-intensive privately owned cars remain the norm, or the aspiration of many, it matters little whether that vehicle has an electric engine.83 Moreover, it does not help much if the electricity for these vehicles comes from coal-fired power plants - as is the case for over 40 per cent of Germany's electricity.84 Recently, Austria, like many other states, has begun promoting private electric car mobility. While the country offered a €4,000 premium to people who bought an electric vehicle by the year 2018, it offers no such incentive to people who decide not to buy a car at all. Austria aims to provide free parking spaces for 'eco-friendly' cars as well as allow them to be used on bus lanes.85 So, while the state promotes car mobility and the automotive industry, it is applying measures that actively limit the space available for public and non-motorised forms of mobility.

Research into environmentally less harmful technologies is undoubtedly necessary. Yet we must not forget that efficiency gains, as the section on flights highlighted, are slow. Moreover, rebound effects (GLOSSARY) often cancel out any positive impacts. For example, certain new technologies and innovations can cause issues in other areas, such as electric vehicles that depend on the availability of rare earths, or agrofuel production that competes with food cultivation (see infobox on "Agrofuels").⁸⁶

The aforementioned UN aviation emissions agreement is another example of current strategies that aim to solve ongoing transport and climate crises by using emissions offsetting to externalise impacts. The agreement leads consumers to believe that their flights are



sustainable. The dominant approaches therefore leave the imperial mode of living untouched and actually grant it a new source of legitimacy.

Accelerated mobility is an essential ingredient of an economic model built on growth, the constant development of new markets and 'progress'. However, it has only become predominant because it is anchored in our everyday lives, plans and desires. This offers an indication as to why resistance to this model and alternative approaches face an uphill task and highlights the obstacles any transformative pathway must overcome. True transformation will depend on the Global North bidding farewell to its growth-based economy as well as to a number of privileges. This is about more than just modernisation; we need to overcome the imperial mode of mobility.

Solidary forms of mobility

So how can we break the persistent hold, which the imperial modes of production and living have over mobility? What could be the relevant strategies, levels and stakeholders? What shape could a non-imperial form of mobility take? How can we design an inclusive and just mode of mobility that does not depend on the excessive exploitation of labour or the environment and does not export its impacts?

To overcome today's mode of mobility and its blatant lack of solidarity, we will need to begin with the aforementioned points, which offer the system such stability. For this, we will briefly sketch out a number of strategies, actions and measures aimed at change, and describe three possible areas of transformation. Ultimately, we will need to topple the social norm of individual, motorised mobility and permanent access to goods from around the world. Furthermore, new everyday practices, norms and sustainable infrastructures must be established. This will have to happen against the resistance of those who profit from the current system, a list that not only includes our industries but also societies that benefit from flying and driving as well as the consumption of generally affordable goods.

"Anti-everything"? Strategies for transformation

Cutting down on damaging activity at the individual level and choosing sustainable consumption patterns is a frequently discussed strategy. Important as they are, such approaches alone are nowhere near enough. So far, however, practical ideas and demands that aim for a deceleration at the individual and societal level, as well as a rejection of hypermobility and modern nomadism, only appeal to a very small, sated and generally affluent consumer class.⁸⁸ Meanwhile, there is a relentless global trend towards fossil fuel-based motorised mobility, which has lost none of its appeal. People who opt for 'conscious' forms of consumption limit their contribution to choosing between different sustainable products, while multiple forms of broader democratic control remain untapped.

These can include strategies of resistance: against the increased power of industry vis-à-vis the public or against measures that further entrench motorised fossil fuel-based mobility systems (such as the expansion of airports). This is just as essential at the local as at

the national level. One example for the networking of local protest groups was the globally coordinated week of actions that took place in autumn 2016 at airports in London, Mexico City, Istanbul, Nantes and Vienna: "Stay Grounded. Aviation Growth Cancelled Due to Climate Change". In order for social movement struggles to be successful, it is vital to share experiences, experiment with transnational solidarity and participate in shared communication.

Resistance and an 'anti-everything' attitude alone will not transform the dominant mode of living. To make socio-ecologically viable forms of mobility conceivable and increase their attractiveness, we will need to experiment with and develop alternatives. Such approaches should, for example, help people realise that while carfree streets or neighbourhoods may be inconvenient to some, they offer peace and a better quality of life to many.

Moreover, we need a thought-through strategy of transformation, in order to get from the status quo to another future in a just way. The dismantlement of the automotive industry demands the development of new concepts of decent work. Workers and unions in particular could shift their current focus on maintaining jobs and, possibly in co-operation with the environment and climate movements, push for the expansion of sustainable economic sectors, a reduction of working hours and a new distribution of work.90 Workers in the automotive industry could, for example, find employment in local car-sharing initiatives, in an expanded public transport system or renewable energy cooperatives. Such approaches are necessary to reduce people's fear of losing their jobs, their sense of insecurity and to block the rise of right-wing support. Transformation strategies, however, will also need to consider limiting advertisements for environmentally harmful forms of transportation, and, where applicable, renationalising privatised mobility infrastructures (such as railways or trams) through the joint efforts of citizens' initiatives, bringing them back into public or collective ownership.

