

Regime Consequences

Methodological Challenges and Research Strategies

by

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Chapter 9

METHODOLOGICAL ISSUES IN THE STUDY OF BROADER CONSEQUENCES

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1. INTRODUCTION

The study of the broader effects of international regimes is just beginning. For a long time, regime analysts operated with a two-fold fiction, namely that a regime could be established largely in isolation from other regimes and that its consequences were concentrated to its own domain. In the real world, the international system is increasingly densely populated by international governing institutions. A study elaborated for the Rio Summit of 1992 counted more than 125 important multilateral environmental regimes alone, most of which were institutionalized separately from each other (Sand 1992). Every year, states conclude about five new important environmental agreements (Beisheim et al. 1999: 350 – 51). Against the backdrop of this trend and the sheer number of independently established international regimes, it is difficult to image that interaction among regimes is an irrelevant phenomenon.

Moreover, regime analysts have long established that the effects of international regimes are frequently not limited to adaptations of behavior. Quite often, institutions influence the preferences of relevant actors (Oberthür 1997). It is difficult to believe that these secondary consequences are always entirely limited to a regime's own domain (Levy et al. 1995: 308 – 12). It may well be that an international regime affects the structure of a domestic political system. In addition, modern international regimes include, beyond a set of substantive norms regulating collectively desired behavior, collective decision-making systems (Young 1999a: 24 – 49.) Their proliferation may empower non-state actors or otherwise have an impact on

interaction within the international system far beyond the issue-areas regulated by the particular regimes (Princen and Finger 1994).

The study of the broader consequences sets out to question, and replace where necessary, the fiction both of the isolated operation of international regimes and of the limitation of their effects to their own issue-area. Broader consequences research focuses on regime effects that occur beyond a given regime and the issue area governed by it. It is an attempt to expand the study of regime effectiveness to those effects that have been ignored so far. Thus, it deals with an object of inquiry that is located at the margin of classical regime analysis. Moreover, this object is negatively defined. The new field of regime analysis constitutes first and foremost a residual category that collects numerous different side effects and externalities of regime governance.

Having been ignored by classical regime analysis does not imply that the broader effects of international regimes have altogether escaped the attention of international relations scholars. There are several strands of literature on which the study of broader consequences may draw. Within the literature on transnational relations, attention has been drawn to the importance of non-state actors for the establishment and development of international regimes. This is true for environmental nongovernmental organizations (NGOs) (Princen 1994; Clark 1994); human rights NGOs (Price 1998); "epistemic communities" (Haas 1990); or "advocacy networks" (Keck and Sikkink 1998). Although it has been observed that transnational actors of this type regularly emerge in the context of international regimes (Risse-Kappen 1995: 28 – 32), the emphasis of systematic inquiry has been on the influence of non-state actors on regime decision making, rather than on the effects of regime establishment on the emergence and development of these actors. Likewise, International Relations has a long tradition in analyzing the impact of the international system on domestic society. This "second image reversed" research (Gourevitch 1978) currently explores, for example, the effects of "internationalization" or "globalization" on domestic society (Garrett 1998; Scharpf 1999) and on domestic political systems. Whereas internationalization and globalization are not least consequences of the effectiveness of international institutions, especially of the world trade system (GATT/WTO) (Milner and Keohane 1996: 22 – 24), authors of this strand of literature usually do not distinguish between the broader consequences of one or more international regimes and other sources of internationalization and globalization.

This is also true for the intensive discussion on the changing nature of state sovereignty (Litfin 1997) and the transformation of the originally "Westphalian" nation-state into some "post-Westphalian" entity (Caporaso 1996). However, if this debate is moved into the context of European

integration, it is immediately related to the influence of the European Union, that is an (admittedly quite specific) institution for governance beyond the nation-state. Within the integration literature, it is hotly debated whether the European Union strengthens the state vis-à-vis domestic society (Moravcsik 1994; Grande 1996), or whether it undermines its ability to control internal and external affairs by providing non-state actors with additional opportunities for action (Marks et al. 1996; Stone Sweet and Sandholtz 1997). Similar effects on domestic political systems are also produced by international regimes, albeit at a lower scale (Wolf 1999). The study of the broader regime consequences may thus draw on several existing literatures that address related issues. It promises to contribute to these literatures by adding a particular regime perspective. In remarkable contrast, research on the interaction of international regimes that co-exist within the international system is largely absent.

