Am 28. April 2024 feiert Renate Mayntz ihren 95. Geburtstag. Die Redaktion der SOZIOLOGIE gratuliert ganz herzlich und freut sich, zu diesem Anlass einen aktuellen Beitrag der Jubilarin präsentieren zu können.

Paradigm Shifts in Macrosociology

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The choice of topics in social science research is a sounding board, reflecting changes in reality and also changes in perspective. This was the case in political science when a view implicitly dealing with a single nation widened to recognize its international embedding, and earlier when the emphasis on political steering by a given government widened to include the process of implementation and the reactions of a changing target population. This particular widening of the perspective was captured in the notion of governance, where governance meant a process of social regulation involving both public and private actors. Empirically based social science research is generally tied to the present. In this paper I look with a wider time perspective at changes in macrosociological paradigms. At the core of my argument is the concept of social differentiation. Macrosociology deals implicitly with processes within bounded social systems and hence primarily with nations, while political science can explicitly focus on international relations. The Ukrainian crisis of early 2022 is an event that touches a bridging problematic in the relation between national and international relations.

»Society« is a very abstract term. Niklas Luhmann applied it to social configurations at different social and geographical levels, including »the world« (Weltgesellschaft). More commonly, »societies« are seen as bounded social macro units at the level of nations, often formally organized by some kind of central authority. In the historical process of social development

perceived in modern social science, bounded and spatially defined social macro units have evolved from a segmentary over a stratified to a functionally differentiated system, the latter elaborated in slightly different forms by Talcott Parsons and Niklas Luhmann. In this historical process, the segmentary society was based on families and clans as units, while the stratified society came in two forms, as the feudal society in which agricultural laborers worked for feudal lords, and as the class society described by Karl Marx. The stratified society has in turn been replaced by a society in which an institutionalized division of labor between functional subsystems makes for superior efficiency. Schools, productive firms, and political institutions fulfill separate social functions and serve as life-worlds for their members, irrespective of their status. The functional subsystems are not hierarchically related, though there is vertical differentiation within each of them.

The image of a functionally differentiated modern society, first proposed by Parsons in 1951 in "The Social System" and developed by Luhmann in the 1970s and 1980s (Luhmann 1984), alludes to the nexus between a social science perspective and the historical postwar situation in which both authors write – a connection between reality and theory already obvious in the case of Marx and his view of class society. Implicitly, postwar countries in central Europe and North America were supposed to have reached the last stage of historical development. Though in principle the integration of a society consisting of functionally diversified subsystems could be seen as a variable, stretching from a negative to a positive pole, a positive vision of the functionally differentiated society has until recently dominated in the Western world: A productive economy collaborates with an innovative science system, and a democratic polity controls the behavior of society's members. As I shall argue, this typically postwar image of the social process as a »success story« neglects two sources of social change: change in the structure of modern societies, and change in the transnational context in which they are embedded.

The image of an apparently positive development of societies is the result of a selective perspective. It deals implicitly with the Western world of developed and democratic societies and assumes, as in the case of the USA, a population without racial divisions. This particular selectivity has been pointed out by Gurminder Bhambra and John Holmwood (2021), who emphasize that a famous list of »Western« authors developed a historically limited Western view of society, neglecting ethnic (or racial) divisions. This holds particularly for the United States, where African American authors

recently criticized the work of their (better known) white colleagues for neglecting the still acute racial and ethnic differences in the population (Rogers, Turner 2021). Modern Western macrosociology is shaped by a limited perspective on social reality, a fact also recognized by Tanja Börzel and Thomas Risse (2021). These authors maintain that the image of a Western, functionally differentiated modern society has served as the generally tacit background picture for most recent social science research. As the authors show, countries in Africa and Asia have realized other forms of social structure, at lower and partial levels of the social integration that is often attributed to a recognized Western nation. The image of social differentiation resulting in an effectively functioning modern society appears as a social science reflection of the hopes connected with the peace following WWII.

The regionally limited perspective of Western observers recently became evident when, in the late summer of 2021, public interest turned to the crisis of Afghanistan. For twenty years, Afghanistan failed to become what its imported model of Western development meant. But the view of a functionally differentiated modern society is not only geographically limited; it also neglects significant traits of the present Western societies. The generalizing ambition of a sociological view of »society« has hidden the fact that the applicability of a social theory dealing with functionally integrated national societies is limited – not only in space by dealing solely with the Western world but also in time by neglecting recent changes in »modern« societies. These limits can be seen if we focus on major changes in dominant macrosociological paradigms.

