

Renate Mayntz

Über Governance

Institutionen und
Prozesse politischer
Regelung

Schriften aus dem Max-Planck-Institut
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Einleitung

Die hier vorgelegte, von Wolfgang Streeck angeregte Aufsatzsammlung enthält eine Auswahl meiner während der letzten zehn Jahre entstandenen Arbeiten, die sich im weitesten Sinn mit Governance befassen, aber entweder bisher noch nicht publiziert wurden oder in einem anderen thematischen Kontext erschienen sind. Mit zwei Ausnahmen, dem Aufsatz zur Handlungsfähigkeit des Nationalstaats und der Analyse des *9/11 Commission Reports* (4 und 9), entstanden die hier enthaltenen Beiträge aufgrund von Einladungen zu einem Vortrag oder einer Konferenz.

Alle Aufsätze in diesem Band, in deren Titel das Wort Governance vorkommt, beruhen auf Einladungen, in denen ich ausdrücklich aufgefordert wurde, über *Governance* zu sprechen oder zu schreiben. Mit Fritz Scharpf zusammen war ich an der Entwicklung der Forschung und Theorie zu politischer Steuerung beteiligt. Wie der früheste Aufsatz in dieser Sammlung nachzeichnet (Artikel 1 von 1998), unterminierte die kritische Analyse der meist unzulänglich erfüllten Voraussetzungen zielorientierter Steuerung die Vorstellung vom Interventionsstaat und trug so zur Entwicklung des governancetheoretischen Ansatzes bei. Dennoch rechne ich mich nicht der Gruppe von Autoren zu, die den Begriff Governance in die politische Theorie eingeführt und Forschung speziell zum Thema Governance betrieben haben. Wenn ich in den vergangenen Jahren zum Thema Governance vernommen wurde, ging es entweder um die (sekundär-analytische) Anwendung des sich mittlerweile herausbildenden Governance-Paradigmas auf spezielle Sachverhalte und Bereiche oder um eine kritisch reflektierende Darstellung dessen, was nunmehr in der politikwissenschaftlichen Literatur unter dem Stichwort Governance behandelt wurde. Nimmt man beides zusammen, dann können die hier versammelten Aufsätze als Versuche gelesen werden, ein vorfindliches Paradigma durch die Anwendung auf immer neue Gegenstände zu erweitern, es aber zugleich kritisch zu reflektieren und auf seine Grenzen hinzuweisen. Beides hängt eng zusammen: Es waren gerade die Versuche, das gewöhnlich recht summarisch auf »den« Staat, auf Regelung im öffentlichen Interesse allgemein bezogene Modell von Governance zum Beispiel auf die Förderung von Innovation, auf technische Infrastruktursysteme oder

auf verschiedene Wirtschaftssektoren anzuwenden, die die Aufmerksamkeit auf blinde Flecke und theoretische Schwächen der Governance-Theorie lenkten.

»Governance« ist fast zum Modebegriff geworden, nicht nur in den Sozialwissenschaften, sondern auch in Politik und Verwaltung. Aber was heute unter dem Stichwort Governance läuft, ist alles andere als eine kohärente Theorie. Der Governance-Begriff ist mehrdeutig – so mehrdeutig, dass manche ihn für wissenschaftlich unbrauchbar halten. Hinter den verschiedenen Begriffsvarianten stehen unterschiedliche Erkenntnisinteressen. In der weitesten Begriffsvariante wird »Governance« zur Bezeichnung der verschiedenen Mechanismen benutzt, die in einer Population von Akteuren Ordnung stiften können. Das kann geschehen durch einseitige Anpassung wie beim Markt, durch Befehl und Gehorsam wie in einer Hierarchie, durch Verhandeln in Netzwerken oder schließlich durch die gemeinsame Orientierung des Handelns an den Normen oder Praktiken in einer Gemeinschaft. Etwas enger gefasst dient der Begriff Governance dazu, verschiedene Formen der absichtsvollen Regelung kollektiver Sachverhalte zusammenzufassen; in diesem Sinn habe ich den Begriff gewöhnlich benutzt. Der weite, erste Governance-Begriff lässt sich unter anderem auf die Ordnung einer Volkswirtschaft beziehen, wie es Crouch (2005)¹ getan hat. Der engere Governance-Begriff, der auf absichtsvolle Regelung abstellt, wird auf verschiedene territorial definierte politische Ebenen (europäische oder globale Governance), aber auch auf Unternehmen angewandt; er lässt sich aber ebenfalls auf Industrien und Volkswirtschaften beziehen, was ausgesprochen verwirrend sein kann, wie in Aufsatz 8 am Beispiel der Governance technischer Infrastruktursysteme gezeigt wird.

Die begriffliche Unschärfe von »Governance« liegt nicht allein an dem Nebeneinander einer weiteren (eher soziologischen) und einer engeren (eher politikwissenschaftlichen) Fassung. Auch der engere, auf die Regelung kollektiver Sachverhalte bezogene Begriff ist schillernd und mehrdeutig. Im politikwissenschaftlichen Kontext wurde »Governance« zur Bezeichnung einer Form des Regierens benutzt, bei der private (korporative) Akteure an der Regelung gesellschaftlicher Sachverhalte mitwirken. Auch hier gibt es aber noch zwei Begriffsvarianten. In der auch von mir benutzten Variante wird unter Governance eine Form des Regierens verstanden, bei der nicht nur der Staat, sondern auch private korporative Akteure an der Regelung beteiligt sind. Manchmal aber werden nur nichthierarchische Formen der Regelung als Governance bezeichnet, das heißt Governance steht im Gegensatz zu hierarchischer Regelung. Gewiss ist es sinnvoll, die Leistungsfähigkeit nichtstaatlicher, nichthierarchischer For-

1 Crouch, Colin, 2005: *Capitalist Diversity and Change: Recombinant Governance and Institutional Entrepreneurs*. Oxford: Oxford University Press.

men der Regelung gesellschaftlicher Sachverhalte zu untersuchen. Damit wird aber die Frage nach dem Zusammenwirken hierarchischer und nichthierarchischer, staatlicher und nichtstaatlicher Regelungsformen ausgeklammert. Es ist die alle unterschiedlichen Regelungsformen umfassende Definition, die den Governance-Begriff besser als andere Begriffe zur Analyse real existierender politischer Ordnungen geeignet erscheinen lässt. Wie in den Aufsätzen von 1998 und 2005 ausgeführt, war es die beobachtete Vielfalt der im Nationalstaat nebeneinander bestehenden Regelungsformen, die in Deutschland schrittweise das seit den Sechzigerjahren vorherrschende Paradigma politischer Steuerung verdrängte. Nicht nur »Steuerung«, auch das Konzept »Herrschaft«, das ja wie »Steuerung« ein klar identifizierbares Steuerungs- beziehungsweise Herrschafts-subjekt voraussetzt, passt nicht so recht auf eine politische Ordnung, in der die präsumptiven »Steuerungsadressaten« oder »Herrschaftsunterworfenen« an der Regelung kollektiver Sachverhalte mitwirken. Selbst die klassische Vorstellung vom Staat als dem alleinigen Wahrer des Gemeinwohls verflüchtigt sich hier. Der weitere politikwissenschaftliche Begriff »Governance« dagegen eignet sich sehr gut dazu, die Wirklichkeit nationaler und vor allem auch der über den Nationalstaat hinausreichenden politischen Ordnungen zu erfassen. Dieser Begriff lässt sich auch auf Sachverhalte anwenden, die – wie neokorporatistische Strukturen – zunächst in einer anderen Terminologie beschrieben wurden beziehungsweise die – wie die Handlungsfähigkeit des Nationalstaats oder die Organisation von Sicherheitspolitik – sich noch heute ohne begriffliche Bezugnahme auf Governance behandeln lassen.

Der Begriff Governance wurde zunächst überwiegend auf die gesamte politische Regelungsstruktur in einem territorial definierten Gemeinwesen angewandt. Die Architektur von Governance variiert jedoch zwischen verschiedenen Regelungsfeldern, sowohl im Hinblick auf das Verhältnis zwischen öffentlichen und privaten Instanzen als auch im Hinblick auf ihre Lokalisierung auf verschiedenen Ebenen der Politik. Entsprechende Unterschiede werden auch deutlich, wenn man nach der Handlungsfähigkeit des Nationalstaats in Zeiten der Globalisierung fragt – ein Thema, das ja gerade durch die vertikale Differenzierung von Governance aufgeworfen wird. Auch ein Vergleich der sich über mehrere politische Ebenen erstreckenden Governance von einzelnen Wirtschaftssektoren lenkt die Aufmerksamkeit auf Unterschiede zwischen verschiedenen Regelungsfeldern. Governance-Strukturen und die eingesetzten Instrumente verändern sich zudem in Reaktion auf Veränderungen im Regelungsfeld. Wie am Beispiel der Innovationspolitik deutlich wird, spielen dabei aber auch sich verändernde Kognitionen eine Rolle (Aufsatz 7).

Die entscheidende Bedeutung einer korrekten Situationsdefinition und Problemdiagnose für erfolgreiche Governance wird nicht zuletzt in Aufsatz 9 deut-

lich, der sich mit der misslungenen Verhinderung des terroristischen Anschlags vom 11. September 2001 befasst. Im Unterschied zur Policy-Forschung beginnt allerdings die explizit der Governance-Perspektive verpflichtete Forschung selten mit einem bestimmten lösungsbedürftigen Problem, um dann nach möglichen Wegen zu seiner Bewältigung zu fragen, sondern setzt analytisch bei den Regelungsinstanzen an. Die Fokussierung auf die Governance einzelner konkreter Regelungsfelder verlangt jedoch, dass die Beschaffenheit dieser Felder und des sich in ihnen gegebenenfalls stellenden Regelungsproblems ausdrücklich in die Analyse einbezogen wird. Ein analytischer Rahmen, der die Chance erfolgreicher Problembewältigung aus dem Verhältnis zwischen Problemerzeugung, Problembetroffenheit und Regelungskompetenz ableitet, wird im Aufsatz 5 über *Common Goods and Governance* vorgestellt.

Natürlich geht es bei Governance nicht immer um die Lösung eines spezifischen »Problems«; oft ist die Verwirklichung von bestimmten Werten (Umweltschutz, Menschenrechte) oder die Verbesserung bestimmter Leistungen (Wirtschaftswachstum, Energieversorgung) das Ziel. Hier wird das Regelungsfeld nicht im Hinblick auf die darin angelegte Problemerzeugung betrachtet, sondern im Hinblick auf die soziale Struktur, in der ein bestimmtes Wirtschaftsgut oder eine Dienstleistung erzeugt beziehungsweise »produziert« wird. In diesem Sinn benutzen die Aufsätze 6 und 8 den Begriff der Produktionsstruktur zur näheren Beschreibung verschiedener Regelungsfelder. Am Beispiel technischer Infrastruktursysteme wird dabei deutlich, dass die Produktion von Leistungen, die Regelungsgegenstand sind, mehr oder weniger stark durch die verfügbare und benutzte Technik bestimmt sein kann, sodass außer der Produktionsstruktur auch die Technostruktur eines Regelungsfelds in die Analyse einzubeziehen ist.

Der engere, politikwissenschaftliche Begriff von Governance, der auf die Mitwirkung privater Akteure an der Regelung gesellschaftlicher Sachverhalte abstellt, wird mit unterschiedlicher Akzentuierung benutzt, je nachdem, ob der Tatbestand der Regelung, die Mitwirkung privater Akteure daran oder die Bezugnahme auf ein kollektives Interesse im Vordergrund steht. Governance als Regelung, als Entwicklung und Anwendung von gesetzlichen Normen, Satzungen, Standards und Kodizes steht dort im Vordergrund, wo es um die Problematik von Recht jenseits des Nationalstaats geht. Diese Akzentsetzung war zum Beispiel kennzeichnend für die Beiträge auf der Konferenz »*Law and Legitimacy in the Governance of Transnational Economic Relations*«, die im Juni 2008 in der Villa Vigoni stattfand. Die selektive Betonung des Regelungsaspekts, die bis in die Definition von Governance hinein wirkt, ist nicht nur generell aus juristischer Perspektive, sondern auch dann naheliegend, wenn das Erkenntnisinteresse sich auf die Governance-Instrumente konzentriert, die internationalen Institutionen zur Verfügung stehen.

Die Beteiligung privater Akteure an der Regelung steht im Vordergrund, wenn es um die Transformation des modernen Nationalstaats vom Interventionsstaat zum kooperativen Staat geht. Mitwirkung, Beteiligung, Partizipation sind heute nicht nur selbst hochgeschätzte Werte; im demokratietheoretischen Kontext wird ihnen auch ein Wohlfahrtseffekt zugeschrieben: Sie sollen bewirken, dass bindende Entscheidungen eher im gemeinsamen als in einem partikularen Interesse erfolgen. Ob private Selbstregelung und die Kooperation staatlicher und privater Akteure allerdings wirklich diesen Effekt haben, ist eine empirische Frage und darf nicht unterstellt werden. Das Zusammenwirken staatlicher und privater Akteure bei der Erbringung bestimmter Leistungen in Form der sogenannten *public-private partnerships* könnten, wie etwa im Aufsatz 8 argumentiert wird, sehr wohl dem Interesse von Unternehmen, Beratern und Investoren dienlicher sein als dem öffentlichen Interesse an einer kostengünstigen und qualitativ hochstehenden Versorgung.

Die definitorische Festlegung auf die Regelung von Sachverhalten in gemeinsamem Interesse hat zur Folge, dass die Aufmerksamkeit nicht auf die tatsächlich hinter konkreten Regelungsbemühungen beziehungsweise der Schaffung von Regelungsinstanzen stehenden Interessen gelenkt wird. Diese Schwäche vieler Governance-Analysen ist gewissermaßen ein erblicher Defekt. Die Theorie politischer Steuerung wurde in entwickelten westlichen Demokratien ausgearbeitet. In diesen von ihrer Bevölkerung weitgehend akzeptierten politischen Systemen ging es vordringlich um die Lösung innenpolitischer Probleme – um wirtschaftliches Wachstum, Gesundheit, soziale Sicherheit und zunehmend auch um umweltverträgliches Verhalten. Dabei wurde, was in diesem Kontext unproblematisch schien, meist stillschweigend unterstellt, dass staatliches Handeln der Lösung von Problemen im gemeinsamen Interesse dient. Diese selektive, im Aufsatz 2 von 2001 behandelte Perspektive der Steuerungstheorie hat die Governance-Forschung vielfach übernommen. Ein selektives Erkenntnisinteresse an den Möglichkeiten der kollektiven, nicht diktatorischen Regelung öffentlicher (gemeinsamer, gesellschaftlicher) Sachverhalte ist ebenso legitim wie es ein selektives Erkenntnisinteresse an Macht und Machtmissbrauch, Ungleichheit, Ausbeutung und Konflikten wäre; aber es handelt sich eindeutig um zwei verschiedene Erkenntnisinteressen. Dabei ist die Governance-Theorie nicht blind für die Existenz divergierender Interessen; wenn sie sich mit Verhandlungssystemen beschäftigt, setzt sie ihre Existenz sogar zwangsläufig voraus. Auch die Existenz unterschiedlicher Machtpotenziale wird in der Governance-Forschung nicht ignoriert. Aber allfällige Phänomene wie Profitgier, Machtstreben, Ausbeutung und Korruption sind nicht ihr Thema. Um systematisch nach den tatsächlichen Triebkräften hinter den von ihr untersuchten Institutionen zu fragen, muss die Governance-Forschung sich von der definitorischen Kopplung an ein – wie auch immer bestimmtes – Gemeinwohl lösen.

1 New Challenges to Governance Theory (1998)

1 Definitions of Governance and the Purpose of this Paper

The subject of this paper is the development, and the successive modifications, of governance theory, a theory that began by being concerned with the steering actions of political authorities as they deliberately attempt to shape socio-economic structures and processes. In Germany this goes by the name of »Steuerungstheorie« (Mayntz 1987). The English term »governance« has long been equated with »governing,« the process aspect of government, thus complementing the institutional perspective of government studies. In other words, governance was used roughly as a synonym of »politische Steuerung.«

Recently, however, the term »governance« has been used in two other ways, both distinct from political guidance or steering (see Figure 1). To distinguish these different meanings is not only important in order to avoid misunderstandings, but also because a change in semantics usually reflects a change in perception, whether this in turn reflects changes in reality or not.

For one thing, »governance« is now often used to indicate a new mode of governing that is distinct from the hierarchical control model, a more cooperative mode where state and non-state actors participate in mixed public–private networks. Governance as an alternative to hierarchical control has been studied on the level of national (and sub-national) and of European policy-making, and in international relations. The works by Jan Kooiman (1993) and R. W. A. Rhodes (1997) illustrate the first, the article by Bulmer (1994) the second, and the book by Rosenau and Czempiel (1992) the third of these strands. It is hard to say where exactly this particular meaning of the term originated. In the March 1998 issue of the *International Social Science Journal* that is entirely devoted to »governance« in the sense of non-hierarchical modes of coordination (UNESCO 1998), the concept is traced to a 1989 World Bank report, i.e. the international context. In any case it is clear that attempts at collective problem-solving outside of existing hierarchical frameworks, such as we can observe on the European and the international level, have contributed significantly to this shift in the meaning of the term governance.

Figure 1 Evolution of the Theory of Political Governance

| | | |
|-----|-----------------------------------|---|
| (1) | Early seventies | <i>Prescriptive</i> theories of planning |
| (2) | Seventies | <i>Empirical</i> studies of policy development (agenda setting, instrument choice, role of law, organizational context) |
| (3) | Late seventies/ early eighties | Policy implementation |

The second »new« meaning of the term governance is much more general, and has a different genealogy. Here governance means the different modes of coordinating individual actions, or basic forms of social order. This use of the term seems to have grown out of transaction cost economics, more specifically Oliver Williamson's analysis of market and hierarchy as alternative forms of economic organization (e.g. Williamson 1979). Williamson's typology was quickly extended to include other forms of social order such as clans, associations, and – most importantly – networks (e.g. Hollingsworth/Lindberg 1985; Powell 1990). It was in fact the »discovery« of forms of coordination not only different from hierarchy, but also different from the pure market form, that led to the generalization of the term »governance« to cover all forms of social coordination – not only in the economy, but also in other sectors. In this way, the attention payed to forms of »modern governance« (governance in the second meaning of the term) triggered another semantic shift. The third meaning of governance now includes the two more narrow understandings of the term as sub-types.

In the following, I will first sketch the evolution of the theory of political governance in the narrow sense of steering (*Steuerungstheorie*). I shall then trace successive paradigm shifts, or modifications of this theoretical frame. Finally I will discuss the most recent, and as yet only partly met challenges to the theory. To avoid the disappointment that arises from mistaken expectations, a few disclaimers are in order. It is not the purpose of this paper to make a substantive contribution to governance theory, to challenge one of its premises or to introduce new theorems. My intention is rather to reflect on the development of a certain body of political theory, a development in which I have actively participated over more than 20 years. In reconstructing this theoretical development it will not be possible to spell out in detail the content of the literature I shall refer to, nor shall I attempt to document the unfolding of governance theory by extensive references.¹ An account of the development of governance theory

1 For such a documentation, see Mayntz (1996) and the literature cited there.

can serve to put seemingly separate fields of research into a larger context, but it also does more: It raises an important issue about the nature of theory development in political science. Does this development follow an internal cognitive dynamic, or is it simply a reflection of changes in political reality or in problem perception, as John Dryzek and Stephen Leonard (1988) have argued? The answer to this question will indicate whether political science is cumulative, building step by step a more inclusive theory, or is meandering from topic to topic, following the shift in subjective definitions of what is salient.

2 The Development of the Core Paradigm of Political Governance

The modern theory of political governance (*Stenerungstheorie*) emerged after World War II at a time when governments aspired explicitly to steer their nations' social and economic development in the direction of defined goals.² The first paradigm of the theory evolved in three successive phases:

- (1) In the late nineteen sixties it began with a – largely prescriptive – theory of *planning* (how to steer).
- (2) In the nineteen seventies, with the planning euphoria waning, *policy development* became the object of empirical analyses; this directed attention to context factors influencing policy development, in particular executive organization; different policy instruments were discussed, in particular the role of law.
- (3) Finally, in the second half of the nineteen seventies, *policy implementation* became a new research focus.

The first paradigm of a theory of political governance was thus concerned with policy development and policy implementation, and it adopted a top-down, or legislator's perspective.

This theory carried in itself the seeds of its own transformation. Implementation research called attention to the fact of wide-spread policy failure, and proved that such failure was not only the consequence of cognitive mistakes in planning or of shortcomings on the part of implementation agencies, but of having neglected the recalcitrance of the target groups of public policy and their ability to resist or subvert the achievement of policy goals. This recognition led to a first, important enlargement of the initial paradigm. Had it so far concentrated

² For a more detailed description of the theory development summarized in this section, see again Mayntz (1996).

on the *subject* of political steering, government and its ability or inability to steer, it now included also the structure and behavioral dispositions of the *object* of political control. In German, this meant to shift the focus from *Steuerungsfähigkeit* to *Steuerbarkeit*, i.e. governability. In a second step it was recognized that governability varies considerably between policy fields (or sectors). For instance, policy fields consisting of a specific category of individuals (e.g. youth) or households (e.g. single-parent households) call for a different policy approach than do policy fields dominated by a few big organizations. Thus the top-down perspective of the initial paradigm (policy making and implementation) was extended by the inclusion of bottom-up processes of selective compliance with policy measures by their target groups, processes which are in turn conditioned by the structure of a given regulatory field. This expansion of the analytical perspective taught us much about the conditions of policy effectiveness.

However, the research that followed, and elaborated, this enlarged paradigm undermined what had so far been the basis of the model of political governance, i.e. the assumption that the state, even if it meets with resistance from target groups, is the control centre of society. The disappointment of the belief in the existence of an effective political control centre then directed attention to alternative forms of societal governance: In two separate lines of discussion, market principles and horizontal self-organization were discussed as alternatives to hierarchical political control. This ushered in another extension of the paradigm.

Market principles were first prominently discussed as a more effective alternative to regulation in American environmental policy. At about this time, market principles became the backbone of the political ideology of neo-liberalism and Thatcherism, promoting deregulation and privatization as means to stimulate economic growth and to increase economic efficiency. Political scientists analyzed the emergence and the policy consequences of this »neo-conservatism«, using the analytical framework of policy analysis (e.g. Döhler 1990). More recently the demise of state socialism strengthened the belief in the ordering power of the market. Meanwhile, however, attention has turned to the potential contradictions between market principles (or capitalism) and democracy (e.g. Dunn 1990; Katz 1997; Kitschelt 1985), an issue that so far has not been part of governance theory. The development of governance theory, even of governance theory applied specifically to economic organization, focused instead on the second alternative to hierarchical control, i.e. cooperative and horizontal forms of societal self-regulation and of policy development. In other words, attention turned to governance in the second of the three senses distinguished above.

At the centre of this new line of discussion were different kinds of negotiating systems. Along the way, traditional forms of what might generally be called societal self-regulation also received new attention, in particular local

Figure 2 The Governance Paradigm and Its Extensions

| | |
|------------------|---|
| Basic paradigm | Policy development (by government) + policy implementation (by public agencies) |
| First extension | Include bottom-up perspective: sectoral structure and target group behavior |
| Second extension | Include policy-development and implementation in public-private networks and self-regulating societal systems |
| Third extension | Include effect of European policy upon domestic sectoral structures and policy-making |
| Fourth extension | Include European level of policy-making |
| Fifth extension | Include political input processes on European and national level |

self-government and the so-called »third sector« of private, non-profit service organizations, but this is not what is usually meant by »modern governance.« The two major types of negotiating systems are neocorporatist arrangements, or more generally mixed public-private policy networks, and systems of societal self-regulation in which the state does not directly participate, such as the institutionalized wage bargaining system between capital and labor (*Tarifsystem*) or the self-government of the German public health system, in which the organizations of health fund physicians and of public hospitals bargain with health fund representatives about fees. Another form of societal self-regulation are the so-called private interest governments (Streeck/Schmitter 1985). Here opposing interests are not represented by independent organizations, but are internalized within regulatory regimes that subject the activities of private agents to a self-imposed discipline; the German technical standardization agency DIN is a case in point (Voelzkow 1996).

By the middle of the eighties, the theoretical discussion was dominated by the terms decentralization, cooperation, and network. This was quite in line with the spirit of the times, which was set against all manifestations of hierarchical authority, whether by parents, teachers, or the state. However, it was quickly realized that the problem-solving capacity of public-private networks and of societal self-regulation may be limited. Networks typically emerge where power is dispersed among the agents in a policy field, but where cooperation is necessary for the sake of effectiveness. As the various public and/or private agents in a policy field typically have different interests, this poses the problem of how to agree on an effective problem-solution without shifting the costs this implies to outsiders (Scharpf 1993). The discussion of this issue within the framework of governance theory is an elaboration, rather than a further extension, of the theoretical paradigm as it had evolved by now.

A second important line of elaboration started from the observation that, from the viewpoint of the original, top-down conception of political governance, the negotiation of political with societal actors in policy networks or neo-corporatist structures and the delegation of regulatory functions to institutions of local or sectoral self-government indicate a loss of steering capacity. The state appeared weak, »semi-sovereign« (Katzenstein 1987) – a perspective consonant with modern systems theory and with concepts of post-modernism, both of which are characterized by viewing society as centreless, or polycentric (e.g. Willke 1987). However, empirical political science research has made it clear that what we are dealing with is not so much a loss of state control, but rather a change in its form. Societal self-regulation takes place, after all, within an institutional framework that is underwritten by the state. The state does not only legitimize, but has often enough helped to establish various forms of self-government. Where state actors participate in policy networks, they are a very special and privileged kind of participant; they retain crucial means of intervention, and this holds even where decision-making has been devolved to institutions of societal self-government. In particular, the state retains the right of legal ratification, the right to authoritative decision where societal actors do not come to a conclusion (e.g. in negotiations about technical standards), and the right to intervene by legislative or executive action where a self-governing system such as the German health system fails to meet regulatory expectations. Thus, hierarchical control and societal self-regulation are not mutually exclusive. They are different ordering principles which are very often combined, and their combination, self-regulation »in the shadow of hierarchy«, can be more effective than either of the »pure« governance forms (Mayntz/Scharpf 1995).

3 Challenges to Governance Theory: Europeanization and Globalization

Having arrived at this point, the basic frame of a theory of political governance seems complete. But meanwhile new problems have arisen, notably the crisis of the welfare state that is connected with European integration and economic globalization. In the light of Europeanization and globalization, certain accepted and apparently unproblematic features of the previously sketched theory of governance appear suddenly as deficits, deficits which can trigger a new phase in theory development by challenging governance theory to extend its analytical frame once more. The deficits in question are:

- the concentration on the single nation state (even where international comparisons are made),
- the selective concern with domestic politics – a point closely linked to the first, and
- the concentration on policy effectiveness, on the output and outcome of policy processes, neglecting the input side of policy formation and the relationship between both.

The theory of political governance has so far dealt with political systems that have a clear identity, a clear boundary, and a defined membership which implies specific rights and duties. This kind of approach is incapable of dealing with the problems raised by European integration, and especially with the problems raised by globalization.

The formation of the European Union has established a new, transnational governance structure. The European Union is decidedly more than a regime, a contractual frame or a negotiating arena, but it is as clearly not a federal state; it can best be described as a complex multi-level system whose dynamics cannot well be understood in the conceptual frame developed for the analysis of political governance in nation states. Private interest governments, for instance, are still largely of a national scope. The tripartite configurations, or triangles, that at the national level link political parties, interest groups and government agencies, or the neocorporatist arrangements linking the state, employers, and organized labor, are not structurally replicated at the European level. There are no true European political parties, organized labor is only weakly represented, and the representation of industry is even much more diversified and complex than on the national level. New categories are needed for the analysis of European policy-making and implementation.³

For a theory of political governance, European integration has two consequences: (1) it raises new problems of governance on the national level, and (2) it requires the extension of governance theory to a supra-national level.

Ad (1): The shift of powers to the European level requires us to study the effect of European directives upon various sectors of the national economy (agriculture, food stuffs, the banking and insurance sector, energy, railroads, road transport, etc.). This is in fact being done (e.g. Schneider 1988; Lütz 1998). In this way the previous paradigm is extended once again, this time by adding an important *external* factor of policy formation and implementation. European policy decisions affect the conditions of effective domestic policy resting in the

3 This does not mean that the European Union is a *sui generis* case that can only be analyzed in a framework tailored uniquely to it alone; for this discussion see Hix (1998).

structure of the regulatory field, and at the same time restrict the freedom of national policy choice. This results in a loss – this time a genuine loss – of control capacity for national governments (Scharpf 1997b). But this loss does not only follow from the shift of legislative and regulatory competences from the national to the European level; it also follows from European market integration, the gradual dissolution of national economic boundaries. The consequences for national economies are intensified competition and increasing mobility of productive capital and of finance capital. This creates new problems for national tax regimes and tax policy, national economic policy, and last not least the national welfare state, problems that have in fact all become prominent topics in political science research.⁴

Ad (2): We can also observe the growth of a field called »European policy-making« (e.g. Héritier/Knill/Mingers 1996; Richardson 1996). What is not yet clear is whether this will, in the long run, become a separate field of study, or remain a genuine extension of existing governance theory. The latter requires that such studies are not undertaken in a comparative perspective of policy sectors, but focus on the interconnection between different levels of policy-making. In other words, the object of study would not be what happens in Brussels (or between Brussels and Straßburg), but the mutual interdependence between national and European policy processes in a multi-level system.

Concern with European policy-making also calls attention to the third blind spot of the national governance paradigm mentioned above. It is a peculiarity of European policy-making that democratic elements are largely lacking, or at least weakly developed. As Fritz Scharpf (1998) demonstrates, rule-making by the European Commission is based on technical expertise wherever action goes beyond the implementation of the common interest of all member states. Where national interests diverge, which is generally the case for decisions with redistributive consequences, technical expertise alone cannot legitimate interventions. Where redistributive decisions require full consensus, the result will simply be blockade. Decisions with redistributive effects are tolerated only within stable communities (we-groups), and only if they have been arrived at by democratic procedures. The European Union meets neither of these preconditions: It is not a socially integrated system, and it lacks a European-wide democratic decision process.

The discussion about a European democracy deficit makes us aware that what is clearly lacking in European policy-making – a fully developed and well functioning democratic input process – has apparently been taken for granted

4 The present research program of the Max Planck Institute for the Study of Societies in Cologne is nearly entirely devoted to these problems.

at the national level, an assumption that permitted to neglect the political input process in the analysis of national policy making.⁵ In retrospect it is indeed surprising how long democracy theory and the theory of (national) political governance have remained isolated from each other. When governance theory came to focus on horizontal cooperation and policy formation within networks, it was recognized that this raises the problem of democratic accountability, because the private actors in policy networks typically lack democratic legitimation. Horizontal cooperation and negotiation in networks can be no substitute for democracy, even though, in view of the difficulty of representing very specific interests within a system of general elections, the development of policy networks that include representatives of opposing socio-political interests is sometimes seen as a more practicable modern form of interest representation. Helmut Voelzkow (1996) is one author who has explicitly dealt with the tension between these two different forms of interest representation. If this tension is not recognized there is the danger that a governance theory highlighting horizontal cooperation and societal self-regulation leads inadvertently to a renaissance of old corporatist models (see Bowen 1971). But to recognize the existence of a problem of accountability where policy-making occurs in mixed public–private networks is not the same as trying to include the input part of the policy process explicitly into the theoretical paradigm of political governance. This challenge has not been met so far, and it is indeed a question whether an integration of democracy theory and governance theory as we know it would overextend the latter. Still, it might be worthwhile to pursue this path of theory development a few steps further.

While political science has responded, at least partly, to the challenges which Europeanization poses to governance theory, this does not equally hold for the challenges connected with globalization. Globalization is in fact a much more serious challenge to any theory of political governance. At the European level it is, in principle, still possible to talk of a policy process with its input and output aspects. This is no longer possible at the global level where there exists no identifiable steering subject, and no institutionalized framework containing the object of steering. What is, often rather vaguely, referred to by »globalization« has not resulted in the formation of a new higher order system, a truly transnational system with its own identity, boundary and membership roles. This of course raises the question whether the structures and processes generated by globalization can still be a subject for the theory of governance. This question can be answered affirmatively if, and only if, we speak of governance in the widest sense of basic modes of coordination, because only in this case is the concept not tied to the existence of some sort of a political control structure.

5 An early exception is Scharpf (1974).

Globalization is usually taken to refer to two interrelated processes (e.g. Stykow/Wiesenthal 1996):

- expanding *communication*, both transport and information exchange, and growing personal mobility (migration!), meaning that the formation of social groups becomes increasingly independent of geographical location;
- the emergence of *global markets* for capital, goods and services, as a consequence of liberalization, deregulation, and the growing ease of communication.

As in the case of European integration, these processes raise both (1) new problems for a theory of national political governance, and (2) issues of transnational governance different from European integration.

Ad (1): Though national governments have themselves spurred the process of globalization through policies of liberalization and deregulation, they are now forced to consider how to respond to the challenges it raises. There are basically three different strategies. One strategy is unilateral adaptation; the possible measures are similar to those that are being discussed in relation to the European common market, which means that this issue is already being covered in contemporary research. A second strategy is protectionism and isolationism; at the most, this adds a new policy problem to the catalogue of domestic policies already dealt with by policy studies. A third strategy would be efforts to ward off specific impacts (e.g. illegal immigration) by international coordination. At this point we are leaving the national level of analysis and must turn to the issue of transnational governance.

Ad (2): Problems of international coordination beyond the European context have been studied for some time already by scholars of international relations (e.g. Krasner 1983). This sub-discipline of political science evolved quite separate from (national) governance theory. In international relations, the actors and negotiating partners are states that stand in a relationship of strategic interdependence. This is the reason why there exists an obvious affinity between international relations and game theory. The international relations approach assumes that nation states are the most important actors on the global scene. This perspective is misleading if we take a closer look at the governance issues that present themselves at the global level.

Globalization does not simply mean that economic and non-economic relationships become increasingly transnational. There is more *movement* across national boundaries – movement of goods, services, capital, information, scientific knowledge, and last not least of people. This results in new, often one-sided dependencies, but only partly in new transnational *relationships*. Unbridled competition for instance is increasing, though it does not affect all branches of

national economies in the same way. New transnational markets are less well regulated and hence tend more toward atomism and anarchy than has been true of market relationships contained within nation-states. This also means an increase in uncontrolled negative externalities, ecological as well as social and economic. There is a growing disjunction between increasingly unbounded and farflung economic and communicative networks on the one hand, and bounded political systems on the other hand, a disjunction between problem structures and regulatory structures that might cope with these problems. In response to this situation, conscious efforts have been made, and continue to be made, to institute transnational regulatory structures. The UN is of course the most inclusive of such structures, a conglomerate of sub-organizations and special organs ranging from a simple forum (UNCED = UN Conference on the environment and sustainable development) to corporate actors such as the World Bank, with UNESCO, ILO, WHO and WTO possibly somewhere in between (Rittberger et al. 1997).

To investigate the emergence and functioning of transnational regulatory structures *beyond* the EU is certainly a fascinating agenda for a theory of political governance. But this is not where the challenge ends. Globalization poses yet another theoretical problem: The problem of the co-existence of many different types of structures and processes, i.e. different governance modes. Market models and the nonlinear dynamics of ecological systems seem best able to deal with the aggregate outcomes of a fragmented, but interdependent global economy. In the structurally diffuse context created by globalization, specific events or changes often cannot be causally attributed to the behavior of identifiable actors. Situations of recognized strategic interdependence that can guide the choice among alternatives are rare. In the global market, most agents play, as it were, most of the time »against nature.« At the same time, however, the transnational scene is not devoid of structure. The new regulatory structures have already been mentioned. There are, furthermore, many kinds of international as well as transnational organizations – the large multi-national corporations, transnational professional associations, interest organizations and scientific organizations. Finally there exist transnational epistemic communities and social movements, incipient social groups without a clear geographical reference. Together, these various transnational groupings, regimes and organizations, with their often fluid boundaries and cross-cutting domains, their mutual and one-sided dependencies, form a structure of such complexity that it seems to defy all our analytical efforts: What confronts us here is truly Habermas' »*neue Unübersichtlichkeit*« (Habermas 1985). Only if we enlarge the governance perspective to include *all* of the different modes of social ordering, *all* of the different types of actor configurations beyond hierarchies and networks, their combinations

and particularly *their interactions*, might we be able to address the issues created by transnationalization and globalization. Should such a theory emerge, it would have to be a governance theory of a very different kind from the one we started with in this account.

What is an obvious theoretical problem on the global level alerts to the existence of an analytical dimension that also applies at the national level. Governance studies at the national level have typically used an approach that has come to be called actor-centered institutionalism (Mayntz/Scharpf 1995; Scharpf 1997a), i.e. they are concerned with actors acting and interacting within institutional frameworks. The actors whose decisions (and non-decisions) are studied to explain policy outcomes are normally corporate actors: agencies, organizations, associations (represented, of course, by individuals). Simple »populations«, collections of many individuals responding to given stimuli in the same way, normally play a role only as target groups of some policy. Aggregate effects arising from the uncoordinated actions of many individuals appear only as parameters in policy analyses, not as a process to be explained within the theoretical framework of governance. Only in exceptional cases do we find an analysis of the *interplay* between steering attempts on the part of corporate actors, and processes of collective behavior that evolve first for reasons of their own, but may then motivate, and later on also react to, political interventions. In the sectoral studies of the transformation processes in East Germany there are some analyses of this kind (e.g. Wasem 1997). But in general the fact that processes following different logics – collective behavior, market exchange, bargaining, negotiation, and authoritative intervention – co-exist and are causally interrelated has not been a topic in (national) governance theory.

Whether this can be called a deficit of governance theory in particular is, however, an open question. Parallel to what has been argued for a global governance theory it may well be that to extend the paradigm to include *pari passu*, i.e. on an equal footing all the distinguishable forms of coordination, or social ordering, would *over-extend* it, making it lose the necessary amount of selective attention that is a prerequisite of theory-building – for human minds at least. In any case we would no longer deal with a theory of political governance, but with a much more comprehensive theory of social dynamics, i.e. not with an extended, but with a completely new theoretical paradigm.

4 Conclusion

In this paper, I have traced through several stages the development of a body of theory concerned with the forms and problems of social and political guidance. In retrospect, this development looks like the successive unfolding of a cognitive agenda, driven step by step by the awareness of blind spots and of deficits in explanatory power vis-à-vis observable reality. There have been some interesting bifurcations in the process, e.g. when governance theory concentrated on horizontal cooperation rather than the market as alternative to hierarchical authority, and there are still blind spots in the theory to which it has not reacted. But until now, this has been a cumulative cognitive process that did not follow the developmental logic of political science described by John Dryzek and Stephen Leonard (1988), who argued that the objects of political science are historically contingent, wherefore political scientists must continually begin to develop new and different analytical frames and substantive theories that cannot build upon each other. At least in the case of governance theory (which is, of course, not all there is to political science) we find instead a successive extension of the initial framework, not its suppression and exchange for a new one, i.e. not a paradigm shift in the radical Kuhnian sense (Kuhn 1962). In this development, changes in political reality have played an important role, influencing the direction in which the paradigm was being extended. The modern state has in fact become more »cooperative«, networks have proliferated, and European integration is a new phenomenon. These observable real changes were challenges that could be accommodated by extending the paradigm. But with globalization, there may well have come the point where a further extension of the paradigm would be dysfunctional, and we may witness the emergence of an altogether new field.

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2 Zur Selektivität der steuerungstheoretischen Perspektive (2001)

Der Gegenstand des folgenden kritischen Arguments ist ein relativ eng umrissener Bereich innerhalb der politischen Wissenschaft, nämlich die Theorie politischer Steuerung. Im englischen Sprachbereich, wo eher von *governance* als etwa von *steering* die Rede ist, entspricht dem das weniger scharf umrissene (und ins Gebiet der *policy studies* übergehende) Feld der *theory of the policy process*. Der Kern dieser Theorie wird von Paul Sabatier im ersten Satz des von ihm kürzlich herausgegebenen Buches *Theories of the Policy Process* wie folgt gekennzeichnet:

The process of public policymaking includes the manner in which problems get conceptualized and brought to government for solution; governmental institutions formulate alternatives and select policy solutions; and those solutions get implemented, evaluated, and revised. (Sabatier 1999: 3)

Ähnlich äußert sich die Politikwissenschaftlerin Renate Martinsen: Im Zentrum der mit *policies* beschäftigten politikwissenschaftlichen Ansätze habe seit den Achtzigerjahren »die Konzeptualisierung des Politischen als Problembearbeitungsprozess durch die politisch-administrativen Instanzen« (Martinsen 2000: 3) gestanden. Beiden Autoren ist zuzustimmen: Politische Steuerung beziehungsweise *policymaking* zielt auf Problemlösung, und zwar, wie wohl von beiden Autoren stillschweigend unterstellt wird, auf die Lösung im weitesten Sinne gesellschaftlicher Probleme (zu denen natürlich auch wirtschaftliche Probleme gehören). Der methodologische Status dieser Feststellung ist dabei nicht nur ein definitorischer, sondern ein inhaltlicher: Es wird nicht etwa nur gesagt, dass wir beobachtbare Versuche politischer Steuerung als Problemlösungsprozesse *bezeichnen* wollen, sondern es wird gesagt, dass es Versuche der Lösung gesellschaftlicher Probleme *sind*. Ich will im Folgenden die These aufstellen und begründen, dass diese Konzeptualisierung von politischer Steuerung als Problemlösungsprozess die politische Wirklichkeit nicht korrekt erfasst, dass es sich um eine selektive und insofern verzerrende Perspektive handelt.

Indem ich diese These entwickle, übe ich in gewisser Weise Selbstkritik, denn ich selber war an der Begründung und Entfaltung der Steuerungstheorie, deren Selektivität ich hier unter die Lupe nehmen möchte, beteiligt. Schon An-

fang der Siebzigerjahre des vorigen Jahrhunderts, als ich zusammen mit Fritz Scharpf über die Voraussetzungen »aktiver Politik« forschte und schrieb, hatte ich jedoch im Hinterkopf den vagen Verdacht, die unsere könnte eine allzu rationalistische Sichtweise sein. Indem wir die Voraussetzungen »aktiver Politik« untersuchten, schienen wir zu unterstellen, dass »aktive Politik« zu treiben, das heißt, zielbewusst gesellschaftsgestaltend zu handeln, tatsächlich das oberste Ziel unseres Auftraggebers, der Bundesregierung, ja überhaupt jedes politisch-administrativen Systems ist.

