5. The Great Transformation of the Transport Sector

After presenting the transport sector and the field of transport policy in all their facets, the following chapter will once again take up the fundamental observations on the political economy of transport within the framework of capitalist socialisation and discuss the question of the conditions required for sustainable transport development. This entails placing people at the centre of a major transformation of the transport sector.

5.1 Placing People at the Centre of Sustainable Transport Development

The discourse of sustainability is characterised by the idea of nature in its natural state. This concept, in turn, is based on the assumption that one can distinguish between nature in its natural state and something unnatural that deviates from it. This is where people usually come into play, encountering an unsullied nature and deforming it in a way that renders it unrecognisable. This motif – natural versus unnatural – results in a far-reaching social consensus that transcends all party boundaries and underpins the entire discourse of sustainability: nature in its natural state must be preserved or restored.

A point of view that assumes that all people are (or at least should be) equally motivated to restore nature to its natural state is as charming as it is demanding. This becomes clear the moment the specific social

conditions come into view in which different people with different interests are active. Then it becomes apparent that people are affected quite differently by the overexploitation of natural resources and its negative consequences. The rise in sea level as a result of climate change would primarily affect the 90 percent of the world's poor population, a large proportion of whom live close to the ocean, while the few rich cities have the necessary means to adapt to these changed conditions and continue to lead a good life (cf. Schellnhuber 2015).

This way, the perspective changes and it is no longer *people* as such who have to save *nature* as such. Rather, it is different people with very different interests who have to agree on how to deal with natural resources. In this context, nature in its supposedly natural state is a misleading point of reference, because contrary to what this idea suggests, there is no state of nature which people can use to orient their actions. The natural environment has never been static, but has been in a state of constant, sometimes profound change for 17 million years. Since the emergence of Homo sapiens almost two million years ago, humans have also been exerting an increasing influence on the natural environment. This development reached its provisional peak and a new quality with the beginning of the industrial revolution about 200 years ago. Since the middle of the 20th century, the influence of humans has finally become so great and the changes in the natural environment so visible that researchers have diagnosed the transition to a new geological age – from the Holocene to the Anthropocene (cf. Kersten 2014).

Nature its natural state thus loses its significance as a reference point, as a guide for taking action, and people become the focus of attention. While viewing pristine nature as the goal previously seemed indisputable, i.e. it did not require a political decision, the question now arises as to how people want to organise their "metabolic interaction [with] the earth" (Marx 2004: 637) in the future. Social relations as an expression of capitalist socialisation, which decide how the relationship of people to their natural environment will be shaped, are now placed on the political agenda. The discourse of sustainability, which had previously been largely politically inoperative, is thus politicised (cf. Swyngedouw 2007; Wilson & Swyngedouw 2015). The goal is now no

longer to align one's own actions with an original state of nature that can be taken as a given by all people equally. Since pristine nature as a justificatory fundament is now lost, the regulation of our relation to nature must now be negotiated politically (cf. Görg 2003). The formerly natural standard is replaced by a social criterion and a political decision has to be made regarding how we want to live together in the future. In the process, the existing power relations and relations of domination necessarily come into view. Can we imagine that 90 percent of the world's population will suffer under the consequences of climate change in the future, while ten percent will even benefit from it? These ethical questions are always also political questions and can only be answered by people who are politically informed (cf. Negt 2011).

By contrast, as was shown at the beginning of the present study, the capitalist mode of socialisation is based on compulsive economic growth, which is the dominant factor in political action. Accordingly, it is not qualitative questions that are determinant, about who produces what, for whom, with what aim, but rather how more can be produced, quantitatively. So one doesn't begin with the question of what do I need and how much of it; instead, it is simply assumed that ever more is needed because the capitalist mode of production depends on it. Only then is the question posed as to who should consume the additional goods that are produced, which explains the recurrent interplay of crises of over-production and under-consumption that manifest themselves in severe social dislocations, over which the people affected by them have no influence (cf. Zimmermann et al. 2013). Following Marx's characterisation of the human being as a *zôon politikon*, as a potentially self-aware and self-determined – that is, *political* – being, the human being appears alienated from his or her particular abilities within the framework of capitalist modes of socialisation (cf. Sörensen 2016).

In the transport sector, alienation is expressed in a reversal of the means and the purpose: within the framework of the capitalist mode of production, transport is transformed from, initially, a means to achieve a specific end, into an end in itself. Transport serves as a medium of the sphere of circulation and guarantees the linking of production and consumption on an ever-longer stepladder, and at an ever-increasing speed.

The resulting growth in transport cannot be justified qualitatively; transport is not designed to satisfy concrete human needs. Rather, transport growth legitimises itself through its contribution to economic growth. Thus, transport growth is functionally linked to economic growth, which in turn draws its purpose from itself – growth for its own sake. The primary purpose of transport is thus to serve the capitalist mode of production, not to serve people.