The changes in macrosociological paradigms reflect underlying structural changes and are partly related to changes in the technologies humans use. The famous »Cold War« period of tensions between a fully armed Soviet Union and a fully armed West led to a relatively peaceful time. In the late 1970s/early 1980s, the dominating theoretical image of a functionally differentiated society reached a new point in the concept of complexity; the complexity of a highly developed functional differentiation became the code word of analysis. Ariane Leendertz (2016) has studied this change of perspective as it happened in the USA in the 1980s, when complexity displaced planning theory that no longer served to solve social problems. The discussion of complexity that unfolded after the 1980s went back to earlier publications by Herbert Simon (1962) and Friedrich A. von Hayek (1972). Complexity is a property of systems characterized by a large number of units at

different social scales, connected by a large number of overlapping interactions, including feedback processes and other kinds of nonlinear relations. The notion of complexity, often dealt with in abstract mathematical terms, has since the 1970s been introduced into empirically based sociological analyses. A famous example is the work of Todd La Porte (1975), who speaks of *organized social complexity*, with organizations playing a crucial part in his analysis. Complexity refers to an image of pronounced functional differentiation, but as Leendertz points out, there is no detailed complexity theory in the social sciences: »We lack understanding in the sense that we cannot combine the parts [...] in ways which will make the complex wholes intelligible« (Leendertz 2016: 121; quoting Langdon Winner).

The change of a scientifically reflected social perspective from a positive image of functional differentiation to complexity that occurred in the USA in the 1970s and 1980s happened in a similar way in (Western) Europe. At that time, an optimistic postwar development program gave way to a more realistic image of modern society. Complexity became a generally recognized trait of modern European societies. Structural complexity meant the lack of a clear pattern. This can produce a subjective feeling of insecurity. Telltale signs are publications such as Jürgen Habermas' book »Die neue Unübersichtlichkeit« (1985), with its focus on insecurity. Ulrich Beck's »Risikogesellschaft« (1986) similarly pointed to structural reasons for the risks emerging from a complex modern society. Functional differentiation turned into complexity raises problems that call for concerted coordination efforts. This has also been shown in the research program of the Max Planck Institute for the Study of Societies, founded in 1985. Based on a view of a complex social structure, the empirical studies dealt with interactive processes in contested policy fields such as health and with technological innovation in situations where actors follow diverging interests.

Structural complexity not only raised challenges requiring coordination efforts but led to the development of theoretical alternatives to the view of the functionally differentiated, complex society. One such effort was discussed by Veronika Tacke (2009), who compares the familiar perspective on functionally differentiated social systems with networking as an alternative view. Network studies are well represented in the work of Harrison White, whose publications range from 1963 to 2008 (White 2008). In Germany there exists a network research organization (Deutsche Gesellschaft für Netzwerkforschung) that staged a major congress in 2022. The network concept

has mainly been applied to individuals or families and to organizations; examples are the work by Fritz Scharpf (1993) and Patrick Kenis and Volker Schneider (2021), but the concept has also been used to characterize the basic configuration of a society. Examples would be the work of Manuel Castells (2009), François Dépelteau and Christopher Powell (2013), and Alexander Friedrich (2016). Occasionally, the network concept has been used to characterize the modern state, called »Netzwerkstaat« – a state using a fragmented system of political parties that responds to formal and informal social groups in a society (Vesting 2018: 169). Networks can be based on units from the local, the national, and the international level where legally recognized nations are the actors; they can deal with relations that are real (as in exchange or control) or ideal, relations that can be voluntary or enforced, cooperative or competitive, and with units related by a common objective. As Peter Csermely (2009) insists, links between units can be weak or strong, a property of great importance for network stability. Units related in different networks can join in a large network, as shown in the graphic descriptions used by Lothar Krempel (2005). The cognitive interest of most network research deals with individuals, small groups, and organizations, but the network concept can in principle deal with a complex society in which different types of social units are combined.