»Aktive Politik« setzt Planung voraus. Also befassten wir, und nicht nur Fritz Scharpf und ich, uns damals mit Fragen der Planungsorganisation (Mayntz/Scharpf 1973). Die Steuerungssemantik wurde erst dominant, als die Planungssemantik zusammen mit der Planungseuphorie verblasste. Aber die Entwicklung des klassischen steuerungstheoretischen Paradigmas begann tatsächlich bereits in den späten Sechzigerjahren mit der – weitgehend präskriptiven – Planungstheorie. Diese erfuhr dann in den Siebzigerjahren eine empirische Wende, indem zunächst die institutionellen und organisatorischen Rahmenbedingungen der Politikentwicklung, sodann die Voraussetzungen für den Einsatz unterschiedlicher Instrumente der Politik und schließlich der Implementationsprozess zum Forschungsgegenstand wurden. Damit war gegen Ende der Siebzigerjahre das steuerungstheoretische Kernparadigma vollendet. Seine Hauptelemente waren die Politikentwicklung innerhalb des politisch-administrativen Systems und die Implementation der so entwickelten Politik durch staatliche Vollzugsinstanzen.

Wie bekannt und verschiedentlich ausführlich beschrieben (zum Beispiel Mayntz 1996), wurde dieses erste steuerungstheoretische Paradigma anschließend erweitert und damit zugleich revidiert. Zum einen wurde die bisherige *Top-down*-Sichtweise durch eine *Bottom-up*-Perspektive ergänzt, das heißt, das Adressatenverhalten und die strukturellen Besonderheiten verschiedener Regelungsfelder wurden in die Analyse einbezogen. In einem zweiten Schritt löste man sich von der Konzentration auf das politisch-administrative System und bezog die Mitwirkung korporativer gesellschaftlicher Akteure an der Entwicklung und Implementation von Politik mit ein. Neokorporatistische Entscheidungsstrukturen, Politiknetzwerke und die gesellschaftliche Selbstregulierung in *private governments* zogen die Aufmerksamkeit auf sich. Am Ende dieser perspektivischen Erweiterung stand das heute dominierende Modell des kooperativen Staates.

Auch der so erweiterten steuerungstheoretischen Perspektive haften jedoch ihre Geburtsfehler noch an. Sie hat erstens einen Nationalstaatsbias. Das wurde mit der zunehmenden europäischen Integration sichtbar und hat inzwischen zu einer neuen Erweiterung der steuerungstheoretischen Perspektive geführt (Mayntz 1998 bzw. Aufsatz 1 in diesem Band). Politische Steuerung im europäischen Mehrebenensystem heißt jetzt das Stichwort. Zweitens aber hat die

Steuerungstheorie von Anfang an einen Problemlösungsbias gehabt. Dieses ist die spezifische Selektivität, mit der ich mich hier näher befassen will. Der Problemlösungsbias besteht im Kern darin, dass die Steuerungstheorie nicht fragt, *ob* politische Akteure primär an der Lösung gesellschaftlicher Probleme orientiert sind, sondern unterstellt, *dass* dieses ihr dominantes Ziel und gesellschaftliche Problemlösung die zentrale Aktivität von Politik und Verwaltung ist. Gelegentlich wird eine solche Orientierung in die Definition von politischer Steuerung aufgenommen; meist bleibt diese Annahme jedoch implizit. Die Unterstellung, dass der Staat – auch der kooperative Staat auf seine Weise – tatsächlich auf gesellschaftliche Problemlösung beziehungsweise die Förderung des Gemeinwohls aus ist, macht die Steuerungstheorie krypto-normativ.

Der Problemlösungsbias der Steuerungstheorie hat Wurzeln, die sich bis in die klassische politische Philosophie eines Plato und eines Aristoteles zurück verfolgen lassen. Gewiss, die Klassiker sprachen nicht von »Steuerung«; aber es ging ihnen um Formen der Regierung. Bei Plato weiß der Philosophen-König, was der Allgemeinheit dient, und ist durch seine Liebe zur Gerechtigkeit motiviert, im Interesse des Gemeinwohls zu handeln. Auch bei Aristoteles sucht der gute Monarch zu verwirklichen, was der Allgemeinheit dient. Bei Plato wie bei Aristoteles wird dabei das Gemeinwohl am individuellen Wohl der Untertanen, der Bürger festgemacht (Kaufmann 1994). Im Europa der Renaissance griff man auf diese klassischen Vorstellungen zurück. Wieder sollte der »gute« Herrscher das Wohl seiner Untertanen zu verwirklichen trachten, Frieden stiften und Gerechtigkeit üben. In der idealistischen Staatsphilosophie schließlich wird diese Aufgabe dem Staat zugewiesen; die Wohlfahrt des Ganzen, der Gesellschaft wie der Nation zu sichern wurde zum staatsbegründenden Ziel (Münkler/Fischer 1999).

Von hier lässt sich eine direkte Linie zur Vorstellung des politisch-administrativen Systems als Steuerungszentrum der Gesellschaft ziehen. Steuerung als Versuch der Lösung von gesellschaftlichen Problemen, die wie auch immer auf die Tagesordnung der Politik gelangt sind, ist eine moderne Reformulierung des Staatszwecks der Gemeinwohlmaximierung. Zu den klassischen Staatsaufgaben gehört die – gewissermaßen nach innen gerichtete – Mehrung der öffentlichen Wohlfahrt und die – nach außen gerichtete – Wahrung nationaler Interessen. Die Wahrung nationaler Interessen in der Außenbeziehung zu anderen Staaten hat die Steuerungstheorie infolge ihres bereits erwähnten Nationalstaatsbias lange Zeit dem Forschungsbereich der Internationalen Beziehungen beziehungsweise der Außenpolitik überlassen und sich stattdessen auf innenpolitische Probleme konzentriert. Das hat sich erst geändert, als sich mit der erweiterten steuerungstheoretischen Perspektive auf das Mehrebenensystem der Europäischen Union die Trennungslinie zwischen Innen- und Außenpolitik verwischte. Geblieben ist jedoch das Postulat, dass der Staat beziehungsweise das politisch-administrative

System auf dem eigenen Territorium im Interesse seiner Bürger in soziale und ökonomische Prozesse interveniert, also – steuert. Aber während Aristoteles sein Augenmerk nicht nur auf den guten Monarchen, sondern gleichermaßen auf die Entartungsform der Tyrannis richtete, in der es dem Herrscher nur um sein eigenes Wohl geht, fragt die moderne Steuerungstheorie nicht, ob es in der Politik tatsächlich zuerst und vor allem um die Lösung von Problemen geht, die das Gemeinwesen betreffen. An die aristotelischen Überlegungen über Entartungsformen der Politik haben andere Stränge politikwissenschaftlicher Theoriebildung angeknüpft, nicht zuletzt Theorien der Klassenherrschaft.

Der Problemlösungsbias der politikwissenschaftlichen Steuerungstheorie hängt sowohl mit ihrer besonderen Entstehungssituation wie auch mit den theoretischen Denkströmungen zusammen, in die ihre Entwicklung eingebettet war und ist. Die Planungstheorie und die frühen Untersuchungen über Planungsorganisation fanden in einem Klima politischen Reformwillens statt (vgl. unter anderem Mayntz/Scharpf 1975). Sie dienten explizit der Politikberatung und konnten, ja mussten deshalb von einem »Steuerungswillen« der Adressaten beziehungsweise Auftraggeber ausgehen. Der hauptsächliche Adressat (und oft genug auch Auftraggeber) steuerungstheoretischer Arbeiten war außerdem die öffentliche Verwaltung¹, zu deren Selbstverständnis es gehört, dass sie mit ihrem Tun dem öffentlichen Wohl dient. Das gilt genauso für die Ministerialbürokratie, deren Fachleute die Sachentscheidungen des Parlaments vorbereiten, wie für nachgeordnete Verwaltungsebenen und die kommunale Selbstverwaltung. Mit der öffentlichen Verwaltung als primärem Adressaten im Hinterkopf war die Unterstellung einer Problemlösungsorientierung, bei aller Berücksichtigung organisatorischer Eigeninteressen, nicht abwegig.

Was zweitens theoretische Einflüsse angeht, hängt der Problemlösungsbias der Steuerungstheorie erkennbar mit ihrer Verwandtschaft zu systemtheoretischen Ansätzen, ja ihrer bei einigen Autoren ganz deutlichen Einbettung in einen systemtheoretischen Kontext zusammen. Der Steuerungsbegriff selbst ist in kybernetischem Gedankengut verwurzelt, das beispielsweise von David Easton und Karl W. Deutsch auf die Politik übertragen wurde: Das politische System erscheint hier eindeutig als Steuerungsinstanz innerhalb des gesellschaftlichen Gesamtsystems, das von ihm geregelt (um den eher technischen Begriff zu benutzen) beziehungsweise reguliert wird. Das war dann bei Talcott Parsons recht ähnlich: Bei ihm erfüllt das politische Teilsystem den Systemimperativ des *goal attainment*, der Ausrichtung von Handlungen im System auf (politisch) gesetzte Systemziele. Parsons funktionalistischer Systemtheorie ist oft Herrschaftsblind-

1 Diesen Hinweis verdanke ich Uwe Schimank.

heit vorgeworfen worden. Diesen genetischen Defekt hat die Systemtheorie offensichtlich auf die Steuerungstheorie übertragen.

Auch Luhmanns Abkehr von Parsons Funktionalismus hat daran nichts Grundsätzliches geändert. Zwar ist Macht haben oder nicht haben der Code des politischen Systems, aber Macht wird als Kommunikationsmedium und damit als Instrument angesehen, und auch bei Luhmann hat das politische System mit der Produktion kollektiv verbindlicher Entscheidungen eine positive, ordnende Funktion – selbst wenn er zumal nach der autopoietischen Wende seiner Systemtheorie die Möglichkeit politischer Steuerung verneinte. Jüngere Vertreter der Systemtheorie haben dem politischen System beziehungsweise dem Staat dagegen erneut eine Steuerungsfunktion zuerkannt, selbst wenn es sich nur noch um Kontextsteuerung handelt (Teubner/Willke 1984). Wurde der Staat auch »entzaubert« (Willke 1983) und zum bloßen gesellschaftlichen Teilsystem herabgestuft, so behielt dieses Teilsystem doch eine zentrale, positive Funktion. Bei alledem ist die Verwandtschaft zwischen deutscher Staatsphilosophie und soziologischer Systemtheorie unübersehbar, was die Funktionsbestimmung des Staates beziehungsweise des politisch-administrativen Systems angeht. Zwar negiert weder die Staatsphilosophie noch die Systemtheorie, dass der Staat beziehungsweise das politisch-administrative System Macht ausüben. Machtausübung ist jedoch nicht Selbstzweck, sondern bloßes Instrument – ein notwendiges Mittel der Funktionserfüllung.

Das sieht ganz anders aus, wenn man die Wirklichkeit nicht systemtheoretisch, sondern in der Tradition von Max Weber aus der Perspektive der Herrschaftssoziologie oder durch die Brille marxistischer Klassentheorie betrachtet. Hier sind nicht Funktion oder Leistung, sondern Herrscher, Herrschaft und politische Klasse die Schlüsselbegriffe. Aber herrschaftssoziologische Ansätze, die zuletzt in der Stamokap-Variante eine gewisse Konjunktur hatten, sind heute auf den Foren der Politikwissenschaft ziemlich an den Rand gerückt. Wie wenig heute die Betonung herrschaftssoziologischer Aspekte in den theoretischen *mainstream* passt, wird deutlich, wenn zum Beispiel Gertrud Nunner-Winkler die von mir (im differenzierungstheoretischen Kontext!) getroffene Feststellung, dass Herrschaftssicherung und Herrschaftsausübung bei aller semantischen Umstellung auf die *Leistung* von Teilsystemen die Basis politischer Handlungslogik bleibt, als »kontinentaleuropäische Tradition einer Politikauffassung« bezeichnet und, so relativiert, der anglo-amerikanischen Tradition gegenüberstellt, die sich bei näherem Zusehen als eine steuerungstheoretische erweist: Staat als verantwortliche Instanz für Gemeinwohlproduktion (Nunner-Winkler 1994: 137).

Die relative Herrschaftsblindheit der Theorie politischer Steuerung liegt nicht etwa daran, dass sie die Machtdimension ausblendet (was sie nicht tut), sondern daran, dass Macht nur im Kontext der Formulierung und Durchset-

zung von Problemlösungen behandelt wird, und nicht als politisches Handlungsziel. Dabei ist es Teil unseres tagtäglich durch Berichte in den Medien bestärkten Alltagswissens, dass es in der Politik tatsächlich um Machtgewinn und Machterhalt geht. Und selbst wenn man einmal beiseite lässt, dass der *Code* oder Zentralwert des politischen Systems Macht ist – warum sollten ausgerechnet Politiker nicht nach Macht streben, da der Besitz und die Ausübung von Macht doch auch für gewöhnliche Sterbliche zutiefst befriedigend ist? Selbst sogenannte Volksparteien unterscheiden sich durch ihre Verbindung mit unterschiedlichen Gruppeninteressen, und wir wissen, dass politische Parteien ebenso wie einzelne Politiker Macht nicht nur suchen, um bestimmte Problemlösungen durchzusetzen, sondern auch, um gruppenspezifische Partikularinteressen zu fördern, ihre Patronagechancen zu erweitern, Pfründe zu erwerben und das eigene Ego zu stützen. Wo politisches Handeln sich primär an Machterwerb und Machterhalt orientiert, reicht, wie ich früher schon einmal argumentiert habe (Mayntz 1996: 157), die Abhängigkeit der Politik von den Ressourcen der anderen gesellschaftlichen Teilsysteme nicht aus, »um das politische System vor Hybris und Korruption oder umgekehrt vor der widerstandslosen Instrumentalisierung durch mächtige Partikularinteressen zu bewahren«. Und tatsächlich beobachten wir auch in unserem eigenen Land immer wieder Fälle von Hybris, Korruption und Instrumentalisierung, die man als Folge einer dominanten Herrschaftslogik ansehen kann.

Natürlich sind derartige Phänomene auch Wissenschaftlern nicht verborgen geblieben. Beispielhaft seien hier lediglich die Werke von Donatella della Porta und Alberto Vanucci (1994) und von Herbert von Arnim (2000a) erwähnt, die, auf reichhaltiges empirisches Material gestützt, den eigeninteressierten und aus gesellschaftlicher Perspektive disfunktionalen Charakter des Handelns der Akteure auf verschiedenen Ebenen des politisch-administrativen Systems darstellen. Aber diese Autoren gehören typischerweise nicht zum Kreis der politikwissenschaftlichen Steuerungstheoretiker. Das gilt auch für die ökonomische Theorie politischer Rationalität, die Politikern explizit ein dominantes Interesse an Machtgewinn und Machterhalt unterstellt (Downs 1957; Kirsch 1974). Dieser Theorie zufolge werden nicht nur die Interessen des Demos allgemein, sondern selbst Gruppeninteressen (als Interessen bestimmter Wählergruppen) von der Politik aus einem Machterhaltungskalkül (Wiederwahl) heraus, also als Mittel zum Zweck verfolgt. Allerdings setzt das dem eigenen Machterhalt dienende Wiederwahlkalkül eine demokratische Verfassung voraus, und in der Tat stellt die ökonomische Theorie politischer Rationalität sich auch als *Demokratiethorie* dar.

Wie in der Demokratiethorie im Allgemeinen bündigt die demokratische Verfassung also auch in diesem machtbezogenen Konzept politischen Handelns den Eigennutz von Politikern. In der Steuerungstheorie jedoch wird diese

Problematik zusammen mit dem ganzen Input-Ast des politischen Prozesses ausgeblendet. Die Konzentration auf politische Effektivität, auf das Zustandekommen und die Durchsetzung von politischen Entscheidungen, mit denen auf Problemsituationen reagiert wird, hat dazu geführt, dass die diesen – im politisch-administrativen System oder in Politiknetzwerken unter Beteiligung gesellschaftlicher Akteure ablaufenden – Entscheidungsprozessen vorgelagerten gesellschaftlichen Willensbildungsprozesse aus dem Blick gerieten. Demokratietheorie und Steuerungstheorie haben sich in getrennten Strängen von Theoriebildung und empirischer Forschung entwickelt und sind selten systematisch miteinander verknüpft worden. Faktisch allerdings ist die Steuerungstheorie bezogen auf demokratisch verfasste, hoch entwickelte Nationalstaaten formuliert worden. Die Steuerungstheorie hat zumeist stillschweigend die Existenz eines funktionierenden demokratischen Input-Prozesses unterstellt, in dem die zur Lösung anstehenden Probleme formuliert werden.

Auch die neueren Entwicklungen der Steuerungstheorie haben an ihrem Problemlösungsbias, dem in der Theorie selbst nicht infrage gestellten Postulat, dass es in der Politik zentral um Problemlösung geht, nichts geändert. Zwar wurde die Dichotomisierung von Staat und Gesellschaft durch die Einbeziehung von Formen gesellschaftlicher Selbstregulierung und von öffentlich/privat gemischten Politiknetzwerken überwunden, aber der analytische Maßstab bei der Beurteilung derartiger nicht oder nicht rein staatlicher Regelungsformen ist nach wie vor die Effektivität bei der Lösung anstehender Probleme. Fragte man früher nach den Erfolgsvoraussetzungen regulativer Politik (Mayntz 1983), so fragt man heute nach der Chance, in Verhandlungssystemen zu positiver Koordination zu kommen (Scharpf 1993). Solche Verhandlungssysteme sind sowohl die aus (Repräsentanten von) privaten wie staatlichen korporativen Akteuren bestehenden Politiknetzwerke als auch Systeme gesellschaftlicher Selbstregulierung. In beiden Fällen wird die Existenz von Machtunterschieden zwischen den Beteiligten nicht negiert, und es wird durchaus gesehen, dass sie sich darauf auswirken, welche unter den verschiedenen, von den einzelnen Beteiligten präferierten Problemlösungen sich am Ende durchsetzt beziehungsweise wie der schließlich gefundene Kompromiss aussieht. Zwar mutiert der Staat mit der Hinwendung zu Politiknetzwerken und gesellschaftlicher Selbstregulierung vom gesellschaftlichen Steuerungszentrum zu einer Koordinationsinstanz, die sich mit dem Management gesellschaftlicher Interdependenzen befassen muss. Aber von Herrschaft zur Befriedigung persönlicher Interessen der Politiker oder zur Durchsetzung eines nicht allgemein akzeptierten gesellschaftlichen Gestaltungskonzepts mit einem besonderen Nutzen/Kosten-Profil über die verschiedenen gesellschaftlichen Gruppen ist nach wie vor nicht die Rede. Die mit der Analyse von Politiknetzwerken verbundene neopluralistische Auffassung von Politikent-

wicklung geht eher im Gegenteil von der Annahme aus, dass die Einbeziehung von möglichst allen Betroffenen und Interessenten in einen politischen Entscheidungsprozess zu einer optimalen Problemlösung führt.² Und in der Diskussion um die staatliche Regulierung gesellschaftlicher Selbstregelung kommt man zu dem Schluss, dass die staatliche Intervention, ja selbst die drohende Möglichkeit einer regulierenden Intervention die Problemlösungsfähigkeit von Systemen gesellschaftlicher Selbstregelung verbessert, indem sie die gesellschaftlichen Akteure veranlasst, die Interessen nicht beteiligter Dritter oder Werte wie den Umweltschutz zu berücksichtigen.

Nun wäre grundsätzlich nichts gegen eine selektive Betonung von Problemlösungsaspekten zu sagen, solange es sich um eine bewusste und reflektierte Einschränkung des eigenen empirischen Geltungsanspruchs handelt. Genau das geschieht jedoch in der Steuerungstheorie nicht: Die zentrale Frage des *cui bono*, der Orientierung politischer Entscheidungen am privaten oder öffentlichen Interesse wird in der Steuerungstheorie nicht zum Thema gemacht. Dabei kommt in der politischen Wirklichkeit beides vor, und es macht für den Inhalt der getroffenen Entscheidungen einen großen Unterschied, welche dieser Orientierungen im Einzelfall ausschlaggebend war. Man braucht hier nur an die berüchtigte italienische *tangentopoli* und *partitocrazia* auf der einen Seite und an die mutigen Reformentscheidungen andererseits zu denken, die die niederländische Regierung im öffentlichen Interesse traf, obwohl sie damit bewusst die eigene Wiederwahl gefährdete (Visser/Hemerijck 1997). Vielleicht weil eine gültige empirische Antwort schwer zu erhalten ist, vielleicht weil der außenstehende Analytiker damit eine Art moralisches Urteil über die Handlungsorientierung von Politikern und anderen am Politikprozess beteiligten Akteuren abgeben müsste, wird in der Steuerungstheorie die Frage erst gar nicht gestellt, wie weit im Einzelfall das von den Entscheidungsträgern politisch Gewollte tatsächlich einem vorgestellten Gemeinwohl dienen soll, oder nicht doch nur die Manifestation des Herrschaftsinteresses einer politischen Klasse oder einer mächtigen gesellschaftlichen Teilgruppe ist. Und genauso wenig wird nach der Qualität – der fachlichen Kompetenz und der Handlungsorientierung – der Akteure gefragt, die im Zuge des demokratischen Wahlprozesses in jene Ämter gelangen, deren Inhaber später eine zentrale Rolle bei der versuchten Lösung gesellschaftlicher Probleme spielen. Die Steuerungstheorie akzeptiert die Wahl von Personen und die Wahl von Problemen als gegebenen Ausgangspunkt und ist so zwangsläufig unkritisch gegenüber den Implikationen einer möglicherweise eng interessenge-

² Vgl. hierzu etwa Schuppen (1999), von Alemann/Heinze/Wehrhöfer (1999), kritisch von Arnim (2000b: 139).

bundenen Themenwahl und der möglichen Auswahl inkompetenter oder sogar korrupter Akteure.

Diese Selektivität führt zur Ausblendung einer weiteren Frage. Wenn und soweit es bei politischer Steuerung tatsächlich um die Lösung sozioökonomischer Probleme einer konkreten Gesellschaft und nicht einfach um Herrschaftsausübung geht, müsste die Qualität der zugrunde liegenden Problemdiagnosen ein wichtiges Thema sein. In der Steuerungstheorie wird auch diese Frage nicht systematisch gestellt. Zwar ist im Rahmen der Implementationsforschung gelegentlich ausdrücklich darauf hingewiesen worden, dass ein konformer Gesetzesvollzug nicht *eo ipso* wünschenswert ist, sondern dass ganz im Gegenteil der Nicht-Vollzug unsinniger Gesetze sehr viel sinnvoller sein kann. Zu einer systematischen Frage nach der Qualität vorgängiger Problemdiagnosen ist das im Rahmen der Steuerungstheorie jedoch nicht entwickelt worden. Vielmehr wird in steuerungstheoretischen Analysen in der Regel von einem konkreten umweltpolitischen, beschäftigungspolitischen, sozialpolitischen etc. Problem ausgegangen, das heißt, von Zuständen, deren Problemhaftigkeit als generell akzeptiert gelten kann oder zumindest vermutet wird. Die – erreichte oder verfehlt – Problemlösung wird dann zum Maßstab, an dem die Effektivität der Steuerung gemessen wird. Selbst wo es in der Politik um Problemlösung geht, und das ist ohne Zweifel über weite Strecken der Fall, sind jedoch die Problemdefinitionen und die Lösungsansätze oft ideologisch gefärbt, durch postulierte Werte (Wachstum, soziale Gerechtigkeit) oder durch manifeste Sonderinteressen geprägt. Nur indem man von der kritischen Beurteilung von Problemdiagnosen und Lösungsvorschlägen absieht, lässt sich das politisch-administrative System – oder auch der kooperative Staat – als gesellschaftliche Problemlösungsinstanz im positiven Sinne verstehen.

Fragt man weder, wieweit Politik eigentlich an gesellschaftlicher Problemlösung orientiert ist, noch nach der Genese und der Qualität von Problemdefinitionen dort, wo tatsächlich Problemlösung das oberste Ziel ist, dann wird die Zuschreibung einer Steuerungsfunktion ans politisch-administrative System zu einer legitimierenden Fiktion. Auch wenn man dem Staat heute nicht mehr ein Monopol auf die Bestimmung des Gemeinwohls zubilligt, sondern Gemeinwohlvorstellungen aus einem fortlaufenden, gesellschaftsweiten Argumentationsprozess hervorgehen sieht, beanspruchen Parlament, Regierung und Verwaltung und mehr und mehr auch die zu sogenannten Volksparteien mutierten, ehemals ganz legitim bestimmte Klassen- und Gruppeninteressen repräsentierenden politischen Parteien eine besondere, für den Systemerhalt unverzichtbare zentrale Funktion. Steuerung, so habe ich selber gesagt, »bleibt dem Anspruch nach die besondere Funktion des politisch-administrativen Systems« (Mayntz 1996: 157). Hier gilt es allerdings, Steuerung als Grundla-

ge eines Legitimitäts*anspruchs* nicht zu verwechseln mit der Realität politischen Handelns.

Ihr Problemlösungsbias, das Ausblenden von Herrschaftsphänomenen lässt die Steuerungstheorie offenkundig für die Analyse politischer Entscheidungen in Ländern ungeeignet erscheinen, in denen ein diktatorischer (auch wenn gewählter!) Herrscher oder eine herrschende Klasse beziehungsweise Clique regiert. Beispiele fallen schnell ein: Miloscevicz in Serbien, Saddam im Irak, Mugabe in Mozambique. Auch der russische Krieg in Tschetschenien ist vor der jüngsten Präsidentenwahl mit dem persönlichen Wahlinteresse von Putin, und nach dieser Wahl mit dem korporativen Interesse des russischen Militärs beziehungsweise mit dem persönlichen Machtinteresse einer Gruppe russischer Generäle in Zusammenhang gebracht worden. Dies mögen Extremfälle von höchster Sichtbarkeit sein, aber sie zeigen nachdrücklich, wie folgenreich eine dominante Machtorientierung einflussreicher Entscheider für ein Land sein kann. Es wäre auch falsch, sich an diesem Punkt darauf zu verlassen, dass in gefestigten Demokratien der Down'sche Mechanismus genügt, um die Befriedigung privater und partikularistischer Interessen wirksam an die Verfolgung des öffentlichen Interesses, des Gemeinwohls zu binden. Selbst in Deutschland lassen sich hinter einzelnen politischen Vorgängen, wie unter anderem dem Scheitern der vom Grundgesetz geforderten Neugliederung der Bundesländer, private Interessen von Amtsinhabern als wichtige Triebkraft erkennen (von Arnim 2000a: 146).

Natürlich kann man auch nach den Wirkungsvoraussetzungen politischer Maßnahmen fragen, die dem Machterhalt eines Herrschers oder einer Partei beziehungsweise einem partikularen Gruppeninteresse dienen sollen. Das Ergebnis wäre eine rein technokratische Steuerungstheorie, die sich ebenso gut in den Dienst von Diktatoren wie von gemeinwohlorientierten Regierungen stellen ließe. Eine solche technokratische Entartung der Steuerungstheorie ergibt sich zwangsläufig, wenn man den Begriff der Steuerung vom Bezug auf gesellschaftliche Probleme, Gemeinwohlziele beziehungsweise Systemrationalität löst. Es sind demnach gerade ihre impliziten Unterstellungen, die reale Bezugnahme auf demokratisch verfasste Gemeinwesen und die postulierte, dem Gemeinwohl verpflichtete Problemlösungsorientierung der politisch Handelnden, die die politikwissenschaftliche Steuerungstheorie vor einer solchen Entartung bewahrt.

Ich habe im Vorangehenden versucht, die spezifische Selektivität der steuerungstheoretischen Perspektive herauszuarbeiten. Dabei sollte man meine Kritik jedoch nicht so verstehen, dass ich einer hemmungslosen Ausweitung der Theorie politischer Steuerung durch die gleichgewichtige Thematisierung der bisher vernachlässigten herrschaftstheoretischen Fragen das Wort reden möchte. Wissenschaftliche Perspektiven auf einen Gegenstand sind *zwangsläufig* selektiv. Eine synthetische Wirklichkeitsschau ist unserem analytischen Verstand

versagt: Wir können nicht alles auf einmal betrachten, nicht alle Phasen, Verästelungen, Voraussetzung und Varianten politischer Prozesse in einer integrierten Makrotheorie behandeln. Aber man sollte sich der besonderen Selektivität der je benutzten analytischen Perspektive bewusst bleiben, damit nicht offene Fragen über die Beschaffenheit von Wirklichkeit kurzschlüssig mit Unterstellungen beantwortet werden, die, gerade weil sie in der Regel implizit bleiben, sich um so ungehinderter auswirken und zu Fehlinterpretationen verführen können. Um das zu vermeiden, sollte in der steuerungstheoretisch angeleiteten Forschung auf jeden Fall die Handlungsorientierung der am politischen Entscheidungsprozess Beteiligten thematisiert werden – selbst dann, wenn diese Variable sich empirisch nur schwer erfassen lässt.

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3 Governance Theory als fortentwickelte Steuerungstheorie? (2005)

Als Herr Schuppert mich bat, diese um den Leitbegriff Governance kreisende Konferenz mit einem Referat zum Thema »Governance Theory als fortentwickelte Steuerungstheorie« einzuleiten, leuchtete mir die in der Themenformulierung enthaltene These, nämlich dass es sich bei der Governancetheorie um eine Fortentwicklung der Steuerungstheorie handelt, zunächst spontan ein. Dass Sozialwissenschaftler und vor allem Politikwissenschaftler heute auch im Deutschen vielfach eher mit dem Begriff »Governance« als mit »Steuerung« operieren, ist evident. Das könnte auf eine Fortentwicklung der Steuerungstheorie hinweisen, eine weitere Phase in der Entwicklung des bereits mehrfach erweiterten steuerungstheoretischen Paradigmas. Es könnte sich allerdings auch bloß um einen modischen Anglizismus handeln. Tatsächlich werden heute teilweise die gleichen Themen unter den verschiedenen Leitbegriffen »Steuerung« beziehungsweise »Governance« behandelt.¹ Dennoch wird darunter nicht immer dasselbe verstanden. Zwar haben wir, wenn wir Englisch sprechen, schon lange das Wort *governance* benutzt, wenn wir im Deutschen Steuerung gesagt hätten. Aber Governance wird von denen, die Deutsch sprechen beziehungsweise schreiben wollen, umgekehrt nicht einfach mit Steuerung übersetzt. Als mindestens wird ein qualifizierendes Adjektiv hinzugefügt, so wenn Schneider und Kenis (1996: 11) Governance mit »institutionelle Steuerung« übersetzen. Fritz Scharpf und ich haben dagegen schon 1995 für das englische *governance* das Wort »Regelung« benutzt (Mayntz/Scharpf 1995a: 16). *Governance* schien uns mehr zu umfassen als »Steuerung«.

Aber geht es bei dieser semantischen Verschiebung wirklich einfach um eine Begriffserweiterung? Ich behauptete, dass man das bezweifeln kann, und formuliere deshalb den Titel meines Referats als Frage: Ist die Governance Theory tatsächlich eine Weiterentwicklung der Steuerungstheorie? Meine These wird

¹ Vgl. etwa den 2001 erschienenen Sammelband *Politische Steuerung in Theorie und Praxis* (Burth/Görlitz 2001a) und den Text, mit dem die VW-Stiftung ihren Förderschwerpunkt *Globale Strukturen und deren Steuerung* erläutert, mit dem unter dem Titel *Governance* im letzten Jahr erschienenen Lehrheft der FernUniversität Hagen (danach publiziert als Benz 2004b).

sein, dass der mit dem Leitbegriff Governance arbeitende analytische Ansatz eine andere Perspektive repräsentiert als der mit dem Leitbegriff Steuerung arbeitende Ansatz. Governance-Theorie, das heißt die im Rahmen des Ansatzes entwickelte substanzielle Theorie, ist keine einfache Fortentwicklung im Rahmen des steuerungstheoretischen Paradigmas; sie befasst sich mit einem eigenen Satz von Fragen und lenkt dabei das Augenmerk auf andere Aspekte der Wirklichkeit als die Steuerungstheorie.

Der Begriff Steuerung ist erst seit den Siebzigerjahren für die deutsche Sozialwissenschaft bedeutsam geworden. Dabei gab es einen deutlichen Unterschied zwischen Soziologie und Politikwissenschaft. In die Soziologie fand der Begriff Steuerung im Zusammenhang mit der Systemtheorie von Talcott Parsons Eingang, die ihrerseits Anregungen aus der damals populären Kybernetik aufgenommen hatte. Die Parsons'schen Begriffe *control hierarchy* und *control media* wurden als Steuerungshierarchie und Steuerungsmedien übersetzt und später, im Gefolge der Luhmann'schen Systemtheorie, auch in Analysen des politischen Systems benutzt (vgl. Willke 1983). Dabei wurde Steuerung als systemische Funktion, als ein vom Handeln konkreter Akteure abgelöster Prozess gedacht. Systemtheoretische Konzepte spielten zu jener Zeit auch in der Politikwissenschaft eine gewisse Rolle (vgl. Easton 1964; Deutsch 1966). In der sich rasant entwickelnden empirischen Policy-Forschung rückten dagegen Akteure und ihr Handeln in den Vordergrund. Hier bildete sich ein akteurzentrierter Steuerungsbegriff heraus. Der realhistorische Hintergrund dieser Entwicklung war das damals große, praktische und theoretische Interesse an gesamtgesellschaftlicher Planung und Lenkung, an den Möglichkeiten einer »aktiven Politik«, bei der der Staat als zentrale Lenkungsinstanz fungiert. Das kommt gut zum Ausdruck, wenn Burth und Görlitz (2001b: 7) den Begriff der Steuerung als »die fachsprachliche Präzisierung staatlicher Interventionen in die Gesellschaft« bezeichnen und hinzufügen, die Steuerungstheorie beinhalte unser Wissen über Formen, Prozesse und Wirkungen derartiger Interventionen (ibid.: 8). Steuern meint – so habe ich 1987 definiert – ein zielgerichtetes Handeln, das von der Wirkung des Handelns analytisch zu unterscheiden ist; Steuerungshandeln bemisst sich nicht am Steuerungserfolg. Wie jedes Handeln muss Steuern einem Subjekt zuschreibbar sein: Steuerungshandeln impliziert die Existenz von Steuerungsakteuren. Steuerungsobjekt sind existente soziale (Teil-)Systeme, deren autonome Dynamik oder Entwicklung durch das Steuerungshandeln in eine bestimmte Richtung gelenkt werden soll (Mayntz 1987: 93–94). Die für diese Definition zentrale Unterscheidung zwischen Steuerungssubjekt und Steuerungsobjekt lenkt die Aufmerksamkeit zum einen auf die Steuerungsfähigkeit der Akteure und zum anderen auf die Steuerbarkeit der Adressaten ihres Handelns und erlaubt es, systematisch zwischen beidem zu unterscheiden.

Neben dem Denken in Termini von Akteuren gehört zu den kognitiven Prämissen der hier ansetzenden politikwissenschaftlichen Steuerungstheorie ein tradiertes – kontinentaleuropäisches – Staatsverständnis, demzufolge Politik nicht als Herrschaft, als Nutzung von Macht im eigenen oder dem Interesse einer Klasse, sondern als Handeln im öffentlichen Interesse verstanden wird.² Dem gegen Ende der Siebzigerjahre vollendeten steuerungstheoretischen Kernparadigma zufolge bedeutete politische Steuerung demnach die konzeptionell orientierte Gestaltung der Gesellschaft durch – dazu demokratisch legitimierte – politische Instanzen. Es war die damals unproblematisch erscheinende, stillschweigende Annahme demokratischer Legitimität, die es erlaubte, die Steuerungstheorie von demokratietheoretischen Fragen abzukoppeln, den Input-Ast des politischen Prozesses zu vernachlässigen und sich auf den Output-Ast zu konzentrieren, wobei unterstellt wurde, dass das Ziel politischen Handelns die Lösung gesellschaftlicher Probleme ist.

Angeregt durch Erkenntnisse der empirischen Implementationsforschung wurde dieses steuerungstheoretische Kernparadigma zunächst dadurch erweitert, dass man das Adressatenverhalten und die strukturellen Besonderheiten verschiedener Regelungsfelder in die Analyse einbezog und die Gesetzgeberperspektive durch eine Bottom-up-Perspektive ergänzte. Die Eigendynamik des Steuerungsobjekts und die Frage seiner Steuerbarkeit rückten damit ins Zentrum wissenschaftlichen Interesses, wobei sich kurzfristig ein – irritierender – theoretischer Brückenschlag zur Luhmann'schen Vorstellung von der Autonomie sozialer Teilsysteme ergab.

In einem zweiten Schritt löste man sich dann von der Konzentration auf die Akteure des politisch-administrativen Systems und bezog die Mitwirkung gesellschaftlicher Akteure an der Entwicklung und Implementation von Politik mit ein. Auch dieser Schritt wurde wieder durch Ergebnisse empirischer Forschung angeregt, die bei der näheren Untersuchung verschiedener Politikfelder auf die Existenz von neokorporatistischen Entscheidungsstrukturen, Politiknetzwerken und *private governments*, also Formen gesellschaftlicher Selbstregelung gestoßen war. Am Ende dieser Erweiterung des steuerungstheoretischen Paradigmas stand das Modell des kooperativen Staats, in dem die klare Unterscheidbarkeit von Steuerungsobjekt und Steuerungssubjekt verschwindet. »Politische« Steuerung konnte dementsprechend auch nicht mehr allein auf das Handeln politischer im Sinne staatlicher Akteure beziehungsweise im Sinne von Mitgliedern des politisch-administrativen Systems bezogen werden, sondern musste alle Ak-

2 Die Wurzeln dieses Politikverständnisses reichen bis in die klassische politische Philosophie zurück und lassen sich über die Renaissance bis zu Hegel verfolgen; vgl. Kaufmann (1994) und Münkler/Fischer (1999), zitiert bei Mayntz (2001: 19 bzw. Aufsatz 2 in diesem Band: 31).

teure einbeziehen, die mit ihrem Handeln ein »öffentliches Interesse« vertreten und realisieren sollen.³

Mit der Vorstellung vom kooperativen Staat hat sich das Paradigma politischer Steuerung aber nicht einfach erweitert. Hier ist vielmehr der Punkt erreicht, an dem die Perspektive sich zu verschieben beginnt und sich nach und nach auch die Terminologie verändert. In den Vordergrund schiebt sich jetzt die Frage nach den verschiedenen Formen der Regelung. Ganz deutlich wurde diese Verschiebung der Perspektive von Steuerung zu Governance allerdings erst mit der nächsten Erweiterung des ursprünglichen analytischen Paradigmas auf die Ebene oberhalb des bislang im Zentrum der Aufmerksamkeit stehenden Nationalstaats. Zwar wurde die Politikentwicklung auf EU-Ebene noch im Rahmen des steuerungstheoretischen Paradigmas, also mit einem akteurzentrierten Ansatz untersucht. Gleichzeitig wurde jedoch immer häufiger die Eigenart der europäischen Regelungsstruktur diskutiert. So hat etwa Benz (1998) die EU als ein System von *multilevel governance* analysiert, während Kohler-Koch (1999) die Governance-Struktur der EU als »network system« beschrieben hat.⁴ Beide befassen sich mit den Folgen, die eine derartige Regelungsstruktur für die innerhalb der EU ablaufenden Entscheidungsprozesse hat: Die Regelungsstruktur ist der institutionelle Rahmen, der das Handeln der Akteure lenkt. Selbst dort, wo Autoren das Wort Governance vermeiden, wird jetzt nicht mehr schlicht von Steuerung gesprochen, sondern man wählt solche begrifflichen Verlegenheitslösungen wie »neue Staatlichkeit« (Grande/Prätorius 2003) oder »neue Formen des Regierens« – Formulierungen, an denen noch deutlich die Eierschalen des traditionellen (kontinentaleuropäischen) Staatsverständnisses haften. Mit dem Übergang von der europäischen zur sogenannten »globalen« Ebene wird die Governance-Perspektive schließlich dominant. Auf der globalen Ebene kann man von zentraler politischer Steuerung sinnvollerweise überhaupt nicht mehr sprechen. Auf diesen Tatbestand verweist der oft zitierte Titel des Buches von Rosenau und Czempiel (1992), *Governance without Government*. Was heute unter dem Stichwort *global governance* diskutiert wird, ist eine Mischung verschiedener Formen der Regelung – durch internationale Regierungsorganisationen, durch internationale Regime, durch die Kooperation staatlicher und zivilgesellschaftlicher Akteure und schließlich in Form zivilgesellschaftlicher Selbstregelung etwa im Bereich der Wirtschaft. Wenn man mit Rosenau (1992: 4) unter Governance »a system of rule« versteht, dann steht jetzt nicht mehr das Machen, das – polyzentrische, keine erkennbare Einheit mehr bildende – Steuerungshandeln im

3 Einen noch weiteren, nur noch über Macht definierten Politikbegriff vertritt etwa Bang (2003).

4 Die bei Benz (1998) im Mittelpunkt stehende Mehrebenenverflechtung innerhalb der EU ist ihm zufolge ein besonderer Aspekt von »multilevel governance«.

Zentrum des Interesses, sondern die mehr oder weniger fragmentierte oder integrierte, nach unterschiedlichen Prinzipien gestaltete Regelungsstruktur.