Finally, the strategy at the discursive level is also important, i.e. talking, discussing and educating. Jointly discussing society's social and ecological limits, which have thus far been completely ignored by political decision makers, is key. What is a sustainable number of cars and at which speed should we allow them to drive? Are particular forms of mobility socially beneficial or not? Which vehicles fulfil important functions in a city, such as ambulances and removal vans, and which might be counterproductive? Is flying always necessary, or could we maybe choose a different holiday destination? Or take the train? There is no one answer to any of these questions, nor are they equally applicable to everyone, which is why they should be put to debate. Citizens' councils (SUMMARY AND OUTLOOK), neighbourhood assemblies, schools and parliaments are just some of the places where these questions should be discussed. Civil society organisations, social movements and progressive institutions as well as some universities have been debating these issues for decades. In the following section, we summarise some of these approaches and demands as well as some alternatives that are already being practiced.

Three areas of transformation

An apple from New Zealand or from my neighbour's garden? Reducing freight transport

Freight transport currently accounts for around 30 per cent of global transport sector CO₂ emissions and 7 per cent of total CO₂ emissions.⁹¹ Instead of aiming to triple the volume of transport by 2050, we need to regionalise economic activity and greatly reduce greenhouse gas emissions. 92 Here the aim is not nationalist-style protectionism; our apple is still local, regardless of whether it comes from Germany or neighbouring Poland. Moreover, governments will have to cut transport sector subsidies and finally move to tax heavy oil and kerosene. Any remaining emissions-intensive air and truck freight transport should be transferred to the railways or more eco-friendly shipping channels.⁹³ We need an economy of short distances and as much local production as possible (AGRICULTURE AND FOOD).

> The only way to reach revolution is per bicycle.

> > (José Antonio Viera-Gallo)

Avoiding motorised individual transport and switching to other forms

In passenger transport, too, we need to reduce the share of motorised transport and transition to more environmentally sustainable options. A state subsidised railway system could, for example, replace a large share of short-haul flights.⁹⁴ Every year 23.5 million passengers take internal flights within Germany alone (figures taken from 2012).95 84 per cent of flights from Austria land within Europe. 96 Environmental associations and other institutions have long been calling for the privileges awarded to flight operators to be abolished. A kerosene tax would raise the price of flights. While this could mean that everybody would fly less, it might also once again restrict jet-setting to the world's wealthiest—at least if nothing is done to close the gap between rich and poor. Proposals on higher taxes for frequent flyers are still rarely discussed and their feasibility requires further analysis.⁹⁷ Some view modern Zeppelins or sailing ships as a slower yet environmentally friendly alternative to long-haul flights.98

Both from an environmental and social point of view, the promotion of car-centred cities is highly debatable. Urban planning should set aside more space for pedestrians, bicycles and trams, decrease the number of parking spaces and make parking more expensive.99 This would then automatically lead to greater numbers of people using more environmentally friendly, safer and quieter means of transport. The appeal of alternatives would increase and cities would no longer have to rely on individuals voluntarily 'giving up' their cars. Besides having a positive effect on the climate, this would provide serious health benefits and improve people's well-being, as well as reduce fine dust and noise pollution.¹⁰⁰ Speed limits for cars, lorries and ships could also significantly reduce their energy needs and emissions.¹⁰¹ In rural zones, however, concepts for car-free living are far more difficult to realise. From a transport and energy

perspective, today's urban centres are by far the more appropriate fields for policy action, even though this contradicts the widespread desire to own a detached house in the leafy outskirts of the city.¹⁰² But approaches for rural areas do exist, ranging from the expansion of public transport for more frequently used routes, car pools and 'village cars' to taxis provided at the same price as public transport, possibly in combination with (electric) bicycles. 103

Furthermore, companies or institutions (such as universities) could digitise their communication and thereby reduce the need for physical transport. Employees would then no longer need to fly to a meeting with business partners overseas, but could organise a video conference instead. As a side effect, this would also reduce the stress related to permanent business trips and commuting. Digital and smart systems also increase the ability of public transport to flexibly react to changes in demand or make it easier to implement the car sharing initiatives mentioned below. Nonetheless, we should not underestimate the dangers of surveillance, system failures, attacks by hackers and the resource-heavy nature of digital systems (DIGITALISA-TION).104

Using instead of owning! Expanding attractive collective transport systems

The fewer cars are on the road and the more people each of the used vehicles transport, the better. On average, a privately owned car sits unused for 23 hours a day.¹⁰⁵ At the local level, concepts that give car use priority over ownership have become more popular. One example is the Lastenradkollektiv in Vienna and similar projects in other European cities. They provide cargo bikes or bicycle trailers free of charge or at reasonable prices for the transportation of items such as a washing machine or a couch.106 Car sharing, ride sharing and carpooling are among the more well-known examples. However, cheap car sharing vehicles should not become an alternative to public transportation services.