This chapter addresses a number of methodological issues concerning the study of broader consequences. In the light of the residual nature as well as the novelty of the object of inquiry, it will be difficult, and cannot be the purpose of the present paper, to identify a common methodology or analytical approach that is suited to cover the study of all broader consequences alike. The goal will be more modest. This chapter shall systematize different sub-fields of the study of broader consequences and identify research strategies. Section 2 starts with the brief outline of a conceptual framework for the identification of broader consequences that takes process components duly into account. Section 3 then discusses promising dependent and independent variables in an attempt to systematize the heterogeneous field of study. In its final part, section 4 addresses a number of methodological problems of some priority fields of broader consequences research.

The chapter concludes that the study of the broader consequences of international regimes opens a multifaceted and fascinating new field of research on the effects of international governing institutions.

2. A CONCEPTUAL FRAMEWORK FOR THE STUDY OF BROADER CONSEQUENCES

It has become almost usual in the context of research on the simple effectiveness of international regimes to consider a regime as an instrument established by interested actors to bring about change. In this perspective, a regime consists of a set of norms that define the obligations of member states (see also the "consensus definition", Krasner 1982: 186). "Effects" are then conceptualized as changes in behavior of relevant actors caused by

these norms (outcomes) as well as changes in the target of regime-assisted cooperation, for example in trade flows or the quality of the waters of a regional sea (impact). The assessment of simple effectiveness can afford to rely on this simplified model of international regimes (Underdal 1992) unless it inquires into how and why the institution produces these consequences (Young 1999b; Hovi in this volume). In contrast, broader consequences are not always immediately apparent. Frequently they constitute unintended, even unanticipated, effects of intentional action (Martin and Simons 1998) that occur, by definition, beyond the issue areas expressly addressed by relevant regimes. Before we can start to assess and measure them, we will have to identify areas of possible effects. Therefore, the study of broader consequences will need a more complex conception of the operation of an international regime that allows us to identify pathways of their generation.

While cooperation does not necessarily require communication (Axelrod 1984), analysts widely agree to limit regime analysis to international institutions that emerge from negotiations (Keohane 1993; Levy et al. 1995). Only institutions of this type may be used instrumentally to bring about collectively desired change within the international system. What distinguishes them from other types of institution is the *communication* from which norms and behavioral guidelines emerge. The establishment of an international regime enables actors to act (outside its confines) and simultaneously communicate about norms (within these confines), rather than merely communicate by action (Kratochwil and Ruggie 1986). Actors may pollute a regional sea and simultaneously negotiate an arrangement for its collective clean-up. Whereas the role of communication had been largely ignored as long as regime analysis was predominantly based on non-cooperative game theory, negotiations and collective decision making have recently gained a considerably higher priority both theoretically (Young 1989, 1994; Morrow 1994; Fearon 1998) and within the effectiveness debate (Victor et al. 1998). In a process-oriented perspective, international regimes are best understood as decision making systems beyond the nation-state that shape the expectations of relevant actors. They are more or less dynamic (Gehring 1994) and evolve over time as collective decisions are made and practices of governance change.

Whereas non-communicative evolution of cooperation is characterized by its inherent strict limits, negotiations about a cooperative arrangement do not have inherent limits. Significant participation in a trade war requires resources, while communication about trade preferences does (almost) not. Small states and even non-state actors may perfectly well participate in these negotiations. Likewise, there are no inherent limits to the deliberate linkage of issues. Therefore, negotiation situations tend to become over-complex

(Scharpf 1991: 278). All actors interested in cooperation have a common interest in the limitation of a negotiation situation, although they may have differing ideas about the precise nature of the limitation. They are caught in a battle of the sexes – type coordination problem that must be settled in occasionally tough pre-negotiations (Gross Stein 1989) before actual negotiations may start.

