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From Village Community to Megacity

An Urban World

How City Networks Support the Global Order

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Cities, which already represent more than half of the world's population, are conquering fora traditionally reserved for nation states, such as the United Nations Climate Change Conference and the G20, sending their mayors to represent them. It is not just the practical, people-oriented approach, but also the hope for alternative models in times of great uncertainty that is putting cities in the spotlight.

The Rediscovery of "Urban Consciousness"

A brief glance at the past shows that cities play a central role in the development of civilisations, and have been directly involved in shaping the structure of international relations throughout history. The *polis*, a type of city-state of Antiquity, enabled the development of a forerunner of modern democracies. Such cities' interests were already represented in far-ranging networks by the *proxenoi*, who functioned as honorary consuls.[1] Until the middle of the last millennium, cities – particularly trading cities such as Milan – were still active as independent entities on the global stage. With the emergence of nation states, arose the heyday of classical diplomacy among nations, later including supranational organisations such as the United Nations (UN). Following the end of the Second World War, cooperation among cities played a major role in peace efforts, with prime focus upon bilateral treaties for cooperation in the areas of culture, education, and sport.

By the 1990s at the latest, the view of cities as international actors began to shift once again. On the one hand, globalisation was accompanied by strong urbanisation and thus, in many countries, by internal centralisation. So-called global cities arose,[2] concentrating important hubs of the global economy, such as headquarters of the finance industry, and other global corporations. At about the same time, the debate on the shaping of global sustainable development and its actors gained significance. The connections between ecological and development policy efforts at the UN level were discussed for the very first time at the Rio de Janeiro Earth Summit in 1992. One of the key findings was the realisation that sustainable development requires cooperation between various partners, and that global challenges would be increasingly coupled with urban development. This gave rise to Agenda 21, a plan of action to which 172 countries agreed, and in which municipalities were involved as players in global sustainable development. The underlying principle was one familiar from urban planning and environmental movements: think globally, act locally.

The City at the Centre of Global Development

Currently, about 55 per cent of the world's population live in urban areas. The fact that this share was only around 30 per cent in 1950, and that it is forecast to rise to 68 per cent in 2050, shows how rapidly the world is urbanising. Both the rise in the overall population as well as the upsurge in migration to cities will lead to an increase of 2.5 billion additional people in cities, according to UN forecasts. This urbanisation will progress most rapidly of all in emerging and developing countries, with nearly 90 per cent of this growth projected for what are currently mid-sized cities in Asia and Africa. Most of the 43 megacities expected to arise and grow by 2050 will also be located on these continents.[3]

Although cities cover less than two per cent of the earth's surface, they consume about 78 per cent of the world's total energy. More than 60 per cent of total carbon dioxide, and substantial quantities of other greenhouse gas emissions

from energy production, vehicles, industry, and biomass are generated in cities.[4] At the same time, cities are particularly vulnerable to the consequences of climate change. Seventy per cent of the world's megacities are located in coastal areas.[5] A UN study indicates that at least half of the more than 1,500 cities surveyed are highly vulnerable to at least one in six natural disasters (hurricanes, floods, droughts, earthquakes, landslides, and volcanic eruptions). This also has consequences for economic development. Because global cities in particular are central units of the global economy, their development – both positive and negative – has significant global impact. Tokyo's gross domestic product is comparable to that of Canada or Australia, for instance.

Cities account for 78 per cent of global energy consumption.

This shows that the shaping of global sustainable development depends to a large degree on the shaping of urban development. Last but not least, cities can also make a crucial contribution in this domain since they wield fundamental decision-making powers in areas such as land-use planning, waste management, transportation, and energy use.[6] This applies in particular to the emerging megacities in Asia and Africa, which will require massive quantities of resources, for instance, for the construction of infrastructure. These cities are already making investment decisions in infrastructure, housing policy, and other issues of city administration that will lay the foundation for development in the coming decades – not only for the cities themselves, but beyond city limits and even across national borders. The success of cities in meeting these challenges will ultimately also determine the course of global dynamics, such as handling climate change, migration pressures, and competition for increasingly scarce resources.

City Networks and Their Functions

Cities are thus an important instrument for global sustainable development, especially in their role as actors of international cooperation. Particularly in the run-up to, and the aftermath of, the Earth Summit in 1992, many cities began to organise themselves into networks. These networks operate either within certain regions, or globally. The focus is largely on various aspects of sustainable development.[7] An analysis carried out by Boston University distinguishes between networks that function as a kind of gathering place, by opening themselves up to a wide swathe of participants, and those that exhibit club characteristics, making membership conditional upon certain criteria.[8] The study, which relates to US environmental networks, also showed that most of the networks considered operate at two levels: first, at the level of urban cooperation through knowledge transfer and support of local capabilities, and second, at the level of lobbying their respective nation states, or supranational organisations. Eight of the 15 networks studied were initiated by the mayors themselves. The main reason for joining them was the opportunity to join forces in pursuit of a common interest. Other reasons were to signal certain priorities to voters, or to gain access to successful models and to other information.