Instead of privatising and dismantling public transport, it is vital to maintain and expand it. Cities would have to invest in trams, electric buses, as well as the underground and city trains. According to Wolf, underground networks are generally not the best solution. They are extremely expensive to build and often help clear the roads for cars. One tried-and-tested system are busways, and several major cities have implemented separate bus lanes. They bypass traffic jams and offer a cost-effective and fast alternative to the car.107 At the regional level, it is important not only to increase the speed of intercity connections and offer attractive longdistance overnight trains, but also to reverse the gradual dismantlement of regional rail networks. 108

Furthermore, we need to subsidise public transport to the extent that it remains affordable for low-income earners. Allowances, free public transport for the unemployed and asylum seekers or transport systems that are generally made available free-of-charge could achieve this and have already been rolled out in several European cities. Achieving a socio-ecological transformation of our mode of mobility will thus require a diverse set of strategies and fields of action. But one thing is certain: it will require the democratic participation of many and tremendous pressure from the grassroots.

Do you agree?

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

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SUMMARY AND OUTLOOK

From the imperial mode of living towards a good life for all

Our current mode of production and living delivers a good life for a few at the expense of others. What strategies can we use to ensure a decent life for everyone? And what might a solidary mode of living look like?

o recap, nearly every sphere of our lives is pervaded by the imperial mode of production and living: from our smartphones and care homes to current accounts and institutions of education; from the products on supermarket shelves to our transport habits. This closing chapter summarises the findings of our analyses on each of these individual aspects of life. Taking these chapters as a basis, we outline relevant areas where pressure can be applied and explore strategies and guidelines for a solidary form of living. Evidently, there can be no simple solution to these complex issues, hence the need to develop a range of complex answers. Inevitably, therefore, some of the proposals in this summary may appear overly simplified and there is not enough room for obvious contradictions. Some of the ideas and strategies presented here still need testing or further analysis.

Our lives: exploiting and being exploited every day

Our mode of living and the form of production that underpins it rely on the unlimited and privileged exploitation of labour and the environment. In the Global North, it is women and the economically marginalised, refugees and indigenous peoples in particular who suffer racist discrimination, who work in inhumane conditions, are paid less, politically excluded and forced to live in dirty, noisy and unsafe neighbourhoods. Nonetheless, nearly everybody living in the Global North disproportionately takes advantage of the biosphere and other people's labour, particularly from the Global South. Meanwhile, this mode of living is rapidly expanding and being embraced by the urban middle and upper classes in the Global South too. As a trend, this generalises a mode of living that only functions if it remains exclusive and is therefore not universally applicable. Increasingly, we are reaching the ecological and social limits to growth and witnessing ever more severe symptoms of the ensuing crises, which, as in the case of climate change, are becoming ever harder to control.¹

The spread of the imperial mode of living: the model's appeal and its implicit constraints

The imperial mode of living's appeal is one reason, why it is spreading. It promises a relatively comfortable life: consumption of any product at the click of a mouse,

shorter travel times to faraway destinations made enticing by advertisements, faster communication, technological innovations that allow machines to take over everyday tasks and delegate seemingly tedious care work to third parties. However, we tend to overlook the imperial mode of living's considerable implicit social constraints. Faster travel is attractive mainly because our societies demand people to be ever more mobile and flexible, both at work and in their free time. Our everyday lives are built around being able to buy food at the supermarket, have a current account, outsource time-consuming care work and gain qualifications. So that we can afford this, we are forced to spend a great deal of our time earning money and in so doing, we are ultimately supporting the imperial mode of living.

Our mode of living: completely normal, deeply entrenched and institutionally anchored

As our analysis of the imperial mode of living reveals, all of these developments are based on (1) socially anchored concepts of what is normal and desirable; (2) the material infrastructure that systemically favours particular behaviours; and (3) the influence of political institutions and stakeholders with a vested interest in maintaining the status quo. The notion that equates our mode of living with wealth and progress, and that therefore makes people around the world strive to 'develop' based on the same logic, appears to be rooted deeply in our consciousness. Questioning growth, consumption and work remains a game for radical outsiders.2 Furthermore, through its form and content, education (EDUCATION AND KNOWLEDGE), as well as omnipresent advertisements, consolidate these thinking patterns. A series of infrastructures thereby provide our mode of living's material basis, automatically preselecting certain options and making it much more difficult to take other choices. These structures include roads and motorways, kindergartens and nursing homes, schools and universities, banks and insurance policies, labour markets and employment offices, supermarkets, shopping areas and the logistics that underpin these systems. Policies focused almost solely on economic growth (Money and Finance) are also driving the expansion of this material infrastructure. Corporations in particular drive this process, both financially and ideologically, because the resulting growth-oriented developments, such as the expansion of the logistical infrastructure that serves private business or the increasing privatisation of public institutions, are highly profitable. The political and economic interests of diverse stakeholders and institutions therefore sustain the current order. The solutions they propose to solve our global crises, which are based on technology and market-focused