Networks are basically actor structures: They emphasize relations between actors. The structure of a social subsystem like the economy, defined by its function, can be translated into positions and actors, linking the systems and actor perspectives. But there remains a difference between the emphasis on the nature of an action, e.g., actors competing with each other, and its structural effect, e.g., a competitive system structure. Tacke (2009) argues that networks as well as social systems are parts of social reality, if looked at from different cognitive perspectives. But this difference is crucial. It is implied when Rudolf Stichweh (2014: 15) reminds us that differentiation does not mean decomposition. With this phrase, Stichweh notes the coordination bias inherent in systems theory. Its counterpart, decomposition, refers to a cognitive perspective that emphasizes relations rather than functions. The shift from systems to networks involves the choice of a cognitive perspective that makes it possible to recognize an important historical change in social structure.

The network concept emphasizes relations between actors, but there are different kinds of social actors. This has been pointed out in the models

following James Coleman (1986). Coleman did not think in terms of functional subsystems, but distinguishes between social micro and macro actors in social systems. In so doing, he contested methodological individualism, a perspective focusing on individual action that viewed social structures and relations simply as aggregations of individual action. Coleman's frequently quoted model insisted instead on a two-level image of societies. Its major point is its emphasis on causal relations between the action of individuals and actions of larger social units. This distinction can easily be combined with a network perspective. At the micro level, motivated individuals act and interact, collectively causing the properties of a societal macro-level unit. Macro units can be social institutions or formal organizations; they produce collective actions that are attributed to the macro units and can influence the behavior of micro units. The term action is a social science abstraction that does not refer to psychological and sociopsychological approaches solidly based in brain processes, but to observable effects of human doing at the social micro and macro scales. In distinction from methodological individualism, the concept of actor does not necessarily refer to individuals, but can refer to specialized organizations or a legally recognized nation-state, regarding both as collective actors producing collective effects. The distinction between social micro and macro units, combined with the network emphasis on relations, shows how macro properties impinge upon the behavior of micro units or the other way around. In a linear multi-step analysis, the top-down and bottom-up processes appear connected over time.

An image of societies emphasizing relations between micro and macro actors is not simply an abstract choice of analytical categories – it reflects properties of developed modern societies. Their crucial point is the coterminus existence at a given point in time of a *plurality* of causally related but independently acting social micro and macro actors. An image of society composed of a plurality of micro and macro actors contrasts both with a stratified and with a hierarchical image of the social whole. The methodological choice of starting with actors sets my approach against the Parsonian and Luhmannian image of a functionally structured society. In this society, each subsystem is defined by its major function, though it may incorporate other functional elements; a productive economy may for instance incorporate political elements. But functional subsystems are not internally divided into individual actors and organized groups. In contrast, I consider individuals as well as organizations as social actors that produce outputs, acting in situations offering choice and constraints. This draws attention to a crucial

property of concrete societies, i.e., the flexible relation between individuals and organizations. Changing the perspective from functional differentiation to an actor approach shifts attention to the factors that shape individual and organizational behavior.

In the process of social development, the emergence of bounded social units organized to follow a specific goal has been a crucial event. In the primitive society, families may form clans, but clans differ from organizations; organizations that follow specific goals emerge only if the basic structure of a clan society, where families are the major social units, is changing. Both the emergence of organizations as specifically goal-directed social units and their change over time have occurred in a long historical process, not well reflected in social theory. In a stratified society that follows the primitive stage, individuals are fatefully tied to a given socioeconomic class, and to private or public organizations such as a guild, a trade, or a legitimate political ruler. These medieval organizations differ in their properties from present-day firms, political parties, and organizations like the International Labour Organization. In modern organizations, the linkage between organization and individuals is loosened - the organizational membership of an individual is contingent, not fateful. The behavior of individual organization members is only partly determined by the directive bonds of the organization to which they belong. The historical change in organization membership has not been a topic in the theory of functional differentiation. As the stratified society develops into modern forms of social differentiation, important changes happen both at the level of individuals and of organizations - changes that become visible if we focus on social actors rather than functional subsystems. The concept of a societal function does not take account of the distinction between individuals and organizations, and it fails to give a structural image of the social whole. If we look at modern society from the perspective of social action, a new dynamic becomes visible as the characteristics of a population, an aggregate of individual actors, and of private or public organizations change.