If successful, negotiations produce a borderline between actors that are entitled to participate and those that are not, as well as between subjects that are discussed and others that are not. This borderline has no immediate corollary in the outside world and it could have been drawn differently. It does not have any immediate relevance for action beyond the negotiation forum, but it matters for the process of norm-molding by communication. Communicative interventions by some actors are now more relevant than those by others. Demands and proposals on some issues are more easily accommodated within an emerging agreement than others. The borderline determines the constellation of interests within the negotiations (Sebenius 1983, 1991). It matters, for example, whether a cooperation process starts with a limited membership and expands progressively, like the Schengen and ozone layer regimes, or whether it comprises a huge membership from the outset, like the law of the sea and the climate change regimes (Downs et al. 1998). Hence, although it is socially constructed, the borderline does not at all constitute mere fiction. It is a “social fact” (Searle 1995) that influences the output of a negotiation process. Accordingly, in studying broader consequences, we should not bother too much with the fact that the borders of and between regimes could have been drawn differently, nor that they may be changed over time. What matters is that they exist and that they are relevant for collective decision making and norm-molding as long as they exist.

A process-oriented perspective on international regimes and the relevance of institutionally established boundaries suggests that we conceptualize an international regime as a social system that processes information (Gehring 2002). Like all systems, it is constituted along the distinction between the system and its own environment (Luhmann 1984; Willke 1996). The system includes the regime-specific communication process and its own (i.e., regime-specific) criteria for the selection of relevant information as well as its own rules for transforming information into valid norms and other forms of institutional output, such as collectively validated knowledge. Whether scientific information matters for collective decision making depends on how the collective decision process is organized. The system operates entirely according to its own rules, that is, it is operationally closed. Yet, it depends on the *input* of information from its environment, for example through negotiations of the actors involved. If

they interact in the form of bargaining, the system is sensitive exclusively to information about state interests. If they also argue (Elster 1994; Gehring 1996; Risse 2000) and feed into the process convincing knowledge, and if this information gains influence on the collective decision process, the system will "observe" other aspects of its environment. The system also produces an *output*. It releases signals into its environment that are relevant to outside actors, for example a cooperative arrangement, a decision on the noncompliance of a member state, or a report on scientific findings. Hence, despite the operative closure of the system, there is a steady exchange of signals across the system/environment boundary.

On this basis we may now distinguish between two different types of consequence of regime governance.

First, the output of a regime may change the environment of addressees. Upon adoption of a cooperative arrangement or an important decision, it releases a signal into its environment. Although the signal is hardly more than the selection of a collectively agreed solution, it may induce a member state to adapt its behavior, if (and only if) it is accompanied by the expectation that other member states will adapt their behavior accordingly, thus promising to bring about cooperation. It may also induce other actors to react. Firms and other economic actors expecting government action or reactions by relevant other economic actors may be motivated to adapt "voluntarily". Political parties and associations may consider a regime decision sufficiently relevant for them to adjust their political action. They may, for example, launch a campaign for, or against, ratification or compliance.

Second, despite its importance for the success of regime governance, output is not the only way in which an international regime may change the environment of other social systems. A second way of considerable importance for the study of broader consequences is related to the input side. The particular way in which an international regime observes its environment determines opportunities for action of different actors within the communication process. Opportunities for action may be limited to states. However, they may extend to non-state actors in control of relevant information if, for example, the scientific or technological foundations of collective action (Haas 1992) or information about implementation gain importance within the institutionalized decision process (Raustiala 1997). Increased sensitivity of a regime toward different aspects of its environment may, therefore, increase the opportunities for action of previously "weak" actors, for example small, relatively powerless, states and non-state actors, within the decision process. Changes of the regime-specific decision process may induce interested actors, for example environmental NGOs or networks of scientists, to develop transnational activities. They may also encourage

interested individuals or domestically operating groups to form corporate actors capable of exploiting these transnational opportunities (Risse-Kappen 1995).