Establishing a good life for everyone will depend on our ability to redefine what we consider desirable.«

approaches, result directly from this combination of tendencies, infrastructures and powerful interests that exist in our society. However, instead of solving our problems, they only exacerbate them (see infobox on "Green economy").

Part of the reason why the imperial mode of living is anchored so firmly in society is because of the individual advantages it offers people. Moreover, every day we form part of existing infrastructures, are affected by policies and have deep-rooted notions and expectations that we find hard to overcome. It doesn't take long before people who attempt to re-orient their lifestyle by working less or choosing to consume exploitation-free products feel this pressure. Beyond merely changing habits and consumption patterns at the individual level, the situation therefore necessitates changing the structures guiding and influencing our mode of living that exist in politics, business, media and not least in the minds of the people. Numerous emancipatory movements and networks are attempting to apply pressure at precisely this point. Examples include the movements for food sovereignty and a just global trade system, solidary modes of living and mobility, struggles for better working conditions in sectors such as care, or concepts and movements for commons and postgrowth. All of these initiatives and the concepts they embrace ultimately share the goal of creating a good life for all—instead of a good life for only a few.

A good life for all - a tangible utopia

At first glance, demanding a *good life for all* may appear naïve. However, formulating a utopia is a necessary step to increase the appeal and create traction for non-imperial modes of living. As a concept, a *good life for all* describes a global society in which the fact that some people enjoy their lives does not prevent others from enjoying theirs. In such an exploitation-free society, everybody would be equal and live in balance with their environment. This implies respecting ecological and social criteria in our daily activities as well as changing the structures that underpin exploitation, inequality and the destruction of nature.

Establishing a good life for all will depend on our ability to redefine what we consider desirable. Our analysis of different spheres has highlighted how society today often drives people to increase their performance and competitiveness (Education and knowledge), speed (Mobility), efficiency (Care) or consumption (Digitalisation, Food and agriculture). But what would happen if we were instead motivated by freedom, dignity, solidarity and a general lust for life? Would new smartphones, 40-hour working weeks or shiny new SUVs still remain our top goals in life? Or would we instead strive for a 20-hour working week to leave enough time to pursue the things we enjoy, be politically active or spend time with friends, children or parents in need of care?

In our crisis-ridden times that are characterised by insecurity and fear, the concept of the *good life for all*

has the potential to create positive traction and appeal to many people. However, it is also clear that such a project will not appeal to everybody. Not least due to climate change, establishing a good life for all will require highly unpopular measures such as drastically reducing our dependency on fossil fuels, abolishing entire production sectors and putting caps on car and air travel. The politicising nature of stressing that this is for everyone, as opposed to just a few, can help society accept the necessary restrictions on freedoms that the common good requires. To ensure the participation of the greatest possible number of social groups, the socio-ecological transformation needs to be an open and collective process. Such a process already begins today in small (yet frequently still too socially uniform) projects and initiatives, real-life utopias and 'revolutionary reforms'. In the long-term, they must collectively overcome today's exploitative society. Evidently, this process will not be free of conflict. There are powerful interests at play who oppose change. The term we use for the social negotiation about possible future models and strategies is socio-ecological transformation.

Strategies towards a socio-ecological transformation

How can we develop this transformation? How can we oppose the imperial mode of living and the structures that underpin and consolidate it? Based on our analysis of the imperial mode of production and living, and the experiences and practices of emancipatory movements, we shall first present four possible strategies before roughly outlining the direction such a transformation could take. We will highlight the possible cornerstones of a socio-ecological transformation that aims to create a solidary mode of production and living. At this point, we again need to emphasise that a simple solution or one perfect model society does not exist. While we need to recognise the complexity and challenges we face, we must not allow them to paralyse us. The following strategies and cornerstones are therefore by no means exhaustive.

1. Changing everyday habits and resisting

As trite as it may sound: true change also begins within each individual. This is, however, not (only) about changing consumption patterns. Many people are now changing their daily habits in the US, where the Trump administration is implementing an authoritarian government agenda. Americans are participating in demonstrations, engaging in political organising and resisting. They are questioning what they have until now considered a normal way of life, one that consists of going to work, shopping, attending sports events and watching TV. In Europe, too, more and more people are actively fighting for climate justice (GLOSSARY), bike-friendly cities, a transformation of the economy and gender justice, and through this process are making new daily life experiences. A key aspect is to stop avoiding conflict and instead confront powerful stakeholders, such as transnational corporations, and oppose the dismantlement of people's right to democratic participation.