Populations are analytical collectives of individuals, where each individual reacts to their own perceived situation. Since these individually perceived situations vary, a great diversity of concrete actions may follow. In contrast, the goals of organizations appear specific – organizational procedures are oriented to one specific task. Organizational goals can be classified as public or private, a classification that varies between countries and changes over time. The productive goals of economic organizations have changed

with globalization by becoming *economically* specific: Globalization has loosened the ties between the national context and organizations. Changes in technology have played a major role in this process, increasing the perceived risk potential of action as analyzed by Patrick Lagadec (1979) and by Lars Clausen and Wolf Dombrowsky (1983).

The actions of individuals in a population and of organizations are shaped by different kinds of rules and internalized practices, formulated at social scales ranging from the family to governments and international committees. Societal rule systems have become as differentiated as the underlying social structures, and produce, unwillingly or intentionally in the case of crime and war, both conflicts and lacunae. The cognitive differentiation between populations as aggregates of individuals and organizations as goal-oriented bounded social units focuses on the linkage between them. Individuals can be organization members and contribute to the organization's output, but the same individuals can also act as a public in contact with other organizations – for instance as clients of a tax office, passengers on public transport, or shoppers at a department store. Individuals can finally act in spontaneous masses, assembling at New Years at the center of a city or responding to a call and forming a demonstration. Over time, individuals can establish organizations, and an organization can be dissolved. Organization founders have established economic organizations, missionaries have founded religious organizations, and Adolf Hitler stimulated the foundation of the NSDAP. Populations, organizations, and the historical process linking them are the subject of different parts of the social sciences. Societies are composed at every moment in time of both, a population and existing organizations. In the recent past, important changes have taken place in the properties of populations and of organizations, changes which characterize their interaction, and hence the present social situation.

The output of an organization may be a specific kind of decision (e.g., by a court) or a product for use by individuals (e.g., clothing) or by other organizations (e.g., printing machines). Given this diversity of goals, the concept of organization may appear too narrow to cover all forms of multiperson units built to pursue a specific goal. Our social science language offers only descriptive terms for administrative, political, economic, and other kinds of organizations, but not a term covering all kinds of bounded goal-oriented social units. In this paper I have chosen to speak of organizations rather than winstitutions as a terminological alternative; worganization re-

fers to bounded *social units*, while in my (not necessarily shared) understanding »institution« refers to *rules* structuring social processes, whether they refer to individuals or groups.

An action perspective on the social process dealing with organizations and populations could be enlarged by including the actions of powerful individuals; this touches the contested boundary between history and the social sciences. In the social sciences, the focus lies on populations and organizations rather than individual leaders. Sociologically speaking, organizations are bounded social units consisting of a structured membership and producing measurable outputs. The crucial theoretical issue is the interaction of populations and of public and private organizations with their specific goals. The form of this interaction has changed historically, and it characterizes the social dynamic of the present.

Important historical changes in linking the actions of populations, of productive organizations, and of political control have occurred over the centuries. As Daniel Drezner (2020) has argued, scholars are in fact rarely explicit about the social scale and the temporal scope of their key causal processes. There are even authors, like the historian Francis Fukuyama in his book »The End of History« (1992), who argue that we are currently experiencing the last phase in a process that stretches across centuries. But there have obviously been changes that took less than a century to evolve. Change processes are uneven. Since the end of WWII, stepwise changes have happened in the actions of populations and of public and private organizations. In formally democratic societies a feeling of human mastery and a positive image of social development emerged. German unification and the dissolution of the Soviet bloc appeared to open the road toward international collaboration and economic globalization.

But this positive interpretation of the historical Zeitgeist has meanwhile ended. From the late 1970s and the early 1980s, in an apparent period of peace in the Western world, the characteristics of populations and of organizations evolved into a new form of social instability. It did not take the Ukrainian crisis to turn an earlier perception of development into the presently dominating sense of insecurity; it has already been the financial crisis of 2008/2009 that appears as a turning point (Mayntz 2012; 2015). This crisis ended a period of a conflictive but productive form of social differentiation. The financial crisis has not been the only postwar crisis in the Western world, but the oil crisis, for instance, did not put an end to the overwhelmingly positive public perspective on global social development. With the

financial crisis, the accepted wrestling match between diverging interests turned into a non-cooperative game. Since 2008 we have witnessed a global shift from cooperation toward dissociation, a process that started at the national and international levels even before the Ukrainian crisis erupted. The resulting image of social instability is linked to major changes in the characteristics of populations and of organizations, to which I now turn.