To sum up, the interaction-based conception of international regimes as social systems designed to mould norms by communication within a world of other social systems and individuals gives some hints as to where to look for broader effects. Regimes may generate broader (as well as simple) consequences by changing the environment through their generalized expectations, or sets of norms. Effects may also be brought about by the provision of opportunities for communicative action within the process of norm-molding.

3. KEY AREAS OF BROADER CONSEQUENCES RESEARCH

As *consequences* of international regimes necessarily imply causation, studies the broader consequences of international regimes must clarify the variables in the relationships that they intend to study. In this section, I identify some major lines of (actual or possible) inquiry.¹ It should be emphasized that identifying key independent and dependent variables does not exclude the possibility of feedback loops or co-evolution processes in which the direction in the relationship between variables changes. The identification of dependent and independent variables is primarily a heuristic device to structure the extended field of research on broader consequences and a necessary analytic device to explore regime consequences.

Within the context of regime effectiveness, we wish to study the broader consequences of international regimes on some target. This is what distinguishes the regime perspective from other studies focusing, for example, on changes within the international system or domestic effects of international drivers. Accordingly, the independent variable must be related to at least one international regime. However, international regimes may have broader consequences for virtually all sorts of targets. Hence, we may explore effects on an almost unlimited variety of dependent variables. Based on current strands of analysis and existing literature, the following four main areas of research may be identified.

Other Issue Area(s). An international regime may have an impact on one or more issue-areas beyond its own domain. The evaluation of the simple effectiveness of an international regime focuses eventually on its impact on

the target problem. If governance is effective, the climate change regime must have an observable impact on the state of the global climate. Currently, the assessment of the effectiveness of an international regime is largely limited to the issue area governed (simple effectiveness). If we intend to estimate the net social benefit of an international regime, we will also have to assess the externalities caused by a given regime beyond its own domain, for example, the effects of the climate change regime on the state of the ozone layer and on air pollution, on agriculture and forestry, and on the economic performance of the global economy or of national economies.

The study of externalities in this understanding, which is hardly beginning to emerge, may appear in one of two alternative designs. First, one may want to explore as far as possible all externalities created by a given regime, or an important component of an existing regime, in order to assess the net social benefit of, say, the regime for the protection of the ozone layer. In this case, the independent variable provides the fixed starting point of research, while the dependent variable may have to be modified over time, as further externalities in additional issue areas become apparent, or anticipated ones prove to be nonexistent. Yet, one may also want to attribute an observed effect to a number of existing regimes. For example, the state of the environment of the North Sea is not merely affected by the relevant regional marine protection regime (OSPARCOM), but also by several global marine protection regimes controlling single sources of marine pollution, and by the LRTAP regime that affects the extend of acid deposition into the North Sea, as well as the regime for the protection of the River Rhine—let alone economic regimes such as GATT/WTO that influence the intensity of maritime transport (Breitmeier 2000: 46). In this type of “backward induction” a researcher attempts to identify suitable independent variables (regimes) that explain an observed aggregate effect (the state of marine pollution) (see Walter and Zürn in this volume). It is still a limited number of clearly identifiable regimes (i.e., a set) to which influence will be attributed. Strictly speaking, assessment of the contribution of the “main” regime governing the observed issue area, in the example OSPARCOM, would fall into the realm of simple effectiveness, while that of more marginal regimes, like LRTAP and the River Rhine regime, might constitute broader consequences. It appears that the distinction between simple effectiveness and broader consequences is not as sharp as may be assumed at first glance. It is only heuristically fruitful.

One may also want to inquire whether international regimes at large contribute to increasing, for example, the life expectancy of the population in given countries or even all over the world (see Hughes in this volume). Studies in this vein also employ a sort of “backward reasoning,” starting with a readily observable dependent variable that is to be explained by

suitable independent variables. Yet, in this case, the question is not whether, and to which extent, one or more identified regimes contribute to bringing about the observed effect. Rather, it is whether it may be demonstrated that *the universe of unspecified regimes* explains the observed change, or whether it must be attributed to some other explanatory variables not related to international regimes. In this case, the distinction between simple effectiveness and broader consequences diminishes completely.