Yet, a transformation of everyday life can also take place in other, less obvious ways. For example, through people becoming members of a community-supported agriculture project, or opting to ride a bicycle instead of driving, and getting their smartphone repaired instead of simply buying a new one. Or they could divide household chores more equally between male and female family members. All great transformation processes build on people questioning their everyday habits and changing the patterns they live by. An important strategy for change is thus to offer people opportunities and spaces to live new experiences that allow to change daily habits - for example in schools, community centres or do-it-yourself workshops.

2. Influencing public debate

What we do and do not consider to be normal and worthy of support is obviously determined by our everyday lives, but equally important in this regard is public debate. Whether it is globalisation, full employment, economic growth or global export champions, the media inform our common perceptions, as well as the political landscape, through the use of specific terms and narratives. A true socio-ecological transformation will depend on anchoring and legitimising new concepts and narratives in public opinion. We have referred to some examples here, such as a good life for all, time prosperity, degrowth and commons. Direct actions, demonstrations, campaigns and discursive interventions can shine a light on social issues and give voice to dissenting opinions.

The lightning fast pace of media reporting remains a problem, as does the fact that social media give far greater preference to simple answers over complex analyses. There may be the odd debate over free trade agreements, climate change, the curbing of social rights and democratic freedoms or lignite mining, but they are quickly eclipsed by seemingly more urgent headlines. A key task will therefore be to develop groups that focus on and continuously highlight specific issues in the long term. Even when there is no upcoming climate summit, the global climate justice movement relentlessly emphasises the pressing need to change energy and environmental policies. And the care movement is permanently fighting for just forms of and needs-oriented care, even though this issue receives hardly any coverage in the media. As our text highlights, similar forces underpin these diverse issues. Movements thus need to join the dots between the individual issues they are working on. There are already examples of such groups that attempt to link a diverse number of issues and spheres of action, allowing them to develop alternative narratives based on community-oriented modes of living to counter the 'new right's' overtly simplified and resentful interpretations. The growth-critical concept behind the degrowth movement is capable of uniting a diverse set of groups: from anti-coal to pro-basic income and animal rights movements.3 Attac struggles for a form of globalisation that takes greater account of social and ecological aspects, and thereby link issues ranging from global trade to communal level self-administration as well as flight and migration.4 And the group Interventionistische Linke unites radical left-wing activists from anti-racist, anti-sexist and capitalist-critical backgrounds.5

3. Transforming institutions and infrastructures

Institutions (GLOSSARY) hold great power. To enforce change and implement concepts for a good life for all, it therefore makes sense to work together with and within the existing institutions. However, institutions usually follow their own cumbersome logic which can hardly

be questioned or changed. Unions, for example, fight for higher wages for their members, but rarely do so for workers in the Global South. NGOs can organise campaigns and protests, yet only if they keep their donors happy. Ministries can develop new policy proposals, but they often need the support of business or particular voter groups to imple-

A true socio-ecological TRANSFORMATION will depend on anchoring and legitimising new concepts and narratives in public opinion, such as a GOOD LIFE FOR EVERYONE, TIME PROSPERITY, DEGROWTH und COMMONS.«

ment them. To a very limited degree, companies can change their form of production, yet they cannot prevail against the logic inherent to the system.

Changing institutions is therefore key to being able to implement a socio-ecological transformation. This requires applying pressure to institutions, both internally and externally, to unleash their transformative potential and broaden their functional logic. For example, the concept of the transnational social strike aims to improve networking between the struggles of unionised and non-unionised workers from multiple countries. Businesses could be organised as cooperatives, and companies and banks could shift their focus more towards the greater common good, which would oblige them to commit not merely to making a profit, but to primarily fulfilling social and ecological goals.

Alongside institutions, the material infrastructure visible in the shape of motorways, container ports, gigantic supermarkets or the design of cities stabilises the imperial mode of living. This shows why it is important to prevent cities from building new elements of this imperial infrastructure, such as airports, instead of investing in railways or increasing a city's attractiveness for cyclists and pedestrians. One group that pursues such a focus is the System Change, not Climate Change! group in Vienna.6 We need to dismantle or find new uses for the existing infrastructure. We could transform roads into pedestrian zones, dismantle industrial plants and use them as spaces for cultural projects, or transform military barracks into residential buildings. There are many such projects already in existence.