The alienation caused by the reversal of means and purpose in transport is articulated on an individual level through the conceptual confusion of transport and mobility. There is no one who, out of self-motivation, happily undertakes a daily commute over long distances. There are simply some who cope with the associated stress better than others. Nevertheless, those who are on the move a lot are considered highly mobile. The growth paradigm has thus also found expression in individual self-perception, with the qualitative dimension left unexamined. To the extent that transport growth is understood as a necessary contribution to the desired economic growth, it remains removed from political influence. In contrast, a politicisation of transport development would have to start with social conditions and support people in fulfilling their concrete demands and needs.

5.2 Breaking with the Growth Paradigm as a Prerequisite for People-Centred Transport Development

As a functional component of the growth spiral of capitalist production, transport policy moves within the framework of the growth paradigm (cf. Fig. 1) and is trapped in a production regime that constantly derives the goal of unlimited growth from within itself. Due to this lack of alternatives, transport policy is largely powerless; it can regulate transport in the interests of economic growth, but cannot politically shape it beyond that. Accordingly, a politicisation of transport policy must be directed towards emancipation from the prevailing growth compulsion.

Due to its fundamental social significance, a break with the growth paradigm requires profound social change. The German Advisory Coun-

cil on Global Change (WBGU 2011) compares the current situation with regard to the possible global consequences of climate change with the enormous social upheavals that resulted from the industrial revolution in the 19th century. At the time, the economic forces that were unleashed led to social upheavals on a scale that threatened social cohesion. The task was to regulate the largely free market politically in the interest of the common good. The WBGU sees the challenge today in organising societies worldwide in such a way that climate change can be stopped and its negative consequences avoided. To this end, the paradigm of 'higher, further, faster', which is increasingly directed against people, must be replaced by the ethical principle of responsibility formulated by the philosopher Hans Jonas (2003). This principle stipulates that in future people should no longer base their actions on quantitative criteria, but rather on three substantively justified qualitative goals. Firstly, they should be guided by an ecological mindfulness that takes into consideration negative environmental consequences for people's lives. Secondly, democratic participation should be guaranteed so that people can shape their lives in a self-determined, that is, political way. Thirdly, current actions should always be guided by a sense of responsibility for the future, reflecting on the consequences of one's own actions for future generations.

In terms of transport, this would mean that we would have to consider the environmental consequences of a global increase in transport from today's one billion vehicles to two billion in 2030 and three billion in 2050, and how this would affect the coexistence of the world's population (cf. Sperling & Gordon 2010). This objective is confronted with the directive goals of the automobile companies, which are continuously increasing their global production figures. This already addresses the second goal, democratic participation, which is not possible under the current social conditions, dominated as they are by particular market interests. Lastly, one would have to consider the consequences for future generations of excessive transport and traffic development in the emerging regions of the world, as they catch up with the developed industrialised countries. The necessity of political struggle is illustrated by the exist-

ing relations of power and dominance, which stand in the way of a social transformation conducive to sustainable transport development.

The debate within the Commission of Inquiry of the German Federal Parliament into "Growth, Prosperity, Quality of Life – Ways to Achieve Sustainable Economic Activity and Social Progress in the Social Market Economy" showed how great the potential for political conflict is when it comes to economic growth (cf. Deutscher Bundestag 2013). The starting point for the establishment of the Commission of Inquiry was the wide-ranging consensus that societal prosperity can no longer be adequately assessed using the gross domestic product, which relies solely on quantitative economic indicators (cf. Lepenies 2013). Viewed through the lens of these indicators, a traffic accident has a positive impact on the gross domestic product, since it provides a range of employment – police, paramedics, doctors, car repair workshops, etc. – to which income is tied, which in turn can be fed into the economic cycle as consumer expenditure. By contrast, the negative, cost-causing effects on welfare are not sufficiently accounted for. For this reason, the Commission of Inquiry agreed across party lines that, in addition to material indicators of prosperity, social and ecological dimensions of prosperity should also be included in the future.

Nevertheless, a profound controversy arose over the question of the right strategy for sustainable economic development, which remains exemplary of the political debate today. Accordingly, the majority vote advocated a change from quantitative to qualitative growth. By qualitative growth is meant that the entire economy is better organised and produces products of ever higher quality. This entails two strategies: First, technical innovations are supposed to contribute to gains in efficiency (efficiency strategy). For example, car engines that are more economical produce lower CO_2 emissions. Advocates of the efficiency strategy, such as Ernst Ulrich von Weizsäcker, Amory and Hunter Lovins (1995), assume that we can maintain and even ramp up our global lifestyle through efficiency gains alone. In their view, three billion motor vehicles worldwide will then no longer pose a sustainability problem. Secondly, the resources used should be used as effectively as possible, in the best case, used more often, which addresses the issue of recycling (effectiveness

strategy). Here, too, the automobile can serve as an example, in which up to 30 percent of the materials used now come from recycling. Representatives of the effectiveness strategy such as William McDonough and Michael Braungart (2002) assume that artificial substances will be invented in the future, which – analogous to the cycles of natural resources – will be fed over and again into cycles of artificial materials. Like the proponents of the efficiency strategy, they are also convinced that the effectiveness strategy alone will solve the sustainability problems, and from this perspective, too, three billion motor vehicles worldwide therefore no longer pose a sustainability problem.