International Regime(s). The dependent variable may also be one or more international regimes. In recent years, it has been observed that international regimes may influence each other. The most widely discussed case is the interaction between the World Trade Organization (GATT/WTO) and several international environmental regimes that include trade restrictions, like the Basle Convention on the Transboundary Movement of Hazardous Wastes, the Convention on International Trade in Endangered Species (CITES), or the Montreal Protocol (see Petersmann 1993; Lang 1993; Moltke 1997). At closer inspection, issue areas of international regimes frequently "overlap" (Stokke 1999), especially in international environmental relations (United Nations University 1998, Oberthür 2001). Many subject areas are governed by several institutions with different memberships. Moreover, "regime density" (Young 1996) within the international system grows steadily and may even increase the prospect of interaction between regimes up to the point of eventual "treaty congestion" (Brown Weiss 1993: 679). This strand of research challenges the original fiction that an isolated regime may be established to deal with an isolated international problem. Broader consequences research sets out to replace it with the concept of a regime that is embedded within a population of other regimes.

It should be clear then, what a regime is. Some conceptualize regimes so as to comprise all social norms relevant for action within a given area of international relations, for example *the human rights regime* (Donnelly 1986) or *the nonproliferation regime* (Müller 1993). This overly broad conception involves an important analytical problem. It is based on the delimitation of the related issue area by the external observer. It does not take into account that the actors involved have actually chosen to deal with the subject matter in the form of a number of separate agreements emerging from distinct negotiation processes. Thus, it implicitly assumes that it does not matter how system boundaries are drawn and how collective decision making is organized. Practically, this approach would de-emphasize the relevance of interaction among these institutions. Others follow a very narrow regime concept and conceive of every protocol adopted within the regime on long-range transboundary air pollution (LRTAP) as an

independent regime (Sprinz and Vaahtoranta 1994). Some regimes, like LRTAP, develop by a steadily increasing number of protocols, while others, such as the regime for the protection of the ozone layer, do so by successive amendments of an existing one. Yet, neither the London nor the Copenhagen revisions of the Montreal Protocol have been conceptualized as independent regimes so far. The above interaction-based concept suggests that international regimes are temporarily or permanently existing decision-making systems. A regime is then best identified by its system-specific communicative interaction process. Accordingly, the LRTAP regime as well as the regimes on the protection of the ozone layer and on global climate change are best considered as separate regimes, but not the protocols and amendments adopted within their framework. This conception allows us, for example, to distinguish between a global and a regional regime addressing the same substantive problem. Hence, we may examine interaction between the International Whaling Commission and the North Atlantic Marine Mammal Organization (NAMMCO) (Caron 1995), or between the Basle regime on hazardous wastes and the Bamako Convention of the African countries on the same subject (Meinke 1997, 2002).

"Ideally," an interaction situation involves two regimes and a single direction of influence. In this case we may easily identify a source regime (independent variable) and a target regime (dependent variable). Alternatively, the dependent variable and/or the independent variable may also be a component of a regime or a decision adopted within its framework. This will be the case, for example, if we explore the effect of the non-compliance procedure of the Montreal Protocol on the development of implementation control arrangements within the climate change regime or within LRTAP and its protocols. We may also take a limited set of identifiable regimes as either the independent or the dependent variable. For example, we may explore the consequences of a number of environmental regimes with trade restrictions for GATT/WTO. We may also inquire into the influence of the global London dumping convention on a number of regional seas conventions. More complex situations may have to be disaggregated to allow causal analysis (see section 4 and Gehring and Oberthür in this volume).

Hypothetically, we might also want to explore whether the existence of the whole population of international regimes has implications, for example, for the development of a new regime. Yet, this is a systemic research perspective. It asks whether the modern international system with its numerous international regimes and organizations has an impact on the establishment of a new institution. It falls entirely out of the existing literature on regime interaction. Therefore, it is better dealt with it in the context of systemic effects.