I begin with individuals as private actors. Modern individuals do not identify with a social class; they identify with their specific job or profession, with their family, a specific firm, and possibly a political party. While a segmentary and a stratified society projected a clear social pattern to its members, in modern society individual identity is tied to a multiplicity of factors, and these factors are subject to permanent social and technological change. The status of the individual is objectively insecure; personal freedom of choice is the consequence of this social insecurity. There is today a greater freedom of choice in communication, residence, private travel, and occupation, but this happens on the background of a general dependence of individuals on the strategic actions of political and other organizations. The present situation is characterized by the *combination* of binding and loosening ties on individuals.

Looking back in history, the job profile of populations has changed in parallel with technological innovation, affecting first the work of farmers and subsequently work in factories, turning manual labor into the operation of machines. Changes in the occupational profile led to residential concentration in cities. Agricultural and subsequently industrial labor no longer produced visible and self-conscious population groups. The drift away first from agriculture and then from factory work led to a new kind of »middle class«. The present validity of this concept has recently been discussed in an interchange between Nils Kumkar and Uwe Schimank (2021). The apparent »de-industrialization« of the population has been correctly noted as a fiction by Timur Ergen (2019): Though the number of workers in industrial labor declined, their output remained. Massive third sector employment, urbanization, and increased mobility in jobs, residence, and tourism have changed interpersonal relations. The code word for today's interpersonal relations is individuation.

Individuation, the emancipation of the individual from social bonds, is frequently discussed in the media. As a TV interviewer formulated it on April 1, 2022, »Heute sind die Leute alle Individuen« – today all people are individuals. This tendency conflicts both with the former binding power of

social classes and of religion. In a highly developed country like Germany, we find personal status differentiation but no self-conscious social classes that are the basis of a class organization, while the social bonding power of religion disappears where people belong formally to one of several religious cults or to none. In the immigrant culture in large cities, social clans and their tenuous relation to official legality survive but are recognized as an exception. For the majority of the population, individuation and hence changes in the work structure and in private relations are characteristic elements of private life. These changes are directly tied to technological development that affects the working environment, offers communication links, and enlarges the accessible range of information. The recent advent and spread of digital platforms that play an increasing role for individual behavior are a sign of this process (Dolata, Schrape 2022). On streets and on public transport, individuals listen and talk to their devices, immersed in a tight network of distant social interaction with family and friends. Mobile signals lead to unexpected congregations of a public that pose a new threat to the so-called forces of order.

Public media and digital communication address individuals, rather than members of a social group. The recent change in technically mediated linkage has happened roughly since about 2010 and was connected to the use of the internet. It is not only the role of the »influencer« in the media but the increasing network linkage between individuals and between individuals and organizations that characterize the structure of relations in present populations. As discussed by Steffen Mau (2017) and Armin Nassehi (2019), digital communication through a computer or mobile device reflects both communication and the cherished individual »freedom«. This change is reflected in the title of a popular book by Andreas Reckwitz (2017): »Die Gesellschaft der Singularitäten«, the society of singularities; »singularities« is a mathematical term and can be used to refer to a population of isolated and highly mobile individuals. Individuation challenges a personal identity based on membership in a coherent social group, whether it is an ethnic community, a clan, or a religion. But at the same time, digitalization has become a new way of linking social units.

An example that confirms this analysis is the study by Edgar Grande (2018) that deals with modern social movements. There have been social movements with a protesting population for centuries, but today the apparently spontaneous demonstrations are the result of technical communication between accessible individuals. For a growing part of the population,

media and the smartphone generate a growing part of the increasing volume of daily information, both personal and impersonal. Confronted by selectively formulated perspectives, concrete persons join abstract groups on the basis of an apparently shared world view. Social participation on the basis of accessible information, i.e., by membership in a technically based IT world, leads to demonstrations and weakens the traditional political representation by membership in – or voting for – political parties. The media-triggered formation of demonstrations stimulates actions for a momentarily shared individual conviction. This also holds for so-called populism, an attitude that can become the basis of collective action. As Harold James has recently put it, populism has become wa term that has almost lost nearly all definitional claims« (James 2021: 185). Populism includes the American attack on the Congress building in 2021 as well as demonstrations initiated or simply used by the German political party Alternative für Deutschland (AfD). The members and voters of the AfD do not represent a specific socioeconomic class; the same holds for demonstrations in which a relatively young and socioeconomically diverse target group reacts to digital media stimuli. As happened in the beginning of the Ukrainian crisis in 2022, a widely spread outcry of a skillful political leader caused a massive popular reaction that influenced the political process in its early phase.