In its majority vote, the Commission of Inquiry into "Growth, Prosperity, Quality of Life" thus advocates a dual strategy of sustainable economic activity, which primarily relies on technical innovations, whether to achieve efficiency gains, or to use resources more effectively in the future. This is, of course, a repeat of the debate from the 1990s presented at the outset of this study, which was conducted at the time in the Commission of Inquiry on the "Protection of the Earth's Atmosphere" (cf. chapter 2.2.2). Once again, economic growth is qualified, but not fundamentally questioned. This results in the frequently described problem that the gains in efficiency and effectiveness of qualitative economic growth are repeatedly negated or even outstripped by quantitative growth (cf. Paech 2011, Sachs 2015). This has been particularly evident in the transport sector in recent decades. Time and again, technical innovations were presented that served as beacons of hope for sustainable transport development – most recently electric transport (cf. Schwedes 2016a). Measured in terms of the efficiency and effectiveness strategy, the electric car is undoubtedly the product of qualitative economic growth. While the internal combustion engine emits over 70 percent of the energy it produces as heat and can only use just under thirty percent for propulsion, the electric motor is far superior, with an efficiency of over ninety percent. If we assume that the electric car also runs on renewable energy, it is also superior in this respect to the combustion engine, which consumes – just once and irretrievably – fossil fuel that was created over a period of millions of years. Nevertheless, studies in recent years have repeatedly shown that merely

replacing the combustion engine with the electric car, with otherwise unchanged circumstances, results in scarcely any benefit in the energy footprint over the course of the vehicle's life cycle (cf. UPI 2015). This can be explained, among other things, by the energy-intensive extraction of the rare earths needed for the batteries and the still largely unresolved issue of disposal, quite apart from the fact that the electric car is also dependent on finite resources.

The example of electric car production confirms once again that qualitative growth does not provide a solution to the sustainability problem – three billion electric cars worldwide *also* pose a sustainability problem. This does not mean that the efficiency and effectiveness strategies are meaningless, they are just inadequate and must be supplemented by the third strategy of sustainability, namely the so-called sufficiency strategy, which is aimed at changing the behaviour of both producers and consumers (cf. Stengel 2011). In relation to the electric car, this would mean that it is integrated into new concepts of usage, such as car sharing. This means that the electric car is no longer a private commodity that sits around idle for 90 percent of the day, but is ideally used by many people throughout the day, when they need it. The consequence would be that, overall, far fewer electric cars would have to be produced, which would thus contribute to breaking with the growth paradigm. This would require a rethinking on the part of the producers, who would no longer orient their activities towards increasing their production figures, but would instead develop into mobility service providers who gear their offers to the specific demands and needs of their customers. [1] But it would also require a change of mentality among consumers, to use means of mobility collectively instead of owning them individually. Only on the basis of this *social innovation*, which complements the gains in efficiency

1 Of course, the automobile manufacturers claim to be able to anticipate their customers' every wish. However, this remains unsatisfactory as long as democratic participation stops at the factory gates. It can be assumed, for example, that Germans would not have agreed to the health-damaging 'solution' to the exhaust gas problem in diesel vehicles if they had been given the opportunity to do so.

and effectiveness achieved through technical innovations, can the electric car be shown to make a positive contribution to sustainable transport development (cf. Augenstein 2015).

Following the insight into the necessity of breaking with the growth paradigm in order to enable sustainable transport development, the question arises as to the scope for action in transport policy within the framework of the capitalist mode of socialisation (cf. Higgs 2014). Is a transformation of the transport sector conducive to sustainable transport development even conceivable under the conditions of capitalist production? After all, research on the 'Varieties of Capitalism' has shown that, after the Second World War, different paths of capitalist development were taken worldwide, some of which manifested themselves in very different modes of regulation in conjunction with the welfare state (cf. Hancké 2009). However, none of these variants is characterised by changes as profound as the great transformation from laissez-faire capitalism to a capitalist production regime regulated by the welfare state (Gilbert & Perl 2008). At the time, this required far-reaching political interventions, which the German Advisory Council for Global Change (WBGU 2011) takes as a reference point for the overall societal change that it believes is necessary now and that has to be shaped politically. Following this approach, and in the light of historical experience in the transport sector, recommendations for political action in the design of sustainable transport development are developed in the next chapter.