Wie aber kam es, dass der Begriff Governance sich anbot, um etwas auszudrücken, was mit der alten Begrifflichkeit nicht mehr erfassbar schien? Auch in der Entwicklung der Governance-Perspektive gab es verschiedene Stränge. Lange Zeit wurde *governance* im angelsächsischen Sprachbereich nur gelegentlich zur Bezeichnung des Prozessaspekts von Politik benutzt: *governance* bedeutete *governing*.⁵ Ein mit seinem heutigen Sinngehalt benutzter Begriff von Governance gewann dagegen zunächst im Rahmen der ökonomischen Transaktionskostentheorie an Verbreitung, Williamson (1979) kontrastierte hier Markt und (Firmen-)Hierarchie als Möglichkeiten der Koordination ökonomischen Handelns, die unter verschiedenen Bedingungen effizient sind. In den Wirtschaftswissenschaften lenkte der Begriff Governance die Aufmerksamkeit damit auf die »Existenz von Regeln und die Art und Weise der Regeldurchsetzung im Wirtschaftsprozess« (Benz 2004a: 18).⁶ Bald jedoch wurde Williamsons Begriffspaar Markt und Hierarchie um weitere Typen ergänzt: durch Clans (Ouchi 1980), Verbände (Streeck/Schmitter 1985) und Netzwerke (Powell 1990), die man alle auch im Bereich der Wirtschaft fand (Hollingsworth/Lindberg 1985). Am Ende umfasste der Begriff Governance alle wesentlichen Formen der Handlungskoordination. Das eigentlich »Politische«, das interventionistische Handeln tritt dabei in den Hintergrund: nicht die Intervention, das Steuerungshandeln von Akteuren, sondern die wie auch immer zustande gekommene Regelungsstruktur und ihre Wirkung auf das Handeln der ihr unterworfenen Akteure steht nun im Vordergrund. Die Governance-Perspektive geht damit nahtlos in eine institutionalistische Denkweise über. Das wird bereits am Konzept der *corporate governance* gut nachvollziehbar, mit dem bestimmte Aspekte der Unternehmensverfassung gemeint sind – also gerade nicht das »Steuerungshandeln« von Managern, sondern die Institutionen, die rationales Handeln über situative Anreize lenken.

Mit der Erweiterung des Governance-Begriffs auf Formen der Handlungskoordination jenseits von Markt und Hierarchie löste sich die Terminologie aus dem Bereich der Ökonomie und wurde zunehmend auch in die Politikwissenschaft übernommen. In den Internationalen Beziehungen diente der Begriff Governance zur Beschreibung von Herrschaftsstrukturen, bei denen eine übergeordnete souveräne Instanz fehlt. In der Policy-Forschung passte der Begriff gut auf die Besonderheit des »kooperativen Staats«, das heißt der

5 Dem *Concise Oxford Dictionary* von 1991, S. 511 zufolge bezeichnet *governance* »the act or manner of governing« (zit. von Benz 2003: 17).

6 Im Gefolge von Williamson untersuchen Wirtschaftswissenschaftler weiterhin die ökonomischen Effekte verschiedener Formen der Wirtschaftsverfassung unter dem Stichwort Governance, so etwa in der Zeitschrift »Economics of Governance«.

politischen Steuerung unter Mitwirkung zivilgesellschaftlicher Akteure. In beiden Bereichen lassen sich Steuerungssubjekt und Steuerungsobjekt nicht mehr eindeutig unterscheiden, weil die Regelungsadressaten selbst am Entwerfen der Regeln und ihrer Durchsetzung mitwirken. Auf den einzelnen Nationalstaat angewandt meint Governance dann

das Gesamt aller nebeneinander bestehenden Formen der kollektiven Regelung gesellschaftlicher Sachverhalte: von der institutionalisierten zivilgesellschaftlichen Selbstregelung über verschiedene Formen des Zusammenwirkens staatlicher und privater Akteure bis hin zu hoheitlichem Handeln staatlicher Akteure. (Mayntz 2004: 72; vgl. auch Benz 2004a: 21)

Dadurch, dass in dieser Definition nicht vom »Staat«, sondern von »staatlichen Akteuren« die Rede ist, wird die für die Governance-Perspektive mehr als für die entwickelte Steuerungstheorie charakteristische Einsicht ausgedrückt, dass »der Staat« kein unitarischer Akteur, sondern ein differenziertes Geflecht nur teilweise hierarchisch miteinander verbundener Akteure (Behörden, Ämter usw.) ist. Dadurch, dass nicht einfach von Regelungsstruktur, sondern etwas umständlicher von »Formen der kollektiven Regelung« die Rede ist, wird der Doppelnatur des Begriffs Governance Rechnung getragen: »Governance« kann sich sowohl auf eine Handeln regelnde Struktur als auch auf den Prozess der Regelung beziehen; unabhängig von der Wortwahl im Einzelfall sind immer beide Aspekte impliziert.

Neben diesem umfassenden Begriff von Governance entwickelte sich in einem anderen Kontext auch eine engere Begriffsvariante. Im Unterschied zu Governance als Sammelbezeichnung für alle Formen sozialer Handlungskoordination diente der Begriff hier dazu, den Gegensatz zwischen hierarchischer Steuerung und kooperativer Regelung zu betonen: *governance* wurde als Gegenbegriff zu hierarchischer Steuerung benutzt. So bedeutet *governance* etwa für Rhodes (1997) eine grundsätzlich nicht hierarchische Art des Regierens, bei der private korporative Akteure an der Formulierung und Implementation von Politik mitwirken. Ähnlich definiert Héritier (2002: 3): »[G]overnance implies that private actors are involved in decision-making in order to provide common goods and that non-hierarchical means of guidance are employed.« Den Ausführungen in einem ausschließlich dem Thema *governance* gewidmeten Heft des »International Social Science Journal« (UNESCO 1998) zufolge wurde der Begriff *governance* in diesem Sinne in den späten Achtzigerjahren des vorigen Jahrhunderts von der Weltbank eingeführt und in normativer Absicht vor allem auf Entwicklungsländer bezogen. In ihrem Bericht von 1995 hat die *Commission on Global Governance* den Begriff dann mit gleicher Bedeutung auf die globale Ebene übertragen (Messner 2003: 251). Als »*good governance*« gilt dabei eine effiziente, rechtsstaatliche und bürgernahe Staats- und Verwaltungspraxis, die die Voraus-

setzung für eine gedeihliche Wirtschaftsentwicklung ist (vgl. Benz 2004a: 20). Die Parallele zum Begriff des »kooperativen Staats« wird offensichtlich, wenn dabei die Bedeutung zivilgesellschaftlicher Mitwirkung am politischen Prozess als zentrales Merkmal von *good governance* beschrieben wird. Mit dieser normativen Akzentuierung wurde der Begriff dann später auch im sozialwissenschaftlichen Bereich benutzt (zum Beispiel von Kooiman 1993). In der Form von normativ gemeinten Gestaltungsprinzipien wie Transparenz, Partizipation, Verantwortlichkeit usw. diente das Konzept von »good« oder auch »modern« Governance zugleich als neues Leitbild der Verwaltungsreform und als Bewertungsstandard für die Kreditwürdigkeit Hilfe suchender Entwicklungsländer. Damit haben wir heute sowohl einen weiten, neutralen, als auch einen engeren, zumindest latent normativ akzentuierten Begriff von Governance – was seine Verwendung als analytisches Instrument erschwert. Beide Begriffsvarianten beziehen sich jedoch auf Modi institutionalisierter Regelung von Entscheidungsprozessen über gesellschaftliche (»öffentliche«) Sachverhalte, und unterscheiden sich damit von der steuerungstheoretischen Perspektive.

Fasst man nach diesem Überblick über die Entwicklung der Steuerungstheorie und der Governance-Theorie den Unterschied der beiden Perspektiven noch einmal grob zusammen, dann kann man die Steuerungstheorie als akteurzentriert und die Governance-Theorie als institutionalistisch bezeichnen. Die Steuerungstheorie ist dabei von ihrer Genese her an eine kontinentaleuropäische Staatsvorstellung geknüpft. Bei ihr steht das handelnde Steuerungssubjekt im Vordergrund, bei der Governance-Theorie dagegen die Regelungsstruktur, eine Schwerpunktsetzung, die in beiden Fällen mit der Genese des Ansatzes zusammenhängt. Die Steuerungstheorie hat nie die Nabelschnur zu »Politik« in einem relativ engen Sinn des Begriffs gekappt; sie lässt sich nicht von dem lösen, was von Anfang an mitgedacht wurde – Gesellschaftsgestaltung durch dazu legitimierte politische Instanzen.⁷ Die auf die Regelung öffentlicher oder kollektiver Sachverhalte bezogene Governance-Theorie kann umgekehrt ihre Herkunft aus der Wirtschaftswissenschaft nicht verleugnen: sie schaut vor allem auf die Wirkung von verschiedenen Regelungsstrukturen und interessiert sich weniger für ihr Entstehen, das in ökonomischer Perspektive durch rationale Wahl oder den evolutionären Erfolg effizienter Regelungsformen bestimmt ist. Der den Perspektivenwechsel anzeigende, semantische Umschlagspunkt liegt dort, wo die Politikwissenschaft beginnt, sich intensiv mit den politisch zunehmend bedeutsamen Vorgängen auf der europäischen und der internationalen Ebene zu

⁷ Wegen der Prämisse demokratischer Legitimation im steuerungstheoretischen Kernparadigma ist es auch nicht überraschend, dass ein »Demokratiedefizit« erst im europäischen und globalen Kontext intensiv diskutiert wird.

beschäftigen, jenen Ebenen also, auf denen ein »Steuerungssubjekt« nur noch in generalisierter und zugleich fragmentierter Form erscheint. Der Begriffswechsel von Steuerung zu Governance verweist damit *auch* auf Veränderungen in der politisch relevanten Wirklichkeit, die eben diese neue Sichtweise »realitätsgerechter« erscheinen lassen. Der Perspektivenwechsel von Steuerung zu Governance erschwert es jedoch zugleich, sich mit bestimmten Fragen zu beschäftigen, die für das steuerungstheoretische Paradigma zentral waren. So erschwert es der Wegfall einer klaren Trennung zwischen Steuerungssubjekt und Steuerungsobjekt in der Governance-Perspektive, die »Steuerbarkeitsproblematik« systematisch anzusprechen. Es mag sein, dass auch in der Steuerungstheorie das Auseinanderklaffen von Steuerungsfähigkeit und Steuerungsbedarf theoretisch nicht hinreichend bewältigt ist (Dose 2003: 39–41). Aber mit dem Verschwinden der Differenz zwischen Steuerungssubjekt und Steuerungsobjekt fehlt der Governance-Theorie der analytische Ansatzpunkt, der sie zur Behandlung dieser Frage drängt.

Der Perspektivenwechsel von Steuerung zu Governance ist kein Paradigmenwechsel im radikalen Kuhn'schen Sinne; er lässt sich besser als Akzentverschiebung beschreiben. Die beiden Leitbegriffe Steuerung und Governance lenken die Aufmerksamkeit auf verschiedene Aspekte der Wirklichkeit. Aber in beiden Fällen handelt es sich lediglich um eine unterschiedliche Gewichtung, nicht um eine Verabsolutierung verschiedener Aspekte der Wirklichkeit. Auch in der Governance-Theorie spielen Akteure eine wichtige Rolle: Schließlich sind sie es, die im Rahmen einer gegebenen Institution handeln beziehungsweise die durch ihr Zusammenhandeln eine bestimmte Form der Regelung konstituieren. Regelungsstrukturen interessieren nicht *per se*, sondern aufgrund ihrer ermöglichenden und restringierenden Wirkung auf das Handeln von Akteuren. Die Steuerungsperspektive und die Governance-Perspektive schließen sich gegenseitig nicht aus, sondern können sich gegenseitig ergänzen. Im Ansatz des akteurzentrierten Institutionalismus wird ausdrücklich versucht, beide Perspektiven miteinander zu verbinden (vgl. Mayntz/Scharpf 1995b).

Aber gerade weil es sich eher um eine Akzentverschiebung als um einen radikalen Paradigmenwechsel handelt, kann die Governance-Theorie auch nicht eine zentrale Schwäche der Steuerungstheorie aufheben, ihren »Problemlösungsbias« (Mayntz 2001 bzw. Aufsatz 2 in diesem Band). Dieser Problemlösungsbias folgt aus der verbreiteten Konzeption von Steuerung und auch von Governance als einem an der Lösung kollektiver Probleme orientierten Handeln beziehungsweise Prozess. Nicht selten kommt dies sogar in Definitionen der beiden Leitbegriffe zum Ausdruck. So definiert zum Beispiel Nicolai Dose in seinem Überblicksaufsatz Steuerung als »eine intentionale und kommunikative Handlungsbeeinflussung mit dem Ziel der gemeinwohl-orientierten Gestaltung« (Dose 2003:

20–21), während Governance in der bereits zitierten Definition von Héritier »implies that private actors are involved in decision-making in order to provide common goods« (Héritier 2002: 3). Nun ist ein selektives Erkenntnisinteresse an Problemlösung und ihren Voraussetzungen durchaus erlaubt, solange nicht *ex definitione* unterstellt wird, dass es in der politischen Wirklichkeit immer um die Lösung kollektiver Probleme und nicht – auch oder primär – um Machtgewinn und Machterhalt geht. Die Gefahr einer solchen Unterstellung setzt in der Steuerungstheorie beim Akteurhandeln, bei der Motivation der Steuerungsakteure an. Die Governance-Theorie, die sich auf Regelungsstrukturen konzentriert, wird dagegen leicht zu dem funktionalistischen Fehlschluss verführt, dass existierende Institutionen im Interesse der Lösung kollektiver Probleme entstanden sind. So erscheinen insbesondere inter- und transnationale Institutionen in der Sichtweise europapolitischer »Funktionalisten« beziehungsweise des *liberal institutionalism* in der Theorie internationaler Beziehungen als Reaktion auf Probleme, die im nationalstaatlichen Rahmen nicht mehr zu lösen sind (Haas 1990: 2).⁸

Als Aussage über die Beschaffenheit von Wirklichkeit ist eine solche Annahme empirisch falsch.⁹ Die partikularen Interessen einzelner Staaten beziehungsweise mächtiger Wirtschaftsakteure haben beim Entstehen internationaler Institutionen eine wichtige Rolle gespielt, und spielen weiterhin eine Rolle für die Art ihres Operierens. Damit ist weder geleugnet, dass partikulare Betroffenheit (zum Beispiel durch Umweltverschmutzung oder eine bestimmte weltwirtschaftliche Entwicklung) dazu motivieren kann, ein gemeinsames Problem zu identifizieren und auf seine Lösung zu drängen. Noch wird behauptet, die Existenz partikulärer Interessen würde in Steuerungstheorie und Governance-Perspektive völlig ausgeblendet. Der Steuerungstheorie zufolge können partikuläre Interessen die Steuerungsobjekte zum Widerstand beziehungsweise zum Unterlaufen staatlicher Interventionen motivieren, was bei der Wahl geeigneter Steuerungsinstrumente berücksichtigt wird. In der Governance-Theorie spielen Verhandlungen zwischen divergierenden partikularen Interessen und ihre Fähigkeit, zum wechselseitigen Ausgleich und damit zur gemeinsamen Problemlösung zu gelangen, eine zentrale Rolle. Aber beiden Ansätzen wohnt die Gefahr inne, die erfolgreiche Kanalisierung beziehungsweise Transformation partikulärer Interessen im

8 Diese nicht auf die Motivation von Akteuren, sondern auf die Genese von Regelungsstrukturen bezogene Annahme hängt erkennbar mit dem ökonomischen Hintergrund der Governance-Perspektive zusammen.

9 Ein in die gleiche Richtung zielender Skeptizismus hinsichtlich der Orientierung politischen Handelns kennzeichnete bereits die vor allem mit den Namen Downs und Olson verbundene ökonomische Theorie der Politik, der ein eigeninteressiertes Handeln politischer Akteure allerdings als rational und deshalb nicht zu beanstanden galt.

Interesse des größeren Ganzen als Normalfall anzusehen beziehungsweise sich in der empirischen Analyse auf solche Fälle zu konzentrieren.

In dieser Situation steht die Governance-Theorie vor einer klaren Alternative: Sie muss entweder das selektive Interesse an Problemlösungsprozessen als Auswahlkriterium für Forschungsfragen explizit machen, oder sie muss um einer vollständigeren Erfassung der politischen Wirklichkeit willen ihre Perspektive erweitern. Das allerdings könnte auf einen ziemlich radikalen Paradigmenwechsel hinauslaufen. Die Governance-Theorie mag heute andere Fragen aufwerfen als die Steuerungstheorie, teilt jedoch mit ihr das Interesse an Vorgängen der Regelung kollektiver Sachverhalte. Würde die Governance-Theorie zur modernen Herrschaftstheorie erweitert, könnte die für die Theoriebildung erforderliche Selektivität des Erkenntnisinteresses verloren gehen und die Governance-Theorie würde zu einer sehr viel allgemeineren Theorie soziopolitischer Dynamik auf der Basis eines ganz neuen Paradigmas mutieren. Einer solchen Entwicklung sollte man vielleicht erst dann das Wort reden, wenn die Erkenntnismöglichkeiten im Rahmen der existenten Governance-Theorie erschöpft sind, das heißt, wenn wir einen besseren Einblick gewonnen haben in die Zusammenhänge zwischen der Beschaffenheit verschiedener Regelungsfelder, den in ihnen erzeugten Problemen, und den auf sie bezogenen Formen der kollektiven Regelung.

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4 Die Handlungsfähigkeit des Nationalstaats in Zeiten der Globalisierung (2007)

In der Theorie und den Untersuchungen zur politischen Steuerung ist es schon immer um staatliche Handlungsfähigkeit gegangen. Dass der Staat beziehungsweise die politischen Instanzen Regierung und Parlament Wirtschaft und Gesellschaft gegenüber handlungsfähig sind, war die grundlegende Prämisse der Steuerungstheorie. Sie unterschied sich damit sowohl von marxistischen Analysen, die den Staat vom Kapital instrumentalisiert sehen, wie von systemtheoretischen Konzepten, die davon ausgehen, dass infolge der selbstreferenziellen Geschlossenheit funktioneller Teilsysteme das politische Teilsystem grundsätzlich unfähig ist, als gesellschaftliches Steuerungszentrum zu wirken (vgl. Scharpf 1989). Aus steuerungstheoretischer Perspektive erschien dagegen »eine im Sinne ihrer Ziele erfolgreiche Einwirkung der Politik auf gesellschaftliche Strukturen und Prozesse zwar schwierig, aber nicht grundsätzlich ausgeschlossen und unter bestimmten Bedingungen durchaus möglich« (Mayntz/Scharpf 2005: 236). In der empirischen Policy-Forschung wurden die Voraussetzungen erfolgreicher politischer Steuerung identifiziert (Mayntz 1997[1987]), und zwar nicht selten, indem man sie im Umkehrschluss aus Fällen gescheiterter Reformen ableitete. Zu den in solchen Studien identifizierten Voraussetzungen erfolgreicher Steuerung gehören aufseiten des Staates gesetzliche Interventionsrechte, finanzielle Mittel und durchsetzungsfähige Vollzugsinstanzen, aber auch die Konsensfähigkeit des relevanten Sets von Entscheidungsbeteiligten. Die Voraussetzungen erfolgreicher Steuerung liegen jedoch nicht nur aufseiten des Staates. Die empirische Implementationsforschung fand vielmehr, dass wichtige Steuerungsvoraussetzungen im Bereich der Adressaten beziehungsweise des betroffenen gesellschaftlichen Regelungsfelds liegen. Zu den relevanten Merkmalen des Regelungsfelds gehören seine Organisationsstruktur, die Präferenzen und das Widerstands- beziehungsweise Protestpotenzial betroffener Adressaten. Eine wichtige Rolle spielt schließlich die Art des durch staatliche Intervention zu lösenden Problems. So, wie es beim Gewichtheben auf das Verhältnis zwischen der Muskelkraft des Sportlers und der Schwere des Gewichts ankommt, hängt auch die erfolgreiche politische Steuerung vom Verhältnis zwischen der Steuerungsfähigkeit des Staates und der Art und Intensität des zu lösenden Problems

ab. In empirisch orientierten Analysen von Reformblockaden, wie Kitschelt und Streeck sie für Deutschland vorgelegt haben (Kitschelt/Streeck 2003), überfordert die aus angebbaren Gründen veränderte Problemsituation (etwa wirtschaftliche Stagnation, Arbeitslosigkeit) die aus ebenfalls angebbaren Gründen beschränkte Handlungsfähigkeit von Regierung und Parlament, weshalb die Problemsituation auch im Wesentlichen unverändert bestehen bleibt.

Diese analytische Perspektive erhielt im Kontext der Globalisierungsdebatte einen neuen Akzent. Es geht jetzt nicht mehr nur um die Erklärung von Steuerungsdefiziten durch das Missverhältnis zwischen Problem und Problemlösungsfähigkeit, sondern ins Zentrum des Interesses rückt die Frage, ob und wie weit speziell die Globalisierung, die Intensivierung von Interaktionen und Transaktionen, die über nationale Grenzen hinweg gehen, dieses Missverhältnis verursacht. Nicht Problemlösungsfähigkeit, sondern Autonomie ist jetzt der Schlüsselbegriff: In Frage steht die *autonome* Handlungsfähigkeit (*state autonomy, state capacity*) des Nationalstaats. Nach wie vor geht es dabei nicht um die außenpolitische, sondern wie auch im Rahmen der Steuerungstheorie um die Handlungsfähigkeit des Nationalstaats nach innen. Diese Handlungsfähigkeit sah man verstärkt seit den Neunzigerjahren des vorigen Jahrhunderts durch die Globalisierung gefährdet, in deren Gefolge der Nationalstaat seine territoriale Allzuständigkeit verlor. Staatsrechtler und Sozialwissenschaftler, die mit der Kategorie staatlicher Souveränität arbeiten, sahen die Souveränität des Staates durch die Globalisierung verletzt. Zwar sind die begrifflichen Voraussetzungen staatlicher Souveränität (völkerrechtlich anerkannte Alleinzuständigkeit nach innen und nach außen sowie volle Beherrschung aller internen und grenzüberschreitenden Prozesse) auch bisher praktisch von keinem Staat ganz erfüllt worden, doch wird das nationalstaatliche Regulierungsmonopol und die Beherrschbarkeit interner und grenzüberschreitender Prozesse ohne Zweifel durch die Globalisierung weiter beeinträchtigt (Krasner 1999). Globalisierungsbedingte Einschränkungen der nationalstaatlichen Fähigkeit zur Steuerung interner und grenzüberschreitender Prozesse (wie Handel, Kommunikation, Migration) stehen auch im Zentrum von Analysen, die sich nicht der Souveränitätssemantik bedienen, sondern eher Begriffe wie Handlungsfähigkeit oder staatliche Autonomie benutzen. Insbesondere der Einfluss ökonomischer Globalisierung, der wachsenden Internationalisierung des Handels, der Investitionstätigkeit und des Finanzmarktes, und ihre Auswirkungen auf die wirtschafts-, steuer- und sozialpolitische Handlungsfähigkeit des Nationalstaats schienen vielen Autoren zum Rückzug, zur Erosion, ja, zur Abdankung des Nationalstaats zu führen (vgl. Horsman/Marshall 1994; Ohmae 1995; Strange 1996).

Inzwischen ist allgemein anerkannt, dass insbesondere die ökonomische Denationalisierung (Zürn 1998) erstens kein ganz neues Phänomen und zweitens

kein von außen über den modernen Nationalstaat hereinbrechendes Schicksal, sondern eine durch bewusste politische Entscheidungen ermöglichte, ja, teilweise vorangetriebene Entwicklung ist (vgl. Mayntz/Scharpf 2005). Erinnert man sich überdies an die Tatsache, dass der moderne Nationalstaat ein räumlich und zeitlich begrenztes historisches Phänomen ist, und dass es deshalb auch keinen ein für alle Mal feststehenden Katalog von Staatsaufgaben gibt, dann erscheinen die im Gefolge der Globalisierung auftretenden Veränderungen nicht mehr als Demontage, sondern vielmehr als eine weitere historische Transformation des Nationalstaats (vgl. Weiss 1998; Clark 1999; Ilgen 2003). Diese »Transformationsthese« wird inzwischen in der einen oder anderen Form von den meisten Autoren unterschrieben, die sich mit der Handlungsfähigkeit des Nationalstaats in Zeiten der Globalisierung befassen (vgl. Jayasuriya 2001; Leibfried/Zürn 2005). Dabei werden die einschränkenden Wirkungen der Globalisierung insbesondere auf die staatliche Wirtschafts-, Steuer- und Sozialpolitik nicht bestritten; so konstatieren Milner und Keohane einen »loss of policy autonomy« durch die Globalisierung als Ergebnis ihrer Einwirkung »on the constraints and opportunities faced by governments« (Milner/Keohane 1996: 16f.). Doch wird der Nationalstaat nach wie vor als »major actor in both domestic and international affairs« (Gilpin 2001: 362) betrachtet. Dem Staat wachsen nicht nur eine Reihe neuer Aufgaben zu (so bei der Implementation internationaler Politik, bei der Lösung neuartiger Probleme), sondern auch neue Handlungsmöglichkeiten. Hier steht sicher an erster Stelle die Mitwirkung an Entscheidungsprozessen auf internationaler Ebene. Hirst und Thompson etwa meinen, »states will come to function less as »sovereign« entities and more as the components of an international »quasi-polity« (Hirst/Thompson 1999: 257). Das Entstehen supra-, inter- und transnationaler Organisationen und Regime mit eigenen Regelungsbefugnissen schränkt zwar die nationalstaatliche Regelungsautonomie ein, eröffnet aber zugleich Chancen der Mitwirkung an Regelungen, die über den eigenen nationalen Bereich hinausgehen (das heißt Machtausübung über andere). Dabei erlauben es Entscheidungsprozesse im Kontext von Putnams berühmten Two-Level-Games unter Umständen, auf internationaler Ebene eine bindende Regelung durchzusetzen, die den eigenen politischen Zielen einer Regierung entspricht, bislang jedoch innenpolitisch auf Widerstand stieß (vgl. Grande 1996). Die scheinbar konträren Einschätzungen der Globalisierungsfolgen für den Nationalstaat betonen verschiedene Seiten des gleichen Prozesses: auf der einen Seite einschränkende Wirkungen auf die Nutzung bisheriger nach innen gerichteter politischer Instrumente, auf der anderen Seite erweiternde Wirkungen auf das Spektrum der nach innen und außen gerichteten Aufgaben und die Chancen der politischen Einflussnahme in intergouvernementalen Entscheidungsprozessen.

Konzentriert man sich, wie es im Folgenden geschehen soll, auf die einschränkenden Wirkungen der Globalisierung auf das nach innen gerichtete staatliche Handeln, dann läuft man Gefahr, die nationalstaatlich verfasste Gesellschaft als in sich geschlossenes und klar nach außen abgegrenztes System zu sehen, das, wie ein Gebäude dem Wirbelsturm, einer fremden Kraft ausgesetzt ist. Die Vorstellung, die Globalisierung wirke »von außen« auf die nationale Gesellschaft ein, ist genauso falsch wie die Vorstellung von der Existenz zweier getrennter Ebenen, einer nationalen und einer internationalen oder globalen (vgl. hierzu auch Sassen 2002). Dennoch ist es legitim zu fragen, wie weit, inwiefern und wie (durch welche Faktoren, aufgrund welcher Prozesse) die Handlungsfähigkeit der nationalen politischen Instanzen durch die nationalen Grenzen überschreitende Expansion von funktionell differenzierten Handlungssystemen – und nur das meint »Globalisierung« – eingeschränkt wird. Trotz einer inzwischen hunderte von deutsch- und vor allem englischsprachigen Publikationen umfassenden Literatur lässt sich diese Frage allerdings nur relativ ungenau beantworten; vor allem der Versuch, sowohl empirisch fundierte als auch generelle, über den Einzelfall hinausgehende Aussagen zu machen, hat mit einer ganzen Reihe methodischer Schwierigkeiten zu kämpfen.

Verallgemeinerungen über die Handlungsfähigkeit »des« Nationalstaats in Zeiten der Globalisierung sind schon deshalb nicht möglich, weil, wie Scharpf und Schmidt in einer großen ländervergleichenden Studie gezeigt haben, konkrete weltpolitische und damit verknüpfte weltwirtschaftspolitische Vorgänge nicht auf gleiche Weise alle Länder, ja nicht einmal alle Länder der OECD-Welt berühren (vgl. Scharpf/Schmidt 2000). Auch »dem« einzelnen Nationalstaat Handlungsfähigkeit zuzuschreiben ist eine grobe Vereinfachung, ist ein Staat doch kein einheitlicher Akteur, sondern ein in sich hochgradig differenziertes System, in dem verschiedene Instanzen über ganz unterschiedliche Machtpotenziale verfügen. Betroffen von der Globalisierung sind außerdem immer ganz konkrete Sektoren, gesellschaftliche Teilsysteme beziehungsweise politische Regelungsfelder, wobei die transnationale Verflechtung verschiedener gesellschaftlicher Teilsysteme sehr unterschiedlich ist. Die verschiedenen Politikfelder beziehungsweise gesellschaftlichen Sektoren stehen auch nicht gleichgewichtig nebeneinander wie die Stücke einer Torte; vielmehr gibt es zwischen ihnen komplexe und vielfach asymmetrische Abhängigkeitsbeziehungen. Während in anderen Teilen der Welt die organisierte Religion oder das Militär der dominante Sektor sein mögen, ist es in den Staaten der OECD-Welt ohne Zweifel die Wirtschaft. Unterschiede im Gewicht verschiedener Sektoren spiegeln sich im Profil der einschlägigen Literatur wider: Hier dominieren Publikationen über den Einfluss der Globalisierung auf die Wirtschaftspolitik und auf die über die Finanz- und Steuerpolitik mit ihr verflochtene Sozialpolitik. Dass speziell

die Globalisierungsfolgen für den Sozial- oder Wohlfahrtsstaat im Zentrum des Interesses stehen, hat auch mit der ihm für die soziale und politische Stabilität zugeschriebenen Bedeutung zu tun, war es doch der moderne Wohlfahrtsstaat, der durch die rasante wirtschaftliche Entwicklung nach dem Zweiten Weltkrieg nicht nur finanziell ermöglicht wurde, sondern der ihre verunsichernden Auswirkungen zugleich für weite Teile der Bevölkerung erträglich gemacht hatte.

Verschiedene Politikfelder werden nicht nur unterschiedlich stark, sondern zugleich von verschiedenen Facetten des multidimensionalen Globalisierungsprozesses betroffen. Für die Sicherheitspolitik etwa sind andere Aspekte der Globalisierung von Bedeutung als für die Steuerpolitik, die Medienpolitik oder die Telekommunikationspolitik. Zwar steht in Untersuchungen über die Auswirkung der Globalisierung auf den Nationalstaat die ökonomische Globalisierung im Vordergrund; Prozesse der »Denationalisierung« finden jedoch auch bei den technischen Infrastrukturen, im Bereich des organisierten Verbrechens und bei den Medien statt. Dabei gibt es keine einfache Zuordnung von Globalisierungsaspekten zu Sektoren. Die Internationalisierung von technischen Infrastruktursystemen hat nicht nur direkte Auswirkungen auf die nationale Luftfahrt, Energieversorgung und Post, sondern hat auch eine wichtige Rolle bei den Veränderungen in den Bereichen Wirtschaft und Finanzen gespielt. Aussagen über die Einschränkung staatlicher Handlungsfähigkeit durch die Globalisierung müssen deshalb zwischen Sektoren differenzieren und dabei ihre (unterschiedliche) Betroffenheit berücksichtigen (Milner/Keohane 1996: 15f.).

Nicht nur die Globalisierungsbetroffenheit verschiedener Staaten und Sektoren ist unterschiedlich. Staaten unterscheiden sich auch in ihrer Handlungsfähigkeit, und diese Unterschiede scheinen – zumindest für die von Scharpf und Schmidt festgestellten Länderunterschiede bei der Bewältigung des Beschäftigungsproblems – sogar wichtiger zu sein als die variable Intensität der Problem-betroffenheit (vgl. Scharpf/Schmidt 2000). Auch die staatliche Handlungsfähigkeit ist keine allgemeine, sondern muss entweder auf bestimmte Sektoren (etwa Wirtschaftspolitik, Steuerpolitik, Forschungspolitik) oder auf die verschiedenen Dimensionen staatlicher Machtausübung (etwa Ressourcengewinnung, rechtliche Regelung, Gewährleistung von Sicherheit und Ordnung) bezogen werden.¹ Aber ob staatliche Handlungsfähigkeit nun auf Sektoren oder auf Dimensionen der Machtausübung bezogen wird, die zentrale Frage bleibt, ob und auf welchem Wege die Globalisierung tatsächlich die staatliche Handlungsfähigkeit beeinflusst. Handlungsfähigkeit ist genau wie Macht ein Potenzialbegriff: Man kann fähig sein, etwas zu tun, kann es aber auch unterlassen, so wie man Macht

1 Auf Dimensionen staatlicher Machtausübung beziehen sich etwa Ikenberry (2003) und Leibfried/Zürn (2005).

»haben« kann, ohne sie anzuwenden; sowohl das abstrakte »Können« als auch der politische Wille, prinzipiell verfügbare Instrumente einzusetzen, sind Beschränkungen unterworfen. Die wählbaren Optionen der Politik sind das Produkt aus dem Zusammenspiel von (beschränktem) Wollen und (beschränktem) Können. In der Tat wird staatliche Handlungsfähigkeit in empirischen Analysen auch genau in diesem Sinne verstanden: Die Politik tut (nur), was sie unter den jeweiligen Gegebenheiten tun und wollen kann.

Die wesentlichen Voraussetzungen eines prinzipiellen staatlichen Handelns sind aus der Steuerungstheorie bekannt; es sind Interventionsrechte und die Verfügung über finanzielle und sachliche Mittel sowie ein wirksamer Vollzugsapparat. Die Funktionsweise des Vollzugsapparats kann die Implementation internationaler Vereinbarungen genauso beeinträchtigen wie die Implementation nationaler Politik, aber das ist sicher keine *globalisierungsbedingte* Einschränkung der nationalen Handlungsfähigkeit. Die rechtlichen Voraussetzungen staatlicher Intervention sind in Verfassungsstaaten schon immer beschränkt gewesen. In jüngerer Zeit sind die Grenzen für staatliche Intervention durch eine Politik der Privatisierung enger gezogen worden. Die Privatisierung zuvor von öffentlichen Betrieben erbrachter Leistungen im Zuge der Verbreitung neoliberaler Wirtschaftspolitik ist zwar weltpolitisch (durch die Vormachtstellung der USA) beeinflusst, aber nicht im engeren Sinn globalisierungsbedingt. Eindeutig globalisierungsbedingt sind die Einbußen an autonomer staatlicher Handlungsfähigkeit dagegen, wenn Regelungsrechte auf internationale Organisationen (und speziell die EU) übertragen werden. Wie Cassese feststellt, gibt es kaum noch einen Sachbereich, der von Regelungen internationaler Organisationen und Regime unberührt geblieben wäre – von Handel, Finanzmärkten, Landwirtschaft, Fischereiwesen und der Zuckerproduktion über die Telekommunikation und Postdienstleistungen bis hin zur Nutzung geistigen Eigentums, zur Seuchenbekämpfung und zu Buchhaltungsstandards (vgl. Cassese 2006). Diese internationalen Regelungen betreffen verschiedene Sektoren unterschiedlich stark; selbst die gleichen Sektoren in verschiedenen Ländern können unterschiedlich stark betroffen sein. So beschränken EU-Normen die nationale Agrarpolitik lediglich in EU-Mitgliedsländern, während die Konditionalitäten des Internationalen Währungsfonds IMF sich restriktiv nur auf Länder auswirken, die IMF-Kredite in Anspruch nehmen. Oft allerdings sind es eher die schon vorher existierenden rechtlichen Schranken staatlicher Intervention als die Einbußen an nationaler Regelungskompetenz durch internationale Verträge, die den Staat daran hindern, wirksam zu intervenieren; so schließt die verfassungsmäßig garantierte Forschungsfreiheit und die Tarifautonomie auch Maßnahmen aus, mit denen der Staat gern auf globalisierungsbedingte Probleme reagieren würde. Die staatliche Handlungsfähigkeit wird hier durch die Globalisierung nicht eingeschränkt, sondern überfordert.

Die Verfügung über finanzielle Ressourcen ist über die Steuerpolitik eng mit staatlichen Interventionsrechten verknüpft. Mittelknappheit schränkt die Politik in kostenintensiven Politikbereichen spürbarer ein als in Bereichen, in denen vor allem rechtlich normierend interveniert wird; so leidet die Sozialpolitik stärker als die Rechtspolitik oder der Embryonenschutz unter knappen Finanzmitteln. Für die staatliche Verfügung über finanzielle Ressourcen spielt die Selbstbindung durch internationale Verträge (wie im Fall des europäischen Stabilitätspaktes, der die staatliche Kreditaufnahme beschränkt) eine weniger bedeutsame Rolle als die mit der Internationalisierung der Wirtschaft und dem internationalen Standortwettbewerb zusammenhängenden Beschränkungen, denen die staatliche Steuerpolitik speziell im Bereich der Unternehmensbesteuerung unterliegt (vgl. Ganghof 2005). Ansatzpunkt für die Reduktion steuerpolitischer Optionen ist hier nicht das (rechtliche) Können, sondern das (politische) Wollen, die in Betracht gezogenen Optionen politischer Intervention. Wenn der Staat aufgrund des internationalen Standortwettbewerbs und der Internationalisierung der Wirtschaft gewisse steuerpolitische Interventionen (wie höhere Unternehmenssteuern) für kontraproduktiv hält und nicht als wählbare Option betrachtet, dann ist dies kein direkter, sondern ein indirekter Globalisierungseffekt. Tatsächlich vermitteln viele Studien den Eindruck, dass der Optionenspielraum der Politik stärker indirekt als direkt durch Einschränkungen des staatlichen Kompetenzbereichs, des prinzipiellen Handeln-Könnens beschränkt wird (so unter anderem Scharpf 1998 und Schulze/Ursprung 2005).

Ein Ansatzpunkt indirekter Globalisierungswirkungen könnte die politische Entscheidungsstruktur sein. Unter dem Motto *Institutions Matter* haben institutionalistische Analysen insbesondere den Zusammenhang zwischen politischer Willensbildung (politischen Outputs) und Merkmalen der politischen Entscheidungsstruktur, wie dem Regimetyp, dem relativen Gewicht »linker« und »rechter« Parteien, der Existenz beziehungsweise dem Fehlen neokorporatistischer Arrangements und der damit zusammenhängenden Art und Anzahl von »Vetospielern« untersucht (so bei Streeck 2005). Die wählbaren Optionen der Politik werden auch durch »Pfadabhängigkeiten« wie *policy legacies*, tradierte Politikstile (etwa der Konsensdemokratie), eingefleischte Erwartungshaltungen der Bevölkerung und unveräußerliche Zielsetzungen politischer Parteien beschränkt. Die Globalisierung kann derartige Pfadabhängigkeiten und institutionelle Gegebenheiten jedoch bestenfalls langfristig beeinflussen, etwa über das veränderte Gewicht »linker« Parteien oder Vetospieler, wie die Gewerkschaften, die durch den internationalen Wettbewerb und die Ausbreitung internationaler Unternehmen geschwächt werden.

Dagegen wirken sich globalisierungsbedingte Veränderungen in politischen Regelungsfeldern unmittelbar auf die Inhalte der Politik aus. Nur wenige Pro-

bleme, mit denen es die nationale Politik heute zu tun hat, sind grundsätzlich neu. Das gilt etwa für ungenügendes Wirtschaftswachstum, mangelnde Beschäftigung, prekäre Geldwertstabilität, Altersarmut, Seuchen, Kriminalität, Wasser- und Luftverschmutzung, Kinderpornographie, rechtsradikale Propaganda. Neu ist, dass viele der Probleme, mit denen es eine Regierung schon immer zu tun hatte, mehr und mehr in denationalisierten Handlungs- beziehungsweise Funktionssystemen erzeugt werden. Das gilt für die Auswirkung globaler Finanzkrisen auf nationale Finanzmärkte, für einen guten Teil der sich national manifestierenden Luft- und Wasserverschmutzung, für das organisierte Verbrechen und den internationalen Terrorismus und selbstverständlich für das Beschäftigungsproblem, das durch Produktionsverlagerung (*off-shoring*) und den Einkauf bei Herstellern aus Billiglohnländern zwar nicht allein erzeugt, aber doch verschärft wird (Zürn 1998: 125–128). In allen diesen Fällen fehlen den nationalen politischen Instanzen teils die praktischen, teils auch die rechtlichen Möglichkeiten des Zugriffs auf die Problemverursacher, die im Zuge der Internationalisierung über neue Möglichkeiten verfügen, sich missliebigen Interventionen zu entziehen. Das ist vor allem am Beispiel der internationalen Standortkonkurrenz (so unter anderem durch Scharpf 1998), aber auch am Beispiel des internationalen Terrorismus gezeigt worden (Mayntz 2006 bzw. Beitrag 9 in diesem Band). Wenn dann politisch auf die fehlende Möglichkeit regulativer Intervention (etwa mittels des Verbots von Produktionsauslagerungen zur Eindämmung von Arbeitslosigkeit) mit dem Instrument finanzieller Anreize (etwa durch Senkung von Unternehmenssteuern) reagiert wird, können wie bei einer Kettenreaktion negative Auswirkungen auf andere Politikbereiche entstehen. So kann die Senkung von Unternehmenssteuern reaktiv Protest bei den – auf dem Umweg über staatliche Budgetzwänge betroffenen – Empfängern sozialer Transferleistungen auslösen, was bei einer entsprechenden parteipolitischen Gewichtsverteilung in der politischen Entscheidungsstruktur einen gegenläufigen (mit der Steuerpolitik konfligierenden) Einfluss auf die politische Willensbildung haben kann.

Es ist das Verdienst empirischer Policy-Studien und speziell von Untersuchungen zur Reformfähigkeit einzelner Länder, wie etwa der Studie von Kitschelt und Streeck (2003), auf die Verflechtung zwischen Veränderungen in einem Regelungsfeld und der darauf bezogenen politischen Handlungsfähigkeit hingewiesen zu haben. Im klassischen steuerungstheoretischen Paradigma mit seiner Gegenüberstellung von Steuerungsfähigkeit (der Politik) und Steuerbarkeit (der Adressaten, des Regelungsfelds) findet die komplexe Wechselwirkung zwischen politischer Handlungsfähigkeit und den Vorgängen im Regelungsfeld keinen rechten Platz. Unter dem Aspekt »Steuerbarkeit« interessiert vor allem die Folgebereitschaft beziehungsweise das Widerstands- und Umgehungspotenzial der Steuerungsadressaten, die Verbote missachten und finanzielle Anreiz-

programme durch Mitnahmeeffekte ins Leere laufen lassen können. Merkmale des Regelungsfelds und das Verhalten der Adressaten politischer Steuerungsentscheidungen beeinflussen jedoch nicht erst den schließlichen Steuerungserfolg, die zentrale abhängige Variable in steuerungstheoretischen Analysen, sondern bereits die konkreten politischen Zielsetzungen und die Konsensbildung unter den Entscheidern, die bei ihren Entscheidungen die wahrgenommenen (oder unterstellten) Präferenzen wichtiger Wählergruppen und organisierter Interessen und ihre möglichen Reaktionen auf eine Intervention berücksichtigen; Zohlnhöfer spricht in diesem Zusammenhang von »elektoraler Bestrafung« (Zohlnhöfer 2005: 57). Das Risiko, für eine politische Entscheidung von den Wählern »abgestraft« zu werden, ist für alle an der Macht ihrer Partei und ihren Wiederwahlchancen interessierten Politiker eine stark empfundene Restriktion. Das Gewicht eines antizipierten Protests bestimmter Gruppen von Entscheidungsbetroffenen hängt dabei von ihrer Beziehung zu einer bestimmten politischen Partei und von deren Position in der gegenwärtigen Entscheidungsstruktur (Regierung, Parlament) ab.