The above analysis can also be applied to transnational networks of cities. Additionally, such networks often pursue an internal strategy that combines both cooperation and competition among cities. The competition for the reputation of pioneer ought to lead to ever more ambitious goals, such as regarding the reduction of greenhouse gases. At the same time, however, cities cooperate regarding concrete measures and the implementation of these objectives, for instance, by exchanging experiences in project development and good practices. Transnational networks support their members in the development of common projects, the acquisition of funding, and organise their own conferences, workshops, and study trips. Lobbying also includes placement of mayors at international

conferences. Some networks even award prizes in order to provide their own incentives to improve performance and thus provide participating mayors with an instrument for communicating success in their respective local arenas.

The number of city networks rose especially quickly after the Earth Summit, tripling within about 15 years to the current number of about 160. Local Governments for Sustainability (ICLEI), founded in 1990, operates with its approximately 1,000 members in various areas of sustainable municipal development. ICLEI sees itself both as a form of lobby group for the interests of cities worldwide, as well as a provider of services for municipalities, such as technical support during the preparation of urban climate assessments. United Cities and Local Governments (UCLG) is a global interpretation of the principle of subsidiarity, representing about 24,000 members for democratic local self-government.[9] The Rockefeller Foundation runs the RC100 Network, which supports 100 cities in the development of strategies and management structures for urban resilience, both in the form of financing, and in the form of advice from the direct exchange of ideas with other cities. C40 was founded in 2005 with the goal of uniting 40 of the largest cities in a coalition of the willing to reduce greenhouse gases. It tasks each of its now more than 90 members with the preparation of a climate action plan that meets the requirements of the Paris Agreement. Cities in the Global South in particular receive support for this, part of which is financed by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. C40 thematic sub-networks are intended to allow cities to exchange information about obstacles and solutions, thus accelerating the development of urban infrastructure and management on the road to climate neutrality and climate adaptation. As part of this programme, cities with a developmental advantage in a certain area – such as Rotterdam regarding storm surges, or Bogotá when it comes to public transport by bus – support their colleagues in other cities.

New Forms of Influence

There are various interpretations of the increasing rise of inter-city networks and their role within global governance. Some analyses are based on a perspective that sees cities as places whose increasing mass of urban population can be harnessed to make them drivers for the global population overall. Until the 1990s, the rise in the number of city networks may well have remained strongly influenced by this perception. The special role of cities as actors in the implementation of innovative solutions to global problems was recognised in the past few decades. The UN settlement programme HABITAT, for instance, dates back to 1978, and was founded to alleviate the increasing housing shortages.

For the past decade or so, the role of cities has been increasingly analysed from the perspective of global governance, and city networks have been seen more as a piece of a larger puzzle. It is assumed that since about the end of the last century, there has been an ongoing fragmentation of global power distribution away from nation states to new actors. Multinational and transnational companies such as Nestlé, Amazon, and Google, as well as non-governmental organisations such as Greenpeace, can operate outside of national regulatory systems. This development was reinforced by the emergence of global crises, such as the financial crisis of 2007. Questioning the justice of the global economic system and of the Western model of progress – and thus also the role of representatives and actors of this model – has by now grown from a niche into a mainstream theme. In the group of new, transnational actors, cities are increasingly joining in, often represented in global fora by their networks' agents.

The expiration of the Kyoto Protocol for limiting human-induced global warming was also a political crisis that occurred during this period. For years, negotiations for a follow-up agreement at the UN level gave the impression of irreconcilable differences among nation states concerning one of the most urgent challenges

in human history. This vacuum ultimately also affected cities, which had already begun to implement the international agenda at a local level. Without an agreement, there was a lack of clear objectives. Moreover, the refinement of mechanisms for cooperation – for instance, the transfer of know-how and financial resources for the implementation of measures – stalled.

To counteract this development, cities began increasingly to mobilise themselves. In 2012, for instance, during the summit marking the 20-year anniversary of the Earth Summit in Rio de Janeiro that produced Agenda 21, more than 30 megacities from the C40 network met for a parallel summit. Michael Bloomberg, former mayor of New York City and the UN Secretary-General's Special Envoy for Climate Action, warned that neither mayors nor cities had the luxury of sitting around discussing problems. Instead, he announced specific plans and voluntary commitments for cities that wanted to reduce greenhouse gases.[10] By 2015, 392 cities had joined the Compact of Mayors, a network that involved, among other organisations, C40 and ICLEI. At the same time as the 21st UN Climate Change Conference in Paris, these cities voluntarily committed to reducing greenhouse gas emissions by 739 million tonnes per year by 2030 via their construction, transportation, and waste policies. When, in 2015, a compromise was finally reached for a successor agreement to the Kyoto Protocol – the Paris Agreement –, many cities and their most prominent networks had already committed to reducing greenhouse gas emissions and organised themselves as primary players. In the meantime, the first climate action plans have already been drawn up by cities such as New York or Paris; these plans comply with the Paris Agreement on limiting global warming to a rise of less than 1.5 degrees centigrade, and contain both strategies and specific measures for reaching climate neutrality by 2050.