5.3 The Common Good as the Starting Point for a New Transport Policy

In the course of the historical development of the welfare state, the principle of public administration oriented towards the common good, also known as public services, was established in the early 20th century and remains valid today (cf. Hofmann 2012). This was based on the insight that people in modern urban societies would no longer be able to afford certain necessary services that the rural population had previously organised themselves, such as the water supply. Instead, the state

would have to provide the infrastructure services that are necessary for large masses of people to live together, such as sewage systems, electricity grids or transport networks (cf. Meinel 2011). This situation resulted in the so-called "social question". Basic services necessary for daily life were to be made available to all citizens in their homes, be it a toilet connected to the sewage system, electricity or connection to the water supply. The idea of household access was born! Transport was also part of the provision of public services and was to be organised in the interest of the common good. At the time, however, due to a lack of alternatives, the requirement only referred to public transport, which was in principle supposed to be accessible to everyone in order to guarantee a minimum degree of mobility.

With the individual mass motorisation of the post-war period, the situation in the transport sector changed fundamentally. The availability of a private automobile meant that more and more people were able to provide for their own personal mobility needs. In the transport sector, they were less and less dependent on state-run public transport services. Admittedly, the state provided the necessary massive road infrastructure and an obligatory parking space. But beyond that, people organised their (auto-)mobility more and more independently. Until finally, it became almost impossible for a household to satisfy the basic need for mobility without resorting to the private automobile, while access to collective public transport was increasingly thinned out.

Today, the social environment has once again fundamentally changed. With challenges such as climate change and the finite nature of fossil fuels, private auto-mobility is increasingly contested. In light of this, the question arises regarding the extent to which the individual's right to a minimum degree of mobility can be guaranteed without having to rely on the private car. If it should be the case in the future that personal mobility with the help of a private car is no longer feasible on an individual basis due to rising costs, how is the necessary basic mobility, congruent with the common good, to be provided? In other words, the social question is being posed anew.

Ensuring sustainable transport development through access to mobility from home could be a future task for the state, within the frame-

work of a redefined concept of public services. This requires as great an effort, socially speaking, as in the 19th century, when public utility infrastructures were established in European towns and cities. In the following section, challenges are outlined and solutions suggested that aim to create access to mobility for low-income population groups, in conformity with minimum social standards. These solutions point to the necessity to rethink public services, with the aim of establishing a mobility law that guarantees access to mobility from home, without being limited to traditional collective public transport. Thus, low-income earners can prove to be pioneers of mobility in the context of sustainable transport development.

5.3.1 On the Relationship between the Common Good and Transport

The attractiveness of the private car is explained by its permanent availability. By having it right outside the front door in the best case, its owner has the certainty of being mobile at all times. Just as the household connection to the water supply, to sewage, the electricity grid and heating guarantee that basic needs are met, the private car functions, as it were, as a household connection to mobility. However, with one crucial difference: as a 'stationary vehicle'[2] it is highly inefficient. While public utilities guarantee a permanent and thus efficient service due to their collective use, the private car stands around unused most of the time. This situation results in a dilemma! The private automobile ideally fulfils a basic need for individual mobility, but at the expense of the common good (cf. Knoflacher 2013).

Given this situation, the question is how this obvious contradiction can be resolved. In other words, the challenge for transport policy is to organise household access to mobility such that it supports sustainable transport development. By contrast, the current situation is that those

2 Translator's note: *Stehzeug* ("stationary vehicle") as opposed to *Fahrzeug* ("moving vehicle/vehicle designed to move").

who do not have a private car are confronted with multiple barriers because a public transport stop is obviously not to be found outside every doorstep. Also, it is usually not possible to step out the front door, grab a rental bike and ride to the next stop to quickly change to the next mode of transport. And cars for car sharing are rarely available in the neighbourhood, let alone at the front door. On the contrary, they are lacking precisely where they are most needed: in areas of the cities where cycling is common, as well as in rural areas. Many households thus have no guaranteed connection to mobility because their needs are not covered by private business models. As a result, a growing part of the population experiences social injustice to the extent that their mobility or social participation is restricted, for a wide variety of reasons. This is where transport policy must start today, by revisiting the social question, taking the changed social situation into account and reflecting on new forms of public mobility (cf. Schwedes 2021).

The causes that limit individual mobility and thus social participation are manifold and usually tightly interwoven. The hindrances to individual freedom of movement can have to do with one's personal environment and be caused by a lack of skills and/or financial resources, and can be lasting, due to location and time considerations. The constant thinning out of comprehensive bus and train services, especially in rural areas, has ultimately shifted transport to the automobile. Socially disadvantaged urban districts or rural regions without appropriate transport infrastructure are dependent on motorised individual transport, i.e. primarily on the car. But there are also spatial developments that have fostered car dependency and barriers to accessibility in recent years. Thus, we observe a reduction in settlement density, a separation of residential and work areas, and spatial dispersion that favours motorised individual transport (Holz-Rau 2018). But traditional space-time ties have also changed. Needs have become more differentiated, the purposes of transport have become more diverse and journeys more complex. In addition, routines or habits are significant for transport behaviour. Thus, the choice of means of transport is for the most part habitual. This is especially true for daily journeys. People no longer think about the choice of transport or the routes they take. On the other hand, complicated tar-

iff systems or the purchase of individual tickets from ticket vending machines often enough serve as an obstacle to a routinised choice of transport mode. Transport policy and planning that aims to promote environmentally and socially equitable transport use requires services that go beyond the high network density and frequency of traditional public transport, by ensuring a connection to mobility for individual households (cf. Catapult 2016).