Wenn fehlende Möglichkeiten eines direkten Zugriffs auf Problemverursacher infolge der Denationalisierung eines Regelungsfelds das wichtigste globalisierungsbedingte Hemmnis für staatliches Handeln sind, dann liegt genau genommen keine Reduktion, sondern eine Überforderung staatlicher Handlungsfähigkeit durch die Globalisierung vor. Die Rede von der Einschränkung staatlicher Handlungsfähigkeit durch die Globalisierung ist an diesem Punkt ungenau. Praktisch macht es zwar zunächst keinen Unterschied, ob die staatliche Handlungsfähigkeit durch die Globalisierung reduziert oder überfordert wird; für politische Problemlösungsversuche ist es jedoch wichtig, ob ein Problem »hausgemacht« ist und damit prinzipiell im Bereich nationaler Reformen liegt, oder ob ihm, wenn überhaupt, nur auf internationaler Ebene begegnet werden kann. Für ersteres und damit gegen die Annahme eines quasi automatisch von der Globalisierung erzeugten strukturellen Zwangs auf die nationale Politik spricht die inzwischen gut belegte Tatsache, dass das zwischen Ländern variiierende Maß der inter- und transnationalen Verflechtung eines Regelungsfelds (und speziell des Finanzmarkts und der Wirtschaft) etwa die Höhe der Arbeitslosigkeit nicht determiniert. Der politische Werkzeugkasten enthält viele Instrumente. So gibt es, worauf auch Ganghof hinweist (vgl. Ganghof 2005), bei gleicher »Betroffenheit« nicht nur steuerpolitische Entscheidungsspielräume; anstatt mit niedrigen Unternehmenssteuern kann der Staat Unternehmen auch durch bildungspolitische (und andere sich positiv auf die Standortattraktivität auswirkende) Maßnahmen zu halten und anzuziehen suchen (so Gelleny/McCoy 2001). Es mag auch notwendig sein, wie Jayasuriya zu bedenken gibt, stärker auf Instrumente der negativen als der positiven Koordination zu setzen

beziehungsweise, wie schon Majone meinte, von staatlicher Leistungsproduktion auf Regulierung umzustellen (vgl. Jayasuriya 2001; Majone 1990).

Offenbar können sich jedoch verschiedene Länder des politischen Werkzeugkastens unterschiedlich gut bedienen. Diese Unterschiede, und auch hierin stimmen viele Analysen überein, werden durch genau jene institutionellen Merkmale und »Pfadabhängigkeiten« bedingt, die von der Globalisierung kaum direkt berührt werden (vgl. Scharpf/Schmidt 2000; Rogowski 2003; Basinger/Hallerberg 2004). Das aber heißt, dass die Überforderung auch eine (zumindest im Augenblick) definitive sein kann, die Probleme mit den einem gegebenen Staat verfügbaren Strategieoptionen also nicht gelöst werden können. Auch ein Staat kann »schachmatt« sein – aber daran ist nicht (nur) die Globalisierung schuld. Im Übrigen darf man auch nicht unterstellen, dass die politischen Instanzen eines Landes tatsächlich immer bemüht sind, im Interesse des Ganzen handfeste Probleme wie etwa Arbeitslosigkeit, Armut, Kriminalität und Umweltverschmutzung zu lösen. Auch der »Problemlösungsanspruch« der politisch entscheidenden Akteure ist eine Variable. Dabei geht es nicht nur um das Verhältnis von kollektiver Problemlösung zu individuellem Nutzenstreben, sei das nun Machterhalt oder persönlicher Besitz, sondern auch um die Art des Problems, das man gegebenenfalls zu lösen versucht. Es macht für die Wahl konkreter Strategien einen großen Unterschied, ob eine Regierung volkswirtschaftliches Wachstum oder Umverteilung anstrebt, und ob sie zwischen Reich und Arm oder zwischen verschiedenen Regionen (Ost/West, Nord/Süd) umverteilen will.

Zu den strategischen Alternativen, zu denen eine problemlösungsorientierte Regierung angesichts globalisierungsbedingter Gefahren greifen kann, zählt auch die internationale Kooperation. Den Risiken, die ein weitgehend globalisiertes Finanzsystem für den einzelnen Staat erzeugt, versucht man dann beispielsweise durch die Kooperation zwischen den Staatsbanken verschiedener Länder entgegenzuwirken (vgl. Underhill 1991). Aus dem Blickwinkel der auf die internationale Ebene konzentrierten Globalisierungsliteratur erscheint die »Inkongruenz« zwischen globalisierter Problemerzeugung und national begrenzten Regelungsmöglichkeiten als Grund für das Entstehen internationaler Organisationen und Regime, welche die vom einzelnen Nationalstaat nicht mehr zu lösenden Probleme aufgreifen. Diese »Entstehungsgeschichte« ist gewiss blauäugig und blendet allfällige Machtinteressen aus. Der globalisierten Problemerzeugung entspricht (bisher) keine effektive globale Regelungsstruktur und zahlreiche empirische Studien verweisen auf die Schwierigkeiten, mit denen Ansätze zur Bildung transnationaler Regelungssysteme zu kämpfen haben, egal ob es dabei um Geldwäsche, den Verkehr von Öltankern, das Internet, die Ausbreitung von BSE oder die Besteuerung multinationaler Konzerne geht. Mit diesem Hinweis wird am Ende der Bogen zurück zum Ausgangspunkt geschlagen. Die Beziehung

zwischen dem Prozess der Globalisierung und der Institution des Nationalstaats hat zwei Gesichter, ein gewissermaßen nach »innen« und ein nach »außen« gerichtetes. Über politische Handlungsfähigkeit in Zeiten der Globalisierung kann man nicht mehr allein auf der Ebene des Nationalstaats sprechen.

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5 Common Goods and Governance (2002)

All of the major social sciences share an interest in the preconditions of reaching a socially relevant end or goal-state: in economics it may be wealth, in macro-sociology social integration, and in political science it is public welfare or *Gemeinwohl*, the *bonum commune* of old. These various dependent variables are not identical. Moreover, each discipline pays attention to a different set of factors or independent variables. Governance is one such variable; it plays a focal role in political science approaches dealing with the production of public welfare or *Gemeinwohl*. This is the causal nexus I shall take as the starting point for the following analytical considerations.

In everyday parlance, public welfare or *Gemeinwohl* is a very diffuse concept needing specification before questions relating to its preconditions can be precisely formulated. I shall argue that there are at least three distinct theoretical traditions which lead to three different, if partly interrelated, definitions of the *bonum commune*. One of these is connected with the concept of common goods. This line of thinking is today popular in political science, though it goes back to the arguments of economists trying to specify which goods can be supplied by the market, and which goods it is unlikely to supply. In present-day welfare economics, we find a second, formal definition of public welfare as the (quantitatively measurable) sum of utilities achieved – or received – by the individual members of a »public.« This definition of the *bonum commune* is in turn to be distinguished from a sociological definition of welfare that refers not to individuals but to the social system as such; here the criterion is system viability (system survival, ultrastability). The well-being of the system members ultimately rests on the viability of the system, but what serves the latter does not *eo ipso* maximize aggregate individual utility.

These three different versions of what »public welfare« or the *bonum commune* might refer to – the achievement of »common goods,« the maximization of aggregate individual utility, or system viability – have common roots in classical social philosophy. It was only later, when the substance of the *bonum commune* was no longer felt to be self-evident and hence not in need of definition, that social scientists of different disciplinary orientations made conscious efforts to

spell it out and define it more stringently. In the social philosophy of Plato, the philosopher king knows what is just and lies in the public interest.¹ Aristotle's good monarch also knows what lies in the public interest, and he acts so as to serve it; the tyrant, in contrast, only seeks his own advantage. Plato as well as Aristotle distinguished between the (selfish) orientation towards one's own and the orientation towards the interest of the community. However, they and later political theorists following the classical tradition envisaged no contradiction between individual interest and public interest, because the well-being of the social whole, the polis, was identified with the well-being of its citizens. It was, as Kaufmann points out, the liberal critique of the absolutist state that first led to define public welfare and individual welfare in different terms. The well-being of the polity was seen to rest on the achievement of inner order and external security, characteristics that clearly refer to the whole, the system. External security and inner order provided the framework for the individual pursuit of happiness, but are not identical with the satisfaction of individual needs. In spite of this incipient conceptual differentiation, no contradiction was seen between the maximization of individual happiness and the public interest (Kaufmann 1994: 358). In the economic theory of Adam Smith, they were even seen to be positively linked by an invisible hand, the assumption being that public well-being, defined as a nation's wealth, resulted automatically from the individual pursuit of selfish goals. This is still the assumption underlying the public welfare concept of modern welfare economics. Modern political discourse, in contrast, became framed in terms of the functions that need to be fulfilled in the interest of the nation-state (*Staatsfunktionen*). In sociological systems theory, which similarly adopts a »holistic« approach to the definition of public welfare, the state functions of political theory became the function of the political subsystem and thus one, if only one, of the functional prerequisites of system viability.

Today we are faced with the widespread conviction that the common interest is an elusive construct. What »public welfare« means in concrete terms cannot be established objectively, so the argument goes, but depends on variable (contextualized) historical processes of (subjective) definition – mere social conventions whose substance changes with the procedures regulating the process of opinion formation. Quite in contrast to this conviction, both welfare economics and sociological systems theory claim to offer substantive and objective definitions of the *bonum commune*, the welfare of all and/or of the whole. The notion

1 Here a fourth theoretical tradition in defining a socially desirable end or goal-state comes in, i.e., justice as a reference point of legal theory. This strand of thinking will not be systematically considered here, though it becomes relevant also for the development of a formal definition of public welfare as aggregate utility.

of common goods is less sweeping, referring to a plurality of different goods to be sought, but it still claims to be based on objective criteria. I shall briefly outline these three »objectivizing« approaches, emphasizing the differences between them rather than what sets all of them off from the constructivist conviction.

Public welfare as originally defined in welfare economics consists of the sum total of the utilities achieved, or received, by the individual members of the public in question – the aggregate utility for short. There are several difficulties with such a conception, which have been variously addressed. Utility is necessarily a one-dimensional concept, otherwise individual utilities could not be added up. Now it would be easy if utility could be defined in terms of money, but obviously not all individually cherished values can be measured in terms of money. This also speaks against the operationalization of public welfare as the sum of all monetary transactions, i.e., GNP (Albert 1998). But even if it were possible to assign a fixed abstract utility to different kinds of goods, the aggregation of individual utilities to form a measurable public welfare would still face the problem that individual preference orders differ, and hence also the relative value a given good has for different individuals. Even money, and hence the subjective value of a given amount of it, does not have the same utility for all individuals. This problem stimulated attempts in the theory of social choice to develop an algorithm that takes different preferences into account (Albert 1998: 13), but apparently an algorithm transforming different individual preferences into a logically consistent collective preference order cannot be defined (Scharpf 1994: 385–386). Another problem with the concept of public welfare as aggregate utility lies in its disregard for the distributive dimension, i.e., the equal or unequal distribution of the sum total of realized utilities among the members of the »public.« To take the distributive dimension into account, Amartya Sen has developed a measure of poverty to enter into the calculation of aggregate utility, by which irrespective of subjective preferences, goods given to the poor produce a higher utility than goods given to the rich (Gaertner 1998).

But a just distribution of valued goods is not all there is to public welfare. Even John Rawls has recognized that a »viable human community« requires more than distributive justice, mentioning for instance coordination, efficiency, and stability (Rawls 1972: 6). This observation points to what is probably the crucial weakness of this particular way of defining public welfare: by taking individual preferences as reference point, it neglects the social value, the systemic functionality or dysfunctionality of given preferences. Reckless driving, drug consumption, and child abuse can be strong individual satisfactions, but they surely detract from, rather than add to, what commonly passes as public welfare. If the external effects of individual need satisfaction were taken into account, this would even hold for public welfare as the sum of individual satisfactions.

The different social value of individual satisfactions calls for different yardsticks to measure individual and collective utility, respectively. What links individual interests and public welfare is a causal relationship, not an algorithm aggregating the former to the latter.

To counter this critique, individual preferences are sometimes taken to refer not to the satisfaction of needs that individuals presently feel, but to their »enlightened self-interest« – their long-term, rationally considered interests. In this way the possibility of a conflict between individual interests and public welfare is ruled out – by definition, as it were. But individual interests that are already disciplined by taking the long-term collective consequences of their possible satisfaction into account are mere theoretical attributions. It is only in normative conceptions of a rational societal discourse à la Rawls or Habermas that this version of Kant's categorical imperative can be assumed to guide observable behavior.

If the welfare economics approach to defining public welfare neglects the system level in so doing and concentrates on the individual, the reverse is true of system theoretic approaches. The most impressive attempt to conceptualize what might be called the well-being of the social whole, or systems rationality, in contrast to individual rationality, can probably be found in the work of Talcott Parsons (1951, 1956). Starting from the identification of various ways leading to the dissolution and ultimate disappearance of a social system (i.e., biological death or total apathy of its members, the war of all against all, or absorption into another system), Parsons developed his theory of the functional prerequisites of system stability, or the survival of a social system as a functioning whole. Having identified four basic problems any social system – or action system in his own terminology – must solve, Parsons specified four functions that must be fulfilled to this end: adaptation, goal attainment, integration, and latent pattern maintenance. It might seem possible to use this scheme of system imperatives as a measuring device of system viability, asking whether and to what extent the four functions are fulfilled by the institutions of a given society. This, however, is impossible because we can neither measure directly different degrees of adaptation, integration, etc., nor can we infer the fulfillment of system functions from the existence of observable social institutions. Because of the fact of widespread equi-functionality, there exists no fixed relationship between social form and function, so that we cannot infer the fulfillment (or nonfulfillment) of a given function from the existence (or nonexistence) of a given institution, or structural characteristic of a social system. Nor does Parsons offer operationalizations, and hence measuring sticks for the four system functions, making it impossible to differentiate directly between varying degrees of fulfillment. Short of observable processes of system disintegration, it is thus impossible in the framework of Parsonian theory to conclude that a given society is less viable than another one.

According to Parsons' view of social evolution, societal subsystems arise in the process of historical development and specialize in the fulfillment of one of the system functions, leading to higher overall efficiency. The economy, for instance, serves the function of adaptation, and the political subsystem, the function of goal attainment. Parsons did not believe in the empirical existence of a tendency inherent in all social systems to fulfill the four functional imperatives, but he was interested in the conditions under which this would be true. For Parsons the crucial precondition rests in the integration of the personality system (of system members) with the values and norms of the society's cultural system. The values and norms of the cultural system shape the social roles which system members learn to adopt in the process of socialization. If socialization is successful, role norms become internalized, which means that they are transformed into subjective need dispositions. Where this does not succeed completely, social control comes in as a supplementary mechanism that guarantees conformity by rewarding compliance with, and sanctioning deviation from, normative expectations. If the values and norms of the cultural system embody the requirements of system viability, and if socialization is successful, the individual members of a social system consequently have no needs that would conflict with the needs of system viability; the pursuit of presumably private goals unwittingly serves the fulfillment of system needs. Socialization plus social control is Parsons' version of Adam Smith's »invisible hand« – a version that is less rationalistic, but otherwise curiously similar to the »enlightened self-interest« solution used in welfare economics to avoid the problem of potentially conflicting private and public interests.

The attempts of welfare economics and of systems theory to establish what constitutes public welfare are both one-dimensional in that they neglect the qualitative difference and hence the possibility of a conflict between individual (private) and collective (public) interests. The two approaches differ only insofar as in welfare economics, the satisfaction of individual desires is identified with the satisfaction of system needs, while in Parsonian systems theory individual needs are derived from, and therefore in accord with, system needs. And yet conflicts between the satisfaction of individual and of system needs obviously do exist; for instance, a high innovation rate may be needed to secure long-term system viability, but this may demand that sacrifices in the maximization of short-term individual utilities are made. Both of the approaches treated so far thus define away a major practical and theoretical question, i.e., how private and public interests are interrelated, how they interact, and how it is possible to solve conflicts between them. In contrast, the third approach to the definition of public welfare via the concept of common goods allows such questions to be tackled because it starts from the distinction between private and public

interests. Another advantage is that common goods are defined at a lower level of generality than a comprehensive concept of »public welfare« which refers to a systemwide end-state. Of course public welfare implies the achievement of common goods, and it could in fact even be so defined, i.e., as a system state in which all important common goods are being supplied. But it is conceptually much easier to identify (and measure the achievement of) a single concrete »good« than an overall state of public welfare defined at the system level.

Though often treated as a synonym of »public goods,« the term »common goods« is also used in a wider sense as including two distinct types of collective problem solutions, namely, the solution of common pool resource problems in addition to the provision of formally defined public goods.² This is the way in which I shall be using the term here. Based on definitional attempts by Musgrave and Samuelson, public goods are formally defined as goods characterized by non-rivalry of consumption, and non-excludability from consumption (Ostrom 2002). Public goods are contrasted to private goods, which are characterized by both rivalry of, and excludability from, consumption. Private goods are typically provided by the market economy. But it is not in the individual interest to produce goods which, once produced, are available to all and thus invite free riding. At least initially it therefore appeared that public goods must be provided by the state; in fact the »public« character of a good served to legitimate state intervention to ensure its supply. Common pool resource problems, like the famous tragedy of the commons, exist where there is rivalry in the consumption of a scarce resource, coupled with non-exclusion from consumption.³ This typically leads to overutilization and hence the exhaustion (destruction, erosion) of the resource. The starting point is a conflict between the short-term individual interest in maximal consumption, and the long-term collective interest in maintaining future consumption chances. Elinor Ostrom has intensively studied common pool resource problems and the conditions of their solution (Ostrom 1990). The big question is whether a central (hierarchical) authority is needed to solve common pool resource problems, or whether such problems can also be solved through horizontal coordination.

Though both can be called collective problem solutions, there is an important difference among the two types of common goods. In the case of formally

2 Elinor Ostrom (1999: 4) similarly names public goods and common pool resources as the major subtypes of collective action problems.

3 A third type of common goods, i.e., club goods (see, for example, H eritier 2002), is not considered here, since by definition club goods are for the use of limited groups only. From a global perspective, however, the population of a given nation-state may be considered a »club.« This calls attention to the fact that the social reference of »common« or »public« is a matter of definition.

defined public goods, the problem is the production of a certain good. It is not available unless produced, and if produced, scarcity is no problem – which is already implied in the characteristic of non-rivalry. In the case of common pool resources, we are typically dealing with »goods« that are naturally available, such as water or fish, but which are scarce resources. Here the basic problem is therefore sustainable utilization, and it is solved by establishing rules regulating consumption. Scarcity, of course, is a variable; arable land or clean water can be abundant for a small population in a given area, but can become scarce as the population grows and demand rises. There is therefore no fixed boundary between the two types of common goods. Nevertheless, the solution of the two collective problems requires different strategies. Whereas the solution of a common pool resource problem requires regulation, i.e., setting up and enforcing rules for resource utilization, the provision of a public good such as national defense or general education needs much more than rules of access, namely, to set up a public production structure, complete with armies or with schools, teachers, etc., respectively.

Common goods are generally considered a component of public welfare, though the exact relationship between their provision and public welfare in the sense of system viability (or quality) is unclear. System stability or survival may require the provision of some, but it is not equal to the provision of all imaginable public goods. The production of a public good such as national security can be called the solution of a system problem, but certainly not all kinds of products that the market will not supply because they are characterized by non-rivalry and non-excludability would *eo ipso* be a condition of system viability. Similarly, system viability will require the regulation of the utilization of crucial, but presumably not of all, common pool resources. On the other hand it is open to debate whether all system problems, all social »bads,« fall either into the category »failure to provide a public good« or into the category »failure to solve a common pool resource problem.« Efforts at risk avoidance (e.g., in the fields of nuclear energy production or climate change) can be formulated in terms of common goods provision, and so can market regulation, since productive market exchanges presuppose institutional frameworks within which such exchanges can take place. But would it also be meaningful to define the fulfillment of functional imperatives which are not recognized as such, and hence not desired, as »common goods«? The functionality of interethnic tolerance, for instance, may well be denied by the ethnic groups involved where ethnic cultures clash, group identification is strong, and conflicts are violent. Nor is it generally recognized that it contributes to social integration if we define persons unable to play their roles effectively as »ill« because this obviates the need to subject them to sanctions. In systems theory, the fulfillment of functional imperatives often happens

behind the backs, as it were, of the system members; it is to a large extent the unrecognized latent functions upon which system maintenance rests.

In contrast, common goods typically refer to recognized collective action problems. It is in fact a distinct characteristic of the common goods approach to public welfare to be action oriented, or even specifically policy oriented. The action orientation of the common goods perspective quite naturally directs attention to the actor constellations and action orientations conducive to their achievement. In this way governance becomes a focal factor, and the form of governance which is most conducive to their achievement plays a major role in the discussion about common goods. But the term »governance,« like the term »public welfare« previously, can mean different things and it therefore needs specification.

Before it became the hallmark of modern political theory, the English term governance had been equated with governing, the process aspect of government. Governance thus complemented the institutional perspective of government studies. Today, the term governance is most often used to indicate a mode of governing that is distinct from the hierarchical control model characterizing the interventionist state. Governance is the type of regulation typical of the cooperative state, where state and non-state actors participate in mixed public–private policy networks. As an alternative to strict hierarchical control the term governance has been applied to processes of policy-making at the national and at the European level (e.g., Kooiman 1993; Rhodes 1997). Most particularly, however, we find this meaning of the term in the literature on »global governance.« Driven by economic globalization and the international networks of transport and communication, we appear to be approaching an age in which problems transcending national boundaries increasingly call for international and transnational forms of regulation, which, lacking an inclusive world government, takes place in the form of »governance without government« (Rosenau/Czempiel 1992). In fact, the use of the term in the study of international and transnational relations has probably been the main reason for identifying governance with nonhierarchical forms of coordination and rule setting.⁴

This presently dominant meaning of the term governance has pushed into the background, if not supplanted, another conceptual tradition that started with Oliver Williamson's analysis of market and hierarchy as alternative forms of economic organization (Williamson 1979). Williamson's typology was quickly

4 In the March 1999 issue of the *International Social Science Journal*, which is entirely devoted to governance in the sense of nonhierarchical modes of coordination, this very meaning of the concept is traced to an international source, namely a 1989 World Bank report (UNESCO 1998).

extended to include other forms of social coordination such as clans, associations, and – most importantly – networks (Hollingsworth/Lindberg 1985; Powell 1990). In this way, the meaning of governance was gradually extended to become a summary term for all basic forms of social order. Among these forms, the market is an important subcategory. But where governance is mainly used to distinguish horizontal (network) coordination from hierarchy, markets are no longer considered, and the main substantive issue becomes the problem solving potential of horizontal forms of coordination. Sometimes it is asked specifically whether self-regulation (or horizontal coordination) can produce problem solutions of the same or even superior quality as hierarchical coordination (e.g., Scharpf 1993). This discussion complements, as it were, the earlier discussion revolving around the comparative advantages and disadvantages of state (hierarchical) and market solutions that led, among other things, to the distinction between public and private goods and continues today in debates about the pros and cons of deregulation and privatization.

In principle, these two strands of scientific debate – hierarchy versus network, and hierarchy versus market – could be integrated in a theory of governance if this concept were used in its widest possible sense. In a discussion of the conditions facilitating the production of common goods, however, the »market« form of governance plays no role – at least no positive role. Market coordination is assumed to contribute to public welfare in the sense of aggregate utility, among other things, because where preferences differ as a consequence of the division of labor, market exchanges permit a higher degree of aggregate individual satisfaction. At the same time, however, the theory of market failure states that where market principles dominate, no »public goods« will be produced. Nor is spontaneously arising market exchange able to solve common pool resource problems; the possible use of market principles to this end presupposes the political creation of a market, as when a scarce resource is divided authoritatively into limited shares and offered for sale. The debate therefore concentrates on hierarchy and networks as those governance forms that can be positively related to common goods. A minor role is also played by clans/solidarity. In sociological theory, solidarity is widely considered important for system integration; it is thus linked especially to conceptions of system viability. Solidarity and small group size clearly also facilitate the solution of common pool resource problems. Especially in connection with horizontal coordination, solidarity (possibly in the shape of trust and the norm of reciprocity) is considered important for the production of common goods.

The common goods discussion in fact concentrates on the conditions under which horizontal coordination can succeed. Two reasons may play a role in this selective attention. One reason is that much of the present discussion about com-

mon goods starts from the observation that state powers (i.e., hierarchy) are either insufficient for the solution of many problems, or totally absent, i.e., if we move to the global level. Hence the question becomes how much problem solution is possible without having recourse to hierarchy. The second reason is a general normative preference for horizontal over hierarchical forms of coordination, even where the latter might be more effective. Again this gives priority to the question of how we can get problems solved without having recourse to hierarchy.

It cannot be the purpose of these remarks to summarize the results of the various empirical and theoretical inquiries into the preconditions of successful horizontal coordination for the production of common goods. Ostrom (1999), for instance, discusses four »blocks« of variables affecting the chance of reaching a problem solution via horizontal coordination. Aside from certain characteristics of the resource in question, these are the action orientation of individuals, attributes of group structure (particularly size), and the rules-in-use in a given collective action situation. The framework of actor-centered institutionalism (Mayntz/Scharpf 1995; Scharpf 1997) similarly calls attention to actor constellations and action orientations. The actor constellation refers to the type and number of actors involved in a given problem situation, the distribution of resources among them, and the interest structure (e.g., prisoner's dilemma or battle of the sexes) underlying the situation. The individual actors also have normative beliefs, they have – false or correct – perceptions (of the problem in question, of available solutions), and they have cooperative, competitive, or downright hostile action orientations. The chances of cooperative problem solution depend on the specifics of given constellations.

The perspective just sketched is undoubtedly fruitful for policy research, and it fits well with the dominant action (or policy) orientation of the common goods approach. However, it remains a selective perspective insofar as in analyzing the causal nexus between governance and common goods, the emphasis is generally on the potential of a given constellation to solve a recognized problem. A more comprehensive approach might want to distinguish between three aspects: problem generation (who causes a given problem by what kind of behavior), problem impact (who suffers what kind of negative effects) and problem solution (who engages in what kind of coping behavior). The genetic, impact, and coping structures correspond to stages in a process that are linked in a causal way. Set in the framework of a common goods analysis, we have initially a population of rational actors in pursuit of their personal interests: to produce only goods that can be sold on a market, or to consume as much as possible of a scarce resource. This initial interest structure motivates behavior which gives rise to a problem, here the nonavailability of a desired public good, or the erosion of a scarce resource, i.e., the destruction of an available good.

The impact of the problem creates a new interest structure, defined by the perceived need to arrive at a problem solution – to stay the erosion of the resource or to provide the desired public good. The coping efforts which ensue will be shaped by cost-benefit considerations; actors suffering from the erosion of a vital resource or the absence of a public good will weigh the benefits of a problem solution against the costs this imposes on them, directly (i.e., as taxpayers) or in terms of the foregone immediate benefits of noncooperative behavior. For a comprehensive case analysis it is important to consider not only the coping structure, but all three structures and their interrelation. The genetic structure in particular must be known because it shows why and how the problem arises and what, therefore, must be changed if it is to be avoided or solved. The impact structure is important because it shows who has an interest in arriving at a problem solution. This in turn is an important precondition for the emergence of a coping structure.

A dimension of utmost importance for the dynamics of the process of problem creation and problem solution is the scope of the genetic, impact, and coping structures, i.e., the answer to the question of which actors exactly each structure is composed.⁵ Where we deal with problems of the tragedy of the commons type, the scope of the genetic, impact, and coping structures is identical, i.e., they include typically the same group of actors: the problem is produced by the behavior of the group members; they are themselves affected by the negative long-term consequences of this behavior, and they also have the chance to agree upon rules of utilization which avoid the exhaustion/destruction of the resource. While this is less explicit, the same kind of congruence appears to underlie cases where a perceived market failure motivates efforts to produce a public good. For Mancur Olson, the provision of a public good is efficient only if its users are the same as those who pay for, and those who mandate, its production (see Holzinger 2000: 5). But it is in fact a very special type of situation where those creating a problem in the first place are also those who suffer from its long-term effects, and where the cooperation of the latter is both a necessary and sufficient cause for the solution of the problem. Many public »bads« are negative external effects visited upon those who have no share in their production, and many problems cannot be solved by those whom they afflict. In such cases it makes sense to separately describe the genetic, impact, and coping structures, specifying where they overlap (in social and possibly geographic terms) and where they involve different parts of a population instead.

⁵ The genetic and impact structures are often collapsed into the dimension »problem scope,« which is then related to the regulatory (= coping) structure; see Knill/Lehmkuhl (2002).

A more realistic analysis would also have to take into account that none of the three structures is composed of uniform elements. There are differences in the extent to which different actors contribute to the production of a problem; some, for instance, use up more, some less of a common resource. Similarly, there are differences within an affected population in the intensity of suffering from the erosion of a given resource, and there can be differences in the benefits derived from the provision of a public good, as for instance the construction of dikes. Such differences result in different cost-benefit balances when it comes to coping. Finally, there are also differences in coping potential. Effective coping can only be expected from actors able to affect the emergence of the problem at hand, either directly by changing their own (problem producing) behavior, by sanctioning those who produce the problem, or by making arrangements for the production of a public good. But the potentially effective actors, i.e., those who dispose of the relevant direct and/or indirect problem solving capacities, are not necessarily motivated to join the coping effort spontaneously. Under such circumstances, the formation of an effective coping structure becomes a challenge of its own.

This point can be well illustrated by a practical case I recently had to deal with: the local implementation of a federal German program of urban melioration that goes under the name »Die soziale Stadt« (Schader-Stiftung 2001). The problem in this case is the physical deterioration and social disintegration of urban quarters where problem groups (unemployed, relief recipients, single parent households, drug peddlers and users, criminals of various kinds) concentrate. To stop the growing degradation in such areas (neighborhoods), the program envisages the creation of area networks set up and coordinated by an area network manager, who is typically not a city official. The melioration program set up by such a network is to receive financial aid from program funds, and practical support by city officials of different departments. A comparison of cases where this program was or was not at least partially successful shows that the gravest obstacle to the solution of this problem, which is largely created by the external effects of a host of different economic and social processes at the societal level, does not primarily depend on the willingness of local actors (actors in the impact structure) to engage in positive coordination, but on the sheer availability of actors disposing of a certain problem solving power among those who could be recruited into the area network. In areas where the houses belong to a variety of private absentee owners there was less of a chance of this than where a single owner was responsible for the upkeep of most of the dwellings. In areas with a variety of smaller shops and firms with local employment, the chances to mobilize resourceful actors into the coping structure were infinitely better than where these lack.

If »governance« refers specifically to a coping structure, the problem solving capacity of the given actor constellation depends on the availability of actors who, if they become part of the constellation, might jointly produce a problem solution because they are able to manipulate the factors causing the problem, or at least possess resources necessary to compensate for its negative effects. This fact is easily overlooked where only the already existing constellation of actors engaged in a problem solving effort is considered, as in many formal analyses of actor constellations and their problem solving capacity. Where, on the other hand, the multilevel character of political systems is the focus of analysis, differences between the genetic, impact, and coping structures of a problem are a familiar topic – at least in the reduced form of a recognized discrepancy between problem scope and the scope of institutions available for problem solving. In the optimal case, the coping structure (or political jurisdiction) would be coextensive with the problem generation and the problem impact structures, because such congruence provides a strong incentive to cooperate. But where problems are of supranational or even global scope, there is typically no such congruence. Especially in the literature on European integration and on global governance, the difference between the sociogeographical scope of collective problems, on the one hand, and the nation-state as the dominant coping structure, on the other hand, is held to generate pressure for the growth of new coping structures at a higher (regional, international) level – whether these are political institutions proper, international regimes, or sectoral networks of nongovernmental organizations. If, as I have argued, the common-goods-and-governance perspective is indeed the preferred approach where we deal with problems falling outside of the jurisdiction of existing (national and sub-national) political institutions, the analytical potential of this perspective might be enhanced by the systematic inclusion of the distinction between the problem generating, the impact, and the problem solving structures.

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6 The Architecture of Multi-level Governance of Economic Sectors (2007)

1 The Analytical Frame

The multi-level governance of economic sectors is a new field of investigation that extends the familiar research on the governance of national capitalist economies (see Crouch 2005a; Levy-Faur 2005) in two directions. What is new is the focus on *multi-level* governance, and the focus on economic *sectors* instead the economy as a whole. In research on different national capitalisms, as in the related research on national innovation systems, governance is generally perceived as a single-level phenomenon. Multi-level governance is a concept originating in political science analyses of policy making and implementation in vertically differentiated political systems, in particular in federal states and the European Union (EU) (see Benz 2004: 127–130). The increasing expansion of markets and production systems beyond national boundaries directed attention to the parallel increase in international regulatory efforts on the part of the Bretton Woods institutions and of the EU, i.e. to multi-level governance. The emergence and functioning of these higher level institutions of economic governance have been studied by scholars of International Political Economy. The focus, however, is on policies that touch on general features of the economy, such as tax competition, control of environmental effects, or compliance with the principles of the International Labour Office, but rarely with the regulation of specific economic sectors.

To study the multi-level governance of economic sectors raises two sets of questions. One set refers to the architecture of multi-level governance, specifically the relationship between different levels; the second set refers to the dimensions along which the multi-level governance (MLG) of different economic sectors vary, and the underlying causes of such differences. Before an attempt can be made to answer these questions on the basis of a comparison of three highly internationalized economic sectors, the core concepts that will be used must be spelled out.

The dominant understanding of »economic sector« follows even today the classification by type of output into primary, secondary, tertiary, etc., introduced

in 1940 (Wolf 1955). While successively more refined classifications of economic sectors by economic output have been developed, case studies of specific industrial sectors have not led economic sociology to develop an »architectural« concept of economic sector that highlights its internal differentiation and organization. Such an architectural sector concept can, however, be found in the analysis of sectoral innovation systems. These are seen to be

composed of a set of agents carrying out market and non-market interactions for the creation, development and diffusion of new sectoral products. These agents are individuals and organizations at various levels of aggregation [...] They interact through processes of communication, exchange, cooperation, competition and command. (Malerba 2005: 65–66)

While a sectoral system of *innovation* includes universities, banks, state agents, unions, and business associations as well as firms, the core components of a sectoral *production* system would be firms of different types, arranged in value production chains that cover supply, production, and marketing. As is true of innovation systems (Whitley 2006), sectoral production systems extend to varying degrees beyond the national to the regional and international levels. I shall be using the term economic sector in the narrow sense of a production system, distinguishing it analytically from the sectoral governance structure.

The term governance is used in the political science sense, where governance refers to all institutions designed for the deliberate solving of collective problems, irrespective of the private or public character of the actors involved and the hierarchical or horizontal mode of their (purposive) interaction (Mayntz 2004). This definition of governance excludes spontaneous market coordination (and, for that matter, all forms of spontaneous, non-intentional coordination, or self-organization as it is understood by the natural sciences). However, the analytical distinction between an economic production system and a governance structure is a functional, not a structural one: To the extent that they are involved in regulation, whether in mixed public/private policy networks or in institutions of self-regulation, economic *actors*, i.e. firms or corporations, are also part of the governance structure. The functional distinction between a production system and governance is consonant with Glenn Morgan's distinction between the level of firms and the level of institutions in the analysis of national economic systems (Morgan 2005).

The concept of institution can refer both to agents (corporate actors or organizations) and to regimes, understood as sets of norms. This double perspective is reflected in governance theory in the distinction, rarely made explicitly, between the architecture and the instruments of governance. The architecture (or structure) of governance focuses on the constellation of actors (public or private) involved in governance and their (hierarchical or horizontal) relations,

while governance instruments refer to the type (or means) of intervention chosen to achieve policy goals. Even if governance is defined in the narrower political science sense, governance *instruments* can include the deliberate use of market mechanisms. While analytically distinct, governance architecture and governance instruments are empirically related; by and large, binding norms backed up by sanctions can be more easily used in hierarchical governance arrangements, while both compulsory and voluntary negotiation are more likely to produce »soft« law dependent on voluntary compliance.

An important dimension of the governance architecture is its vertical differentiation. In the concept of multi-level governance, levels are defined in a spatial or territorial sense, ranging from local to national, regional and global, rather than by relations of command and obedience as in a hierarchy. Levels in the governance structure refer to the spatial scope of the regulatory competence of agencies, or of normative regimes. To extend the concept of multi-level governance to the global level is not generally considered fruitful (e.g. Hartenberger 2007); Grande et al. (2006) prefer to refer to transnational regimes. But »regime« suffers from similar conceptual problems as »governance,« and glosses over the important fact of vertical differentiation which the concept multi-level governance highlights.

Though there is agreement that multi-level governance does not imply a hierarchical command-and-compliance relationship, the concept is often taken to imply that decisions are being coordinated between levels (e.g. Benz 2004: 127). In the case of an institutionalized division of regulatory competences between levels, as in a federal constitution, such coordination may in fact exist. But agencies at different territorial levels are sometimes only related by the fact that they are directed at the same economic sector, without explicit coordination between them. Beyond the nation state, MLG tends to be described as unevenly developed, unstable tangled hierarchies (Cerny 2006), as regulatory patchworks (Héritier 1996) beset by coordination problems, or as orders of »competing institutions, overlapping jurisdictions, multiple identities [and] territorial flux« (Cerny 2006: 694). These descriptions suggest strongly that MLG can be more or less incoherent and lead us to ask how the units in a multi-level governance structure are »coordinated,« or cohere.

In the following section, the MLG of three manifestly transnational (or even »global«) economic sectors will be described. Based on these descriptions (which the hurried reader may skip), Section 3 will offer a comparative analysis, highlighting, and trying to explain, the observable differences in MLG. In the final section, the descriptive material is used to understand in what sense the components of multi-level governance, both units and regimes, can be said to cohere.

2 The Cases

Making use of the specialized knowledge present at the Max Planck Institute in Cologne, I have looked at the MLG of international tourism, telecommunication, and the pharmaceutical industry. Though chosen for pragmatic rather than systematic reasons, these three cases offer a significant amount of variance in terms of the features of the economic sectors and their governance. The following case descriptions focus on features of the economic sector, and of its MLG – the kind of agencies involved at different territorial levels and the nature of the operative regimes. Sector structures, however, are only summarily described, starting from the level of OECD nation-states.¹ An analysis of the worldwide structure of international tourism or the pharmaceutical industry would have to pay attention to the different configurations of the given industry in countries of different levels of development, a dimension that is neglected in this study. Sectoral governance structures are described in more detail, but they are likewise viewed from the – selective – vantage point of the corresponding sectors in a typical OECD country that is, moreover, also a member of the EU.

International Tourism²

Sector Characteristics

Tourism is a huge service industry that has greatly expanded beyond national borders with the increasing legal, technical (transport) and economic opportunities of transnational mobility. Tourism crossing national borders can be counted; in global trade statistics supplied by the World Bank it is considered as service export (because it involves the influx of foreign currency). International tourism (iT) accounted for nearly one third of global service exports in 2003. In national accounts, national tourism figures, too, but cannot be clearly separated from iT; in the EU, the sector comprises about 1.5 million enterprises.³ The service producers involved in iT are travel agencies, travel companies, global reservation systems, hotels, and airlines. None of the producers are dealing only

1 This selective perspective reflects the *de facto* bias of the available literature. There is a difference between the description of a national economic sector and its degree of internationalization, the perspective adopted here, and the descriptions of a regional or even worldwide economic sector (e.g. textiles). Governance institutions at all levels will impinge upon any given national economic sector.

2 The following case description is based on information and material collected by Lothar Kempel in the course of an ongoing project and partly presented at the MPIfG in a lecture on »International Tourism and Global Governance« on July 6, 2006.

3 Press release of a speech by Commissioner Verheugen on February 10, 2005.

with tourism, let alone iT; the sector iT is closely intertwined with related service sectors. Large co-producers like hotel chains and airline alliances are themselves multi-level systems.

Regulatory Institutions

By and large, iT is only subject to national regulation that touches upon economic activities, financial transactions, and the transborder movement of persons in general. Thus liability norms and tax norms also apply to hotels and to travel companies, and immigration control norms may have to be observed. Most countries have a minister responsible for tourism, some even a special ministry; in Germany there is only a special agency (Bundeszentrale für Fremdenverkehr) that cooperates with the economics ministry (BMWi). National business associations (such as the Hotel- und Gaststättenverband) fulfill self-regulatory functions while also pursuing promotional activities. In developed and in developing countries alike, iT is also promoted by national development organizations.

The EU has only very limited competences in the area of tourism. The sector is subject to the general EU provisions concerning economic competition, but there is no special unit dealing with it, and only two EU directives specifically addressing this sector are known. One directive regulates the liability of travel companies for prospectus information, the other addresses liability issues in air travel. The European Investment Bank (EIB) supports investment in developing countries; this includes iT. Other regional institutions besides the EU are similarly involved in promoting iT, such as the Southern African Development Community (SADC). In addition to the business associations formed by European travel agents and tour operators (ECTAA), European camping sites and holiday parks (EFCO&HPA), and European hotels, restaurants and cafés (HOTREC), there is an association especially for tour operators bringing tourists to Europe (ETOA). Aside from representing the interests of the sector, these associations may serve some self-regulatory functions.

At the international level, both public and private institutions are involved in iT governance. The World Tourism Organization (UNWTO) is a United Nations agency located in Madrid. It represents public sector tourism bodies from most countries, i.e. national representatives; firms and business associations participate in its regional subunits. UNWTO is also the most important international body collecting statistical information on iT from national agencies, using the Tourism Satellite Account (TSA), a standard to measure tourism formulated in negotiations among Eurostat (EU), OECD, and UNWTO, and accepted by the Statistical Commission of the UN. In addition, UNWTO encourages compliance with the Global Code of Ethics it has formulated, aiming to ensure that

tourist destinations and businesses maximize the positive economic, social and cultural effects of tourism while minimizing its negative social and environmental impacts.