The fact that, at the end of 2017, New York was the first city to propose such a plan may well have to do with the current domestic political situation in the US. When the debate concerning a US withdrawal from the Paris Agreement began, a coalition of US cities opposed the withdrawal and announced that they would continue to conform to the Agreement. The US president's claim, when announcing the withdrawal in 2017, that he had not been elected to represent the residents of Paris, but those of Pittsburgh, unexpectedly provided the coalition with

Urban swarm: Particularly in Asia and Africa, immigration to major cities is progressing at an enormous pace.
Source: © Johannes Höhn.

additional attention. Pittsburgh's mayor reacted to the announcement with a tweet observing that the US was joining a group that included Russia, Nicaragua, and Syria, which had also announced that they would not comply with the Agreement. He went on to say that he believed that implementing the Agreement was no longer the responsibility of the US federal government, but of US cities, including Pittsburgh.[11]

While the Paris Agreement continues to underscore the significance of nation state cooperation, it also emphasises that all levels must cooperate to prevent climate change.[12] In the meantime,

the urban agenda has also found its way into the updated catalogue of goals for global development and is represented in Agenda 2030 as "Goal Category 11: Sustainable cities and communities". In the so-called New Urban Agenda, a strategy paper that was ratified at the third and most recent World Conference on Urban Development, HABITAT III, in 2016, the UN pursues sustainable and integrated urban development while calling for a strengthening of urban governance, its institutions and mechanisms, and for more effective financing models.[13]

Municipalities are increasingly being given more responsibility in regional areas such as the EU as well. As early as 1992, the Maastricht Treaty stipulated that, in accordance with the principle of subsidiarity, decisions within the Union should be taken as closely as possible to the citizen. The Lisbon Treaty of 2007, confirmed regional and local self-government. In the "Pact of Amsterdam" the EU recently adopted an urban agenda designed to provide cities with improved opportunities for codetermination. Since last year, there has also been a group representing the interests of cities within the G20, called the U20, or Urban20.

Urban Diplomats on the World's Stages

With the increasing emergence of networks, a new global community has arisen alongside the traditional networks of nation-state diplomacy. This community is capable of greatly influencing global political decisions.[14] The slogan of the 1992 Local Agenda 21, "Think globally, act locally" is today reversed: "Think locally, act globally", emphasising the local actor's claim to play a key part in global policy. This background also characterises the concept of city diplomacy as a form of decentralisation of international relations management.[15] However, there is an enormous variance in the resources that cities invest in international relations. Often, there is an international relations department within municipalities. Sometimes there are entire teams consisting of multiple players that may include an ambassador, and sometimes there is a single person. City networks link up with these structures, but in some cases also spread further into other administrative units or municipal companies, such as those relating to public transportation or waste management.

Mayors and representatives of city networks present this development as a new self-image for cities, offering cities as the bearers of hope for an innovative form of international cooperation, and thus an additional alternative to cooperation among nation states. The core argument is often that cities can bridge disparate political orientations due to their pragmatic approach at the technical level. Network structures instead of hierarchies allow expertise to be transferred in other ways than just from top to bottom. Depending on project and expertise, cities can learn and share their own knowledge at the same time. The hope is that this will also bridge the global North-South gap, allowing for cooperation to occur on an equal footing. The idea is therefore to use the expertise of cities, on the one hand. Where could one find better-educated and more experienced urban waste management experts than in the cities themselves? At the same time, innovative projects in the Global South can also lead to learning processes in the Global North or in other cities in the South.

Beyond the level of technical cooperation, cooperation among cities promises to become a permanent pillar within the framework of international relations, which, unlike cooperation among nation states, cannot and ought not bear responsibility for core national tasks such as monetary policy and external security. Thus, city networks are in a unique position to use their non-binding, pragmatic character to overcome international conflicts and employ decentralised communication channels to maintain the exchange of ideas at the level of problems and solutions. Cities can thus be part of global governance, enabling the development of an institutional and regulatory system, and new mechanisms of international cooperation, for the continuous management of global challenges and transnational phenomena.[16]

The International Urban Agenda in Germany

German cities can look back on a long history of bilateral cooperation at the international level. It is common for lists of partner cities in other countries to appear next to German town signs. German cities are also involved in city networks. There are 20 German members of ICLEI, including larger cities such as Hamburg, but also smaller cities such as Münster or Ludwigsburg, while the organisation itself is headquartered in Bonn. Berlin and Heidelberg are members of C40, and Heidelberg recently joined a group of cities that have voluntarily committed to procuring only emissions-free buses from 2025 as part of an effort to make a large part of the city emissions-free by 2030.[17]

The German federal government supports several international city networks.