Physical disabilities, insecurity and fears can create acceptance thresholds that significantly limit mobility. Especially in old age, fears and insecurities increase. For example, some people find it difficult to use public transport if they associate it with negative experiences (e.g. uncertainty when changing trains, a confusing fare system, harassment). It is not only older people who often avoid using a bicycle because they feel unsafe on slippery or damaged bicycle paths, or on roads with a high proportion of cars. People tend to avoid places that give rise to fear, i.e., places where the threat of crime and violence is perceived to be particularly high. Those who are restricted in their movement are also often confronted with structural barriers. Ramps and footpaths with steep inclines, stairs, steps or missing handrails can mean that one has to ask for assistance or is unable to use a particular means of transport. Spaces and transport facilities should be designed in such a way that everyone feels safe and can get around without worry. Adequate lighting, pathways that are easy to follow or elevators with glass walls can increase the feeling of safety. Personal barriers can therefore be quite diverse and affect not only elderly people, but can basically affect everyone. Accordingly, an environmentally sound transport policy is designed to meet the needs of the weakest members of society, it is thus a 'design for all', and thereby contributes to the common good – everyone benefits from a barrier-free ticket machine (cf. Gaffron 2016).

Lastly, it is the lack of financial means that limits mobility. Although low-income households have lower transport expenditure in absolute terms, expenditure on mobility takes up a much higher share of the total budget compared to high-income households. In addition, transport costs have risen at an above-average rate in recent years. Due to their limited financial means, low-income households find it extremely diffi-

cult to offset rising transport costs from other areas, since large parts of the income are tied up in fixed expenses for food, clothing, hygiene articles etc. Finally, a reduction of transport costs is hardly possible for low-income earners, since they already make heavy use of non-motorised and public transport (Altenburg et al. 2009). It thus becomes clear that strategies in transport policy designed to maintain mobility are tightly linked to socio-political issues.

In the changed social environment, the target group of low-income households constitutes a social group that not only – as in the past – raises the social question. Due to their precarious economic situation, they also need to keep transport costs as low as possible and thus do without a private car. They are often forced to use public transport and are therefore also called 'captives'; i.e. those who are 'trapped' in public transport. As a result, low-income earners or the 'captives' are the population group that, in terms of transport, gets around in a particularly sustainable way. Seen in this light, the income-poor are actually the pioneers of sustainable transport development (cf. Daubitz 2014)!

What could be the first steps on the path to linking the social question with the ecological question?

5.3.2 The Mobility Act

In order to respond adequately to the changed social environment, the idea of the common good must be further developed in the direction of sustainability (cf. Ambrosius 2016). In doing so, it is certainly possible to build on the legal institutions that were developed in the past in the context of providing public services (cf. Ringwald 2008). Accordingly, the Local Public Transport Act can become the starting point for a much broader mobility law, on the basis of which rather than a local transport plan a mobility plan can then be drafted. While the Local Public Transport Act is directed one-sidedly towards collective public transport and is intended to offer a corresponding minimum degree of access for every citizen, the Mobility Act is based on a different understanding of transport and mobility. In contrast to the traditional notion of transport as physical movement in space, mobility is understood as potential mobil-

ity, which is measured by the range of opportunities for social participation (cf. Schwedes et al. 2018).

This conceptual distinction results in a fundamental change of perspective, because the Mobility Act no longer focuses on individual means of transport, as before, but rather considers the potential mobility of citizens, measured by the possibilities for social participation. In this way, the narrow focus on collective public transport is broadened to include all means of transport. This also expands the scope of responsibility of the public sector at the municipal level to include all mobility services that contribute to sustainable transport development. Unlike in the past, the municipality does not have to provide these services itself, but must ensure that private providers contribute to integrated transport development with innovative transport services. The task of transport policy is to create the necessary regulatory conditions for this. For example, the municipality could put the fine distribution in commercial transport out to tender in a one-stop process and award it to a private service provider who can then manage the last mile efficiently.

In addition, other fields of action open up that should be considered under the banner of integrated transport policy and planning. These include, in particular, urban development and housing policy, which can make a decisive contribution to ensuring that people on low incomes can participate adequately in society without having to deal with complex transport problems and the corresponding high costs. Ensuring affordable rents in the inner cities is just as much a part of this as functionally mixed urban neighbourhoods in which the facilities necessary for everyday basic needs are only a short distance away.