The World Travel and Tourism Council (WTTC) is a private organization composed of the presidents, chairs and CEOs of 100 of the world's foremost companies involved in tourism, including airlines, hotel chains, travel companies, banks, credit card companies, and car rental firms. Its mission is to raise awareness of the economic impact of the sector and lobby governments to adopt the Council's »Blueprint for New Tourism,« a programmatic statement and recommendation in favor of the sustainable development of iT. The WTTC undertakes TSA-based country studies and translates them into recommendations on policies to ensure a profitable and sustainable development of iT.

The World Trade Organization (WTO) also belongs to the iT governance structure. The General Agreement on Trade in Services (GATS) will contain a special section on transport, and one on tourism, which is still being negotiated. Objects of regulation are different aspects of service transaction between countries (e.g. cross-border trade, commercial presence in other countries) as well as employment. Until now, these questions have been regulated in bilateral agreements. The rules apply to hotels and travel companies, but touch also on airlines, which are subject to regulation by other specialized international bodies as ICAO and IATA.

The International Monetary Fund (IMF) with its Structural Adjustment Programs (SAP) and the Poverty Reduction and Growth Facility (PRGF) is also involved in iT regulation. The conditionalities attached to loans from the IMF, basically designed to get receiver countries to open their economies to foreign investments and multi-national corporations (MNC) while eliminating subsidies and protective measures, promote iT as a means for Third World countries to repay their debts. This goal is also pursued by the World Bank. Several organizations in the World Bank Group are involved in tourism promotion: they facilitate market expansion by liberalization, but also by giving incentives for investment, while the Multilateral Investment Guarantee Agency (MIGA) tries to alleviate the financial risks connected with political events in developing countries. The International Bank for Reconstruction and Development (IBRD) serves middle-income countries with capital investment and advisory services, while the International Development Association (IDA) provides interest-free credits and grants to the poorest developing countries, part of which goes into tourism, or infrastructure build-up related to the development of tourism.

Telecommunication⁴

Sector Characteristics

Telecommunication (Tc), traditionally a state monopoly in developed countries, has been successively privatized and liberalized for political reasons, forming today a publicly regulated infrastructure system of near to global scope. Privatization changed the sector structure: producers became separated from regulators, and many providers, suppliers etc. previously linked to the monopoly as the focal organization now constitute a more open market. In 2000 there were more than 305 licensed telecommunication companies active on the German Tc market (Hartenberger 2007).

Technological development has also changed the sector. At first it comprised only the telephone network and the services based directly on it; later mobile telephony was added. The Tc sector used to be separate from postal services, and from the (print and broadcasting) media. With digitization and the related advent of electronic media such as TV and the Internet, Tc and information technology started to merge, and encroached upon the postal services (email); convergence in one encompassing technical system became a realistic option. Internet expansion and regulation was driven and guided by private actors. The global nature of the Internet called for a global regulatory regime from the start: here governance was largely transnational, and largely private, from the very beginning. While Tc regulation is now closely integrated with the regulation of information technology, the Internet remains a distinct component of the regulatory regime; in fact, Internet standardization is completely detached from any official standardization (Werle 2002: 255).

Regulatory Institutions

At the national level, hierarchical control of public Tc used to be very detailed; it aimed at performance, not profit. When Tc was privatized, independent regulatory agencies became the major national actors; supervised by a ministry, these agencies control market access and prices and have sanctioning power. Competition law also applies to Tc; antitrust agencies monitor and can intervene in Tc operations. The formally independent national standardization agencies such as the German DIN, the British Standards Institute (BSI) and French AFNOR have Tc-specific subunits. As international standardization has grown, national standardization has decreased, and national agencies now mainly transpose regional

⁴ The following case description is based on Werle (2002), Schneider/Werle (2007), Hartenberger (2007), and oral communication by Raymund Werle.

and international standards to the national level. Private corporate actors are involved in technical, but not in economic regulation at the national level. Firms as well as unions lobby national governments and regulatory agencies, but private initiatives aim increasingly at the global level (Schneider/Werle 2007: 275–276); industry has in fact become a driving force of transnational regulation.

At the level of the EU, a special Tc policy domain evolved in the 1980s with the advent of commercial TV. Tc policy is the domain of the DG Information Society, but occasionally of the DG Competition, too. After a first Commission directive sought to liberalize the equipment market in 1988, liberalization of the Tc networks and services became a major focus. A 1990 directive required the deregulation of state monopolies, and in the following decade, various steps to promote the opening of national markets were undertaken. Attempts to establish an EU regulatory agency for Tc failed. In 2002, upon the initiative of the Commission, national agencies formed the European Regulators Group instead, a regulatory clearing house working towards the harmonization of national regulation. Today EU policy covers all aspects of communication policy (in the inclusive sense), and some attention is also paid to the possible negative effects of market extension on service quality and security. There is now also a European Internet policy, promoting a European e-commerce regime and trying to shield it from globalization pressures.

Technical standardization is a necessary complement to Tc liberalization, diverging national standards obviously being a trade barrier. Already in 1988, the Commission established the European Telecommunications Standards Institution (ETSI). The agency is composed of national representatives and private Tc companies, and its goal is to develop European standards to replace national standards. In the U.S. and Japan, the corresponding agencies are formally national, but de facto of regional significance. The EU has accredited the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC); these public, non-governmental organizations are the European counterparts of the international standardization organizations ISO and IEC. These committees are, however, not specialized in Tc standardization. Outside the EU framework there is the European Conference of Postal and Telecommunication Administrations (CEPT), established by national governments in 1956; CEPT is the regional counterpart of the International Telecommunications Union (ITU). Since 1997, the Independent Regulators Group comprising representatives of 29 national regulatory agencies has partly taken over the functions of CEPT.

At the European level, MNCs and sectoral interest organizations push for liberalization, harmonization, and compatible technical standards. Numerous business and trade associations, industry consortiums and forums are involved

in standardization; the European Computer Manufacturers Association (ECMA) has achieved quasi-official status and maintains stable links to ITU, ETSI, CENELEC and other private forums.

At the global level, the WTO is a relevant, but not very forceful actor. Within the WTO General Agreement on Trade and Services (GATS), the special Agreement on Basic Telecommunications Services (ABTS) of 1997 and the Agreement on Basic Telecommunication (ABT) of 1998 are mainly directed at opening markets, among other things by avoiding standards that are obstacles to international trade. These agreements provide only a loose and very general framework; their impulse is promotional rather than regulatory. The Agreement on Technical Barriers to Trade (ATBT) of 1996 contains a Code of Good Practice that can also be applied to Tc; it is binding only for countries that adopt it.

The International Telecommunications Union, established in 1865 to facilitate international Tc in the age of national telephone monopolies, with its standardization branch ITU-T, formulates Tc standards. The ITU is a classical international organization, composed originally of representatives of national monopolies; today it brings representatives of national governments together with national standards organizations. In 1990 it opened membership to Tc firms as well. With the growing importance of private MNCs, the ITU has lost importance; it tries to extend its domain to the Internet and focuses on Tc in developing countries.

Pharmaceuticals⁵

Sector Structure

The boundary between medicines for human use and products classified as food-stuffs (such as herbal teas) is a matter of definition and difficult to establish. Pharmaceutical firms range from very small (individual pharmacies) and local enterprises, to national companies, to MNCs. In Germany there are roughly 1,200 registered drug manufacturers; some 40 of them are MNCs. The industry is internally differentiated by size, by research intensity, and by type of product – innovative medicines, generic drugs, and prescription-free drugs. Many national companies are only marketing organizations for firms headquartered elsewhere.

The business associations in the pharmaceutical industry are powerful. In Germany there are separate organizations for the pharmaceutical industry at large (Bundesverband der Pharmazeutischen Industrie, BPI), for research-intensive

5 The following case description is based on Feick (2000, 2002, 2005), Abraham/Lewis (2000), and oral communication from Jürgen Feick.

companies (Verband forschender Arzneimittelhersteller, VFA), for firms manufacturing generic drugs and for firms manufacturing prescription-free drugs. National associations representing research intensive firms are organized in the European Federation of Pharmaceutical Industry Associations (EFPIA). Professional associations present expert views, but are not involved in licensing. Consumer protection organizations are not specialized in pharmaceutical issues, but may occasionally deal with risks from certain medicines. They have only recently become more influential actors in this field. Particularly in the U.S., specialized patient organizations and public health advocacy groups can play a role as watchdogs.

Regulatory Institutions

Public health has always been of concern to national governments. In the U.S., a law dealing with food and drug safety dates already back to 1906; in 1927, the Food and Drug Administration (FDA) was established. In imperial Germany, public health was addressed by the Reichsgesundheitsamt, local health agencies, and special branches of the police and the trade inspectorate. Professional associations of doctors and pharmacists formulated standards for their members and evaluated medicines, functioning as private governments. Licensing, i.e. mandatory marketing approval for new medicines, was introduced in Scandinavian countries earlier than on the continent, where regulation was mainly spurred by the thalidomide affair. In Germany, at first a manufacturer had to be licensed; after 1961, registration of new medicines with the federal health agency (Bundesgesundheitsamt, BGA) became mandatory and was tied to providing information; sera and blood products had to be registered with the Paul Ehrlich Institute; from 1978 on medicines required marketing approval. In the UK, the Commission on Safety of Drugs had to approve new drugs from 1970 onwards. National licensing agencies are co-financed to varying degrees by the fees of applicants. Everywhere registration and later on marketing authorization (licensing) became tied to increasingly exacting prerequisites in terms of pre-marketing testing. »Practically every detail of the product itself, substantial parts of research, development, production, commercialization and medical utilization are regulated« (Broscheid/Feick 2006: 7). Market entry control is complemented by monitoring utilization (pharmacovigilance). While previous market entry controls had left old drugs on the market, a 1975 EU directive with which national governments eventually complied required *all* medicines to be assessed according to »modern licensing standards.« In consequence, many traditional medicines disappeared from the market.

In the EU, pharmaceuticals are the domain of a special unit in the DG Enterprise (also called DG Industry). Health policy is basically a national pre-

rogative. The first pertinent EU directive came only in 1965 after the thalidomide disaster, followed in 1975 by the directive requiring a review of all drugs already on the market before licensing became mandatory. In the same year, the inter-agency Committee for Proprietary Medicinal Products (CPMP) and the Pharmaceutical Committee, an intergovernmental network of national bureaucrats involved in policy formulation, were set up. EU policy aims at creating the single market for pharmaceuticals, safeguarding public health, and fostering innovation. In the beginning the EU supported legal harmonization in order to facilitate the mutual recognition of national marketing authorization. This was followed by attempts to centralize authorization at EU level. In 1995, the European Medicines Evaluation Agency (EMA) was established; CPMP became its scientific committee and regulatory cornerstone. Not a genuine independent regulatory agency, EMA mainly serves to coordinate the evaluation procedure; the final decision is taken by the Commission. The members of the crucial scientific committee CPMP are mainly representatives of national regulatory agencies. A centralized procedure grants EU-wide authorization for biotechnology-derived pharmaceuticals and other innovative medicines; it is mandatory for all such products. EMA receives the application, CPMP assesses it and makes a recommendation, and the Commission makes the final decision after going through a comitology procedure. For all other new medicines not restricted to the national market there is a Mutual Recognition Procedure that involves negotiation between national agencies, but requires mandatory arbitration by the Commission in case disagreement arises. Though Mutual Recognition is complicated and time-consuming, this procedure outweighs the Central Procedure in terms of number of applications/cases; in some EU countries, purely national licensing procedures still account for the largest part of applications. If recognition in countries outside the EU is sought, application must be made directly to their national agencies. However, by the fall of 1999, the EU had signed Mutual Recognition Agreements with the U.S., Canada, Australia and New Zealand.

Pharmacovigilance is basically a national responsibility; however, for medicines approved in the Central Procedure, EU is responsible. EMA tries to coordinate national measures, but is not actively involved. The national agencies are linked in an electronic network (EudraNet). In many countries several different agencies are involved in pharmacovigilance; there is a special EU service for the transmission of reports (EudraWatch).

Governance of pharmaceuticals at the international level concentrates on harmonization rather than regulation. The International Conference on Harmonisation (ICH) deals with the technical requirements for the registration of pharmaceuticals. ICH is not an agency, but a regime established by national agencies and the International Pharmaceutical Association, which hosts the

ICH secretariat. ICH was launched in 1990, and by its own account has served to »almost fully« harmonize the standards for demonstrating the quality, safety and efficacy of new medicines throughout the EU, the U.S., and Japan. Testing standards are defined by detailed technical guidelines, and test results are to be presented in standardized form in marketing application. However, the three regulatory institutions (EU, USA, J) who have negotiated the agreement with industry do not always comply with these standards, which are legally only recommendations. Within the WTO, the TRIPS regime only deals with patenting new substances and testing procedures. Of course licensing could be a trade barrier, but since the national health policy prerogative is generally accepted, WTO does not try to intervene, except in the unlikely case that a country bars entry to *all* foreign medicines.

3 Differences in Sectoral Governance

A comparison of the three cases bears out the expectation that there are significant differences in sectoral multi-level governance, and allows us to identify the dimensions of variation. The main differences in the MLG of the three sectors concern

1. the prevalent purpose, or goals of governance,
2. the prevalent governance instruments,
3. the relative importance of governance agencies at different levels, and
4. the prevalence of public, private, or mixed forms of governance.

International tourism is the least regulated of the three sectors compared; it is largely left to market forces and private initiatives. Promotion of the industry is the dominant goal of governance specifically directed at iT on all levels. A few regulatory measures are directed at service quality and consumer protection, while mainly lip service is paid to the prevention of negative externalities, i.e. damage to the environment. Governance thus addresses preferably (profitable) service production. There is little by way of regulation targeted especially at iT. What little there is occurs mainly at the national level, where iT is subject to the regulation of national general-purpose agencies, such as tax offices, customs and border control agencies, and trade inspectorates. The regional level of the EU is only marginally involved, but there are specialized international organizations, both public and private, serving primarily iT development. To the extent that governance is specifically directed at iT, it uses mainly positive incentives, information, and brokerage as instruments. Measuring iT activities and gene-

rating information plays an important role as a precondition for assessment, and for giving promotional advice. At all levels, from the sub-national to the national, the regional, and to the international, representatives of the industry are actively involved in attempts to develop iT.

In contrast to the relatively new sector of iT, Tc is a very old sector that has been a public service until recently. As a public service, it used to be tightly regulated by national governments; service quality and cost efficiency were the dominant goals. Privatization and liberalization policies pursued at the national, the EU and the international levels (i.e. WTO) have changed Tc governance significantly. Service quality is still an important goal, but privatization has caused economic profitability to supplant the goal of simple cost efficiency. Since the use of mobile phones for criminal purposes has become a significant threat, there have been some efforts to control this negative externality. Market access, prices, and service quality are regulated at the national level, while further liberalization is still the dominant goal at the EU and international levels. Parallel to the change in the functional orientation of governance, there is a shift in the nature of the regimes as we move from the national to the international level. At the national level, Tc governance is highly legalized; all EU member states have sector specific, national Tc laws. At the regional (EU) and the international level, technical coordination conducted in the spirit of problem-solving predominates. Technical coordination through the development of standards has always been a prevalent instrument of Tc governance, and is a precondition of liberalization. Standardization now shifts from the national to the regional and the global level, and from public to private actors (Werle 2002: 256). At all levels, standardization is the task of special agencies or specialized units within non-governmental organizations. Representatives of public regulatory and standardization agencies still predominate at all levels, but producers participate increasingly in standardization. As Ute Hartenberger (2007) explains, Tc governance can be described as a closely integrated, transnational regime that subjects a liberalized, internationalizing economic sector to collective regulation.

Medicines for human use are the oldest economic sector of the three, and it is the most strictly regulated. As in Tc, there are sector-specific laws, but in pharmaceuticals they address not simply the provision of a service but above all the quality of the product. The primary goal of regulation had traditionally been the safety of medicines, but as the pharmaceutical industry and public health organizations (hospitals, health funds etc.) grew, industrial policy and budgetary concerns became additional goals. At the regional and international levels, market expansion (e.g. creation of a single European market in pharmaceuticals) and fostering innovation are the major goals; safety and lately also budgetary concerns (health costs) serve as limiting conditions to the goal of market ex-

Table 1 Multi-level Governance Features

| Governance features | Sectors | | |
|-----------------------------------|--------------------------|----------------------------------|----------------------------------|
| | International Tourism | Telecommunication | Pharmaceuticals |
| Governance goals | Development of industry | Quality of service | Market expansion, product safety |
| Relation of public-private actors | Private involvement high | Mixed public-private involvement | Dominantly public |
| Relative importance of levels | All three equal | EU and international | National and EU |
| Scope and density of regulation | Low | Medium | High |

pansion. Private self-governance, which dominated in the past, has in time given way to increasingly tight public regulation; in fact, medicines are among the most regulated products on the market today (Feick 2005: 3). A host of public agencies, both general purpose and specialized, deal with the control of pharmaceuticals at the national level. The major instrument is to make market access conditional upon proven quality, complemented by monitoring utilization and health costs. Beyond the national level, regulatory norms are largely arrived at by negotiation and voluntary agreement. At the level of the EU, market access of new medicines is partly subject to a centralized procedure that, however, includes strong elements of intergovernmental negotiation. In addition there is procedurally regulated voluntary coordination (in the Mutual Recognition Procedure). International governance in this sector is weak, being largely limited to legal harmonization. At all levels, business associations and large MNCs play an important role as pressure groups. Unlike iT, and in a more pronounced way than Tc, the pharmaceutical industry has scientific experts integrated into the regulatory procedures and agencies, especially at the national and regional levels. Table 1 crudely summarizes the sectoral governance features.

The significant differences existing between the MLG of different economic sectors raise the question of whether the intersectoral variation is so large as to invalidate attempts to make general statements about the governance of economies as a whole, statements of the sort that are the basis for distinguishing varieties of capitalism. Though this paper is far from the systematic two-dimensional comparison of the multi-level governance of different (national) economic sectors in different types of national economies that would be needed to answer this question, it nevertheless suggests that differences between sectors within a given country are larger than differences in the MLG of the same sec-

tors in OECD countries with different types of capitalist economies. At the regional level, in contrast, there should be a pronounced difference in the architecture of MLG between members and non-members of the EU. For non-members of the EU, a regional governance level hardly exists, which gives international institutions relatively more weight. At the global level, finally, there should be a difference in governance between OECD countries and developing countries, last not least the so-called weak or failing states preferably addressed by international organizations as the UN in its function of peace-keeping, by the World Bank, and the IMF.

Driven by political as well as economic interests, the MLG of a given economic sector evolves within institutional and legal constraints. At the same time, the specific character of the sector presents opportunities for intervention as well as restrictions. It is therefore not surprising to observe a – contingent – relationship between the architecture of MLG and the specific character of the sector itself. While sectoral properties such as the degree of internationalization, the boundedness, the concentration, and the internal differentiation of the production system can impinge upon the design of governance institutions, the crucial feature seems to be the quality of the product or service itself, its potential profitability for the producers, its more or less vital importance for consumers, and the risks associated with its consumption. Where potential profits, benefits, and risks are all high, there is a tendency to call for tight public control. Turning to structural properties, economic sectors generally vary considerably in the degree of internationalization, but for this study I have chosen only sectors with an appreciable degree of internationalization. Even so there are differences among our cases. Internationalization can refer to the service itself, as in *iT*, it can be part of service quality, as in *Tc*, and it can refer to the market for a product, as in pharmaceuticals. If a service is international in nature from the start, higher level governance institutions develop and assume importance more quickly; this, for instance, has also happened in the case of the Internet. As for the scope of the market, it makes a difference whether producers want internationalization (i.e. bottom-up as in pharmaceuticals), or whether it is imposed upon them politically, in which case the development of international regimes meets with more resistance. As for the property of boundedness, a clear functional separation of the sector from neighboring sectors favors the development of specialized governance agencies and regimes, while vaguely bounded sectors (such as *iT*) are more subject to governance by general-purpose agencies. But as the case of *Tc* shows, the boundedness of a sector can change with technological development. Internal differentiation, finally, refers to the size distribution of firms, and to the development of sub-categories of a given product or service, as observed in the production of pharmaceuticals and in *Tc* services. The latter kind

of differentiation has consequences both for the structure of sectoral interest representation, and for the emergence of specialized regulatory regimes. Yet another kind of internal differentiation is represented most visibly by iT, where producers belonging to several different sectors are involved in the production of a given service. This kind of differentiation appears to militate against the development of specialized regulatory regimes targeted at the service.

Comparison between our three sectors also enables us to identify a causal mechanism linking different governance features, especially the goal of governance, the density of regulation, the level, and the public, mixed, or private character of governance agencies. Control as goal of governance, regulatory density, prevalence of public agents, and dominance of the national level appear to be connected in a closely linked causal chain. As noted, the goals of governance differ between sectors, concentrating on different parts of the production chain: in iT governance is about the development of production, in Tc it revolves around a crucial part of service quality (i.e. the territorial scope of communication), and in pharmaceuticals product safety is the paramount concern. The control of negative externalities (i.e. risk to public health) is most palpably a concern in the governance of pharmaceuticals, and least so for Tc. Across sectors, the goals of governance differ characteristically by level. In all three sectors, legal regulation aimed at the control of product or service quality and backed by sanctions occurs mainly at the national level, where the notion of public service connected with statehood prevails and a sanctioning apparatus is in place. At the level of the EU, regulation serves primarily, but not exclusively, to create the Single European market. At the international level, finally, market expansion beyond national and regional boundaries is the predominant goal. These differences reflect the tasks assigned to the EU and the Bretton Woods institutions by their founders, i.e. they are the historical result of a political process. Where product safety is the dominant goal and regulation backed by sanctions the predominant instrument, governance by specialized agencies and legal regimes is more intense than in sectors where governance aims primarily to develop a service. The balance of public and private involvement in governance is similarly related to the governance goals pursued, and correspondingly differs between levels. In iT, where promotion rather than regulation is the predominant goal of governance specifically targeted at the sector, private economic actors are heavily involved at all levels. In Tc, private economic actors play a lesser, though increasing role in governance at all levels ever since state monopolies were privatized. Since public authorities have tightened safety control, industry and business associations participate least directly in the governance of pharmaceuticals; in this sector, private actors act today mainly as pressure groups. Involvement of private actors giving rise to mixed public/private forms of governance that function as negotiating

systems differs more by sector than by level. At the regional and international levels, mixed public/private negotiating systems are particularly complex, since industry representatives meet with agents not of one but of several different governments who often pursue divergent interests.

Sector structures are subject to historical change, and this is reflected in changes in MLG. Thus the prevalence of public agencies, both governmental and non-governmental,⁶ in the present governance of Tc is a path-dependent effect of the former public status of the service. In pharmaceuticals, the growing power of manufacturers as a result of the market dominance of big corporations, together with the development of a growing and increasingly costly public health system, have motivated governments to tighten their regulatory grasp. These observations attest to the importance of a historical perspective in the analysis of MLG.

4 Coherence in Multi-level Governance

To turn to the second question formulated at the beginning of this paper, in what sense can it be said that the MLG of the three sectors is more or less coherent? In contrast to cohesion and integration, coherence is not a core concept in social theory. Coherence refers to the interrelationship of the components in a whole, and is applied to meaning (of an utterance, a text), to strategy, and to systems of different kinds. In legal theory, the vertically and horizontally differentiated European body of public law is called coherent if there are no gaps in the protection of substantive rights, and if its component regimes are systematically coordinated (Schmidt-Aßmann 2006: 274–275, 288). A political science counterpart of the first of these two legal criteria of coherence, i.e. absence of gaps, might be the complete regulatory coverage of a given process of production and utilization of a given product (good or service). In fact the case studies point to some regulatory gaps in areas where regulation was a goal, for instance in the technical standardization of Tc and in monitoring the safety of medicines not subject to licensing. But regulation per se is functional only if profitable production, high product or service quality, and avoidance of negative externalities cannot be achieved without (public and/or private) regulation. Dense regulatory coverage is therefore not a meaningful criterion of coherence in MLG.

⁶ By non-governmental public agencies we understand private law organizations serving public functions, such as technical standardization.

The literature on the varieties of capitalism (VoC) suggests that coherence may be the result of institutional complementarity.⁷ The notion of complementarity

is at the core of most analyses that try to identify coherent national models, systems of innovation and/or production, varieties of capitalism or models of *regulation* [...] These approaches [...] stress that the pattern of interrelationships between the different elements of the institutional structure defines the coherence of this structure. (Amable 1999: 20)

The core assumption of the VoC school is that institutional complementarity, whether based on mutual functional enhancement or on value homogeneity (i.e. the sameness of normative orientation), makes for superior economic performance (see the discussion in Crouch 2005a, 2005b). However, the relationship between coherence, complementarity, and performance is ambivalent: if complementarity is defined as mutual functional enhancement of institutions (Streeck 2004: 114; Amable 2003: 6), it can stabilize institutions, but need not increase system performance. Nor does coherence necessarily presuppose either functional complementarity or value homogeneity. The atoms in a molecule cohere not because they complement each other functionally, nor because of some ulterior sameness, but as a result of interacting forces of attraction and repulsion. In social systems, coherence may not only be based on a functional division of labour, functional complementarity, normative integration, or social cohesion, but at least for some time also on brute force.

Coordination in MLG does not take the form of complementarity between functionally distinct institutions which mutually enhance each other's ability to contribute to system performance.⁸ For one thing, it is hardly possible to define a performance measure for MLG that would permit measuring the effect of different sectoral governance arrangements. In VoC, the performance of the economy is an outcome of the activities of the component institutions as measured by an outside observer. Even an outside observer, however, would be hard put to define a single effectiveness measure for the MLG of different economic sectors, because such a measure would have to take into account several potentially conflicting criteria.⁹ Even if we relate functional complementarity between institutions not to system performance, but only to the stability of an institutional arrangement, it can hardly be said that the component institutions

7 For an extended discussion of the connection, see Mayntz (2006).

8 Mutual enhancement and contribution to system performance are two different aspects of complementarity that are usually not distinguished in VoC, and that may, but need not, be empirically related.

9 Economic profitability, service quality, and the avoidance of negative externalities are criteria defined from three different perspectives: the perspective of producers, of users, and of the system as a whole.

of a given MLG enhance each other's functioning mutually. While the agencies and regimes of sectoral governance do fulfil different tasks, they do not appear to assist and stabilize each other, but rather to accommodate to each other as best they can. This even holds true when, as in the licensing of medicines, a functional division of labor has been established between the EU Central Procedure and national authorities.

If it is not based on functional complementarity, coordination in MLG might be based on subsidiarity, the normative principle guiding the division of labour in multi-level government. Subsidiarity means that at each government level, only those problems shall be addressed that can best be solved at that particular level,

1. because of scale economies,
2. because the means are available only at this level,
3. because of the scope of the problem and hence the nature of the causal structure to be targeted.

In discussions of European integration and international institutions, particularly the third criterion is often given as a reason for the emergence of the EU, and of global governance. Functional considerations do in fact suggest that the development of iT, technical standardization of international Tc, and the control of access to an international market for medicines be assigned to international agencies. Market expansion, however, the prevalent goal of the EU and of international institutions involved in economic governance, has been a political choice rather than a functional response. Functionalist theory would require that at higher levels of governance, priority be given to the control of negative externalities of cross-border movements and transactions. But this is clearly not what we found.

Multi-level governance differs from a vertical division of labor and of powers in which »higher« level agencies are constituted by the transfer of competences to be executed by their own personnel. In MLG, in contrast, levels are in good part linked by interpenetration, i.e. they form Putnam's famous two-level games, where the members of a higher level agency represent at the same time a lower level unit to which they belong. This dual membership leads to dual loyalties. Interpenetration is a special mode of organizational coupling, studied mainly in horizontal relations as in interfirm networks. Interpenetration between levels in MLG constitutes a specific type of regional and international agencies, namely hybrids of intergovernmental negotiation systems and corporate actors (Mayntz 2002). Public non-governmental organizations fulfilling a given function at successively higher levels, such as the standardization organizations DIN (national), CEN (regional), and ISO (international), are linked by inter-

penetration in a way much like the way national representatives link individual governments to regional and international institutions. The same holds again for vertically differentiated sets of business associations and private organizations. Where regional governance exists, linkage between the national and the international level can still be direct; thus the German DIN sends delegates both to the regional organization CEN and the international ISO.

Interpenetration in MLG is the result of bottom-up delegation to newly forming higher levels and of cooptation from lower levels in (less frequent) top-down processes of MLG development. Interpenetration gives the MLG of economic sectors an appearance of coherence, but it is a form of linkage that is often fraught with conflict. MLG has to deal with two fundamental kinds of conflict: conflicts between governance agents and governance addressees, and conflicts among different governance agencies and regimes. Conflicts of the first type arise wherever the goal of governance is to discipline and regulate, rather than to promote; they are not specific to MLG. Though producers can be in favor of regulation where it serves to restrict competition or to expand markets, intense conflicts between governance agents and producers result when producers seeking profit are to be disciplined in the service of public interest. Pharmaceuticals, the most densely regulated of our three sectors, is beset by the most intense conflict, as manufacturers wanting to put medicines on the market are confronted with regulatory agencies at the national and EU levels that regulate the market access of products in the interest of public health.¹⁰ The fact that firms – very much so in Germany, but depending on legal opportunities in other countries as well – even go so far as to challenge regulatory decisions in court, attests to the acuteness of this conflict. In Tc, a conflict line between manufacturers and regulators evolved after the service became privatized; in this sector, too, the regulatory agency's decisions are occasionally challenged in court – at least in Germany, where this is legally possible. In general, however, MLG in Tc is not very conflict-ridden. There are some conflicts involving economic issues (e.g. price regulation, or market access granted to competitors) and some competition between private and official standardization organizations, but by and large technical standardization is characterized by the »peaceful coexistence« of different standardization organizations (Werle 2001: 400). In iT, finally, producers may chafe at the restrictions imposed upon them by general-purpose regulatory agencies, and there may be occasional disagreement about the scope and nature of promotional activities, but there is no evidence of manifest conflict.

10 In the case of pharmaceuticals, it has not been the regulation per se, but the time-consuming and complicated regulatory procedures involved that have incited opposition.

The cooptation of producer representatives into regulatory decision making is a familiar measure to cope with conflict between producers and regulators, but if it does not lead to agency capture, it leads to the internalization of the conflict, which now calls for within-agency negotiation. Such negotiations do not *resolve* conflicts; they are indicators of their continued presence. Another attempt to move from a confrontation of interests to the sphere of objective problem-solving is the involvement of scientific experts. But especially in the case of high uncertainty and a strong conflict of interests, the success of this measure is doubtful. According to Abraham and Lewis (2000: 58), the experts involved in the regulation of pharmaceuticals in Britain, having in their majority financial interests in the industry, constitute a »revolving door« between industry and agency.

Conflict between agencies is again not specific to MLG, except where it involves different levels. There are conflicts about the distribution of powers between agencies at the same and at different levels. Conflicts between different levels occur mainly between national governments and the EU. EU member countries have delegated substantial powers to EU institutions; non-EU members who are weak states may be dependent on the IMF or the World Bank, but this is not a relationship of manifest conflict. Occasionally there is conflict between regional and international agencies, such as the EU and the WTO; conflicts between WTO and individual countries are more frequent. Agency conflicts between levels occur both in Tc standardization, and in the market control of medicines (licensing). In Tc, national governments wanted to preserve their domain, while the EU pressed for privatization and centralized standardization. In the field of pharmaceuticals, national regulatory agencies resisted the centralization of licensing in a European regulatory agency. The compromise arrived at – participation of national regulators in the scientific committee CPMP – kept being contested by the Commission, to little avail; in the course of the Legislative Review it succeeded in reducing the number of national representatives on the committee from 2 to 1 per country, but due to EU enlargement the size of the committee grew at the same time from 15 to now 27 members.

Conflicts about agency powers often coincide with, and are exacerbated by, a difference in the goals pursued by agencies at the same and at different levels, and even within agencies. This sets the WTO, intent on market expansion, against quality controls pursued at the national level. Within the framework of the EU, different agencies or subunits of the Commission pursue conflicting goals; thus there is conflict between the development of the tourist industry and guaranteed service quality for tourists, and even more pointedly between market expansion and the safety of medicines. That it is difficult to strike an appropriate balance between industrial, medical and budgetary needs is openly admitted by the Enterprise-Directorate General of the Commission. Abraham and Lewis

(2000) therefore doubt that public health is still sufficiently safeguarded since regulation has shifted to the EU. Conflicts within agencies are rampant not only where different subunits have different priorities, as in the EU Commission, but also where the prominent decision-makers represent different countries or regions. The WTO thus often serves as an arena for conflicts between the U.S., Japan, and the EU.

Domain conflicts are about the allocation of powers to different corporate actors and the delineation of jurisdictions. But there is not only conflict between different actors in MLG; different regimes can also conflict with each other substantively. Joerges (2006, 2007) distinguishes between vertical, horizontal, and diagonal legal conflicts in the EU, i.e. conflicts about which legal norms apply to a given case. These three types of legal conflict can be applied to MLG generally. Vertical conflicts are conflicts between legal regimes at different territorial levels; they occur both between national law and EU legislation, and between EU law and WTO rules. In horizontal conflicts, the injunctions of different national laws to a given case diverge. Horizontal legal conflicts occur typically in the context of transactions involving the movement of persons, goods, or finances across national borders. Diagonal legal conflicts finally occur if regimes at two different levels that apply to different aspects of a given case make contradictory demands. Thus Community competition law may accept a given contract between businesses as a pro-competitive arrangement, while national competition law may find it unfair and hence invalid (Joerges 2006: 794). While this paper has not analyzed MLG from a specifically legal viewpoint, the case studies have nevertheless pointed to the existence of horizontal conflicts between national regimes in the control of pharmaceuticals, and of horizontal and vertical conflicts between different standardization regimes in Tc. In general it may be expected that the frequency of conflicts between legal regimes varies with the extent of legalization of sectoral MLG.

Different and partly cross-cutting lines of conflict between agencies, and legal conflicts at the same and at different levels, make coordination in MLG precarious and problematic. The resulting tensions and inefficiencies provoke continuous efforts to cope with them; conflicts thus are a major driving force of institutional change in MLG, as Morgan (2005: 416) also pointed out with respect to institutional change in the governance of national economies. A new kind of collision law which Joerges (2006: 2007) has analyzed specifically for the EU, but which can also be found at the international level (in WTO law, for example), is being developed in response to the increasingly frequent vertical, horizontal, and diagonal legal conflicts in MLG. The anticipation of a power conflict between governance levels is dealt with by having lower level representatives serve in higher level agencies. A famous instance is the EU comitol-

ogy system (Joerges/Neyer 1998).¹¹ The comitology procedure grants member country executives influence on the elaboration of regulatory provisions which implement EU legislation. Comitology developed in response to the power conflict between the Commission and national governments, even before it was formally instituted in 1987. In addition to permanent institutions in which lower level representatives negotiate with each other and with higher level representatives, ad hoc committees are also set up to coordinate diverging interests. Thus in Tc, various committees have been set up for the express purpose of coordination; one such committee (ICTSB) coordinates ETSI, CEN, CENELEC, and many private standards organizations. Besides, in 1997 an Independent Regulators Group which is not part of the EU framework was established; this intergovernmental network deals with problems of regulatory practice. Another example of coordination efforts which respond to coordination deficits is the Legislative Review Process started in 2001 by the Commission to deal with the obvious problems in the market control of medicines. The reform turned an existing informal group facilitating the Mutual Recognition Procedure into an official Coordination Group, charged with speeding up the processing of applications and negotiations about the mutual recognition of national authorizations, and improving the effectiveness of pharmacovigilance.

If coordination is understood as resolution, and hence the disappearance of conflicts, coherence in MLG should not be called coordination. EU comitology has sometimes been interpreted euphemistically as leading to genuine supranationalism (e.g. Joerges/Neyer 1998). In truth, however, the very need for such a procedure attests to the continuing conflict between national and European governance. Conflicts between regulators and economic actors, and conflicts between governance agents and the norms they produce and apply follow from the interest structure underlying the actor constellation in a given economic sector and its governance. Both the architecture, and the regimes of MLG are shaped by the attempts to cope with conflict, and manifest the endurance of conflicts that cannot be resolved once and for all. To the extent that there is coherence in MLG, it is closer to the notion of coherence familiar from chemistry than from arguments about institutional complementarity. The dimension of conflict, and coping with conflict, is neglected in VoC analysis as pursued by Hall and Soskice (2001). Analysis of the multi-level governance of economic sectors may help to change this perspective.

11 Comitology, or implementation committees, are not the only type of committee involved in EU policy processes that link member states and European institutions; there are also numerous expert committees active in drafting policy, as well as Council working parties helping to prepare Council decisions; see Schäfer (2000).

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7 Von politischer Steuerung zu Governance? Überlegungen zur Architektur von Innovationspolitik (2008)

1 Zur Fragestellung

Mit dem Begriff Governance verbindet man die Abkehr von zentralstaatlicher, hierarchischer Steuerung. Bezogen auf das politische Gemeinwesen verweist der Begriff auf die Existenz und das Zusammenspiel *unterschiedlicher* Regelungsformen (Benz 2004; Mayntz 2005 bzw. Aufsatz 3 in diesem Band): Es wird nicht nur von staatlichen Instanzen hierarchisch gesteuert, sondern staatliche kooperieren auch mit privaten korporativen Akteuren – in neokorporatistischen Verhandlungssystemen, Politiknetzwerken und *public-private partnerships*. Theoretisch geht es bei der Analyse von Governance um – gelingende oder misslingende – kollektive Problemlösung beziehungsweise die Erzeugung kollektiver Güter. Empirisch-pragmatisch fragt man, welche *Kombination* von Regelungsformen einen bestimmten Bereich kennzeichnet, beziehungsweise präskriptiv gewendet: welche Kombination am wirkungsvollsten ist.

In der Diskussion um Veränderungen staatlichen Handelns beziehungsweise neue Formen des Regierens ist seit einiger Zeit die Rede vom Wandel des Interventionsstaats zum sogenannten »kooperativen Staat« oder zum Gewährleistungsstaat. Die Frage stellt sich, ob es einen solchen Wandel gleichförmig zumindest in allen innenpolitischen Politikfeldern gegeben hat. Hat sich die Rolle des Staates zum Beispiel auch in der Innovationspolitik gewandelt, und lässt sich diese Veränderung als Übergang von Steuerung zu Governance beschreiben? Und ist dieser Wandel, wenn er denn stattgefunden hat, eine Folge der Entwicklung zum »kooperativen Staat«?¹

Im weitesten Sinn ist jede Politik, die Veränderung will, Innovationspolitik. Im engeren Sinn meint der Terminus eine Politik, die *am Markt* erfolgreiche *technologische* Innovationen fördern will, seien das neu entwickelte Produkte, technische Artefakte wie die Magnetschwebbahn, technisch basierte Dienst-

¹ Diese Fragen wurden von den Veranstaltern der Tagung »Innovation und gesellschaftlicher Wandel« (Dortmund, Oktober 2007) in ihrem Call for Papers explizit gestellt und dienten als Leitmotiv für den Vortrag, der die Grundlage des hier in ergänzter Form erstmals publizierten Aufsatzes bildet.

leistungen wie die Telekommunikation oder neue Herstellungsverfahren. Der Governance-Theorie stellt sich dann die Frage, wie Innovationsprozesse gesteuert werden: Aus welchen öffentlichen und privaten Akteuren besteht die Governance-Struktur, auf welcher politischen Ebene sind sie angesiedelt, wo setzen sie steuernd an und welche Instrumente benutzen sie? Hat sich die Architektur von Innovationspolitik im Laufe der Zeit verändert, und was sind gegebenenfalls die Ursachen dafür?

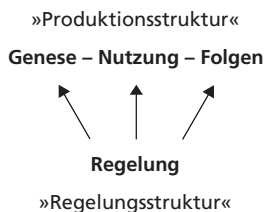
2 Der analytische Ansatz

Für die Untersuchung von Governance in speziellen Politikfeldern ist es notwendig, den Ansatz der Governance-Theorie, die sich auf die Regelungsstruktur konzentriert, durch analytische Komponenten aus der Policy-Forschung zu ergänzen, die bei einem zu lösenden Problem beziehungsweise einem zu schaffenden Gut ansetzt. Mayntz und Scharpf (1995) haben konkrete Regelungsstrukturen – heute würde man von Governance sprechen – auf sektorale Leistungsstrukturen bezogen. Leistungs- oder wie man auch sagen kann Produktionsstrukturen umfassen die unmittelbar an der *Erzeugung* eines Gutes oder Dienstes beteiligten Akteure. Die Regelung einer Produktionsstruktur dient der Förderung von positiven beziehungsweise der Vermeidung oder Eindämmung von negativen Folgen, das heißt der Erzeugung eines Gutes oder der Verhinderung eines Schadens. Angewandt auf die Technikentwicklung würde man zusätzlich unterscheiden, ob die fraglichen positiven beziehungsweise negativen Folgen durch den Herstellungsprozess (die Genese) oder durch die Nutzung einer Technik verursacht werden. Abbildung 1 fasst das sich ergebende analytische Schema zusammen, das sich nicht nur auf Innovationen, sondern zum Beispiel auch auf Rechtsnormen anwenden lässt. Das analytische Schema verlangt die Beantwortung der folgenden vier Fragen:

- Wer sind die potenziellen Produzenten eines Gutes beziehungsweise die Verursacher eines Schadens oder Problems?
- Wer sind die (tatsächlichen beziehungsweise potenziellen) Nutzer beziehungsweise die negativ Betroffenen?
- Welche Folgen hat die Nutzung beziehungsweise ihr Fehlen?
- Wer kann auf diesen Prozess regelnd einwirken?