Organisations such as *Servicestelle Kommunen in der Einen Welt* (Service Agency for Communities in One World, or SKEW) promote the exchange of ideas among German cities in various areas of development cooperation. The German federal government itself already supports several international networks and alliances (ICLEI, Cities Alliance, UCLG, Metropolis, and C40).[18]

The *Interministerielle Arbeitskreis Nachhaltige Stadtentwicklung in nationaler und internationaler Perspektive* (IMA Stadt, the Inter-ministerial Working Group for Sustainable Urban Development at the National and International Level) was established in 2015. Its organising principle was that the success of sustainable development must be demonstrated in specific local living environments and that municipalities deserve increasing national and international recognition for their important practical and political functions.[19]

The German federal government's urbanisation guidelines, published in 2015, focus on the achievement of international climate goals and on Germany's efforts to actively contribute to sustainable global development, to promote peace and security, and to safeguard human rights. The exchanges of information involved should occur on an equal footing, also allowing the German side to benefit from the experience of its international partners in the sustainable design of urbanisation. The guidelines also criticise the international system's focus on the nation state and recommend that the role of the city should no longer be limited to that of a stakeholder. Urbanisation partnerships, which also follow these guidelines, have existed for several years, for instance, with Brazil and China, and are regularly embedded in government consultations. The urbanisation guidelines also expressly support the international activities of German cities, associations of cities, and federal states in the field of urbanisation.[20]

Overcome Obstacles, Strengthen Networks

Meanwhile, at least within the fields of environmental and climate policy, the rapid increase in networks appears to be reaching saturation, while the largest networks, such as UCLG and ICLEI, are becoming consolidated.[21] With respect to the performance of city networks, various studies are currently generating diverse insights: Global city networks appear to have successfully established structures that allow them to organise their own global activities. However, the results regarding actual behavioural change and improvement of environmental conditions are mixed. One possible explanation is the complexity of mastering the social, economic, and political processes at various levels of governance, for which, access to knowledge through networks is fundamental, but insufficient.[22] Therefore, the role of city networks as political players, beyond the sphere of technical cooperation, appears even more important. Despite all the progress and efforts to establish cities as players in the global agenda, especially on the part of city networks, their participation is often limited

Playground megacity: Efficient waste management is only one of many challenges concerning urban life.
Source: © Andrew Bira, Reuters.

to a presence in sideshows. It is telling that the voluntary commitment of the cities in Paris was not announced within the conference itself, but within the so-called official side events. Given the importance of cities for socially just, peaceful, sustainable development at all levels of global coexistence, the voices of cities should be an integral component of international negotiations, especially in any area in which they are not only disproportionately affected, but also constitute an important part of the solution.

Furthermore, the extent to which the promotion of cities whose sustainability is already above average can be established in a more comprehensive trend remains unclear. Despite the large number of cities that are organised into networks, many cities do not belong to any network. This also raises the question of what effects non-participation of many urban actors has on the increasing networking in large parts of the urban world. The contribution of city networks to bridging the global North-South gap ought to be viewed in this context and appears at times to be making only moderate progress.[23] There also appears to be a strong geographical disparity within the EU – between the participation of Western and Eastern European cities and regions.[24] In view of the far-reaching effects of urban development in China, India, and various African countries, the future success of networks will depend in part on their ability to reflect the

weight of these cities within their own structures. Providing greater resources that allow cities not only from industrialised nations, but also from nations without a corresponding budget, to actively participate will be a significant deciding factor in their representation within the networks. At the same time, the achievement of sustainable results relies on constant cooperation that goes beyond temporary participation in events. It is not only that municipal enterprises and other institutions for public service have so far been provided insufficient resources to allow them to engage in international cooperation, especially at the level of technical personnel; recognition of the role of cities, including their status as players in development cooperation, has so far been accompanied by very few financial resources that would allow for long-term commitment, such as by means of mentoring processes.

There is no doubt that cities will influence the further course of global development. The realisation that in 2050 nearly 70 per cent of the world's population will live in urban areas allows conclusions to be drawn not only about the geographical distribution of that population, but also its weight in global policy design. Therefore, cities and their actors should not only receive additional support, but their capacities should also be made use of – as technical experts, managers of urban sustainable development, and, not least, as key players for sustainable global development. Cities are already players in the new political architecture that allows new structures to arise and become linked. Additional policy discretion can promote innovative forms of cooperation and effective solutions that do justice to the complexity of current and future challenges.

–translated from German–

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