4. Creating alternatives

The strategy of transforming institutions and infrastructures has its limits. Ultimately, to survive on the market, also cooperatives and public service-oriented companies need to make a profit. Parties and governments are, in essence, incapable of overcoming the framework provided by the growth economy. Mainly, this is due to the fact that the economy remains driven by a deeply anchored principle: the system rewards competition and profit and makes co-operation and solidarity hard. This is why creating something new and establishing systems based on a different logic is of such fundamental importance. Alternative economic approaches, however, remain underdeveloped. We do not yet know how to turn a solidary mode of living into the new *system*, thus allowing it to maintain itself. Regardless of the countless initiatives and policy concepts, none of them has (so far) led to coherent alternatives.

For the strategies of transformation we have mentioned so far, this gap is a key problem. If co-operative forms of housing, working, caring and doing business were widespread, many people would find it easier to transform their everyday habits. Public debates could point to established alternative models and it would be harder to dismiss criticisms of the current system as destructive and aimless. Instead, institutions and infrastructures could build on these alternatives and help consolidate them. If we wish to develop a realistic strategy that outlines ways to implement a good life, we will need a coherent concept of a solidary mode of production and living. In the following, we shall thus sketch out some of the key aspects such a concept might contain.

Cornerstones of a solidary mode of production and living

Global Social Rights

The good life for all demands a different kind of globalisation. This is not about anti-globalisation in the sense of nationalist protectionism propagated by rightwing globalisation critics. Globally, right-wing politicians are blaming 'foreigners' or 'the others' for current socio-economic problems, and their misanthropic rhet-

By upholding a communityoriented form of globalisation, the call for Global Social Rights stands in direct opposition to the right-wing rhetoric of renationalisation.«

oric declares isolationism to be the solution. Also politicians from the 'bourgeois middle' attempt to perpetuate the exclusiveness of the current mode of production and living by 'promot-

ing business as usual. Such a policy approach, however, is blind to the actual problems. It aims to shape a socially exclusive project that secures wealth and an imperial mode of living for a small minority.

The call for Global Social Rights (GSRs)7 stands in direct opposition to the right-wing rhetoric of renationalisation and upholds the goal of a solidary form of globalisation. GSRs maintain the positive aspects of a culturally open world connected across borders. On the other hand, they aim to reconquer spaces to develop political and economic approaches and push back the negative consequences of an unjust globalisation. The fundamental GSRs comprise comprehensive economic as well as social rights. They also include rights to self-determination such as freedom of movement and food sovereignty, as well as environmental rights. They apply to everybody. Faithfully implemented, GSRs would prevent people from living at the expense of others. In this regard, GSRs do not contradict the notion of universal human rights. Human rights, however, often seem to be purely theoretical demands, which are directed at state institutions, who are to ensure them. Frequently, the transposition of human rights into national legislation transforms them into citizens' rights.

Yet, if you are not a citizen, you are also not entitled to rights.

GSRs emphasise that fundamental rights must apply to everybody without exception—at all times and in all places. This implies that we should not wait for states and courts to ensure our GSRs, but rather that we can appropriate them where necessary and help others to acquire them, too. The climate justice movement, for example, sees resorting to actions of civil disobedience to block fossil energy projects in industrialised countries as legitimate—an approach now endorsed annually by the *Ende Gelände*⁸ campaign. Ultimately, the emissions produced by such projects are a major factor that causes people in other countries particularly affected by climate change to lose their right to a self-determined life and a healthy environment.

A solidary mode of living can only become a reality once neither the legislation nor our everyday actions differentiate between people of different genders, sexual orientations and social or geographic backgrounds. GSRs are therefore a necessary basis to decolonise our economy and our living environment. A good life for all needs the Global North to critically revisit and give up its historically dominant global position. This means to consistently claim the improvement of the living and working conditions of all people from a global point of view. Adopting high social and environmental standards globally would make it harder to outsource costs to other places and to other people. An imperial mode of living would already become untenable if fundamental labour rights were equally applied to plantation workers in Brazil, Polish care workers in Switzerland, IT factory workers in China or German delivery drivers. Moreover, effectively preventing neocolonial forms of displacement and oppression will require the realisation of the rights of indigenous peoples to exist and to selfdetermination, which have long been enshrined in legislation (land and green grabbing, FOOD AND AGRICUL-TURE and MONEY AND FINANCE).

Decolonisation, however, also requires us to question our thinking patterns and to become aware of our privileges as well as to constantly discuss and dismantle the racist and discriminatory structures present in our society. Taking GSRs seriously will lead to questions. Why, for example, do we allow refugees to drown at Europe's doorstep? Why are black Germans more likely to be stopped and searched at German train stations? Why do we not pay Polish care workers the minimum wage?