Nicht nur für die Technikentwicklung gilt, dass die Erzeugung eines Gutes oft mit negativen Nebenwirkungen verbunden ist. Aber kein Handeln, das für alle Beteiligten und Betroffenen erkennbar nur negative Folgen zeitigt, bliebe auf Dauer

Abbildung 1 Governance: Erweitertes analytisches Schema



bestehen: Es sind die bei wem auch immer anfallenden Nutzen, die soziale Prozesse am Laufen halten. Die Motivation, negative Folgen eines Handelns zu verhindern oder von vornherein einzudämmen, ist offensichtlich am höchsten, wenn dieselben Akteure, die diese Folgen (als Produzenten oder Nutzer) erzeugen, unmittelbar negativ von ihnen betroffen *und* zugleich grundsätzlich in der Lage sind, das so erzeugte Problem (zum Beispiel durch eine Verhaltensänderung) zu lösen; das klassische Beispiel für diese Situation ist die gemeinschaftliche Nutzung einer begrenzten Ressource. Wenn dagegen die negativen Folgen einer Innovation bei anderen Personen oder Gruppen anfallen als der Nutzen ihrer Produktion und ihres Gebrauchs, dann fehlt ein Motiv, das problem erzeugende Verhalten zu ändern. In diesem Fall sind externe Regelungsinstanzen gefragt, den Prozess zu lenken, indem sie das problem erzeugende Verhalten unterbinden. Die Umweltpolitik ist das Paradebeispiel für diese Zusammenhänge. Politische Regelung kann in allen Phasen ansetzen – bei der Erzeugung, der Nutzung und schließlich auch durch Maßnahmen der Schadensbeseitigung bei negativen Folgen.

Bezieht man das analytische Schema auf die Innovationspolitik, dann fällt zunächst auf, dass hier eine *positive* Folge, die (gewünschte) Erzeugung eines Gutes im Mittelpunkt steht; wenn es ein Problem gibt, dann besteht es in der unzureichenden Erzeugung, im Fehlen von Innovationen. Tatsächlich ist seit Jahrzehnten in Deutschland die Rede von einer »Innovationskrise« (Sauer 1999). Nun produziert unser Staat nicht selbst technische Innovationen, er kann also regelnd nur bei ihren nichtstaatlichen Erzeugern und Nutzern ansetzen; lediglich in Systemen mit verstaatlichter Wirtschaft ist das anders. Um die konkreten Ansatzpunkte von Innovationspolitik zu identifizieren, bietet es sich an, Weyer et al. (1997) folgend drei Phasen der Technikentwicklung zu unterscheiden: Erfindung, Stabilisierung und Durchsetzung. Der geläufige Innovationsbegriff schließt alle drei Phasen ein; die Durchsetzung einer technischen Neuerung am Markt impliziert ihre Nutzung. In jeder Phase des Prozesses sind die wichtigen Akteure andere; zur Erfindung müssen Forscher angeregt werden, zur Stabilisierung müssen Hersteller und für die Durchsetzung potenzielle Abnehmer motiviert werden.

Der Innovationsprozess weist aber nicht nur verschiedene Phasen auf, er unterscheidet sich auch je nach Technik, wie die zahlreichen Untersuchungen zur Technikgenese zeigen. So ist Forschung und Entwicklung etwa bei der Nukleartechnik in wenigen großen Institutionen konzentriert, während sie bei der Nanotechnik in zahlreichen, auch kleineren Instituten stattfindet. Im ersten Fall sind auch eher öffentliche, im zweiten Fall zahlreiche private Einrichtungen an der Entwicklung beteiligt. Ebenso unterschiedlich sind die Abnehmer beziehungsweise Nutzer: Für bestimmte Innovationen ist der Staat (fast) alleiniger Abnehmer (Militärtechnik, früher auch Eisenbahn- und Kommunikationstechnik), sonst aber sind es private Hersteller und Endverbraucher, also »der Markt«. Wie Weyer (2005) am Beispiel der Großtechnik zeigt, ergibt sich aus jeder Konstellation eine andere Innovationsdynamik.

Die Produktions- und Nutzungsstruktur einer bestimmten Technik kann sich schließlich im Laufe der Zeit verändern, sei es infolge der wissenschaftlichen Entwicklung, sei es im Gefolge wirtschaftlicher Entwicklung. Hier spielt nicht zuletzt die Internationalisierung von Unternehmen und Märkten eine große Rolle. Der Gegenstandsbereich, auf den sich Innovationspolitik bezieht, ist also sowohl heterogen als auch in ständigem Wandel begriffen.

3 Veränderungen der Architektur von Innovationspolitik: Allgemeine Tendenzen

Der Vergleich von Governance-Architekturen unterschiedlicher Politikfelder (Grande et al. 2006; Mayntz 2007 bzw. Aufsatz 6 in diesem Band) zeigt sehr verschiedene Ausprägungen des generellen Modells von »Governance«: Es gibt Unterschiede in den Zielen von Governance, im Maß der Beteiligung privater Akteure an der Regelung, in der relativen Bedeutung verschiedener Instrumente und von Instanzen verschiedener Politikebenen. Die Frage nach Beschaffenheit und Veränderung der innovationspolitischen Governance lässt sich anhand dieser Dimension abhandeln. Allerdings ist die Governance-Architektur, also die Akteurkonstellation, eng mit dem dominanten Regelungsziel verbunden, das ebenfalls für die Wahl bestimmter Regelungsinstrumente entscheidend ist.

Das Ziel von Innovationspolitik ist eine Komponente von Technologiepolitik, die sich im Laufe der Zeit semantisch und organisatorisch ausdifferenziert und insofern verselbstständigt hat. Technologiepolitik umfasst im weitesten Sinn neben den durch die Technikentwicklung eröffneten Chancen auch die Herausforderung durch Risiken, Gefahren des Missbrauchs und negative Nebenwirkungen für Umwelt, Gesundheit und Lebensqualität. Untersuchungen

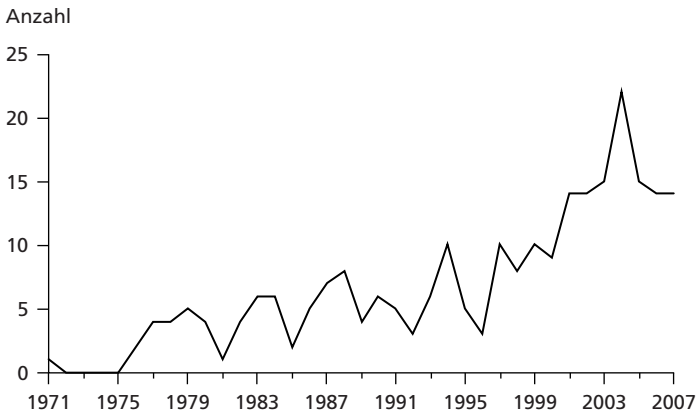
zur Technikfolgenabschätzung beziehen sowohl den möglichen Nutzen als auch die möglichen Kosten oder Schäden neuer Technik ein (wobei sowohl Merkmale des Produkts oder Verfahrens selbst als auch die Art seiner Nutzung Ansatzpunkt der Regelung sein können). Da der Staat nicht selbst neue Technik (Artefakte beziehungsweise Produkte sowie Verfahren) entwickelt, geht es in der staatlichen Technologiepolitik wie in vielen anderen Politikbereichen (zum Beispiel Tourismus, Wissenschaft, Gesundheit, Geburtenrate) einerseits um das Fördern und zugleich um Regulierung zum Zweck der Schadensverhinderung. Dabei stand in der älteren Literatur zur Technologiepolitik die Regelung zwecks Verhinderung negativer Folgen im Vordergrund; im Laufe der Zeit allerdings trat die Förderung stärker in den Vordergrund. Innovationspolitik ist dagegen allein auf den (vermeintlichen, erhofften) Nutzen fixiert; hier geht es zentral um Fördern, nicht um Einschränken. Die Trennung zwischen einer auf positive Folgen gerichteten Politik des Förderns und einer auf die Verhinderung negativer Folgen gerichteten Regulierungspolitik ist sowohl theoretisch wie praktisch ein offensichtliches Problem und eine potenzielle Quelle von Konflikten.

Im Titel deutscher Publikationen taucht der Begriff Innovationspolitik bis in die Mitte der Siebzigerjahre des vorigen Jahrhunderts kaum auf; erst in den Achtzigerjahren kommt er öfter vor und steigt ab 1999 rapide an (vgl. Abbildung 2).² Eine Zählung, die englischsprachige Publikationen einschließt, ergibt ein ganz ähnliches Ergebnis. Das sich in der Literatur manifestierende wachsende Interesse für Innovationspolitik zeigt sich auch, wenn man ihre organisatorische Verankerung auf Bundesebene betrachtet. Das Wort Innovation taucht 1971 zum ersten Mal an untergeordneter Stelle in der Bezeichnung eines Referats in der Abteilung für Technologische Forschung und Entwicklung des Bundesministeriums für Bildung und Wissenschaft auf (»Technologische Forschung und Entwicklung für industrielle Innovation«). 1986 gibt es bereits eine Abteilung für »Informationstechnik und Innovationsförderung« (Stucke 1993, Anhang Organisationspläne). Unter der Großen Koalition schließlich gibt es im Bundesministerium für Bildung und Forschung nicht nur eine Abteilung »Schlüsseltechnologien – Forschung für Innovationen«, sondern auch eine Unterabteilung »Innovationsstrategien« in der Abteilung für Strategien und Grundsatzfragen; außerdem kommt »Innovation« noch in der Bezeichnung von zwei weiteren Referaten in anderen Abteilungen vor.³

2 In englischsprachigen Publikationen ist die Entwicklung ähnlich, nur ist der ebenfalls 1999 einsetzende Anstieg in der Zahl der Publikationen noch viel steiler als in der deutschen Literatur (Literaturrecherche im World Cat; für die in diesem Aufsatz erwähnten Literaturauszählungen in verschiedenen Datenbanken ist Fatih Dilekci, MPIfG, zu danken).

3 Auch diese Entwicklung fand ähnlich in anderen Ländern statt. In Großbritannien etwa wurde das »Office of Science and Technology« 2006 in »Office of Science and Innovation« umbenannt.

Abbildung 2 »Innovationspolitik« in Titeln deutscher Publikationen, 1971–2007



Quelle: Gemeinsamer Bibliotheksverbund GBV; Kölner Universitätsgesamt katalog; wiso-net.de.

Eine praktisch folgenreiche Besonderheit des Ziels der Innovationsförderung liegt in der Tatsache, dass Innovation kein Selbstzweck ist, sondern wegen bestimmter, überwiegend ökonomischer Folgen wie Wachstum und Wettbewerbsfähigkeit angestrebt wird (wobei der kausale Zusammenhang oft nur schwer belegbar ist). Was die Folgen betrifft, um derentwillen Innovation gewünscht wird, hat es offensichtlich im Laufe der Zeit eine leichte Akzentverschiebung gegeben. In den Siebzigerjahren des vorigen Jahrhundert ging es noch um (nationalen) Wohlstand, dann gewann im Laufe der Zeit mit den bekannten weltpolitischen Veränderungen die – vielleicht ökonomisch bedingte, aber nicht nur wirtschaftlich gemeinte – internationale »Wettbewerbsfähigkeit« an Bedeutung. Im Zuge einer solchen tendenziellen Zielverlagerung kann sich auch die Förderungswürdigkeit von Technologien verschieben. Ein nationaler Referenzrahmen sollte zur Förderung von Technologien motivieren, die für das eigene Wachstum beziehungsweise den Ausbau der eigenen Infrastruktur wichtig sind, während sich im Kontext internationalen Wettbewerbs die Wahl zwischen einer Strategie des »auch so« und einer Strategie der Spezialisierung stellt (vgl. Streeck 2005).

Betrachtet man nun, wie sich die innovationspolitische Architektur, die Ansatzpunkte und die Instrumente der Innovationspolitik im Laufe der letzten 30 bis 40 Jahre verändert haben, dann lassen sich grob zusammenfassend vier eng miteinander verbundene Prozesse identifizieren. Zunächst fand von den Siebzigerjahren an eine *vertikale Differenzierung* der Governance-Struktur statt, zuerst

nach unten (Dezentralisierung), dann auch nach oben (EU). Ab Anfang der Achtzigerjahre *diversifzierten* sich die Akteure zunehmend *horizontal*, was aber nur teilweise eine Verlagerung von öffentlichen zu privaten Akteuren bedeutete. Parallel zu diesen strukturellen Veränderungen wurden die *Ansatzpunkte* schrittweise *erweitert*, was schließlich auch eine *Diversifizierung der Instrumente* bedeutete.

Diese Entwicklung lässt sich als Übergang von hierarchischer »Steuerung« durch nationalstaatliche Akteure zu »Governance«, also zur wachsenden Einbeziehung nichtstaatlicher Akteure interpretieren – allerdings nur in stark verkürzter Zeitperspektive. Dass Technikentwicklung in voller Breite überhaupt zu einer staatlichen Aufgabe wurde, ist historisch relativ neu. Natürlich waren Herrscher beziehungsweise Regierungen immer schon an der Entwicklung von Militärtechnik interessiert; mit der beginnenden Industrialisierung kam die (ihrerseits zum guten Teil zunächst militärisch motivierte) Entwicklung von technischen Infrastruktursystemen hinzu, die der Staat vielfach in eigener Regie betrieb. Während es in Deutschland staatliche Technikregulierung seit dem frühen 19. Jahrhundert gibt (Dampfmaschine), motivierte erst der in den Sechzigerjahren des 20. Jahrhunderts einsetzende »technologische Wettlauf« die meisten modernen Industriestaaten zu gezielter Technikförderung, die unter der Bezeichnung Technologiepolitik lief (Stucke 1993; Braun 1997). Erst ab diesem Zeitpunkt konnte eine *Verschiebung* von »Steuerung« zu »Governance« stattfinden.

4 Phasen und Triebkräfte des Wandlungsprozesses

Zu Beginn der staatlichen Technikförderung nach dem Zweiten Weltkrieg dominierte die Vorstellung relativ einfacher, linearer und steuerbarer Innovationsprozesse. Hauptansatzpunkt der Politik war in den Sechzigerjahren die finanzielle Förderung der Industrieforschung, das vorherrschende Instrument die (thematisch selektive) Projektförderung. Dabei setzte die gezielte Förderung nicht bei der Erfindung, sondern in der späteren Phase der Stabilisierung an (Mayntz 2000: 11–15). In Reaktion auf die Ölkrise Anfang der Siebzigerjahre wurde die Förderung noch verstärkt. Etwa ab Mitte der Siebzigerjahre erscheint eine Politik überholt, die »einseitig auf die Entwicklung technischer Spitzenprodukte und auf deren naturwüchsige Durchsetzung auf dem Markt vertraut« (Sauer 1999: 12). Die fördernde Technologiepolitik mutiert zur Innovationspolitik. Das Zukunftsinvestitionsprogramm von 1977 soll sich an »gesellschaftlichen Bedarfsweldern« ausrichten und wird zum Impuls für lokale und regionale technologiepolitische Aktivitäten, die durch den erneuten wirtschaftlichen Einbruch Anfang der Achtzigerjahre im Kontext einer angebotsorientierten Wirtschafts-

politik noch intensiviert werden (Blöcker/Rehfeld 2001). Die bundesdeutsche F&E-Politik zieht sich zunehmend aus der Förderung der gewerblichen Wirtschaft zurück und wendet sich der Förderung von Grundlagenforschung, dem Ausbau der wissenschaftlich-technischen Infrastruktur und dem Transfer zwischen Grundlagenforschung, angewandter Forschung und Produktion zu. Gleichzeitig wird die Förderung auf kleine und mittlere Unternehmen und technologorientierte Unternehmensgründungen umgestellt (Grande 2000). Dieser Veränderung in den Ansatzpunkten der Förderung liegt eine erweiterte Vorstellung von den wissensmäßigen Voraussetzungen der Entwicklung neuer Produkte und Verfahren zugrunde: Man erkannte, dass die Beziehung zwischen wissenschaftlicher Forschung, Produktion und Nutzung nicht linear, sondern rekursiv ist, das heißt durch Rückkopplungen gekennzeichnet. Im Innovationsprozess beeinflussen Nutzer die Entwicklung, und die Entwicklung beeinflusst ihrerseits die wissenschaftliche Forschung. Schrittweise veränderte sich so das frühere lineare Kausalmodell.

Man erkannte jedoch nicht nur, dass der Innovationsprozess nicht linear verläuft, sondern auch, dass die Übergänge nicht in ausreichendem Maß spontan geschehen, dass also sowohl zwischen Grundlagenforschung und angewandter Forschung wie generell zwischen Wissenschaft und Wirtschaft aktive Vermittlung notwendig ist. So förderte das Bundesministerium für Forschung und Technologie Verbundprojekte von Wissenschaft und Industrie, denen allerdings aufgrund der Problematik der »vorwettbewerblichen« Kooperation nur ein relativ geringer Erfolg beschieden war (vgl. Lütz 1993). Technikzentren wurden gegründet und gefördert, Universitäten und die Max-Planck-Gesellschaft richteten spezielle Technologietransferstellen ein, die Gewerkschaften schafften Technologieberatungsstellen, Handels- und Handwerkskammern boten Innovations- und Gründungsberatung an und auch die kommunale Wirtschaftsförderung bediente sich entsprechender Instrumente. Die Erweiterung der Ansatzpunkte und Instrumente und die damit verbundene Beteiligung neuer Akteure führte zur vertikalen Differenzierung und horizontalen Diversifizierung der innovationspolitischen Architektur – womit allerdings eine gewisse Zersplitterung der Zielsetzungen einhergeht. Die neu auftretenden Akteure sind in Deutschland vielfach »staatsnah«, das heißt, es handelt sich um öffentliche beziehungsweise überwiegend öffentlich finanzierte Organisationen. Die anwendungsorientierte Weiterentwicklung verlangte aber neben der (staatlichen) Grundfinanzierung auch Risikokapital; so kamen Banken und private Investoren als Kapitalgeber hinzu. Dieser realen Entwicklung folgend wurden die sogenannten Science–Industry Relations zum Schwerpunkt in der Literatur der Neunzigerjahre (Etzkowitz/Webster/Healey 1998; Mayntz/Schimank 1998). Das unilineare Kausalmodell des Innovationsprozesses wurde jedoch nicht vollständig durch ein neues, rekursives Modell

abgelöst; vielmehr bestanden, wie sich auch an den eingesetzten Instrumenten ablesen lässt, beide Modelle nebeneinander, und ganz praktisch ging es weiterhin um die Beziehung zwischen Wissenschaft (Grundlagen- und angewandte Forschung) und Produktion (Hersteller). Die Hersteller sah man in Wechselwirkung mit ihren Kunden stehen, doch wurde die Nutzung innovativer Produkte durch Private nicht zu einem zentralen Ansatzpunkt der Förderung.

Die hier für die Bundesrepublik Deutschland rekonstruierte Entwicklung fand ähnlich in anderen europäischen Ländern statt (vgl. Abramson 1997). Wie Eberlein (1997) feststellt, ist auch in Frankreich teils durch dezentral-gebietskörperschaftliche Initiativen, teils durch die Verlagerung zentralstaatlicher Kompetenzen nach unten ein komplexes innovationspolitisches Mehrebenensystem entstanden, das von der zentralstaatlichen bis hinunter zur lokalen Ebene reicht. Als Triebkräfte nennt Eberlein eine wirtschaftspolitische Neuorientierung, den technisch-ökonomischen Strukturwandel und die Europäisierung.

Tatsächlich fand in Europa parallel zur vertikalen und horizontalen Differenzierung der nationalen Governance-Strukturen eine Ausweitung auf die internationale Ebene statt (Grande 2000; Barben/Behrens 2001). Diese Veränderung der Governance-Struktur entspricht dem durch zunehmende transnationale Verflechtung gekennzeichneten Strukturwandel der nationalen Ökonomien. Die innovationspolitischen Aktivitäten der Europäischen Union, zu denen der Aufbau von EURATOM und CERN gehörten, waren vor allem durch den Wettbewerb mit den USA und Japan motiviert. In den Achtzigerjahren wurden nationale industrie- und technologiepolitische Kompetenzen auf die EU übertragen; zugleich wurden (zum Beispiel im Programm EUREKA) intergouvernementale Formen der Zusammenarbeit entwickelt. Das Ziel dieser Initiativen war zuerst industriepolitisch: Es galt, die europäische Wirtschaft wettbewerbsfähig zu machen. Primäre Adressaten waren zunächst Großunternehmen; gefördert wurde die Kooperation von Unternehmen in bereichsspezifischen Förderprogrammen wie ESPRIT, BRITe, EURAM, und RACE. Ende der Achtzigerjahre und damit zumindest später als im deutschen nationalstaatlichen Kontext wurde die Förderstrategie der EU auf den Transfer zwischen Grundlagenforschung und industrieller Nutzung umgestellt. Eine dezidiert innovationspolitische Governance findet jenseits der EU bislang nicht statt; vielmehr geht es auf der internationalen Ebene zentral um Ordnungspolitik (Liberalisierung und Privatisierung, Vermarktlichung). Die in Form zwischenstaatlicher Abkommen und Konventionen vorliegenden internationalen Regime zielen auf Sicherheit, Gesundheits- und Umweltschutz und bedienen sich vorzugsweise der Regulierung durch das Setzen von Grenzwerten und Standards (Barben/Behrens 2001).

Ab den Neunzigerjahren fand auf nationaler und europäischer Ebene eine erneute Erweiterung in der Definition des Regelungsgegenstandes statt. Innova-

tion wurde nunmehr als Produkt eines institutionellen Kontextes, eines »nationalen Innovationssystems« (NIS) gesehen, in den Unternehmen als zentrale Akteure eingebettet sind. Mit Lundvall (1992) und Nelson (1993) versteht man unter NIS die spezifische (nationale) Ausprägung des institutionellen Kontextes, in dem Unternehmen operieren, und zu dem neben den wissenschaftlichen Institutionen und der staatlichen Förderung das Erziehungs- und Ausbildungssystem, der Arbeitsmarkt und das Finanzierungsregime (Banken, Kapitalmarkt) gehören. Kern des NIS-Modells bleibt allerdings der Grundlagenforschung, Anwendungsforschung und Produktion verbindende Prozess, den die anderen Institutionen von außen beeinflussen. Besondere Aufmerksamkeit gilt außerdem dem nationalen Bildungs- und dem auf Forschung und Entwicklung verengten Wissenschaftssystem. So erklärt Bonaccorsi (2007) das »europäische Paradox«, also die Tatsache, dass das quantitativ hervorragend entwickelte kontinentaleuropäische Bildungs- und Wissenschaftssystem den USA und einigen anderen Ländern in der Entwicklung moderner Spitzentechnologie hinterherhinkt, durch institutionelle Besonderheiten der universitären und außeruniversitären Forschung. Das von Dieter Sauer geforderte »umfassendere Innovationsverständnis« entspricht dem Konzept von NIS; zwar fällt das Wort in seiner Einleitung zum Sammelband von Sauer und Lang (1999) nicht, aber es ist die Rede von institutioneller Einbettung, von Kontextsteuerung und von Innovationsnetzwerken als »eher langfristig, kooperativ und »komplexitätsmächtig« ausgelegte[n] Beziehungen zwischen Technikherstellern, Nutzern, Zulieferern und institutionellen »Kontextbildnern« (Sauer 1999: 21).

Im Gefolge des neuen Kausalmodells fand sowohl auf nationaler wie auf europäischer Ebene eine Umstellung der Strategie durch die erneute Erweiterung der Ansatzpunkte und Instrumente statt. In Deutschland wurde Blöcker und Rehfeld (2001) zufolge bereits in der zweiten Hälfte der Achtzigerjahre das Ziel technologiepolitischer Förderung auch in der Wirtschafts-, Mittelstands-, Bildungs- und Arbeitsmarktpolitik verfolgt. Der BioRegio-Wettbewerb, 1995 vom Bundesministerium für Forschung und Technologie ausgeschrieben, wollte ausdrücklich das Umfeld für die Entwicklung der Biotechnologie stärken; ein ähnliches Ziel verfolgte 1999 der InnoRegio-Wettbewerb in den neuen Bundesländern. Auf EU-Ebene deutet bereits das Weißbuch zur Industriepolitik von 1990 eine Erweiterung der Perspektive an, indem es Wettbewerbs-, Handels-, Bildungs- und Umweltpolitik sowie Mittelstandspolitik einbeziehen will. 1995 führt ein Weißbuch zur Innovationspolitik (sic!) dies weiter aus: Der Adressatenkreis ist auf alle Akteure im NIS ausgedehnt, auch wenn die Anwendungsorientierung von Forschung und der Transfer Schwerpunkte bleiben. Nicht überraschend diagnostiziert Grande (2000) für eine derart erweiterte Politik massive Koordinationsprobleme horizontaler und vertikaler Art.

Die Stärkung beziehungsweise Unterstützung von Kooperation scheint dort besonders stark zu sein, wo sie projekt- und themenzentriert läuft; der Aufbau eines generell innovativen Umfelds gestaltet sich dagegen wesentlich schwieriger. Ein über die bestehenden Produktionsketten hinausgehendes Innovationspotenzial wird in den Projekten der regionalen Innovationspolitik sehr selten realisiert [...] (Blöcker/Rehfeld 2001: 399)

Die Erweiterung der innovationspolitischen Sichtweise zum Modell des NIS fand wieder schrittweise statt. Eine 1999 am Max-Planck-Institut für Gesellschaftsforschung veranstaltete Tagung »Strukturen, Funktionen und institutioneller Wandel nationaler Innovationssysteme«, auf der der Beginn des Umdenkens mit »gegen Ende der Achtzigerjahre« angesetzt wird, findet die Rezeption des NIS-Konzepts in Deutschland immer noch verbesserungsbedürftig (Hohn 2000). Tatsächlich wird der Begriff NIS in den Beiträgen dieser Tagung noch überwiegend in der engen Variante der – vom Staat geförderten – Beziehung zwischen Institutionen der Grundlagenforschung, der Anwendungsforschung und von Transfereinrichtungen verwendet. Auch in der Förderpolitik laufen die verschiedenen Modelle und Ansätze bis heute nebeneinander her. Die 1997 vom Bundesministerium für Bildung und Forschung ausgeschrieben »Leitprojekte« setzen nach wie vor auf die Kooperation von Wissenschaft und Unternehmen (letztere als federführende Antragsteller) – mit dem Ziel, neue Produkte »mit hohem Marktpotenzial« auf der Grundlage neuer Technologien und Produktionsverfahren zu entwickeln.

5 Schlussfolgerungen und offene Fragen

Die eingangs gestellten Fragen nach etwaigen Veränderungen in der Architektur der Innovationspolitik und ihren Ursachen lassen sich jetzt beantworten. In den letzten Jahrzehnten hat sich diese Architektur von der anfänglich zentralen Steuerung zu einer horizontal und vertikal differenzierten Governance-Struktur gewandelt. Diese Umstellung ist ein *Bestandteil* des Übergangs von zentraler nationaler Steuerung zu »Governance«. Zwar kann sich das normative Staatsverständnis ganz allgemein, also ohne Bezug auf spezifische Regelungsfelder ändern, der reale Prozess des Wandels von Governance findet aber immer in einzelnen, konkreten Regelungsfeldern statt, und dort ist er, wie wir wissen, keineswegs gleichläufig. Nur wenn der Wandlungsprozess tatsächlich in der Mehrzahl der Politikfelder in diese Richtung zeigt, darf man von einem Wandel des Interventionsstaats zum »kooperativen Staat« sprechen. Anders gesagt: Der Wandel zum kooperativen Staat ist nicht Ursache, sondern Folge der Entwicklungen in konkreten Politikfeldern.

Zu den Ursachen der miteinander verbundenen Veränderungen bei den Akteuren, den Ansatzpunkten und den Instrumenten der Innovationspolitik gehören zum einen unzweifelhaft Veränderungen der technische Innovationen hervorbringenden Produktionsstruktur durch die Globalisierung der Wirtschaft und den wachsenden internationalen Wettbewerb. Eine davon zumindest teilweise unabhängige Rolle hat ein kognitiver Faktor gespielt, nämlich Veränderungen im kausalen Modell des Regelungsgegenstands »Innovation«. Wie aus der Wirtschaftspolitik wohl bekannt, legt das jeweils vorherrschende kausale Modell des Regelungsfelds der Politik Ansatzpunkte und Strategien nahe. Das jeweilige Modell des Regelungsfelds spiegelt einerseits seine (sich unter Umständen verändernde) reale Beschaffenheit wider, wird aber zugleich von einer innerwissenschaftlichen, theoretischen Dynamik geprägt; dieser Zusammenhang lässt sich auch an der Entwicklung des steuerungstheoretischen zum governancetheoretischen Paradigma ablesen (Mayntz 2005 bzw. Aufsatz 3 in diesem Band).

Es gibt noch einen hier nicht weiter untersuchten dritten Faktor, der zu den beobachteten Veränderungen in der Governance-Struktur beigetragen haben könnte, nämlich wissenschaftliche Entwicklungen, die zu einer Verschiebung bei den jeweils für besonders wichtig und daher förderungswürdig gehaltenen »Schlüsseltechnologien« führen. Derartige Verschiebungen, die mit den antizipierten Nutzungen und dem ökonomischen Potenzial neuer Technologien zusammenhängen, manifestieren sich in der Verteilung der staatlichen Fördermittel auf verschiedene Förderbereiche. So hat sich in Deutschland die politische Aufmerksamkeit im Laufe der Zeit von der Kerntechnik über die Informationstechnik zu Bio- und Nanotechnologie hin verschoben.⁴ Entscheidend für die Auswirkung solcher Verschiebungen auf die innovationspolitische Governance ist dabei die eingangs kurz bemerkte Tatsache, dass sich verschiedene Technologien durch ihre Produktions- und Nutzungsstrukturen unterscheiden und damit verschiedene Ansatzpunkte für die Förderung bieten, wodurch wiederum verschiedene Regelungsakteure angesprochen sein können. Nur ein Vergleich zwischen verschiedenen *Technikarten* würde es erlauben, dies im Einzelnen nachzuzeichnen. Dabei könnte sich dann ergeben, dass es zwischen den heutigen Spitztechnologien – Biotechnologie, Computer Science, Nanotechnologie – und der diversifizierten und dezentralisierten innovationspolitischen Governance-Architektur eine ähnliche Entsprechung gibt, wie sie seinerzeit zwischen der Struktur großer technischer Infrastruktursysteme und ihrer hierarchischen

4 So ist nach einer aktuellen Auszählung der Anteil der Energieforschung an den Fördermitteln des Bundesforschungsministeriums zwischen 1982 und 2006 von 25 auf 5 Prozent gesunken, während der Anteil des Bereichs Gesundheit und Medizin sich in diesem Zeitraum verdoppelt und der des Bereichs Biotechnologie sogar verdreifacht hat.

(zentralstaatlichen) Regelung bestand (Mayntz 1993). Auch die Verschiebung in der relativen Bedeutung verschiedener Technologien könnte damit ein Faktor des Wandels der innovationspolitischen Governance-Architektur und damit des Wandels vom Interventionsstaat zum kooperativen Staat sein.

Die Rekonstruktion der technik- und innovationspolitischen Umorientierungen erlaubt es aber nicht nur, verschiedene Triebkräfte für die Veränderung innovationspolitischer Governance zu identifizieren. Gemessen an dem theoretischen Modell von Abbildung 1 verweist diese Rekonstruktion vielmehr auch auf eine bestimmte Selektivität von Innovationspolitik: Selbst die nicht nur auf die Förderung von Forschung und Entwicklung konzentrierte Innovationspolitik vernachlässigt bis heute Probleme, die mit dem Übergang von der Herstellung (Stabilisierung) zur Nutzung (Durchsetzung) zu tun haben.⁵

Für die Entwicklung eines potenziell marktgängigen Produkts ist es wichtig, dass Hersteller das Angebot von Forschung und Entwicklung in die Produktion umsetzen. Hier scheint jedoch in der Praxis ein massives Problem zu liegen. Nicht nur die eigene Innovationsleistung der Unternehmen, auch die Rezipitivität von Herstellern für angebotene technische Innovationen ist beschränkt, wenn eine profitable Abnahme (der Markterfolg) nicht gesichert ist oder fraglich erscheint. So beklagen unter anderem Max-Planck-Institute eine beschränkte Innovationsnachfrage von Unternehmen (Mayntz 2001), und auch finanzielle Anreize des Staates können, wie Grande und Häusler (1994) festgestellt haben, Unternehmen nur selten dazu motivieren, innovative Forschungslinien aufzubauen, die nicht ins eigene Konzept passen. Erst die erwartete Durchsetzung am Markt motiviert Unternehmen zum Transfer von Erfindungen in die Produktion, das heißt zur »Stabilisierung« einer Innovation. Die (rekursive) Abhängigkeit des Übergangs von der angewandten Forschung in die Produktion (das heißt der »Stabilisierung«) von der künftigen Nutzung ist ein zentraler Bestandteil des nichtlinearen Modells des Innovationsprozesses.⁶

Das hat man theoretisch durchaus gesehen. Zwar wurde die einmal populäre These vom *technology push* nicht einfach durch die Gegenthese vom *demand pull* ersetzt. Aber auch wenn die sozialwissenschaftliche Technikforschung die Vielfalt der Triebkräfte betont, die die Technikentwicklung prägen, gilt vielen das Profitstreben kapitalistischer Unternehmen immer noch als zentraler Faktor (Mayntz 2000: 7–8). Weyer et al. (1997) betonen dementsprechend, dass sich das

5 Dem entspricht, dass selbst im Konzept des NIS die Abnehmer beziehungsweise Nutzer nicht zum System gerechnet werden.

6 In staatssozialistischen Ländern sind es nicht antizipierte Nachfragemängel, die die Umsetzung von Innovationsangeboten der Forschung in die Produktion behindern, sondern den industriellen Produktionsprozess selbst belastende Probleme (zum Beispiel bei der Materialbeschaffung; vgl. Gläser/Meske 1996).

»Genese-Netzwerk« am Ende zum Markt hin öffnen muss; es wird zu einem »Innovationsnetzwerk« nur, wenn Marktakteure aktiv darin mitwirken. Markterfolg ist aber faktisch schwer vorhersehbar. Wie die Technikgeschichte immer wieder feststellt, besteht für Innovationen zunächst oft keine kaufkräftige Nachfrage. So gab es für elektrisches Licht, Telefon und Eisenbahn zuerst keinen »Bedarf«; erst später wurden diese Innovationsprozesse selbsttragend. Wenn die »aktive Konstruktion von Anwendungsfeldern und Märkten selbst ein wesentlicher Faktor für den Erfolg von Innovation ist« (Sauer 1999: 17), dann könnte man folgern, dass die Schaffung von Märkten ein wesentlicher Bestandteil von Innovationspolitik sein sollte.⁷

Politisch lässt sich die Nutzung von neuen Produkten und Techniken entweder mit Steueranreizen für den Kauf bestimmter Produkte beziehungsweise dadurch beeinflussen, dass öffentliche Instanzen selbst Auftraggeber beziehungsweise Abnehmer sind. Diese Instrumente werden jedoch selten innovationspolitisch zur Nachfragesteuerung eingesetzt. Mit Steueranreizen werden, wie beim Kat oder bei der Solartechnik, zum Beispiel umweltpolitische Ziele verfolgt, und als Abnehmer fungiert der Staat heute vor allem im militärischen Bereich. So bleibt die nationale Innovationspolitik trotz diversifizierter Ansatzpunkte und Instrumente überwiegend eine Angebots-Förderungs-Politik, die nicht mehr primär durch Ziele wie Wachstum und (internationale) Wettbewerbsfähigkeit motiviert wird, sondern zum Instrument umwelt-, militär-, informations- oder verkehrspolitischer Ziele geworden ist. Natürlich wurde auch früher schon Innovation nicht *per se*, sondern immer in konkreten Technikfeldern gefördert. Dennoch deutet sich hier eine weitere Veränderung in der Konzeption des Regelungsfeldes an: Innovation löst sich als eigener Regelungsgegenstand auf und wird zum Bestandteil einer langen Reihe sektoral definierter Politikfelder. Die Politikfelder, auf die Governance sich jeweils bezieht, sind nicht abstrakt definierbare, stabile Gegebenheiten, sondern selbst Gegenstand von materiellen und ideellen Wandlungsprozessen.

7 Die Vorstellung, dass die reale oder erwartete Marktschwäche die Innovation bei den Herstellern hemmt, unterstellt allerdings allzu simpel, dass Hersteller Profit am Markt suchen. Das entspricht dem Marktmodell der Ökonomen. Tatsächlich werden zunehmend die vom internationalen Finanzmarkt ermöglichten strategischen Alternativen der Profitsuche durch Investitionen am Kapitalmarkt, durch Fusionen und durch Rationalisierung genutzt, um Profit zu erzielen. Hier zeigen sich ganz neue Ansatzpunkte für eine systemisch orientierte Innovationspolitik – die allerdings in unserem Rechtssystem noch schwieriger zu beeinflussen sein dürften als die Marktnachfrage.

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8 The Changing Governance of Large Technical Infrastructure Systems (2008)

1 The Analytical Perspective

The changes that large technically based infrastructure systems have undergone in the past decades are well documented (e.g. Eising 2000; Schneider 2001; van Riesen 2007). However, these changes have been and continue to be studied in the confines of two separate research approaches: studies in the tradition of large technical systems (LTS) analysis that emphasize technological developments, on the one hand, and studies within the framework of governance theory that emphasize changes in the regulation of technically based infrastructure systems, on the other. These two scholarly traditions have rarely been linked explicitly, even though the terminology of governance is commonly used in the LTS literature (e.g. Coutard 1999). An attempt to apply the governance perspective explicitly to LTS while taking their technological features fully into account can build upon the distinction between regulation and production occasionally used in governance research. This extension of the analytical framework permits us to inquire more systematically into the relationship between the regulatory, the organizational, and the technological structures of LTIS,¹ and into the forces that cause them to change.

The term governance is applied to higher as well as lower territorial structures (i.e. local, European, global governance), to firms (corporate governance), to industries (industrial governance), and to economic systems (economic governance). However, the meaning of governance varies with its empirical referent. The wider, sociological concept of governance refers to the different modes of action coordination – state, market, corporate hierarchy, association, community, clan, and network. This concept is sometimes used in the analysis of economic systems (e.g. Crouch 2005: 21). Economic or industrial governance thus refers to the combination of market relations, hierarchical relations, and networks that characterize a given industry or national economy. Applied

¹ I use this acronym to underline the difference between spatially extended infrastructure networks and other types of LTS, such as nuclear power plants or container terminals.

to the nation-state, the European Union, or transnational («global») structures, the term governance is used in the narrower political-science sense that focuses on different forms of *deliberate* collective action in matters of public interest, i.e. authoritative political intervention, private self-regulation, and cooperation between public and private actors. Here governance refers to regulation,² i.e. to the development and application of rules (e.g. laws, directives, guidelines, standards, codes of conduct, etc.) directed at specific target populations, and the – public as well as private – rule-makers involved. The term governance has also been used in this sense in studies comparing the governance architecture of different economic sectors (Article 6 in this volume; originally Mayntz 2007), and in studies of supply-chain governance (e.g. Macdonald 2007). In this research, the governance structure is analytically distinguished from the production structure to which it relates, corresponding to the distinction between *Leistungsstruktur* and *Regelungsstruktur* used by Mayntz and Scharpf (1995: 16). The conceptual differentiation between production structure and regulatory structure is meaningful also for studies of large technically based infrastructure systems, where it is, in fact, occasionally used (e.g. by van Riesen 2007).

In the early LTS literature (Hughes 1983; Mayntz/Hughes 1988), some conceptual ambiguity existed in connection with the term »technical system.« While Joerges thought the term referred exclusively to »machineries and freestanding structures performing [...] complex standardized operations« (Joerges 1988: 23–24), Hughes considered technical systems as designed problem solutions that include social and cultural components. In fact, LTS may well be treated as socio-technical systems, a concept originating in the 1950s at the London Tavistock Institute and going back to an article by Trist and Bamforth (1951) on the longwall method of coal-getting. In these studies it was recognized that a given technology did not determine the organization of work, but offered a restricted corridor of ways to use it; the choice between the available alternatives being determined by political, economic, and cultural factors (see Emery/Trist 1960; Trist et al. 1963). The theory of socio-technical systems was absorbed quickly into the field of organizational design and the study of man–machine relations in productive organizations (see Herbst 1974). The theoretical core of this literature concerns the relationship between the social and the technical components of socio-technical systems. In industrial sociology and in studies on technological innovation, the distribution of operations between human actors and machines, the tendency toward automation, and the consequent con-

2 »Regulation« is to be understood here in the sense of *Regelung*, often used as a synonym of governance in German, while *Regulierung* means governance by means of norms backed by the threat of sanctions, i.e. it refers to one particular mode of governance.

centration of human activities either on simple support activities or on monitoring and control has been of major interest.³ The socio-technical systems in such studies have normally been productive organizations, managed and controlled by a single owner or CEO.

In the LTS literature, the term governance has been applied without distinction to the production structure (or *Leistungsstruktur*) and the regulatory structure of a given technically based infrastructure system, which mixes the wider sociological with the narrower political-science meaning of the term. Where LTS are organized as state-owned or state-controlled monopolies, this produces no conceptual problem, as both their production structure and their political regulation are characterized by the same hierarchical mode of governance. But where production systems are private and organized as markets, only the wider (sociological) concept of governance can be applied to their structure, while their regulation, be it public or private, is described in terms of the narrower perspective of (political) governance.⁴ In this case, the lack of a terminological distinction between what might be called the »internal« governance of a production system and its »external« governance or regulation generates ambiguity. To avoid such terminological confusion, I shall therefore speak of governance only with reference to the (external) regulation of LTIS. If LTIS are considered explicitly as socio-technical systems, and if we distinguish between the social and the technical aspects of their production structure, we thus arrive at an analytical framework composed of three dimensions: (a) the technology used in producing a given good or service, (b) the social organization of production, and (c) its external regulation (see Figure 1). The first two dimensions define the structure of the production system (or production structure for short) of a given LTIS, which will be distinguished terminologically from its regulation in the following analysis. Speaking of railroads, Lodge (2007: 161) makes a similar distinction between »organization structure« and »regulation competences.«

In order to study the interrelationships between the regulatory structure, the production structure, and the techno-structure of LTIS, the following analysis will compare four technically based infrastructure systems: telecommunication, rail transport, the provision of electricity and of water. They all share the characteristic that physical networks are crucial parts of their technological base. The socio-technical systems of telecommunication, electricity provision, and rail transport have been created deliberately on the basis of relatively recent

3 For an excellent recent study, see Cramer/Weyer (2007).

4 In fact, the (political) governance perspective has been developed especially for the analysis of policy fields that enjoy relative autonomy – a carry-over from the earlier theory of political steering.