Individuation even extends to spatial mobility. Growing figures for tourism and migration show an important change in the behavior of populations that have become cognitively, socially, and spatially flexible. The population moving around in peaceful tourism and as migrants and refugees has become one of the prime characteristics of change at the population level. For an increasingly urban population, digital media also play a growing role in advertising and hence in market transactions that move away from direct producer/consumer contact. The classical market where buyers and sellers interact personally has increasingly given way to home delivery and shopping in local units of large enterprises, where contact with the sales personnel is often limited to payment at the end of a shopping trip. This relationship is typical of the modern linkage between individuals and organizations. The urban citizen, having left their household, lives as part of a public that comes into contact with a large number of organizations – whether by working in a firm, commuting on public transport, or shopping in a store. This image of normal urban life emphasizes the distinction between populations and organizations, but at the same time their new form of linkage. The individual is in fact »free« - to join on short notice a demonstration or to become a member of a political party. The population has become flexible, and its movements are threatening for a central political control.

The flexibility of a population contrasts with the specificity of organizations. The modern image of a goal-specific organization reflects a historical development. The medieval church used to fulfill political and educational purposes aside from its religious meaning, and medieval trades also included artistic goals and created rules about heritage and about household management. Over time, organizations diversified, and they became more specific in their goals. Economic firms, focused on a narrowly defined output, are a modern invention. Today, organizations form a conflictive bundle of actors that create positive and negative consequences for other organizations.

Organizations with highly different goals grow from populations in steps. The political party Die Grünen emerged from a loose coupling of environmentalists and is now part of the German government. The party is a characteristic example of changing from a movement to an organization. The same mechanism of organization formation can be observed in the economy, where founders with specialized goals establish small firms, firms that may finally grow into international enterprises. There are, however, organizations with »system goals«. Governments (as well as households!) normally follow system goals, i.e., a bundle of multiple specific goals on which the survival of a social unit depends. Governments follow system goals by definition; ministries pursue specific goals like health or public education but must take conflicting goals of other ministries into account. Most units in the world of organizations are, however, fixed on their specific goals - selling cars, solving legal conflicts, paying pensions, etc. We can never view the whole »world of organizations« in detail; we can distinguish between public and private, controlling and productive, and national and international organizations, and we can select cases for social science analysis.

The structure of political institutions in a country like Germany was stable since 1990, and in public administration only small technically induced procedural changes took place. There have been changes in public health organizations and schools, but the most significant change with effects on the global dynamic has happened in the productive economy. Economic productivity is a focal political concern; the impact of politics on the economy is a crucial issue in social dynamics. It is difficult to perceive the economy, consisting of national and globalized firms and divided into many substantive sectors ranging from household goods to machines to electricity, as a structured historical unit. Most empirical social science research deals with

specific cases, with firms or a small subset of firms at a given spatial level. In contrast to empirical studies dealing with concrete firms, political economy and the school of so-called growth models have amassed a wealth of detailed data dealing with developed economies at large (Baccaro, Blyth, Pontusson 2022). Based on OECD input-output tables and using a new form of demand contributions, a complex statistic is developed to compare the economies of countries (Baccaro, Hadziabdic 2022). These summarizing data permit a global impression of national economies, but they do not let us describe in detail the differentiated network structure of the organizations making up a given economy. In this organizational network, collaborative and conflictive relations make for a complex dynamic that can only be analyzed in narrowly circumscribed parts.