On the basis of the Mobility Act, a mobility plan is being drawn up which – unlike the local transport plan – is no longer oriented towards individual means of transport, but makes the mobility needs of the population the starting point for deliberations. In addition to the two traditional planning instruments of infrastructure planning and traffic flow management, the mobility plan relies above all on the newer planning approach of mobility management. In this approach, transport policy and planning aim to involve the population even before people have made transport-relevant decisions. This means that

policy and planning no longer follow – as they customarily have – the private decisions of households or companies concerning location, for example when the latter have decided on a greenfield site, by developing adequate services. Instead, politics and planning use the mobility plan to formulate clear transport policy goals that guide actions to be taken, are condensed into an integrated transport planning strategy and are directed towards sustainable transport development. Accordingly, a municipality could develop new residential concepts that involve low car-use, together with urban housing associations, public transport companies and in cooperation with private mobility service providers, whether taxi companies, operators of car-sharing or bicycle-sharing services, etc.

In view of the challenges of transport policy, the central goal should be to break with the model of 'higher, further, faster' – in other words, generating ever more traffic that has to cover ever greater distances in ever less time. The sustainable counter-design is a model that seeks less traffic by reducing the distances to be covered and, as a result, enables deceleration. A subsequent integrated transport planning strategy formulated in the mobility plan would have the task of organising new forms of social coexistence in consultation with the population in question, which would guarantee the degree of mobility necessary for social participation and largely avoid traffic development with its negative consequences, all for the common good.

5.3.3 Summary

Assuming that the mobility act will be taken seriously as a political challenge in the future, the historical review of the political implementation of public utilities infrastructures in urban Europe is helpful (cf. Schott et al. 2005). On the one hand, in order to get a feeling for the enormity of the forthcoming collective task and, on the other hand, to show that such forbiddingly large tasks involving the community as a whole have already been successfully carried out in the past.

Then, as now, it was external constraints that moved politicians and others in positions of responsibility to act. This can be demonstrated par-

ticularly impressively by the example of the introduction of the municipal sewage system. At the time, the recurring cholera epidemics created growing pressure to act. Nevertheless, the construction of sewage systems was delayed for many years due to massive resistance from the population (cf. Stippak 2010). Although hygiene and healthy living conditions were clearly in the public interest, they clashed with established particular interests. Since people had previously sold their faeces to the farmers in the surrounding area, who used them to fertilise their fields, the citizens saw themselves doubly dispossessed by the sewage system. In future, they would have to pay for their connection to the sewage system through additional taxes. The sewage system would not only remove their excrement and thus a source of income, but also impose additional costs on them.

In the end, the public interest prevailed with the compulsory connection to the sewage system, which remains valid today and holds for all citizens, without them perceiving it as coercion, let alone questioning its reasonableness. The example makes it particularly clear how much the implementation of technical innovations is linked to social learning processes. In this case, it took a decades-long process of "establishing new practices of bodily hygiene in the domestic sphere" (Gleichmann 1979) before people's scepticism about the sewage system, which they perceived as an intrusion into their private sphere, had given way to widespread acceptance.

Today, it is a matter of establishing a new understanding of mobility and reorganising transport with a view to sustainable transport development, in the interest of the common good (cf. Schmitt-Egner 2015). The central political challenge is to communicate the idea of sustainability to the population as being in the public interest. In the transport sector, this requires changing individual mass mobility reliant on the private automobile, which is still taken for granted today. Just as in the past, when the introduction of the sewage system was on the agenda, such a far-reaching change in transport behaviour cannot simply be abruptly imposed. Rather, the political task is to make the population aware of the meaning of a change in transport behaviour within the framework of a new mobility culture and to guarantee, through the Mobility Act, a con-

nection to mobility for individual households that, with the potential for social participation as a yardstick, constitutes an equivalent alternative. Thus, under changed social conditions, the social question becomes central to a transport policy that aims to guarantee every citizen a minimum of sustainable mobility. Conversely, this means that the public subsidies that still support non-social mobility today will be cancelled. Since this will inevitably lead to conflicts with those who still benefit from non-sustainable transport development today, this again points to the central importance of political conflicts in the course of the necessary social transformation.