Figure 1 Analytical Categories

| | | |
|------------------------|-----------------------------------|----------------------|
| | | Regulatory structure |
| Socio-technical system | Social organization of production | Production structure |
| | Technology | |

technological innovations. Utilities such as water provision and sewage disposal are, in contrast, traditional services whose technologies have changed slowly over centuries.

Production structures are often conceived of as production chains, leading from the supply of parts or raw material to production, then to distribution, and finally to marketing and consumption (e.g. Fichter/Sydow 2002). Every component of the production chain usually involves a specific technology (or technologies). The concept of the production chain is synonymous with the concepts of the commodity chain and the value chain familiar in economic analyses (Gereffi/Korzeniewicz 1994; Gereffi/Humphrey/Sturgeon 2005). Although the concept of a chain suggests links that are arranged *horizontally*, value chains are said to vary in the extent to which they are *vertically* integrated. Both this adverb and the chain metaphor can be misleading. The elements of a production structure need not be aligned in a sequence of steps, as in the production of pharmaceuticals and electrical power; they can also form a system of elements jointly producing a service, as is the case in telecommunication and in rail transport. In these cases, distribution does not *follow* production; production of the service involves the *joint* use of a physical net for distribution and specific technical artefacts (telephones, trains).

The concept of a production structure can be applied to a single firm as well as to an industrial sector – two analytical levels already distinguished by Coutard (1999) with regard to LTS. To study different LTIS and their change over time, analysis must obviously be set at the industry level. Industries differ in the degree of concentration (number of active firms/corporations) and in functional integration, i.e. the degree to which firms encompass or specialize in different components of the production chain – a familiar distinction in business theory. The two dimensions can vary independently of each other (Figure 2). There is a third analytical dimension, not depicted in Figure 2, that is of great importance for infrastructure industries – the public or private ownership of the firms. »Concentration« has both a numerical and a spatial dimension; this shows up in the upper right quadrant of Figure 2, which features industries with a majority of functionally integrated firms. These firms can either be territorial (regional or local) monopolies or firms competing with each other in the same territory.

Figure 2 Forms of LTIS Organization

| | | Concentration of national industry | |
|------------------------|------|------------------------------------|---|
| | | high | low |
| Functional integration | high | Public/private monopoly | Public/private local/regional monopolies Oligopoly (private) |
| | low | Specialized »monopolies« | Markets |

I shall use the conceptual framework developed in this section basically to ask three questions: (1) What have been the major changes in the social organization of the four LTIS since the 1970s? (2) What has driven the process, and how has the regulation (the governance) of these LTIS changed? (3) What has been the role of technology and technological innovation in these changes?

2 Historical Baseline

When LTS became an object of interest to social scientists, they appeared predominantly as large territorial monopolies – spatially extended systems that comprised production, distribution, and marketing and that were hierarchically controlled within and politically regulated from without. This idealized description does not fit all LTIS or their development in different countries equally well. Historically, the four LTIS considered here started as small organizations. Whereas municipal water networks were usually organized as public utilities, telecommunication, railroads, and electrical power often started as small private enterprises. Driven by economic considerations and enabled by technological improvements, they subsequently expanded spatially, often by way of mergers between local or regional monopolists. Technical and organizational bottlenecks as well as critical mass problems that arose in the course of expansion stimulated further technological innovations; the introduction of alternate current is one of many examples. As the military potential of telecommunication and of railroads was recognized, these industries came increasingly under public control.

The importance of telecommunication, railroads, and electricity as infrastructure systems for a growing industrial economy justified the involvement of a state that had taken charge of economic development. Infrastructure provision became one of the accepted functions of the modern state (Jäger 2004). The state promoted LTIS development by acting as owner, as investor and by financing research and development. Nevertheless, in the first half of the twentieth century, many utilities continued to be organized as private companies. It was only after World War II that the publicly owned or regulated, integrated national monopoly became a dominant model for the organization of telecommunication, electricity, and rail transport. Even then there were some exceptions to this model, as illustrated by the »essential facilities« doctrine of the United States or the »negotiated associations' agreement« in Germany (Voß 2007: 124–127).

3 Changes in Technology⁵

In order to appreciate the changes in LTIS organization dealt with in the next section, it is necessary to review very briefly the most important technological innovations tied to these changes. Technological innovations may originate in a particular country, but once developed, they become available, in principle, to all countries. However, the point at which such innovations are introduced and the extent to which they are used varies from country to country. Technological innovation has affected the four LTIS discussed here very unevenly. The most radical innovations took place in telecommunication, where the telephone and the transmission network jointly produce the service in question. The telephone apparatus changed, too, but the crucial innovations took place in transmission. The use of optical fiber cables increased the volume of transmission and made parallel cable networks feasible. Digitization and the computer made for a new switching technology; this increased the speed, and lowered the costs of transmission considerably. Computerized exchanges have also been essential for third-party access by enabling local exchanges to differentiate between calls accountable to different firms. The development of wireless transmission on the basis of electromagnetic waves generated an alternative way of telecommunication, i.e. mobile telephony. The wireless revolution began when low-cost

⁵ Where no specific reference is given, this section is based on documentary material collected by Fatih Dilekci, information on telecommunication orally provided by Raymund Werle, and information on electricity transmission provided by Eckhard Pflaum. Fatih Dilekci also helped with the literature research for this paper.

microprocessors and digital switching became available. Mobile telephony connections have risen within ten years in OECD countries from below 10 per 100 inhabitants to over 80 per 100 inhabitants (Werle 2009). Mobile telephony initially involved satellites but is now based on a network of terrestrial radio base stations, where mobile switches collect and transmit calls and can also pass them on to a cable network. The Internet used to be based on the cable network but now relies on wireless transmission, too. The Internet offers not only an alternative to postal services, but also a software- defined telephone service, called VoIP (Voice over Internet Protocol).

The production system of railroads resembles that of telecommunication in that transmission/distribution is the crucial element in the production chain. Together with trains, it provides the service of transporting passengers and freight. However, there have not been similarly radical technological innovations in the railroad industry as there have been in telecommunication (Lodge 2007: 158). Electrification has replaced the steam locomotive, and faster trains requiring new train paths, such as the British Advanced Passenger Train, the French TGV, and the German ICE, have been introduced. The expansion of cross-border transport that had been blocked historically for reasons of military defense brought about changes in rail width and innovations in electronic communication and signalling. The physical network itself has experienced only incremental improvements (e.g. in material, in rail maintenance technology) until the advent of the magnetic levitation train. The project of a maglev, as it is called, was pursued even before the First World War. Still, this new technology has only been implemented in a very few cases, e.g. by the German Transrapid and the Japanese Chuo-Shinkansen and HST. Since people and freight can not (yet) be »beamed,« no alternative to earthbound rails has evolved, but technology has been developed to measure rail utilization by different firms.

In electricity, technological innovation has affected both production and distribution. The material base of power production became more diversified as coal and hydropower were supplemented by oil, gas, and nuclear power. The combined cycle gas turbine (CCGT) is an innovative hybrid production technology that has been used widely in some countries (e.g. the UK) when natural gas became easily available. Gas-fired power production can take place in small plants; CCGTs reach full output a few minutes after a cold start, and their conversion efficiency is comparatively high. More recently, technologies for small-scale, decentralized power production have been developed, such as windmills, solar cells, and biogas energy production. Some of these produce both heat and electricity in close proximity to the consumer. There have also been significant improvements in the transmission capacity of the networks. Since direct current is necessary to couple high-voltage networks over very long distances or

through underground- or sea-cables, the development of more powerful rectifiers with the help of semiconductor technology has been another significant improvement. Rectifiers are converters that transform alternate and three-phase current to direct current. These different types of current need different wires for transmission, which is also true of currents with different voltage needed for different uses. Innovations in converter technology have made network expansion and differentiation possible. None of these innovations provided an alternative way of transmission.

In contrast to the three historically new LTIS, the provision of water has experienced very little technological innovation since the time of the Romans. Over time, the ability to tap ground water sources has improved with more efficient drilling, and there have been improvements in water quality control, purification, and pipe maintenance technology. The most significant recent innovation is desalination, used for instance in the Emirates. While there have traditionally been some alternatives to the use of water from public utilities, such as rainwater collection and private wells, these forms of decentralized water production are not widespread.

4 Changes in the Organization of Production

From the very beginning, there have been substantial differences between countries in the organization of the modern LTIS, especially with respect to their public or private character and the degree of concentration in the industry. These differences confirm the core thesis of socio-technical systems theory, i.e. that new technologies define corridors within which the organization of their use can vary. It is not the purpose of this paper to explain the resulting differences between countries. I shall limit myself to stating the general trends of change in the organization of LTIS.

The general direction of change in the organization of LTIS is usually referred to as liberalization, another ambiguous term that is usually understood to include both deregulation, i.e. the abolition of legal barriers against competition both within a country and between countries, and the privatization of public enterprises. Liberalization essentially means the creation and expansion of competitive markets. In the course of liberalization, the organization of LTIS has moved from functionally integrated, public or publicly regulated monopolies to a system of markets in which firms specialized in one segment of the production chain compete with each other. The general trend thus goes in the direction of the lower right-hand quadrant of Figure 2. Market creation involves changes

along the three previously distinguished dimensions: The functional integration of production chains has been broken up, i.e. chains have been »unbundled«; there has been a general shift from public to private ownership; and concentrated industry structures have been deconcentrated. There has, however, also been a tendency toward concentration in industries that were traditionally dispersed. In England and Wales, for instance, where over 3,000 municipalities had a water utility before 1974, the utilities were fused into ten private regional monopolies that eventually became shareholding companies (von Braunmühl 2005: 22–23).

These general trends can manifest themselves in different forms and degrees of intensity. »Unbundling« can mean the formal – for instance budgetary – separation of the major components of the production chain that still remain part of a holding, or it can mean the establishment of fully autonomous firms for each link of the chain. Deconcentration can mean the replacement of a national monopoly by several (functionally integrated) corporations, as happened when the British government sold the public telecommunication monopoly and licensed one (!) competitor. It can also mean the growth of many small, functionally specialized firms. There are also different degrees of change in ownership. The variety of property forms ranges from full integration into public administration, via autonomous state administration, public-law corporation, private-law corporation with public majority owner, to regulated fully private corporation – a typology used in Schneider and Tenbücken (2004). Where municipalities or small regional authorities are responsible for the provision of electricity and water, public–private partnerships have often been created. In France, for instance, big international corporations like Vivendi and Suez provide drinking water on the basis of concessions or leases from local governments that retain formal responsibility. To create a market, privatization, »unbundling,« and deconcentration must come together. The privatization of a public monopoly does not create a market. A plurality of territorially bounded, regional or local public utilities constitutes a deconcentrated industry, but it does not involve competition and hence does not constitute a market either.

The change of LTIS organization has been a process over time, proceeding at different speeds in different countries, and for the four LTIS. Liberalization has been a classical case of policy diffusion. Alternatives to the »integrated monopoly model« were developed theoretically between 1960 and 1980, and exceptions became more widespread (Voß 2007). LTIS privatization started with telecommunication in the United States, followed by electricity and railroads in the United Kingdom, and became the core policy pursued by the European Union. Schneider and Tenbücken (2004), who have traced the trajectory of LTIS privatization in different countries in a comparative project, find significant differences both in the speed of transformation from public to private and

in the resulting public–private mixes. The most extreme differences are probably found in the social organization of water provision: while in France two international corporations dominate the industry, the majority of the 6,000 providers in Germany are still public utilities and private-law companies in public ownership (Deutsche Bank Research 2000).

For technological reasons, the different parts of a production chain can be amenable to market creation to different degrees. Where electrical power is produced on the basis of coal, water, and uranium, the only economically feasible option are large plants that are costly to construct and to run; this favors at least regional monopolies. In the case of water provision, it is not a specific production technology but the geographically dispersed or concentrated availability of water that favors a specific organization of production. Small organizations of local reach flourish in the first case, and large organizations with a more extensive pipeline network, in the second case. However, for all four LTIS the biggest barrier to radical change in the organization of production has proved to be the physical distribution network. This barrier has only been overcome in telecommunication, where a technological alternative to transmission via the cable network is now available. The maintenance of physical networks is a cost-intensive, permanent task. As Hellwig (2007) suggests, not all network proprietors can get a price for their service that is sufficient to maintain and constantly improve the system. Where distribution occurs by way of a physical network, this is also the point of greatest vulnerability. In electricity provision, the greatest economic losses are regularly produced by power outages caused by breakdowns in distribution.

If network liberalization is not feasible, the alternative is to grant network access to competing producers, which at least permits the creation of a market in production. Aided by computerized switching technology, free network access is today most extensive in telecommunication, but it is technically possible also in the other three LTIS. Network access has not been a technical problem in water provision since Roman times, nor is there a technological barrier to having the trains of different companies use the same network of railroad tracks. In electricity, network access requires adaptations in transmission technology. Nevertheless, free access to electricity networks appears to be more widespread than to railway networks, where access tends to be limited to international firms active in transborder freight transport. If free access in LTIS continues to be contested, it is for economic and political reasons, or – as in the case of water⁶ – for public-health concerns, and not for technological reasons.

⁶ The fact that mixing water from different sources makes it practically impossible to assure constant quality is even considered a *technical* barrier to liberalization (Deutsche Bank Research 2000: 8).

In the end, the extent of liberalization varies considerably between the four LTIS. It has progressed most in telecommunication and less, although with significant variation between countries, in electricity, railroads, and the provision of water. Nor does privatization always mean that competitive markets have been created. This is not only true where a public monopoly is privatized as a whole. Water provision, for instance, has been formally privatized and deconcentrated in England and Wales; but while enterprises can compete for contracts to serve a specific territory, consumers usually have no choice between different providers. Only in telecommunication does a regular market exist: in Germany, 85 firms offered telephone and data transfer services by the end of 2006 (Dohmen/Jung 2008).

Where deconcentration, unbundling, and privatization have taken place, it is not only the ownership structure of production and of distribution that has changed; there have also been other significant changes in the social organization of the production chain. Where the whole production chain was in the hands of a single organization, production, distribution, and sales used to be closely linked. Unbundling has legally severed this linkage. In telecommunication and electricity, core distribution networks (trunk lines) and peripheral networks that distribute directly to consumers are managed by different enterprises. More importantly, liberalization has introduced a new link into the production chain in the form of brokers and resellers, who constitute markets that mediate between producers and distributors. In telecommunication, resellers buy network capacity from network owners and sell it to service providers; this has become the model for resale in electricity, too. In both the United Kingdom and Germany, there is now an official exchange where electrical power is traded on a daily basis. Retail markets and exchanges have long existed for many privately produced goods, but they are new where functionally integrated monopolies used to dominate.

Technological development can change not only the internal structure but also the boundary of an infrastructure industry, as has occurred in the case of telecommunication. Telephony used to be organizationally separated from postal services, but with digitization and the related development of electronic media, particularly the Internet and its e-mail and VoIP services, telecommunication and information technologies started to merge, blurring the boundary to the postal services. Technological innovation has thus led to the fusion of several distinct production systems into one encompassing information-and-telecommunication system that offers a large variety of services, including Internet access via a mobile telephone. A similar, if much less pronounced development can be observed in the case of railroads, where new container trains connect the railway network with waterways and road transport.

The changes in the structure of LTIS industries have led to new power structures that are insufficiently described by indicators of market creation such as the number of competing firms. Markets have very different structures, and the interdependencies among market actors are often countered by contractual strategies and mergers. MacKenzie (2008), for instance, points to the transformation of the Irish telecommunication industry from a series of decentralized local networks of suppliers to a highly centralized arrangement that increasingly resembles a unitary hierarchy. Perrow (2008) has characterized the changes that have recently taken place in the U.S. economy at large as a trend toward a new form of concentration, based on tight relations between producing firms, suppliers, wholesale traders, and retailers. This may well hold also for LTIS industries in Europe; it is a development that makes the true market power of individual corporations difficult to discern. Even more difficult to assess may be the changes in the economic power structure wrought by the increasingly important role played by the finance market in infrastructure industries. Privatization, last but not least in the form of public–private partnerships, has been accompanied by the creation of infrastructure funds that are constructed in a manner resembling the way the finance instruments based on sub-prime mortgages had been (Leyshon/Thrift 2007; Rügemer 2008). This enables large investors to exert influence on the management and particularly on the profit orientation of infrastructure enterprises.

Connected with these – insufficiently analyzed – changes in their power structure are the consequences that the liberalization of LTIS has had for the performance of the industries concerned. In functionally integrated public monopolies, the state was able to prescribe the policy pursued by the management. Liberalization has created new corporate actors who set and pursue their own goals – market actors who face competition, need to defend their domain, and seek profit rather than the creation of a public good. The effects of this transformation are contested. Megginson and Netter (2001) conclude from their survey of empirical studies on privatization that, by and large, research supports the proposition that privatized enterprises become more efficient, more profitable, and financially healthier; but most studies also find that employment in privatized firms usually falls. The greater efficiency may thus be achieved by rationalizing and cutting costs with negative consequences for employment. At the same time, efficiency could lead to lower prices for consumers. Indeed, prices have steadily decreased in telecommunication (e.g. Deutsche Bank Research 2008). This is usually attributed to liberalization, although it is largely due to the introduction of cheap modern switching technology. As Eurostat statistics show, the decrease of electricity prices, also generally attributed to liberalization (e.g. Kemper 2001: 21), mainly benefited industrial consumers and

has been rather short-lived. Here, too, experts think that competition had only a very small positive impact on prices.

Skeptical observers blame liberalization for deteriorating service quality and coverage, and even for rising prices. Although Grande and Hartenberger find that the feared negative effects of liberalization were not observed by and large, they consider at least the provision of a universal service by the privatized British railroads to be »poor« (Grande/Hartenberger 2008: 227). The unbundling, deconcentration, and privatization of British railroads failed both economically and with respect to service quality (van Riesen 2007: 187–195). The spectacular power blackouts in the United States were attributed not only to the physical connectivity of vast electricity networks, but also to deregulation (Voß 2007: 152). In the United Kingdom, the price of water has risen by 40 percent since privatization in 1989, with firms enjoying a profit margin of 35 percent (Deutsche Bank Research 2000). Where prices do rise as a consequence of liberalization, this increase may be due at least in part to the role now played by brokers and resellers, and by the financial market impinging upon the profit orientation of producers. In any case, the clearly ambivalent effects of liberalization emerging from such evidence throw doubt on its official justification, namely, to supply the consumer with efficiently produced, high-quality service at a favorable price.

5 The Driving Forces of Change

Governance theory shares with most institutionalist approaches a static perspective, tending to focus on institutions at a given point in time. Governance, if equated with regulation, tends to be conceptually restricted to the control of given systems. A wider and more activist notion of governance would, however, include the deliberate transformation of institutions and the creation of new ones. Since this paper is about the transformation of the structure and regulation of technically based infrastructure systems, we must ask how the changes in the social organization of LTIS detailed in the previous section have come about. Was it by the deliberate intervention of public actors, by efforts of private self-government, or simply by the self-transforming response of LTIS to new technological opportunities? Evidently, the opportunities created by the technological innovations briefly described in section 3 have not been the major driving force. Most technological innovations that have taken place over the past decades have increased the efficiency of the technical systems and enabled them to expand; they did not require unbundling, but could very well have taken place

in the wonted institutional framework. The primary factor in the transformation of LTIS has undoubtedly been political intervention – the policy of liberalization adopted by the governments of OECD countries in the last quarter of the previous century.

Already ten years ago, Coutard (1999) pointed to the policy of liberalization as the main challenge to hierarchically organized LTS; liberalization is also the focus in Schneider and Tenbücken (2004). Liberalization was a core principle of the famous Washington Consensus that became, under the leadership of the United States, the normative *leitmotif* for economic policy in the Western world. The policy of liberalization, of the expansion of markets in spatial terms as well as in relation to regulated monopolies, corresponded well with the criticism of hierarchical control, in general, and the interventionist state, in particular, that erupted in the late 1960s, and with the change in economic theory from Keynesianism to neoliberalism. But the extent to which concrete measures of liberalization were shaped by global pressures, political preferences, or an economic theory that supported the neoliberal belief in the superior efficiency of private over public provision of goods and services is contested. Regression analysis by Häge (2004) suggests that the global diffusion of an ideology, of causal beliefs and theoretical models, played a more important role than the internationalization of markets. However, economic theory may merely have served to justify measures provoked by entirely different motives. The volume put together by Schneider and Tenbücken (2004) indicates that the left-right orientation of governments made a difference for liberalization in the 1980s, whereas the market pressures connected with economic globalization/internationalization appeared more important in the 1990s. But while economic globalization may have forced the state to relax its pretensions of control, it has probably not played the main role in the political decisions to liberalize LTIS.

Globalization and the mutually supportive trends in economic theory and in popular attitudes provided the general context in which the transformation of LTIS took place. However, the actual decisions were made by policymakers who may have had different political preferences but were exposed to the same acute pressures. On one side, these pressures were exerted by economic actors who expected that deregulation – meaning the abolition of regulated prices, tariffs, and barriers to market entry – would provide them with new profitable opportunities (Grande/Schneider 1991; Reich 2007: 66–70). On the other, there were fiscal pressures: by privatizing public enterprises, the state creates revenue and relieves itself of the costs of closing the widely perceived investment gap in the maintenance of public LTIS. In the face of increasing expenditures for social welfare, health, education, and other demands on public budgets, such as pension payments and debt service, the privatization of public infrastruc-

tures seemed a less conflictive way to shift some of the burden to private investors than cutting back on social welfare, health, and education would have been. Starting in the 1980s, annual privatization revenues for governments grew steadily and peaked at over \$160 billion in 1997 (Megginson/Netter 2001: 327). During the period from 1990–2006, almost two thirds of all privatizations in the OECD area involved utilities, transport, telecommunication, and oil facilities (Stevens/Schieb 2007/2008: 27). But it is doubtful that the shift in the mode of LTIS financing from government budgets to investors and the stock market will indeed provide the substantial funds necessary for technological modernization (*ibid.*). The uncertainty of future system failures justifies putting off investments, even though the investments needed to assure system reliability are likely to be well below the cost of system breakdowns to consumers and the economy. The short-range profit orientation of LTIS managers could be a serious threat to the future provision of essential services of good quality.

At least in continental Europe, a powerful factor driving liberalization have been and continue to be the interventions of the EU. In the United Kingdom national policy did not need prodding. Although the member countries have not transferred regulatory competences for LTIS to the EU, the Commission, together with the European Court of Justice, has been able to push member countries toward LTIS liberalization on the basis of its acknowledged mission to accomplish the Single European Market and by using its competences in opening markets to competition (Grande/Hartenberger 2008). The Commission started its initiative for liberalization in telecommunication with a Green Paper in 1987 and a directive in 1990. These were followed by a directive on railroad reform,⁷ which left great leeway for implementation, and a rather soft directive concerning electricity in 1996, which demanded the separation of the network from production and free access for competing firms. In 2001, several previous railroad directives were compiled into a railroad policy package that the member countries were asked to implement by 2003 (van Riesen 2007: 66–79). In 2006, a Green Paper insisted on the privatization of electricity networks and proposed the establishment of a European regulatory agency, but so far this has been firmly resisted by major member countries. Germany and France, in particular, insisted that the conditions of network access be determined through negotiation between incumbent utilities and new competitors (Voß 2007: 147–151). Only in the case of the European water economy has the EU not pushed for liberalization; instead it seeks to support big European corporations in their attempt to expand their market internationally (Partzsch 2007: 54–57, 114–120).

7 Directive 91/440/EWG was developed after the ECJ, following a complaint from the European Parliament, had charged the Commission with inactivity (see Basedow 1987).

Among other things, the EU supports them by pressing for the inclusion of water provision into the framework of the GATS system of the WTO (www.attac.de/gats/wasser).

Liberalization met with different responses from incumbents. It tends to be supported and even propagated where it creates opportunities for incumbents to expand their market or enter a new one, but it is resisted if concentrated economic structures are to be turned into truly competitive, open markets. Monopolist enterprises do not necessarily object to privatization, but irrespective of their geographical scope, they tend to defend their domains and to exclude competitors from the use of their networks. Incumbents resisting liberalization receive support from unions who object to the privatization of public corporations because they fear job losses and lower incomes for their members, and from left-wing parties who fear that service will deteriorate where it is less profitable. As a consequence, former monopolist enterprises dominate some infrastructure industries even today. Even in the highly liberalized German telecommunication system, the former monopolist still held 62 percent of the cable-based telephony market in 2007, while its share in the new mobile telephony market was only 28 percent (Deutsche Bank Research 2008: 4). In the German railroad system, the former public monopolist, though »unbundled« and partly privatized, still dominates; in electricity provision, four big electricity producers, although no longer regional monopolists, provide more than 80 percent of the electrical power consumed. However, liberalization is not always imposed from above on a reluctant industry. While the German government has not yet liberalized water provision, there has been a spontaneous tendency toward the privatization and concentration of utilities. Numerous public utility owners are looking for private investors to ease their fiscal burden and are starting to merge in order to cut costs. In other countries, large private water providers strive to enter the promising water market in the developing countries. Publications such as Büscher (2001) and Deutsche Bank Research (2000) attest to the strength of this economic motive. Whether liberalization is contested or supported by the industry depends on the self-interest of the providers.

6 Changes in LTIS Regulation

As a consequence of the changes in the organization of production, the regulation of LTIS also had to change. This change was not a *response* to sector change, as can happen where economic sectors change for technological and economic reasons rather than through political intervention; it was part and parcel of the

policy that transformed the production structure of LTIS. Since Majone (1991) it is a commonplace that deregulation is typically followed by re-regulation. But LTIS, whether public or private, have always been subject to regulation. Deregulation alone did not change the architecture of LTIS regulation. The elimination of state control of tariffs, prices, and technological appliances (e.g. telephones, water and power meters) meant a reduction in the intensity of regulation, not a change of the agencies involved. The architecture of regulation changed only with the privatization of public enterprises and the opening of successive parts of the production system to competition by national and by foreign actors. Market creation called for market regulation in order to safeguard the provision of infrastructure services on which the economy and the well-being of the population at large depend. Where public or publicly regulated private monopolies are transformed into markets, the production structure of LTIS becomes organizationally more clearly distinct from their regulation, and the relationship between regulators and the regulated is bound to change: public sector regulation is different from market regulation, both with respect to the goals of regulation and the instruments available.

As Grande and Hartenberger (2008) have described in detail, the governance of LTIS has a complex structure that is differentiated both vertically and horizontally and is dominated by public authorities rather than private self-regulation. While numerous new business associations have been created in all LTIS industries, they appear to focus on lobbying governments and the European Commission in favor of further liberalization and harmonization, rather than involve themselves in self-regulation. However, public welfare NGOs and stakeholder representatives, such as unions and consumer organizations, try at times to influence specific production chains directly. At the national level, regulation by government departments has shifted to independent regulatory authorities (IRA). In the United States, private monopolies have since long been regulated by IRA, while in other countries, public monopolies have traditionally been regulated by the corresponding government departments. In these countries, the creation of IRA is a new development. In terms of formal independence, IRA in different countries are very similar: they are legally separate from the corresponding ministry and have their own resources and competences. However, regulatory competences vary. Railroad regulation in the United Kingdom is comprehensive and *ex ante*, targeting both economic and social aspects of service provision, while in Germany it is *post hoc* and limited to supervision (van Riesen 2007: 261–264). Where goods or services are of vital importance for consumers, as is true of water and electricity even more than of telecommunication and railroads, there is a tendency toward intensive regulation.

Sector-specific IRA often share regulatory competences with government departments. Competition or antitrust authorities (such as the German Bundes-

kartellamt, the British Monopolies & Mergers Commission, and the Conseil de la Concurrence in France) also have some control over the enterprises active in providing infrastructure services, especially with respect to licensing mergers. In England and Wales, three different agencies regulate the provision of water, dealing with water quality, environmental issues, and prices and other economic issues, respectively (von Braunmühl 2005: 23–24). While other infrastructure sectors display considerable variance in the form of their regulation, sector-specific IRA dominate in the regulation of telecommunication. Tenbücken, who studied telecommunication regulation in twenty-six OECD countries, found that market opening and privatization have led everywhere to the establishment of regulatory agencies; these three processes proceeded in impressive temporal parallelism from 1980 to 2000 (Tenbücken 2004: 185). At least in Germany, telecommunication regulation has become closely integrated with the regulation of information technology, even though the Internet still remains a distinct component of the regulatory regime (Werle 2002: 255).

Where the social organization of production has basically not changed, there has not been much change in its regulation either. Water provision has been highly regulated for a long time. The authorities charged with the task of safeguarding the supply of clean drinking water have primarily pursued public-health goals. In Germany, where the provision of water has not been subject to liberalization, there have also been no significant recent changes in the regulatory structure. Water management in general and the provision of water to consumers fall under the jurisdiction of the individual German states. Although the establishment of a federal IRA has been contemplated, the responsible authorities are still located at the state rather than the federal level (Kemper 2001).

In contrast to some other economic sectors, such as pharmaceuticals (see Article 6 in this volume; originally Mayntz 2007), LTIS regulation continues to be concentrated at the national level. While no European IRA exist for LTIS, there are informal intergovernmental EU networks that work with benchmarking and the Open Method of Coordination. Examples are the Independent Regulators Group in Telecommunication, where the chefs of regulatory agencies meet, and the Council of European Electrical Regulators. The governance of LTIS hardly extends beyond the level of the EU. At the global level, the WTO is a relevant but not very forceful actor. Its activities are mainly directed at opening markets, among other things by working against telecommunication standards that are considered to impede international trade. Assuming that liberalization helps with economic development, the World Bank and the IMF have included the privatization of utilities and network access regulation in the conditions imposed on developing countries seeking financial assistance (Voß 2007: 145). Since water is a scarce resource worldwide and a harbinger of intense regional

and international conflicts, and since development and environmental protection are dominant problems on an international scale, water issues, including the provision of drinking water, are also discussed at the United Nations level, e.g. within the framework of the 2002 World Summit on Sustainable Development. In these discussions, diverging opinions about the – positive or negative – effects of privatization tend to clash fiercely (Partzsch 2007).

In the regulation of public monopolies, cost efficiency and public service had been the overarching goals. As operational control has diminished with the organizational separation of production and regulation, the goals of LTIS regulation have changed. Regulatory agencies are supposed to implement the policy of liberalization, but also to prevent any negative consequences of the transformations that have taken place. Once LTIS enterprises operate on a competitive market, they tend to seek profits, expand their market power, and focus on cost reduction; public service interests must now be upheld by state actors. Firms in infrastructure sectors are therefore held by regulators or obliged by law to fulfill public-service functions even if they are legally private. At the same time, network access regulation becomes a priority task of IRA once the political decision to open up network utilization has been made. The German IRA responsible for telecommunication regulates network access by fixing upper price limits and controls the access payment of 100 providers (Bundesnetzagentur 2005: 126); the fine-tuning of price formulas is a highly technical process. Access regulation also involves the allocation of network capacity. In addition to network access, regulation deals with the connection of networks and with the allocation of frequencies and telephone numbers in telecommunication. Reliability and safety continue to be prominent goals for all LTIS. In the case of water, this involves quality control supervised by health authorities. As social and environmental concerns have come to vie with the goal of liberalization, regulation must also take consumer interests and environmental protection into account. As a result, there are now not only potential conflicts between regulators and the regulated, but also among the various goals of regulation.

The design of regulation – its architecture as well as the competencies given to regulators – obviously affects its effectiveness. In the case of the British railroads, the horizontally distributed regulation structure proved unable to coordinate the privatized, unbundled, and deconcentrated production system, and thus contributed to the failure of the privatization experiment (van Riesen 2007: 217). Liberalization has created industries with highly complex structures and intricate interdependencies between actors, processes, and system properties. In light of such complexity, regulation would have posed a big challenge even if it were not also beset by multiple and partly conflicting goals. In this situation, it may well be that governmental R&D policy receives new importance. The de-

velopment of LTIS has always been affected by governmental R&D policy aiming to stimulate technological innovation – not to aid liberalization, but to improve international competitiveness. Thus, the development of technologies for small-scale electricity production has been stimulated by government-supported R&D as well as by tax incentives, both motivated by environmental policy goals rather than the enhancement of competition in electrical power production. Where state control over LTIS has diminished, R&D policy, i.e. indirect guidance through financial incentives, may become more important.

7 The Role of Technology in LTIS Transformation

The driving forces of LTIS transformation may have been political and economic rather than technological, but technology has played an important role in the process. Research on the development of large technical systems has shown that established technologies can be barriers to change, but technological innovation can facilitate it. In turn, politically willed transformations can stimulate technological innovation. Sometimes technological innovation can be the precondition of institutional change, but this does not mean such change is technologically driven; in fact, technological development and institutional change are only loosely coupled: in many cases, both can occur independently of each other. Going back to the points presented in sections 3 and 4, we find evidence that technology played all of these roles in LTIS transformation.

The fact that the production and distribution of goods or services are technically coupled is not, in itself, a barrier to liberalization, since such coupling does not prevent separate ownership. Technology is a barrier to liberalization if it constitutes a natural monopoly, or if its investment requirements and running costs are so high that competitive production and distribution are not feasible. This has been the case in electrical power production. As long as electrical power is produced from coal, oil, and uranium, only centralized production is viable. The high cost of investing in and running nuclear power plants or of producing hydropower through big river dams, as well as the economies of scale to be gained by centralized production, have militated against the multiplication of productive units. However, the most important barrier to »unbundling« and market creation has been the dependence on a physical network for distribution; this dependency constitutes a »natural monopoly.« Still, a »natural monopoly« is often relative to the technological state of the art. When telephone communication still required copper cables and switching was done by hand, the technological state of the art worked against competition. Technological innovation has

overcome this barrier. Railway networks and networks for the overland transmission of high voltage currents, in contrast, are very costly, and since they involve the use of land, their construction may also face legal difficulties. In either case, the construction of parallel networks by competing producers is practically impossible. Network access has been the core challenge for the liberalization of LTIS, but at least today this is no longer a *technological* barrier.

Where technological innovation serves to decentralize production, make competitive transmission possible, or facilitate network access, it has worked in favor of unbundling the production chain and creating markets. Liberalization has been facilitated by innovations in power production. Windmills, CCGT, solar cells, and biomass conversion technologies have created new and more decentralized ways to produce power, while microprocessor technology has facilitated network access for competing producers by making it possible to keep track of different inputs. Together with the innovations in power production, this accounts for most of the liberalization in electricity provision that has taken place. The facilitating role of technological innovation is equally pronounced in the case of telecommunication. Digitization and the microprocessor have revolutionized switching. Together with wireless transmission handled by radio base stations and easy-to-install antennas, they have enabled the construction of competing networks of mobile telephony, networks that can connect to the optical fiber network of earthbound telephony. With the advent of digitization, network access has ceased to be a technical problem. In conjunction with the progressive fusion of telecommunication and information technologies, it has led to the multiplication of services offered by a host of competing service providers.

»Facilitation« of LTIS liberalization by technological innovation does not mean that technology has been the *driving* force. Even if intentionally sought, technological innovation does not *push*, it offers opportunities. Whether and how the opportunities are used depends on the political, economic, and cultural environment. In a culture bent on effective performance and economic efficiency, technological innovations will eventually be used. Such has been the case with the radical, multipurpose innovations in electronics – the transmission and modulation of electromagnetic waves, semiconductors, chips and processors, and digitization. These technologies underlie the transformation of telecommunication, but their use did not presuppose LTIS liberalization. A public telecommunication monopoly could have made use of them as well. It was only in the context of a policy bent on liberalization and the pressure of entrepreneurs for market entry that these innovations led to the evolution of that set of interlinked markets characterizing telecommunication today. In the production of electrical power, the invention of semiconductors and the development of

microprocessors have greatly facilitated the conversion of different kinds of current (direct, alternate, and three-phase) and of currents with vastly different voltage. These innovations in transmission technology have facilitated the spatial expansion and increased the connectivity of power networks, but they have neither stimulated nor supported liberalization. The same can be said of the succession of incremental innovations in railroads, such as electrical locomotives and fast trains. These innovations have improved certain aspects of railroad performance but have not pushed for the creation of competitive markets in rail transport. If there has been a differentiation in ownership, e.g. between passenger and freight transport, and between long distance and local passenger transport, this has not been stimulated by specific technological innovations. In the industrial provision of water in OECD countries, technological innovation has possibly been even more incremental in character and has not produced an impetus towards liberalization. Wherever market creation has taken place, it has been the effect of economic considerations and political intervention.

Both in telecommunication and electricity provision, the legally enforced transformation of the social organization of production has offered new opportunities for entrepreneurs and stimulated, if not the invention of new technologies, then at least the adaptation of already existing ones. The use of windmills to generate electrical power was known already at the beginning of the twentieth century, but the technology was fully developed only when their commercial use became attractive in the context of liberalization policy. Facilitating technological innovations often result from the application of technologies developed for some other purpose and in some other field. In our case, the most effective recent innovations have been adaptations of inventions made in other policy fields. This holds for semiconductors and microprocessors, as well as for the combined cycle gas turbine (CCGT), an application of the turbine technology originally developed for military aircraft. Liberalization policies have, however, given impetus to these innovations. As Markard and Truffer (2006) point out, market liberalization changes the selection criteria for technological innovation by affecting investment decisions and technological choices. In the context of a monopoly, the selection is biased in the direction of incremental improvements that do not disturb the existing regime, while market competition stimulates the choice of technologies that differ from those used by competitors and that require only limited capital. If survival in a market depends on technical performance and technologies are available that would improve performance, then these factors spur the adoption of technological innovations.

Most of the technological innovation that has taken place in the course of LTIS transformation does not consist of functionally specialized artefacts like optical fiber cables, turbines, windmills, or mobile phones, but of innovations

in information technology. Usually, the primary function of modern information processing technology is seen in its ability to overcome, and thus shrink, geographical distance. In the case of LTIS liberalization, however, its main function is coordination. The new information-processing technologies are used to monitor, measure, signalize, and calculate. Their introduction has been unobtrusive and at times hardly visible to the consumer, but they are essential for the continued performance of liberalized infrastructure industries. If a functionally integrated LTIS is transformed into a set of regulated markets, its separate parts are still closely interdependent and must be coordinated to avoid performance deficits or even a system breakdown. It is no accident that the issue of reliability has recently been discussed especially with regard to large technical systems (e.g. Auerswald 2006; de Bruijne/Eeten 2007). Of course, coordination has always been a challenge in cases where LTS developed in a decentralized way, then expanded and became spatially integrated; railroad history and the development of standards to assure compatibility and portability in telecommunication offer abundant examples (e.g. Schmidt/Werle 1998). In the development of electricity provision, the adaptation of power production and network capacity to demand has likewise been a familiar problem. But liberalization has massively increased these coordination needs. Liberalization has turned LTIS into complex systems of spatially distributed, interdependent components fulfilling different functions, owned and directed by market actors who compete but also cooperate with each other and have entered into a multiplicity of contractual relations. The use of converters in producing electricity and of standards assuring compatibility and portability in telecommunication facilitates the expansion and increases the connectivity of networks, rather than serving to coordinate production, distribution, and marketing. Such coordination can become immensely complicated, as Gebhardt and Höffler (2007) show for a problem arising in marketing electricity. It required a set of computer programs that took five years and 1.5 billion pounds to develop to make the British energy stock exchange NETA work (Rohracher 2007: 144). Rohracher (2007) considers coordination technologies to be even more important for the liberalization of electrical power provision than technologies for the small-scale, decentralized production have been. Regulation, too, has called for the development of new technologies. The liberalization of LTIS has led to the multiplication of targets of regulation and to a corresponding increase in the demand for technologies to assist regulators in monitoring and calculating capacities, costs, and demand, in order to control, among other things, the price that owners charge for network access. An adequate »technology of regulation« (Voß 2007: 140) is the precondition for granting network access and thus for the liberalization of network-bound LTIS. The new coordination technologies have not induced liberalization, but they

have done more than facilitate it: had innovations in coordination technology not been made, liberalization could still have been mandated, but it would not have been viable.

8 Lessons for Governance Research

The attempt to apply the conceptual framework of governance theory to LTIS transformation has alerted us to a number of problems connected with the governance perspective. When the governance of an economic sector or policy field is studied, the technological basis is usually neglected or, at best, referred to fleetingly and in rather general terms. The same is true for the study of institutions and their change. A selective focus on regulation ignores the interdependencies between regulatory and production structures. Clearly the importance of technology for institutional design and performance varies between social subsystems; it is much higher for technically based infrastructure industries than, for instance, for education. Where technology is the basis of producing a given good or service, the pool of available technologies defines a limited range of alternatives for the social organization of the production process. These alternatives change with further technological innovations. In this way technology is also implicated in the change undergone by economic sectors or, more generally, policy fields. In the four cases analyzed here, the changes in the organization of production were mainly caused by political intervention. But political intervention had to take into account the barriers to reform inherent in the technological status quo. At the same time, the success of the intended transformation of LTIS depended on a series of technological innovations. Modern coordination technologies have also become essential instruments of regulation. Their use »technicizes« governance – a development that has not yet received sufficient attention. The inclusion of the techno-structure and technological innovation in the research design enhances the explanatory potential of studies on sectoral transformation or institutional change.

Governance theory in general is more concerned with the characteristics of given structures than with their emergence and change, with (post hoc) control than with (ex ante) construction. In the development and change of economic sectors or, more generally, of societal subsystems, the transformative political intervention that may be included under the concept of governance is only one factor. Nor does it suffice to include technology and technological innovation in the analysis. To understand how and why the structure of an economic sector develops, we need a more comprehensive perspective, such as the perspec-

tive offered by theories of institutional change developed in the research on the varieties of capitalism (Streeck/Thelen 2005). The organizations making up production chains are embedded in an institutional environment that contains banks, unions, educational institutions, and labor markets, in addition to regulatory authorities and associations operating as private governments. The interdependencies between these institutions trigger action-response sequences and mutual adaptation. The governance perspective is too selective to explain the outcome of these linked processes.