Social infrastructures for all

To establish a good life, it will be necessary to ensure that everybody can equally fulfil their basic existential needs to enjoy a decent life. Effective and comprehensive public services would take us one step closer to achieving this goal. A socio-ecological infrastructure would have to include the energy and water supply, public transport, the internet and its relevant digital platforms, healthcare and care, critical and emancipatory education—also outside of the established institutions—and a right to affordable housing. These basic services would have to be free for everybody, i.e. either publicly financed or available at a socially acceptable cost. Enabling the public and collective use of goods

could partially replace the individual consumption and the damaging impacts this entails. In contrast to our current system, major consumers such as companies would bear substantially higher costs or be disadvantaged by other means.9

An unconditional social infrastructure would immediately eliminate social insecurity and would thus grant people more freedom to decide how they want to live. Such a system would also reveal what we truly need to exist. Our concept of wealth would change. This is a further reason why we should oppose the commodification of fundamental social services and press for them to stay in public or community hands and remain universally accessible. With sufficient political pressure, it is possible—even today—to demand the implementation of a social infrastructure for everybody and defend established structures in our cities and municipalities. In May 2014, when the Greek government decided to bow to the pressure of the Troika and attempted to privatise the waterworks in Thessaloniki, citizens fought back by means of a successful referendum and ensured the city's water supply remained in public hands. In numerous German municipalities, citizens' protests have prevented the closure of public libraries and adult education centres (Volkshochschulen).

Self-organisation and the collective development of internal rules can produce systems that enable people to secure their livelihood and meet their basic needs outside of state structures. Such commons (GLOSSARY) cannot be bought; users themselves create and care for them. One very well-known example is the network that develops the Linux operating system (DIGITALISA-TION). Knowledge, technology and licence systems can all be organised as commons, as can farms, food stores, open workshops and other spaces for alternative forms of production or areas linked to the environment, such as land or seed.10

Redistributing money, work and environmental

A more solidary lifestyle will depend on a radical redistribution both within and between societies. This would imply the fair distribution of financial wealth. In addition to social infrastructures, a basic income can contribute to social security. In discussions, this is often referred to as unconditional basic income. It would be paid to everybody equally and without expecting any performance in return (Care and Money and FINANCE).11 Ways to finance a basic income and social infrastructure include closing tax havens, increasing taxes on wealth and income, levying an environmental tax, socialising large inheritances and introducing a financial transaction tax. Redistribution could also be pushed by introducing capital levies for the rich and corporations and by granting debt relief.

When partnered with an effective social infrastructure, an unconditional basic income could contribute to develop new perspectives on work, since it can partially free us from dependency on a wage or salary. We could reduce working hours significantly, particularly in destructive economic sectors as opposed to socially valuable ones. This could allow us to find just and inclusive ways to redistribute the selectively reduced amount

of work. People could use the time gained to take part in very different everyday activities that would eventually become as 'normal' and as cherished as the eight-hour day is today. It would also allow for getting involved in politics, caring for people and the environment, or enjoying self-determined leisure time.

Yet not only should the burdens of labour be distributed more justly between people; we also need to tackle the unequal exposure to environmental impacts.

Reviving and expanding democracy

The increasing success of authoritarian parties and governments suggests a growing number of people are unhappy with the current political system. It is thus more crucial than ever to radically reenergise the term democracy and create awareness of the true meaning of the word: democracy means rule by the people and not by kings or corporations. Democratisation is not limited to elections and parties; it demands far greater participation in political decision-making processes. Interesting concepts that people have already begun to experiment with include direct democracy approaches such as referenda, more inclusive voting rights, establishing citizens' councils12 as well as the proposal of urban citizenship.¹³ Moreover, democratisation would require the absolute transparency of state structures and a democratic overhaul of the media.

Beyond the purely political sphere, democratisation would also have to apply to the economic sphere, not least due to the fact that a direct link exists between low levels of political participation and increasing levels of economic inequality. Institutions without sufficient democratic legitimacy should therefore not be able to take important political decisions such as those concerning austerity measures or structural reforms. Otherwise, they effectively circumvent the elected representatives in national parliaments; the actions taken by the Troika in Greece is a prime example (Money and FINANCE). Moreover, people will have to gain greater influence over the organisation of the production, consumption and distribution of goods. In food councils, for example, citizens and experts, such as farmers or scientists, co-operate closely with municipal councils to ensure cities develop a sustainable and just food system (FOOD AND AGRICULTURE).14 Energy democracy, on the other hand, demands the democratic participation of all citizens in energy production, an environmentally sustainable transformation of the sector and universal provision of access to sufficient energy. This requires limiting the power of major energy corporations.15 The concept of social infrastructures and the organisation of commons could very well be interpreted as new forms of economic democracy.

Opportunities to democratise processes and businesses also exist within the sphere of private business. Here labour struggles and nationwide unionisation play an important role. Efforts to establish worker self-organisation in the form of cooperatives, in which workers themselves define production processes, go even further.

To grow this kind of democratisation from the grassroots up, it is imperative to encourage people to see themselves as active citizens and strengthen their desire to participate in social processes from a very young age.

Democracy cannot remain a one-off 'chalk and talk' lesson in schools. Children instead should be able to develop a passion for reaching decisions and collectively shaping the world they live in. Democratic schools are one example (Education and knowledge).