5.4 Fourth Interim Summary – It's the Politics, Stupid!

Since the 1970s, in response to a massive critique of over-regulation in the welfare state, a neo-liberal hegemony has been established worldwide, with policy-making increasingly used to improve conditions for market participants (cf. Prasdad 2006). As a result, the state has withdrawn from more and more areas of activity and left them to actors in the private sector. The conviction at the time was that there was no alternative to this kind of privatisation of services formerly provided by the state. The British Prime Minister Margaret Thatcher had a formative influence on this *zeitgeist* with the TINA principle: There Is No Alternative! According to Thatcher, there was no such thing as society; only markets existed and the government was responsible for their functioning. The primacy of the economy was expressed by Bill Clinton's advisor James Carville in the presidential election campaign with the slogan "It's the economy, stupid", which subsequently became a catchphrase. The German Chancellor Gerhard Schröder was, with good reason, also ennobled as "Chancellor of the Bosses", especially for services rendered to the German automotive industry. Asked as SPD party leader about his party's specific economic programme, he, like Thatcher, said the party had no such programme. This restricted understanding of politics on the part of the SPD government finally culminated in the Agenda 2010 (cf. Nawrat 2012).

In the preceding chapters, the negative consequences of this political attitude in the transport sector over a period of more than 20 years were presented in detail. In 2008, the financial and economic crisis temporarily put the brakes on the neo-liberal market euphoria, but to this point adequate political corrections have not been put in place (cf. Streeck 2015). In light of this, we will conclude here by recalling the fundamental insight into the politically generic nature of human beings, which holds that human beings individuate themselves to the extent that they organise their coexistence with other human beings in a politically self-determined manner (cf. Marx 1989b: 18). As was shown in the first chapter, the prerequisites for a politically self-determined organisation of coexistence within the framework of capitalist socialisation are given only to a very limited extent, since there is little political influence exercised on the privately organised production in a free market economy. In the transport sector, this is expressed time and again today in the fact that political goals regularly remain unattained.

The degree to which markets are subject to political influence varies and is expressed in the 'Varieties of Capitalism' mentioned above, which are characterised by different welfare state regimes (cf. Schröder 2013). However, the idea that markets are 'free' from political influence is misleading, since every market is necessarily politically regulated. The experience with laissez-faire capitalism in the 19th century showed the destructive effects on social cohesion of markets that are politically largely unregulated. The economic historian Karl Polanyi described the unbridled operation of market forces, which resulted in enormous social upheavals at the time, as the "devil's mill" and impressively described it as the consequence of the economy being detached from its political and social ties (cf. Polanyi 1995). Polanyi describes the ensuing great transformation at the end of the 19th century as a political counter-movement with the aim of re-embedding the economy in newly-created political and social institutions, in order to restore the cohesion of society. At the time, the communalisation of services that had formerly been privately provided – such as water, gas, electricity and eventually transport – began (cf. Schwedes & Ringwald 2021).

Since then, municipalisation has moved back and forth between the poles of regulation and deregulation (cf. Wysoki 1995). Markets are certainly more or less 'free' from political regulation oriented towards the common good, which places limits on the particular interests of individual market actors. The degree of political regulation of the market, however, is decided by governments and not by the markets, in each case within the framework of the historically specific social and cultural conditions. It's the politics, stupid!

After a phase of privatisation, we have been experiencing increased efforts in the direction of re-municipalisation for several years (cf. Bauer et al. 2012, Matecki & Schulten 2013). The renaissance of state-administered public services is based on the growing realisation that state institutions are of central importance for guaranteeing social prosperity (cf. Acemoglu/Robinson 2013). In this context, the state not only guarantees the conditions that facilitate a successful market society, it also ensures a social balance conducive to the common good. What the common good encompasses is constantly contested and must always be defined anew, politically (cf. Münkler & Blum 2002).

However, the state is by no means only the moderator between the economy and society. It also has an active role in supporting social innovations that prove successful in the private economic sector. Economist Mariana Mazzucato uses developed industrialised countries such as Great Britain and the USA to show how the state has specifically promoted research in the most diverse areas for decades, for which private investors – who are oriented towards short-term, secure profits – could not be found. Only after innovations such as the internet, the smartphone or forms of renewable energy became marketable after years of systematic state funding did resourceful entrepreneurs take them up and develop them further (cf. Mazzucato 2014). The economist Josef Alois Schumpeter had already praised the economically efficient state organisation of the Prussian Reichsbahn as a reaction to the ruinous competition of private railways at the end of the 19th century (cf. Schumpeter 1961: 357f.). From then on, a long, historical tradition of the state as a successful entrepreneur developed, which was broken

off and forgotten in the 1980s, thanks to the neo-liberal hegemony (cf. Ambrosius 1984, 2016).