Globalization is the major structural change in the present Western economy. The transnational expansion of the firm structure went together with a transnational diversification of input and output processes. Global change processes have impeded co-operative relations between firms and between firms and governments. National governments prefer tax-paying firms to reside in their own territory, but the profit interest of organizational owners and shareholders led to the international extension of the units of large firms. The acquisition of inputs and the sale of products follow an economic rationale. This cost-saving policy changed the economy into a multidimensional network structure. Globalization increased in the period after 1990 and has changed the relation between national economic politics and the economy. A case in point are the so-called Silicon Valley firms that expanded internationally and became independent from the American government. In the period of peace, an internationalized economy existed side by side with national politics. With increasing international tensions, the relation between a profit-oriented and internationalized economic network and national political interest becomes critical; the Ukrainian crisis has expressed this fact.

Economic globalization is reflected not only in the firm structure but also in the global transport system. As some transnationally stretched firms use parts coming from a long list of countries, marine transport assumes a new importance. This visible sign of economic globalization was observed by Khalili (2020) in the Hamburg harbor (and on one occasion also by myself): Ships have become bigger, are more closely packed, and operate without visible crews. Hamburg harbor is seventeenth in a list of freight harbors, most of the others are Chinese. Given a changing political context,

the spatially distributed processes of production come into conflict with political strategies. This is not only a current problem; in history the relation between Britain and India shows that the relationship between economic markets and national politics has often been strained. In the early period of political West-East polarization after WWII, the international structure of markets reflected this strain. This structure changed in a period of peace after 1990 – the period in which neoliberal beliefs dominated.

National taxation – fiscal political control – has become a well-known problem following economic globalization; the nationally based tax system finds it difficult to adapt to globalization. With the Ukrainian crisis, the structure of international infrastructure markets like oil or energy suffered an unexpected change. The globalization of economic production has turned the relationship between national politics and economic organizations into a politically dangerous tipping-point; this is the structural basis of the political problems that increasing economic globalization has produced. Only in internationally peaceful times can a profit motive neutral to political preferences become the driving force of organizational action. The tension between the national polity (power) and the international economy (profit) is a structural conflict that replaces the old class conflict between factory owners and workers. In highly developed societies, the relationship between economic organizations and the state has come to be of singular importance for their dynamic. The unbridled division of economic labor that started as a source of general welfare suddenly became a threat. In 2022, this has been a major reason for the present sense of instability.

The economy has generally been of interest in social science analysis, while the banking industry attracted attention especially after 2007/2008. Internationalization together with technological innovation have changed the classical banking industry. The modernization of the banking industry started in 1950, gained force with a change in international regulation and the end of the Cold War, and survived a crisis in 2008/2009. The main external forces of change in the financial industry have been the liberalization of the monetary system, the introduction of a European currency, and technological change in banking practices. The banking industry became transnational in its reach, and finance based on modern technology became an independent force that influences global economic and political processes. In social theory, the unequal distribution of privately held money played a major role in the analysis of stratification. It was only after 1990 that the banking industry itself attracted social science attention; Kindleberger and

Aliber (2005) are an example of a vastly increasing literature. The financial crisis of 2008 promoted this literature. The role of organized finance has become a major political factor to which national politics reacts. Analyses in the public press suggest that financial processes are a major external force, difficult to understand even for experts. The relation between banks and the population of normal bank clients is correspondingly one-sided. It has been well expressed in a book dealing with the individual uncertainty of living in a financialized world: »Our growing dependence on complex machines and opaque algorithms doesn't make the world more legible or its impending crises more predictable.« (Komporozos-Athanasiou 2022: 64) With the exception of a small group of skilled experts, non-expert individuals observe interest rates and in opening and closing investments contribute to the dynamic of a fiscal process they do not fully understand, hoping for positive individual effects but sometimes disappointed by disastrous consequences. This is exactly what happened in 2008, when housing investments in the USA triggered the massive international financial crisis (Mayntz 2012; 2015).

The same pattern that links banks and the population is true for the economy, where the individual as a customer, following their own private goals, deals with a profit-oriented company offering its wares. If you look upon reality from an action perspective, dealing with a population of individuals on the one hand and formal organizations on the other, the relation between population and organization shows a rift between them that grows with the degree of organization in a society. As said before, the individual in a population is increasingly free to enter or leave an organization; the increasing organization of economic, medical, media, and political life has therefore loosened the relation between the individuals in a population and organizations.