Governance theory does not offer a conceptual framework that directs attention simultaneously and equally to the transformations taking place in the organization of production and to the attendant changes in the regulation of an economic sector. The transformation that has occurred in the production structure of the four LTIS considered here in the course of the past decades can be described summarily, in the general terms of governance theory, as a shift from »state« and »(organizational) hierarchy« toward market forms, with public-private partnerships forming an intermediate layer of hybrid organizations. The description of the social organization of production has to be complemented by a description of the new regulatory structure. This is predominantly »hierarchical,« but here a hierarchical relation between regulators and the regulated is meant. To avoid ambiguity, I have chosen to distinguish terminologically between the social organization of production and the governance of a sector in the sense of its regulation. This appeared fruitful because it directs attention to their relationship. Obviously, there is interdependence between the changes in the production structure and the regulatory structure of a given sector. As the production structure moves from public to private and from monopoly to market, production and regulation become organizationally separated. As the production structure becomes decentralized, the regulatory structure seems to call for concentration; in fact, more concentration in regulation has been one of the responses to the failure of British railroad privatization. The need for coordination increases with the growing divergence between the nearly global geographical expansion of technical systems and their fragmented property and management structure. The more complex the production structure of a sector is, the greater is the challenge facing regulatory agencies, and the more incisive are the well-known cognitive⁸ and political limits to goal-oriented governance.

8 To cope with complex interdependencies is extremely demanding in terms of data requirements and beyond the mathematical capabilities of most social scientists, as a look at the book by Szimba (2008) can show. Szimba has developed a framework for the evaluation of interdependencies in the projected construction of a trans-European transportation network with the help of 30 EU priority projects. The success of this undertaking depends on the management of the intricate interdependencies that exist between the different projects, interdependencies

Another theoretical problem is inherent in the widely accepted, implicit or explicit definition of governance as comprising all forms in which public and private actors, separately or jointly, aim to produce common goods and services and solve collective problems. From this perspective, private–public partnerships found in the provision of infrastructure services are usually considered a form of governance. By implication, such partnerships are in the public interest, even if ambitious goals are not fully achieved. It is, however, an open empirical question which interests are served by public–private partnerships – consumer interests, budgetary interests of public authorities, or the private economic interests of corporations, law firms, and investors, as a critical analysis suggests (e.g. Rügemeier 2008). If governance is linked *by definition* to the pursuit of public interests, then given forms of organizing the production of goods or services and even extant forms of their political regulation would have to be questioned with respect to the *cui bono* of their operation, before they could be considered »governance« rather than, for instance, exploitation or domination. If private–public partnerships in the production of infrastructure services are not considered a form of governance, but merely one among many different forms of organizing production, there is no implication about the interests they serve, and we are immediately directed to the empirical question.

As a final point, tracing the transformation of LTIS, it has become evident that the governance perspective does not adapt optimally to the analysis of power structures. The financial links and contractual relations among a multitude of enterprises of various sizes and with different combinations of public and private ownership, and between producers, network providers, traders, and resellers, make for highly complex sectoral power structures. The system of electricity production that emerges from reports by the German network agency (Bundesnetzagentur 2005, 2006) is a case in point. The big national producers, legally separate but closely connected with network owners, also own a large share of regional and municipal utilities (who sell to users) and are, in this way, involved in the whole production chain – even though 90 percent of the customers are served by regional and local utilities. The big producers and network owners are part of transnational corporations of German as well as foreign origin that compete on the German electricity market; at the same time, the German electricity company RWE is one of the biggest providers of drinking water internationally. Referring to the U.S. economy, Perrow (2008) describes a pattern in which focal

that can constitute potential synergies but can also negatively affect the realization and/or the efficiency gains to be expected. The book is replete with mathematical equations that need a host of diverse data to be calculable before the effects of an individual project can be assessed.

firms have »captured« suppliers, wholesalers, and retailers. As already mentioned, he refers to the power structure of such industries as being concentrated and argues that this is the new profile of market power. Neither the conceptual apparatus nor the lead questions of the different versions of governance theory serve to capture the specific features of such structures and their economic, social, and political consequences. If the power structure of an industrial sector or of a whole economy is to be explained, the governance approach is not the most fruitful. For this, one had better turn to political economics.

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9 Control of a Terrorist Network: Lessons from the 9/11 Commission Report (2006)

1 The Report

After the attacks on the World Trade Center and the Pentagon on September 11, 2001, two urgent questions were raised both in private and public discussions: why do they hate us so much to conceive of such a heinous deed, and why was it not prevented? The second question was asked most insistently by the families of 9/11 victims, and it was a group of them who formed an organization and pressured Congress to institute, against the wishes of the Bush administration, a commission examining in detail the history of the attack and what the competent American authorities had done and had failed to do in order to prevent it. The bipartisan National Commission on Terrorist Attacks upon the United States, called the »9/11 Commission« for short, embarked upon a sweeping investigation and produced a 567-page report that was published in 2004. The report traces the actions of the Al Qaeda terrorists that led up to the 9/11 attacks, and describes in detail the counterterrorism activities of the various bodies and organizations in the American security community. Focusing on the missed opportunities to prevent the attacks, the report indirectly points out the conditions of effective control of terrorist organizations of the kind represented by Al Qaeda. Having previously studied, on the basis of an extensive literature search, the organizational forms of both national and international terrorism (Mayntz 2004), I analyzed the results of the 9/11 Report in order to find out what we may learn from it about the preconditions, and the chances, of controlling a terrorist network. This requires a sort of backward reasoning: by identifying the deficits responsible for the failure of prevention, we can derive the factors that would make for successful prevention – but we can also recognize constraints and restrictions that are difficult to overcome.

The following observations are based on a single source, the 9/11 Report. Of the rich literature spawned by the event, I have only used two additional publications that cover the same subject (Posner 2003; Clarke 2004). Though more critical than the 9/11 Report, which deliberately uses a matter-of-fact approach, neither of these publications contradicts its findings in points that would be important for the following analysis.

2 Control Strategies

There are two basic approaches to control: law enforcement and prevention. Law enforcement, or the strategy to »discover and destroy« as the commission calls it, means to treat terrorists in the same way as criminals, and terrorist acts like criminal acts. Action is taken after the fact, by police forces (or the military). The »criminal« must be identified, in order to be hunted, caught, judged, and finally, sentenced. Law enforcement is a measure of last resort if prevention has failed. Prevention takes place »before the fact.« Legal rules backed up by the threat of sanctions presumably serve the purpose of prevention by making norm violation a costly risk. A general threat of sanctions attached to given categories of acts is, however, unable to prevent specific incidents, for instance of murder, robbery, embezzlement, or terrorism. Terrorists do behave rationally, but for many of them being caught, detained, or even killed are discounted costs; here the »Law« and available law enforcement measures have no preventive effect.

Prevention strategies can be either defensive, trying to protect the potential victim from attack, or offensive, trying to incapacitate the potential perpetrator – either directly by physically destroying him, or indirectly by making him unable to act and starving him out. There is a fluid boundary between these seemingly clear-cut categories. Border controls, for example, are both a defensive and an offensive measure: they protect the potential victim, but they also constrain the action space of terrorists. Promising control strategies of both types depend on the kind of threat. If the threat is a specific one, i.e., if it is possible to anticipate who might do what, where, and when, a feasible offensive strategy could be to detain the person or persons about to commit the act, and protection (sealing-off) of the threatened site would be a sensible defensive strategy. This strategy has been successful in the case of the so-called Millennium scare. Here at least the critical time was known (around New Year's Eve), and certain sites such as computer centers and places of celebration appeared to be especially threatened. All agencies in the security community were on alert, and all threatened sites were highly protected. In the end, nothing happened. One terrorist who planned to bomb the Los Angeles airport was caught when he tried to enter at the Canadian border.

The 9/11 attack was not a specific threat; when it happened, it came as a complete surprise to most – not so much with respect to the organization behind it, but with respect to the time, the place, and above all the kind of attack, i.e., by using hijacked civilian aircraft as missiles. If there is no credible lead as to the place, the time, the kind of a threat, and the identity of the potential terrorists, only highly general defensive measures such as rigid control over the movement of people, vehicles, and goods might serve. The extent to which such

preventive measures are acceptable differs; in authoritarian regimes, potential troublemakers may be detained (or even murdered), but in a constitutional state with a legalistic culture, the actions of public authorities are constrained by law. The first condition of successful control is therefore to recognize the existence of, and identity of, a potential enemy. Such recognition may not permit us to anticipate specific terrorist acts, but it does permit us to develop a more pointed offensive strategy, i.e., to incapacitate the person, group, or organization presumably planning unspecified terrorist acts. This could either be done directly by physical destruction, or indirectly by cutting off their supplies and narrowing their action space.

3 Why Prevention Failed: The Charge

The 9/11 Report deals mainly with two basic prerequisites of successful prevention: information and the ability to act on it. The commission argues that, but for the deficits existing on both counts, 9/11 could have been prevented. Describing the organization and the operation of Al Qaeda, and reconstructing step by step what in the end led to the 9/11 attacks, the commission has identified a number of points where timely intervention might have incapacitated Al Qaeda, or could at least have prevented these specific attacks. The commission enumerates »late leads« that were not pursued, and lists actions by the CIA and FBI that might have made a difference but were not undertaken (National Commission 2004: 266–277, 355–356). At least two of the hijackers who had previously been identified as possible terrorists could, for instance, have been held for immigration violations, had they only been found in the U.S.

In sum, the domestic agencies never mobilized in response to the threat. They did not have direction, and they did not have a plan to institute. The borders were not hardened. Transportation systems were not fortified. Electronic surveillance was not targeted against a domestic threat. State and local law enforcement were not marshaled to augment the FBI's efforts. The public was not warned. (ibid.: 265)

These failures, so the 9/11 Commission maintains, were largely the result of insufficient information and insufficient action capabilities, which in turn followed from the structure of what one could call the security community, from organizational features of the agencies involved, and from a faulty allocation of funds. Underlying this diagnosis of failure we can recognize a simple control model whose structure is similar to the basic three-step model of a policy process, moving from problem definition (i.e., information) via policy choice to policy implementation (i.e., action). This basic model must be disaggregated (or

differentiated), and specified for the particular kind of control task. Only then will it be possible to pinpoint conditions for the control of a terrorist network.

Let us begin by analyzing the charge of the 9/11 Commission in more detail. With respect to information, in the eyes of the commission the main cause of failure was not its absolute lack, but the way it was, or rather was not, processed. The organization Al Qaeda as such was known from the time when the U.S. helped to finance the war against the Soviets in Afghanistan; information on its goal and strategy had been supplied by Bin Laden himself. But it seems that there existed only little useful up-to-date information on the structure and action plans of Al Qaeda. Such information might be obtained from the interrogation of detainees, or from »moles« (»assets«) within, or close, to Al Qaeda. But in the case of 9/11, the capability of the U.S. to use such sources was obviously underdeveloped. The FBI lacked Arab-speaking officers who might have served as undercover agents, and there were not even enough competent translators, so that a huge backlog of un-translated intercepts in Arabic built up (ibid.: 77). To collect information that first permits us to identify the existence of an enemy, and subsequently to convert a perceived general threat into a specific threat that could be addressed by more pointed measures, is an obvious precondition of successful control.

All actors and agencies that are part of an existing control structure are permanently looking out for danger signals, for intelligence that requires them to become active. It is evident that the danger signals that were recognized before 9/11 did not add up in time to a correct assessment of the threat posed by the scheming of Bin Laden, and the strength of Al Qaeda. There were individuals within the American security community who, in the months before 9/11 when »the system was blinking red« (ibid.: 254), warned that an attack was imminent, that it was aimed at landmark targets, that airplanes could be involved, and that it could take place in the U.S. But these warnings were widely dispersed in the system. If, so the commission maintains, the bits and pieces of information about the behavior and movement of the future 9/11 pilots and operatives (the so-called »muscle men«) that was available at different places had been shared, and used among other things to tighten border controls, the 9/11 plan could have been disrupted. In the view of the commission, the crucial reason that this did not happen is insufficient information sharing: within agencies, between agencies, and upward to the political leadership.

With respect to the ability to act upon threat information, the commission mentions repeatedly a shortage of funds for organizational units specialized in anti-terrorism work, or for certain preventive measures that were considered. The fault, however, was in the allocation of funds rather than their objective availability, from the responsible congressional committees down to the indi-

vidual agencies. Nor was it technically impossible to devise an integrated electronic data-base of visa, law enforcement, and watchlist information, or a monitoring system for foreigners entering the U.S. on a student visa. Aside from funds, it was the lack of intra- and inter-agency cooperation that delayed or blocked these measures. Whether judges refused a needed warrant, the military hesitated to deploy a drone, important files were seized but not passed on to a unit or agency that might use them, or CIA field offices insisted on keeping a case to themselves: in all such cases lack of cooperation prevented timely action. The commission therefore finds the main cause of insufficient action capability in coordination deficits, a concept covering directive authority as well as horizontal cooperation.

4 Structural and Organizational Causes of Information and Coordination Deficits

Projecting the commission's analysis of the failure to prevent 9/11 upon the general control model referred to earlier, it appears that the deficits in sharing information and in coordination were caused by organizational shortcomings. The reform recommendations of the commission, at any rate, focus on agency organization, management, and authority, in addition to the allocation of funds. The implied causal argument is that a suitably organized (and funded) control structure permits the correct perception of a threat, which triggers the re-allocation of attention and the re-definition of priorities, which then leads to the mobilization of action capacities and to action. To assess whether organizational factors bear in fact the main responsibility for the failure to prevent 9/11, it is necessary to give at least a rough description of the U.S. control structure as it existed before the attack (National Commission 2004: 71–107, 407–408).

The set of agencies involved in some way with national security was roughly divided into two functionally defined communities, the law enforcement and the intelligence community, respectively. The law enforcement community included the criminal branch of the FBI, the INS, the Customs Service, local police, and the courts.

The FBI (Federal Bureau of Investigation) is an agency in the Justice Department, which also houses the U.S. Marshals Service and the Drug Enforcement Administration. The FBI has collected domestic intelligence since the 1930s. Responsibilities in connection with foreign and foreign-inspired subversion and espionage, with which Roosevelt charged the FBI, were transferred to the newly established CIA (Central Intelligence Agency) after World War II. The FBI has

56 field offices (or stations) in the U.S.; they set local priorities. According to the »office of origin system,« the station where a »case« originates remains responsible for it. The FBI has criminal as well as intelligence agents; following from a shared belief and ingrained practice rather than formal rules, information sharing between these different agents at the same level is quite limited (ibid.: 271). The FBI is used to write up witness interviews, but not to produce proper intelligence reports that summarize and assess information, and it complies with the norm not to disclose information relevant to a pending investigation. A singular exception to this practice was observed on the occasion of the Millennium scare, but afterwards the FBI »returned to its normal practice of withholding written reports« (ibid.: 180–186). The relationship between the FBI director and the U.S. president is »nearly nonexistent,« and information sharing with the rest of the national security community is insufficient (ibid.: 358).

The Immigration and Naturalization Service (INS) counted 9,000 border patrol agents at the time, 4,500 inspectors, and 2,000 special immigration agents. Its focus has long been on criminal aliens and illegal immigrants in the southwest of the U.S. Given the extended borders of the U.S. and the amount of cross-border traffic, this is judged insufficient. INS technology has long been outdated; efforts to automate a joint watchlist used at entry points and by consulates were made only in 1993. The effort to set up a system to monitor visa compliance of foreign students after entry failed.

The intelligence community included the CIA, intelligence agencies in the Defense Department, the intelligence part of the FBI, and a host of smaller units in the Departments of State, Treasury, Energy, and in the Coast Guard. The CIA is an independent agency established in 1947; it serves the president directly. It has stations abroad, and a Clandestine Service that needs approval from Washington for specific actions. Resources are centrally allocated. The CIA is an organization »institutionally averse to risk, with its capacity for covert action atrophied, predisposed to restrict the distribution of information, having difficulty assimilating new types of personnel, and accustomed to presenting descriptive reportage of the latest intelligence« (ibid.: 93). In the Cold War period, a paranoid fear of penetration by Soviet »moles« reinforced the tendency to compartmentalize and keep secret information (ibid.: 91). There is an ingrained rule that sources must be protected. From the information collected and put into intelligence reports, only a fraction goes into the President's Daily Brief (PDB), which only a small circle of leaders gets to see; the Senior Executive Intelligence Brief and reports that are distributed more widely contain less information.

Among the other actors in the intelligence community, the Department of Defense is the most important. The intelligence agencies in Defense focus on

military intelligence; Defense receives 80 percent of U.S. intelligence spending (*ibid.*: 86). One of the intelligence agencies in Defense is the National Security Agency (NSA), which, however, may not collect data on U.S. citizens without a warrant; its focus was therefore on foreign intelligence, and it is »almost obsessive« in the protection of sources (*ibid.*: 88).

This variegated intelligence community was supposedly led by a Director of Counterintelligence (DCI), but he lacked authority in personnel and budget matters and was unable to intervene into agency routines. The Counterintelligence Center created in the mid-1980s was explicitly charged with coordination functions. Staffed mainly by FBI officers, it never assumed an independent role, and remained ineffective.

This brief description of the control structure existing before 9/11 highlights several features responsible for the failure of prevention. There were barriers to information sharing, and dysfunctional routines and orientations. To some extent, these organizational features are the result of functional differentiation between agencies charged with different tasks. The intelligence community is responsible for discovering information relevant to national security; intelligence agencies generally tend to protect sources, and are afraid of counterintelligence (»moles«). The frame within which different intelligence agencies seek information quite naturally differs between the CIA, concentrated on foreign intelligence, and the agencies in Defense, which work within the framework of military policy. The agencies in the law enforcement community are bent on detection and punishment; they operate within a legalistic frame that constrains quick and independent action. Even in the later 1990s, »officials continued to think of terrorists as agents of states [...] or as domestic criminals« (*ibid.*: 108). From the perspective of fighting terrorism, these may be dysfunctional orientations and routines. But terrorism is only one among many security problems, and for many if not most agencies and field offices, illegal immigration, drugs, and »normal« crimes were more relevant threats than terrorism. Different tasks do require different orientations, and it would not be meaningful to commit all agencies in the security community only to counterterrorism.

In the face of a high degree of organizational differentiation and specialization, coordination is indeed a crucial requirement. What is needed for control is a monitoring institution watching out for terrorist threats, and a leader who in case of need is able to mobilize the differentiated security community and coordinate its actions. In the case of 9/11, coordination was difficult because different agencies tended to defend their respective domains, hedge information and funds and had developed different organizational cultures, standards and routines. Thus the foreign-domestic divide within the intelligence community impeded the sharing and pooling of information. Structural barriers to coopera-

tion within agencies were evident in the case of the FBI with its relatively autonomous field offices and its two functional branches. To overcome such barriers, a strong leadership able to give policy directions and enforce cooperation would have been needed. Leadership would also have been needed to identify required capabilities and to insist that they be developed, such as an up-to-date control technology (INS), or the capability to engage in covert action (CIA). But the management of counterterrorism policy within the differentiated security community was highly divided, and the capacity to set priorities and to move resources weak. For this reason one of the main reform recommendations of the commission has been the creation of a new National Counterterrorism Center and a powerful National Intelligence Director, with full authority over budget and personnel decisions and direct access to the president. The commission also asked to unify congressional oversight in order to strengthen political support for anti-terrorism matters.

5 Cognitive Control Prerequisites

Organizational shortcomings are in fact serious impediments to the successful control of a terrorist network. But as the commission itself has pointed out, most impediments to successful control can be overcome if a threat is clearly perceived, as it was in the case of the Millennium scare, when all agencies, setting routines temporarily aside, cooperated in the interest of a joint purpose. Though the reform proposals of the commission only address organizational questions, in chapter 11 of the report »imagination« is discussed as one of the factors that would have been necessary to prevent 9/11. In fact, threat perception is the basic condition of control. Sharing and pooling information become important once a threat is perceived; they do not automatically produce that perception.

Threat perception requires collecting information, but in order to know where to look, and what to look for, some idea as to the nature of the threat must already exist. Nor is threat perception an automatic result of sharing whatever information agents have; a general directive to share information would only produce unmanageable information overload. Criteria of selection are needed in order to recognize what bits of information could be used by whom. Productive information sharing therefore presupposes again what it is meant to produce, the perception of a possible threat. The same is true once more for the pooling of information, the construction of a more detailed image of a specific threat out of unconnected bits and pieces of information. To compose a puzzle

out of many separate pieces is extremely difficult without a clear image of what the finished puzzle might look like. The inherent ambivalence of (most kinds of) intelligence is a problem that cannot be remedied by organizational reform and wider sharing of information. As a consequence of the recursive nature of the cognitive processes involved, there are serious limits to the effect that organization (in the narrow sense of formal structure) can have on threat perception.

The narrative in the 9/11 Report makes evident that the new nature of the threat posed by a transnational terrorist network like Al Qaeda was not recognized. Terrorists were perceived as criminals operating domestically, and law enforcement was the way to deal with criminals. This initial misperception made it difficult to recognize the salience of available bits of intelligence. Especially from the description of »missed opportunities,« »one can see how hard it is for the intelligence community to assemble enough of the puzzle pieces gathered by different agencies to make sense of them« (National Commission 2005: 355). »[N]o one working on these late leads in the summer of 2001 connected the case in his or her in-box to the threat reports agitating senior officials and being briefed to the president« (ibid.: 277). The Al Qaeda network itself was aware of an imminent attack (and of its several delays), and some of this intelligence seems to have seeped to U.S. agents. These, however, did not recognize the links between the people and the acts they knew about. The FBI did not collect intelligence on terrorism systematically, and »never completed an assessment of the overall terrorist threat to the U.S. homeland« (ibid.: 77). Somewhere in the system there were puzzle pieces that would have spelled, if put together, the planned attack. All of the features of the 9/11 attack – that it took place in the U.S., that landmarks were the target, and that airplanes can be used as missiles – were anticipated as a real possibility by some lower level officer. They were not taken seriously because their warning did not fit the dominant view of the threat situation. And thus the information that was available, dispersed in the system, was not put together and did not amount to »actionable intelligence« (ibid.: 260).

To be believed, warnings must be credible. In spite of the fact that threat reporting intensified by July 2001, the FBI stated it had »no information indicating a credible threat of terrorist attack in the United States« (ibid.: 258). Doubts in the credibility of intelligence had already been a major obstacle in dealing with the attack on the American destroyer USS Cole in the port of Aden on October 12, 2000. Applying intelligence standards of proof in the assessment of available information, the CIA never stated with certainty that Bin Laden had been responsible for this terrorist act. On a previous occasion, retaliatory air strikes against Libya seemed to have stopped Libyan state terrorism; this suggested an air strike in response to the attack on the USS Cole. But the lack of certainty

with respect to the involvement of Bin Laden prevented Clinton from responding in this way. In the case of 9/11, President Bush's Daily Brief (PDB) did say on one occasion that Bin Laden was determined to strike in the U.S., but »the threats received contained few specifics regarding time, place, method or target« (ibid.: 262–263). Thus the attack of 9/11 remained one – rather unlikely – possibility among many. The certification of intelligence is an important facet of the »information« component in the basic control model.

Threat perception is intimately linked to »learning,« because present situations tend to be interpreted in terms of past experience. In the case of qualitatively new threats, such learning is dysfunctional. The report contains many examples of dysfunctional learning. The attack on the USS Cole, the African embassy bombings in 1998, and the Rhiyad attack in 1995 seemed to indicate that targets tended to be non-U.S. Thus when 9/11 approached and »the system blinked red,« domestic threats did not appear very likely, and most preparatory action was taken overseas. Overseas stations were used to deal with terrorist threats and had action plans, while »domestic agencies did not have a game plan« and hence »did not perceive a call to action« (ibid.: 264). The size of the threat was underestimated because so far, relatively few people and even fewer Americans had been killed in terrorist attacks. In the 1993 bombing attack on the World Trade Center, there had been few casualties, and it was cleared up quickly. This incident »taught« people that foreign agents might commit terrorist acts in the U.S., but the lesson was erased by the fact that the 1995 Ohio bombing, which had at first been attributed to an Arab foreigner, was in fact committed by an American (Posner 2003: 90–101). While familiar with the hijacking of aircraft for purposes of extortion, the Pentagon, on the basis of the experience with Iran, was mainly concerned with the possibility of hostage-taking. Except for some isolated individuals believed to be raving, nobody imagined that hijacked aircraft would be used as missiles against U.S. landmark buildings. The Federal Aviation Administration in particular did not think the 9/11 kind of threat possible, and did not use the State Department's watchlist for passenger prescreening. If airplanes were to be involved, an attack from outside the U.S. was considered much more likely.

Dysfunctional learning has also hampered the reaction capacity of U.S. control agents. Both the FBI and the CIA »learned« from the harsh criticism that some of its previous activities had met. Since the 1950s, the FBI collected unauthorized intelligence in investigating right- and left-wing U.S. suspects. In the early 1970s, this elicited public criticism, and in 1978, the Foreign Intelligence Surveillance Act was passed, which strictly regulated all action directed at foreign agents in the U.S. The FBI consequently retreated to strict legalism. The need to obtain a warrant, or court review, for many actions prevented the FBI

in several instances from uncovering intelligence important to 9/11. The CIA in its turn had repeatedly planned, and actively engaged from the 1960s onward, in covert actions that were considered illegal. This again triggered a severe critique when these actions became public. After the Watergate era, Congress established oversight committees to assure that the CIA did not undertake covert action contrary to U.S. law (National Commission 2004: 90). Henceforth, the CIA was wary not to infringe legal norms in its actions.

The perceived nature of the threat determines which agency will play the focal role in prevention; if the threat is misperceived, allocation of responsibility may also be wrong. In the 1960s and 1970s, the State Department managed counterterrorism policy, since terrorism threats were seen to emanate from foreign states. When Al Qaeda was recognized as a serious enemy, the CIA became the focal actor to confront it. Al Qaeda being a foreign-based organization believed to strike in other countries, the domestically oriented FBI played only a secondary role. Agencies in the Departments of Defense and of State were involved only episodically (*ibid.*: 400). This allocation of responsibility turned out to be inadequate in view of Al Qaeda's activities within the U.S., and the support it had from its Afghan base.

Threat perception is the condition for the re-allocation of attention, and the re-definition of priorities. The less urgent the threat, the more likely will counterterrorism policy come up against the problem of overload. Every government has to operate permanently under an overload of problems and issues to attend to, and attention, always a scarce resource, will be devoted to the politically most pressing, or threatening ones. This holds both for foreign policy and for domestic policy. Before the »war on terrorism« became a top priority, counterterrorism had to compete with other legitimate policy goals. In the field of foreign policy, Iraq, North Korea, and the Israel/Palestine peace process commanded the attention of the U.S. government in the 1990s. The American Congress is oriented toward domestic affairs, and in the committees dealing with national security issues, terrorism was a second- or third-order priority (*ibid.*: 106). The Treasury, focused on drug money flows, paid little attention to the financing of terrorism. The initial refusal of the U.S. military to intervene in Afghanistan was motivated, among other things, by the priority to create twenty-first century armed forces (*ibid.*: 208).

The allocation of attention is partly a matter of structure. Thus, international terrorism »fell between the cracks« of the committee structure in the U.S. Congress (*ibid.*: 105); this, and the lack of a powerful and independent agency charged with counterterrorism, militated against the early development of measures to contain Al Qaeda and prevent 9/11. But there were also other, situational factors that detracted from the development of such a policy. During

the Clinton administration, the Lewinsky scandal commanded priority attention. Later, the imminent end of the legislative period dissuaded the outgoing administration from starting something big, and when Bush got into office, his administration had to get settled, make personnel decisions, and decide on priorities. It needed something like 9/11 to change political priorities drastically in favor of fighting terrorism.

6 Control Measures Taken and Not Taken

Since no specific threat to domestic targets coming from Al Qaeda was perceived by the dominant actors before 9/11 actually occurred, it was not possible to take measures to prevent this particular attack, or more generally to prevent any major terrorist attack against landmark targets in the U.S. Nevertheless, after the bombing of the American embassies which, in contrast to the attack on the USS Cole, had been explicitly linked to Bin Laden and Al Qaeda, in late 1997 a series of preventive measures were considered. These measures were directed against Bin Laden and Al Qaeda, as the originators of a threat that remained diffuse. A consideration of the measures chosen and not chosen, shelved or implemented, can point to additional conditions of successful control of a terrorist network beyond the organizational and cognitive factors already discussed.

The measures considered included some direct offensive measures, mainly directed at Bin Laden, who had finally been recognized as a dangerous individual. Attempts to capture Bin Laden and to bring him before an American court were planned, but never executed in the end. The same holds for plans to kill Bin Laden by an air strike against a camp in Afghanistan when he was known to be there; this, too, was never actively attempted. As the threat signals became stronger, military invention against the Taliban was briefly talked about, but never seriously considered. The only offensive actions actually undertaken were of a generally preventive nature, and aimed to cut off the vital resources of Al Qaeda.

The 9/11 Commission was well aware of the range of resources that a transnational terrorist organization needs and that might therefore be the target of preventive measures (*ibid.*: 172–173, 365–366). To maintain itself and to prepare and execute terrorist acts, a transnational terrorist organization needs mainly members, money, weapons, and a safe haven; members must also be able to communicate over wide distances, and in preparing attacks they must be able to move about freely. Only some of these resources were in fact targeted, and where attempts were made to constrain them or cut them off, the measures were taken only half-heartedly, came too late, or were ineffective.

There was, to begin with, no policy to impede the recruitment of new active members to Al Qaeda: this, in fact, is clearly beyond the power of agencies directly involved in counterterrorism. As the commission recognizes, it takes a very comprehensive, indirect, and long-term policy to combat the causes making membership in a given terrorist organization unattractive to potential recruits.

As for weapons, intelligence agencies generally try to prevent the acquisition of weapons of mass destruction by terrorists, but are incapable, especially in the U.S., of preventing firearms and dynamite from getting into their hands. However, in the case of 9/11 previously acquired weapons played practically no role. No attempt was made to prevent the use of hijacked aircraft as weapons, since no such use was expected.

Money was one resource in fact addressed, but too late to hurt, and not very effectively. U.S. authorities first froze assets of Bin Laden in the U.S., and later also of the Taliban, but this did not amount to much. Most of the Al Qaeda funds at this time came quite legally from charitable and welfare organizations that were at first sight beyond suspicion and/or resided and operated outside the U.S. Bin Laden himself had been cut off from his inheritance and had lost valuable assets in Sudan. There were also attempts to get major banks to look out for, and prevent, money laundering and suspicious transfers. The effectiveness of this approach was limited by the independence of banks, and the fact that Al Qaeda used the cash-based *hawala* system that leaves no electronic record for money transfer (Posner 2003: 137). Money, moreover, as had been true of weapons, played no important role in the preparation of 9/11; the commission estimates that preparation and execution of the attack cost only \$500,000. Money resources are a useful target only in a long-term effort to starve out an organization, but not effective in preventing a specific attack.

Another target of preventive policy was the safe haven Al Qaeda had found in Afghanistan. A safe haven is a typical need of »homeless« international terrorist organizations; national terrorist organizations need a supportive environment, too, but find this – if they do – in their own country. Bin Laden had returned to Afghanistan after Sudan, threatened with sanctions and pressed by Libya, finally denied him further sanctuary. To get at Al Qaeda's safe haven there, diplomacy was needed. The U.S. had no direct lever on the Taliban; some general threats had been uttered against them after the attack on the USS Cole, but had no effect. The U.S. therefore urged Pakistan to get the Taliban to oust Bin Laden and deny Al Qaeda further sanctuary, but this, too, was unsuccessful.

To exert control, it is not sufficient to cut the supply chains of a terrorist organization. Equally important is the restriction of its action space. Communication, an important condition of terrorist action, is hardly subject to preventive control, thanks to the diffusion of electronic communication technology.

Moreover, Al Qaeda often used couriers to communicate over wide distances. The commission in fact deals at length with terrorist travel, both crossing borders and moving about in a country, and complains about a »lax international security environment« (National Commission 2004: 366). International travel requires passports and visas; a visa is easier to get in some countries than in others, and there is less suspicion against a visa, say, from Germany than from Yemen. Moreover, countries like Malaysia did not require visas from Saudis. Such loopholes, systematically used by Al Qaeda, are a difficult target for preventive measures. Nor is it easy to prevent the manipulation of passports. The Al Qaeda office at Kandahar airport, where passports, visas and other documents could be altered (ibid.: 169), was beyond the reach of U.S. agencies. What remained was a defensive strategy. Attempts were made to tighten U.S. border controls, but before 9/11 such plans aborted. By the late 1990s, the Department of State had finally created a worldwide, real-time, electronic database of visa, law enforcement, and watchlist information, but this was put effectively into place only after 9/11.

7 Policy Context and Limits to the Choice of Instruments

The last section has shown that most of the important resources of Al Qaeda, and Al Qaeda itself, had remained intact by September 2001. It is instructive to spell out what, in addition to failures in threat perception, has impeded the choice of control measures that theoretically might have been effective.

One impediment to the choice of offensive measures is the fact that counterterrorism policy intersects with other policy fields. The general trade-off between security and civil liberties is a familiar example, but this did not really become an issue before 9/11 and the domestic security measures adopted following it. From the beginning, however, the transnational nature of Al Qaeda made fighting it an issue necessarily involving international relations, and hence touching on foreign policy. To induce Pakistan to prevail upon the Taliban to oust Bin Laden required changes in the standing U.S. policy of threatening Pakistan with sanctions in order to keep the Indo-Pakistani conflict from erupting into nuclear war. Foreign policy legacies also made the choice between threatening the Taliban and openly supporting the Northern Alliance a difficult one, and valuable time was lost as these options were weighed. Preventive measures can easily have negative side-effects on international relations. Thus the option of striking physically at Bin Laden was by-passed again and again for fear of the collateral damage (civilian casualties) that an air strike might cause, leading to a

general deterioration of relations with Muslim countries. The fear of attacking the wrong target similarly impedes the choice of offensive measures. The – probably mistaken – air strike against a Sudanese factory believed to produce nerve gas for Bin Laden after the embassy bombings, and the erroneous bombing of the Chinese embassy in Belgrade, were one reason for Clinton not to order military retaliation to the attack on the USS Cole, which clearly bore the stamp of Al Qaeda but could not be linked directly and conclusively to Bin Laden.

Most importantly, the choice of potentially effective measures can be impeded because access to the target of control is restricted. Access is often particularly difficult if the target of control lies outside the national territory. Physical access was a problem for plans to capture Bin Laden and bring him before an American court, given that the U.S. had no undercover agents who could move freely and effectively about in Afghanistan. The so-called »tribal assets« that were to be used instead proved unreliable and ineffective. The U.S. also had no diplomatic access to the Taliban regime, since no formal relations existed, nor could the Taliban be threatened since they did not depend on the U.S. for anything important. Access, however, can also be limited domestically, for practical reasons as well as by the force of legal and constitutional norms. Legal arguments operated against killing Bin Laden. U.S. forces did not even seriously attempt to capture him alive before an indictment against him could be obtained, which it was hard to get for lack of legally convincing evidence. Constitutional norms impeded preventive measures that would affect the freedom of communication, of movement and of entering into private contracts – freedoms of vital importance for terrorist action. Borders, of course, can be controlled, and some potential participants in the 9/11 attacks were in fact denied visas. But those that did get to the U.S. were able to rent cars and apartments, to open accounts, to learn to fly, and to get airline passages. To live the life of a »sleeper« requires a loosely coupled social system with many control-free zones. Such an environment is found in the U.S., with its heterogeneous population, high valuation of individual freedom, and tolerance for people with strange habits and idiosyncratic beliefs. Moreover, in the U.S. »[a] large population lives outside the legal framework. Fraudulent documents could be easily obtained« (ibid.: 81). The attacks of 9/11 were in good part made possible by the opportunities the terrorists enjoyed to pursue their plan in the U.S. These opportunities, however, cannot be removed without making deep changes in the social and legal character of a country. This is likely the most serious barrier to the control of terrorist networks.

8 Conditions for Control of a Network Organization

Effective control presupposes that the control structure, and the control strategy, »fit« the nature of the threat and the character of the »organization« generating it. Though the 9/11 Report does not discuss this, it is obvious that control meets with special difficulties if the target is a clandestinely operating network. A terrorist network that consists of semi-autonomous cells is more difficult to attack, and to defend against, than a hierarchical organization. A loosely coupled network is not disabled if individual cells are discovered and destroyed, and may even survive the elimination of its leader. It is also easier to know the structure of a hierarchical organization than the complex and fluid structure of a network. These problems do not only hold for Al Qaeda, but for terrorist networks generally, becoming the more compelling the more pronounced the network character of a terrorist organization is.

In order to control a clandestine network, it has been argued, the control structure should likewise adopt network features: »It takes networks to fight networks« (Arquilla/Ronfeldt 2001: 15; see also Slaughter 2004: 2). This reform recipe must, however, be understood correctly. The 9/11 Report shows that it was not too much hierarchy that was amiss in fighting Al Qaeda; on the contrary, the agencies that could have prevented Al Qaeda from reaching into the U.S. were too fragmented, pursued different goals, and made different assumptions about the nature and origin of terrorist threats. Nevertheless, the correct response to this would not have been to concentrate counterterrorism in a single hierarchical organization. The 9/11 Commission never suggested such a thing; it diagnosed correctly that the crucial fault lay in the lack of cooperation and the sharing of information within and between agencies.

The 9/11 Report has shown that many a timely intervention was prevented by the lack of decentralized action capacity. But again it does not recommend empowering field offices to take speedy action independently. If the capacity to control the enemy by concerted action is not to be compromised, any movement from »hierarchy« to »network« must be balanced by integrating mechanisms. A shared sense of purpose, and the readiness to give each other unquestioned mutual support, could increase information sharing and cooperation in the national security community beyond what can be obtained by measures of formal organization. The importance of this attitudinal factor can be learned from Al Qaeda's special mode of control: the actions of the semi-autonomous cells are not steered by commands or formal rules, but by the shared mission and a general strategy defined by the leadership. This control mode is predicated on a strong sense of unquestioning identification with the organization and its goal (Mayntz 2004).

In addition to the network character of Al Qaeda, its transnational expansion creates special challenges, because the national control structure is not congruent with the spatial structure of a transnational organization. The spatial incongruence between problem scope and control structure is a familiar issue in governance theory (Article 5 in this volume: 75–77; originally Mayntz 2002: 23–25). As we know from the study of globalization and its effects on national policies, problems that originate outside of a country, but manifest themselves domestically, are particularly difficult to cope with. In terrorism control, the incongruence between the reach of a national control structure and the transnational nature of the control target affects not only the possibilities of intervention, but makes the collection of intelligence extremely difficult. Tardy intelligence in turn affects capability: Al Qaeda had not been targeted early enough for the U.S. to develop a network of »moles« and »assets.« Besides, the dominant orientation of public policy is toward domestic issues. Especially in a country as large as the U.S., the realization that developments taking place beyond its borders may pose a domestic threat takes time, and occurs often only when the point is drastically brought home by some dramatic event. The transnational nature of the control target also requires changes in wonted policy orientations. Law enforcement must extend its scope beyond normal criminals to potential terrorists, accepting foreign intelligence as equally relevant as domestic intelligence. Foreign policy based on diplomacy must become an intelligence-guided foreign policy.

The objective difficulty of collecting intelligence in foreign lands requires a strategic change from a doing-it-ourselves approach to a cooperative approach. Interventions directed at the geographically distributed site of a transnational terrorist network also raise access problems, which cannot be solved without international cooperation. Control over the acquisition of weapons and financial resources may not be much more difficult in the case of a transnational compared to a national terrorist organization, which also buys on the international black market. But the safe haven of a transnational terrorist network in a foreign country cannot be approached by domestic police forces; it requires a skillful use of diplomacy to motivate foreign governments to intervene instead. It is thus above all on the international plane that a network must be created for effective control. This does not only require cooperation among governments, but more importantly in intergovernmental networks at the agency level (Slaughter 2004). International cooperation among intelligence and law enforcement agencies is even more difficult to achieve than the cooperation of national agencies fulfilling different tasks. Threat perception is therefore crucial, because only a threat perceived as affecting all countries equally could motivate full cooperation. Again it is a shared sense of mission that could assure cooperation. This, then, lies at the core of the injunction to imitate the network character of the

target for effective control: what is asked for is not horizontal differentiation, but a specific mode of integration.

9 The Lessons from 9/11 in Conclusion

Without repeating in detail what has already been said about the requirements of controlling a terrorist network, we can briefly return in conclusion to the simple control model with which we started. In the course of the analysis, this model has been differentiated into four analytically distinct components:

1. information collection and threat perception;
2. priority setting and allocation of attention;
3. mobilization and choice of measures; and
4. action.

These components are not to be understood as separate phases in a stepwise causal process; they overlap in time and are linked by feedback loops. Thus threat perception affects information collection as well as vice versa, the results of action reflect back upon the choice of measures, and de facto mobilization affects the allocation of attention. Still, the process is directed in so far as phase 1 plays a special role in the model: threat perception triggers the process, and the nature of the threat perceived shapes it as it proceeds. A specific threat for instance activates a different set of control options than a highly general threat.

For each point in the model, it has been possible to identify – hypothetically, since most of them were lacking – conditions of successful control. Some of these are amenable to purposeful reform. Threat perception would gain from the existence of an agency specially charged with the pooling and assessment of counterterrorism intelligence it receives from both foreign and domestic sources. This agency could develop information scanning and information pooling routines, involving all agencies in the security community. The allocation of attention to the threat would gain from the speedy, uninhibited distribution of threat information to all relevant actors, in the security community as well as in the polity (e.g., congressional committees). Mobilization should be a flexible response to particular threat situations, and use a task-force strategy rather than, or in addition to, the institutionalization of fixed routines. Mobilization needs a central authority able to command resources, to enforce cooperation, and to see that needed capabilities are developed. Action, finally, requires resources, and capabilities – legal, technical, and behavioral (e.g., language, covert action).

At each point in the model, it has also been possible to identify constraints that can not be manipulated relatively easily. Problems of access are a dominant constraint, except on priority setting, which instead suffers from an overload of policy tasks. Some access problems have to do with the nature of the control object – a clandestine, foreign-based network organization. Other constraints have to do with the nature of the control subject – the government of a liberal, democratic, law-based state. These constraints are ultimately based on the values defining the legitimacy of a democratic regime; they can be overridden, but only at a cost that would ultimately change the identity of the control subject. In addition to problems of access and legitimacy, there are constraints that follow from the interdependence of different policy fields, and from objective difficulties of information processing, especially the recursive relationship between information collection and threat perception. These various constraints circumscribe the – relatively narrow – field where reforms could improve the chances of control. The 9/11 Commission has rightly limited itself to recommending the reform of conditions that can be manipulated with relative ease. It is not the task of this paper to assess the reforms that the U.S. government has in fact undertaken in the wake of the report. It is evident, however, that such an assessment must take into account not only the control requirements, but also the obstacles to meeting them identified in the preceding analysis.

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