The concept of transport as a public utility (cf. Knauff 2004) could be further developed by building on the rediscovery of the "need for the state in society" (Vogel 2007). Taking into account the changed social environment, two things in particular must be taken into account. While the concept of public services, originally developed in 1938 by the constitutional lawyer Ernst Forsthoff, was based on the idea of an authoritarian state, a contemporary understanding must take into account the new forms of state rule. The state is no longer to be understood as an institution of centralised control, but as an "integrative state" which expresses the balance of power of a multitude of actors in civil society, all with their specific interests (cf. Röttger 2004). Contrary to the widespread idea of democratic, consensus-based societies, the specific form taken by the state is the result of social struggles for interpretive power between actors from civil society (cf. Hirsch 2005). In this regard, the alleged diesel *scandal* in the German car industry is distinctly revealing. What happened was that a decades-long practice was turned into a scandal. While, for instance, environmental associations or the Federal Environmental Agency had repeatedly drawn attention to the irregularities for many years, the power cartel of politicians, business, and trade unions had managed to keep the issue out of the public eye and thus off the political agenda. Even though the impetus for the break-up of the power cartel came from outside, the decades of activities on the part of actors from civil society should not be undervalued. Through their efforts over many years to inform the public, an awareness of the problem developed, the explosive power of which was ignited by the "scandal". This has unsettled the configuration of social power relations, which had remained sclerotic for decades, without it being possible to foresee at this stage whether there will be a power shift, for example at the expense of the car companies, or whether – as so often in the past – it will simply result in a reorganisation that allows the old distribution of power to be maintained under new circumstances.

On the transport policy front, the success of sustainable transport development will be decided by the outcome of the social power strug-

gle with the automobile industry. At the moment, it looks like the automobile companies, like the energy companies before them, are incapable of reform. If it is true that there can be no energy transition without a transition in transport, then the Federal government must push through measures against the resistance of the automobile companies that are just as vigorous as those it imposed on the energy companies. The impetus for the energy transition also came from outside – in this case through the disaster at the Fukushima nuclear power plant in Japan in 2011. While the nuclear disaster at Chernobyl in 1986 had no consequences for energy policy, after Fukushima it was immediately decided to phase out nuclear energy. But this political decision was also preceded by decades of political struggles by the anti-nuclear movement, which created a public expectation that the power cartel of politicians, the energy industry and trade unions could no longer ignore, forcing even the physicist and German Chancellor Angela Merkel to see reason (cf. Radkau & Hahn 2013).

The experiences in energy as well as in transport policy show in equal measure the influence of actors from civil society on state decision-making and, along with the rediscovery of state-administered public services, these experiences raise the second point that has to be considered in the further development of public services in the transport sector. To the extent that the new form of state rule is no longer organised unilaterally, from the top down, as in the authoritarian state, but is rather increasingly dependent on the involvement of civil society, the question of democratic participation comes up. It has now become so pressing that even the Federal Ministry of Transport (2012) felt compelled to publish a *Manual for Citizen Participation*. Even if it is still just a fig leaf, it is nevertheless an expression of a change in discursive sovereignty, meaning that the issue of democratic participation can no longer be disregarded, at least not in policy objectives.

In view of the often-described discrepancy between programmatic aspirations and real transport development in the field of transport policy, on its own a discursive shift in favour of democratic participation is insufficient to be reassuring. But at least the new discourse offers starting points for actors from civil society who are committed to filling the

political aspirations with substance. Even non-binding political objectives make it possible to take politicians at their word, a fact that should not to be underestimated.

A particularly impressive example of the political impact of civil society is the citizens' initiative in Berlin for a referendum on bicycles.[3] The initiative put a topic back on the political agenda that had been repeatedly heralded for 20 years, in non-binding plans, with plenty of media attention, but the announcements remained largely without consequences. Until the call for a referendum, no politician in Berlin had taken up the issue of transport and supported a transition in favour of cycling and walking. The isolated positive experiences of the past have shown time and again that successes in transport policy are notably dependent on specific individuals (cf. Schwedes 2011). Revealingly, as recently as 2016 Berlin adopted a climate strategy with concrete measures for a climate-neutral city by 2050, but excluded measures in transport policy for the first five years. The reason given by the Senator for Urban Development at the time, Andreas Geisel, is characteristic of the city's transport policy: "I don't believe in tormenting car drivers" (cf. Jacobs 2016).

With its first campaign, the bicycle referendum collected over 100,000 signatures, thus far exceeding the necessary quorum of 20,000. In addition, a representative poll conducted shortly afterwards showed that the majority of Berliners are in favour of a stronger political commitment to cycling – even half of the car drivers surveyed expressed their support (cf. Infratest dimap 2016). Through the resulting public pressure, the bicycle initiative contributed to a socio-politicisation of Berlin's transport policy. The coalition government that took office in 2017[4] now had a state secretary for transport for the first time, who embraced the issue (cf. Kirchner 2021). The coalition agreement announced a mobility law that could form the basis of a turnaround in transport policy. While the few positive examples of transport policy in Germany

3 cf. Changing Cities: https://changing-cities.org/

4 A coalition of the Social Democrats, the Greens and the leftist party, Die Linke (trans.)

have so far been limited to small and medium-sized towns and have received correspondingly little attention, a new transport policy for the capital Berlin could for the first time have nationwide appeal. Only if this succeeds and the Federal government (on which essential legislative decisions depend) is won over as an innovator for a turnaround in transport policy, is a major transformation in the transport sector conceivable.