Social science interest in organizations has differed sharply between substantive fields; only small research fields deal with hospitals, schools, and leisure time organizations. The same holds for the military: While the economy has been of interest to all social scientists, the military has mainly attracted the interest of political scientists. Until recently, the national military remained a relatively stable and inobtrusive institution in Western states. This situation ended with the Ukrainian crisis. Germany is the country where this change has been most pronounced. The official military is generally characterized as a public body of legally drafted or freely joining individuals; irregular soldiers exist in militias – they have been observed in French Africa and have recently reappeared in the Ukrainian war. The national role of the

military varies fundamentally when international relations change from peace to open or disguised war. Wars destroy the »normal« social fabric. In peacetime, the military appears as a secluded social world, but in conflicts its destructive effects disrupt the pattern of »normal life« and hence the peacetime structure of organizations. This must have effects on sociological research that normally deals with issues or events in a time of peace, leaving international political events and their social consequences to political science.

Recent changes in a flexible population and shifts in the world of organizations appear to have caused a widespread feeling of societal instability and perceived insecurity. This feeling is not simply a reaction to the Russian invasion of Ukraine, it is a reaction to changes in the macro structure of modern Western societies that have happened over several decades. The ties between organizations and the population have loosened as both appear to strive in different directions. Recent changes in the economy (globalization) and the banking industry (internationalization) have added to the already problematic relationship between narrowly goal-oriented organizations and a flexible population. There has always been interdependence between organizations and the behavior of populations, but a combination of long-term and recent changes has led to a societal situation that is recognized as critical. This is well expressed in the title of a podium discussion at the WZB Berlin Social Science Center that speaks of the »end of certainties« (Das Ende der Gewissheiten) and asks what role science can now play (WZB podium discussion on November 30, 2022). The widely distributed impression of a crisis refers to a new break in Western societies that we believed to have reached a state of stasis. Populations and organizations behave as independent actors, though they are causally tied. There is a general feeling of a loss of control, the control of individuals over their life as well as political control over social dynamics.

The root cause of the present crisis are changes in the properties and the interdependence of populations and organizations. Individualized populations have become highly mobile, which leads not only to demonstrations and politically condoned deviant behavior but also to flows of migrants. An individualized population does not produce the public loyalty on which a democratic system in a policy guided by political parties depends, but favors political absenteeism or sudden action in strikes and demonstrations. There have been related changes in the world of organizations. After 1990, their narrow goal-orientation has caused and is increased by globalization. The

economy became a globally extended but substantively increasingly diversified system of egocentric actors. In the national context, the economy is a dominant sector on whose taxes public welfare depends. The dependence of a political regime on a productive economy has reached a critical level. At the same time, globalization has affected the banking industry that shapes social processes both within and across countries. These developments add up to a historical change from an age of controlled complexity to problems of negative coordination, a trajectory reflected in the titles of two publications by Fritz Scharpf that speak in 1972 of complexity and in 1993 of negative coordination (Scharpf 1972; 1993). At the macro scale the world has become unpredictable, as a group of international researchers conclude (Fomin et al. 2021). But this is not, as Niklas Luhmann claims, the »negative consequence of functional differentiation« (1984: 516). It is the effect of the changing nature and the causal linkage between the present actions of populations and organizations.

As social scientists we can pick a specific event or a specific structural change in society and look for its causes. This kind of analysis does not cognitively add up to a detailed picture of the structure and dynamics of the present global social system. There is in fact something special about uncertainty in the social world (Katzenstein 2022). Physical uncertainty goes down to the subatomic level; in the present social world we deal with a new historical kind of highly interdependent egocentric organizations and individuals that react continuously to a broad range of external and quickly changing influences. A great diversity of consequences can follow from apparently minor changes in the conditions shaping the behavior of individuals and organizations. The Ukrainian war has visibly underlined this condition. In the social world, the causal ties connecting the behavior of organizations and populations have loosened over time: it is not only in the economy that a fear of an uncertain future has displaced the earlier spirit of development (Beckert, Bronk 2018); it is the intricate web of the nested actions of populations and economic and political organizations that has led us to an era of insecurity. Some years back I doubted if the observable feeling of insecurity was objectively founded, or simply a subjective reflex (Mayntz 2019); in this paper I take it to be objectively founded. Even if social research is methodologically constrained to focus on level-specific events, attention to the contributing effect of the historical macro context will help us to identify the contemporary relevance of our findings.

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