Needs-oriented, solidary and environmentally friendly economies

A solidary mode of production and living will have to be needs- and not profit-focused, and must aim to fulfil these needs in an environmentally and socially sustainable manner. There are already established solidary forms of economy in which producers and consumers cooperate in collaborative and non-hierarchical forms. Examples include community supported agriculture projects (FOOD AND AGRICULTURE) and collaborative open source software (DIGITALISATION). Moreover, there are a growing number of social movements where producers and consumers work collectively in the pursuit of the common good. The movement for food sovereignty brings both farmers and the consumers of agricultural products out onto the street (FOOD AND AGRICULTURE); those providing and those receiving care jointly promote the care revolution (CARE). Short transport distances, renewables, regional products, re-utilisation and recycling are key building blocks in a solidary economy. This is what a good life for all — for people, animals and ecosystems—is about.

In terms of the overall economy, the goal must be to shrink socially and environmentally harmful economic sectors in a controlled and socially just manner. Degrowth or post-growth are economic concepts that already offer an alternative to our fixation on growth. In return, we need to strengthen sectors related to the fulfilment of people's fundamental needs and that are environmentally sustainable. This requires inclusive public debates on what is socially more desirable: do we want more subsidies to develop public transport or tax breaks for high-emission company cars? Should we promote environmentally friendly peasant farming or industrial-scale factory farming?

At the global level, transnational networks of production and finance are the backbone of the imperial mode of production and living. Strict regulation of businesses, banks and the cross-border movement of capital, as well as a ban on socially or environmentally harmful businesses and business practices, could be a first step towards more just forms of production. Moreover, we need to develop new forms of economic democracy on a global scale.

There is no blueprint for a solidary economic framework. It can only emerge from the exchange between

pioneer projects, social movements from both the Global North and South as well as institutions. We must do away with the notion that the best way to ensure a functioning economy is to keep markets outside of the political realm and thus outside of people's sphere of influence. The wide-scale social resistance to the TTIP and CETA free trade agreements showed that many people no longer want to relinquish their say in economic and trade policy and are willing to fight for a new economic framework. Ultimately, this is about reversing the trend of increasing deregulation that has handed over ever-greater spheres of our lives to the market, i.e. the aim is to free an increasing number of elements vital to production and our lives from the grip of the market and transition them to a solidary economic system.

What sort of transformation do we want?

The cornerstones described here to establish a solidary mode of production and living, and the strategies presented to implement a *good life for all* are far from exhaustive. Making a global, socio-ecological transformation a reality represents a huge social challenge. Alternative concepts remain underdeveloped at the conceptual level and need to be more robustly linked. At the political level, firm alliances still need to develop, as do long-term strategies for the implementation of alternatives.

Nonetheless, alternative approaches are not utterly hopeless. The imperial mode of living is increasingly reaching its limits and distorting our societies and our environment. This damage, and the rise of right-wing social projects that aim to secure the imperial mode of living using an authoritarian approach, lead to an increased need for solidary alternatives. 'Business as usual' seems to be increasingly unrealistic. The question is therefore not whether there will be a comprehensive transition, but what shape this will take and who will lead the charge. Without our active involvement, such a transformation could potentially arrive as an ecological and social disaster, while market-based pseudo-solutions and dangerous right-wing alternatives become ever more established. We should take this moment filled with multiple crises and tremendous social challenges as an opportunity to pool the strength of existing projects, policy proposals and stakeholders (both radical and reformist) in order to stand up for a good *life for all* together.

Do you agree?

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

Endnotes

- 1 Kallis, 2016
- 2 Welzer, 2011
- Konzeptwerk Neue Ökonomie,
 2017
- 4 Attac, 2017
- 5 Interventionistische Linke, 2017
- 6 System Change, not Climate Change, 2016
- 7 Klautke & Oehrlein, 2008; Rätz, 2007

- 8 Ende Gelände, 2017
- 9 Steckner & Candeias, 2014
- 10 Habermann, 2016; Helfrich, 2012
- 11 Lammer, 2016
- 12 Land Voralberg, 2017
- 13 Verein Sand & Zeit, 2017
- Ernährungsrat Köln, 2017Weis, Becker & Naumann, 2015

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

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

Endnotes

Brinkmann, Dörre & Röbenack, 2006

² glokal, 2013, pp. 12-13

glokal, 2013, p. 10

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FOOD AND AGRICULTURE

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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, la Eradze, Anil Shah, Lukas Wolfinger

Digitalisation:

Anil Shah, Lukas Wolfinger

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Money and finance:

Samuel Decker, Jannis Eicker, Christoph Podstawa

Education and knowledge:

Hannah Engelmann, la Eradze, Maja Hoffmann

Food and agriculture:

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Summary and outlook:

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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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