Beside the “regular” cases of regime interaction mentioned, there are two specific cases that need some elaboration. The present framework does not exclude the possibility that we can explore the consequences of an important decision or component that is part of a given regime for another decision or component of the same regime. The independent and the dependent variables are then chosen from within the same regime. It is exclusively a matter of definition whether we consider this case still to be covered by the study of broader consequences. Without incurring any *theoretical* problem, we may therefore expand the analytical framework to exploring, for instance, the consequences of the NO_x Protocol on the Second SO₂ Protocol within the framework of the LRTAP regime. In this vein, we might even expand research to the interaction between different instruments (e.g., directives) of the European Union. Of course, causal mechanisms and empirical effects will be influenced by the fact that these cases are embedded in a particular overarching institutional framework within which conflicts may be *collectively* recognized and communicatively settled. But these are empirical, not conceptual differences.

A second specific case that has not yet attracted much attention is the exploration of institutional reactions of a regime to its own broader consequences. For example, the world trade system does not only affect other international regimes (and vice versa). It proscribes discrimination between identical goods according to their modes of production (Stevens 1995; Hudec 1996; Farber and Hudec 1996; Howse 1998). This obligation constrains the member states’ opportunities for action especially in the areas of environmental policy making and regulation of labor conditions. These unintended effects generate pressure that might force the institution to expand its regulatory activity in order to address the non-economic consequences of economic regulation (Schoenbaum 1992; Tarasovsky 1997; Esty and Geradin 1998; Charnovitz 1998). In cases like this, the independent and the dependent variables are identical, but the transmission of influence involves externalities that reach beyond the regime’s domain. Once again, it is exclusively a matter of definition whether this path is dealt with under the heading of broader consequences.

It should be noted that research on regime interaction significantly overlaps with the exploration of regime externalities. Overlap will occur if the causal pathway by which a source regime influences a target regime involves the creation of externalities. For example, the ozone regime generates (malign) effects on the climate change regime because the promotion of hydrofluorocarbons contributes to destabilizing the global climate. Thus, it reduces the problem-solving capacity of the climate change regime. What distinguishes the two areas of inquiry, therefore, is primarily a diverging research interest. While externalities research is primarily

interested in the *impact* of an international regime on issue areas beyond its own domain, whether it causes adaptations within any regime possibly governing the target issue area, the study of regime interaction emphasizes the interplay between social institutions, whether or not channeled through changes in impact of the issue-areas governed.

Domestic political system. The study of broader consequences may also inquire into the influence of international regimes on a domestic political system, or a part of it. Studies of this design adopt a "second image reversed" perspective (Gourevitch 1978) that has a long tradition within international relations research. What distinguishes research on the domestic consequences of international regimes from other "second image reversed" studies is their specific focus on the impact of institutions, rather than aggregate developments at the international level, as a source of influence. Research is still in its very beginnings and a wide range of possible dependent variables might be chosen according to the particular research interests.

It may be expected, however, that an important cluster of dependent variables will relate to the modification of power relations within constellations of actors (e.g., social groups, organized interest groups, state organs). Occasionally, a single regime as important as GATT/WTO may serve as the independent variable. Hence, if an international institution causes significantly increased trade flows, it may be expected to change power relations among interest groups within domestic political systems (Rogowski 1989; Milner 1988). More often, sets of related regimes may constitute the suitable independent variable to assess changes of domestic political systems. For example, the existence of human rights standards tends to empower interest groups claiming compliance over others that do not (Klotz 1995; Forschungsgruppe Menschenrechte 1998; Lutz and Sikking 2000). Or environmental institutions may effectively support particular branches of government (Haas 1990). In yet other cases, the universe of regimes constitutes the appropriate independent variable. It has been observed that both the European Union, which for these purposes may be understood as a particularly well advanced regime, and regular international regimes contribute to shifting power from parliaments to the executive branch of government (Moravcsik 1994; Wolf 1999; Breitmeier in this volume). While the isolated effect caused by any single regime will be insignificant, all regimes contribute to the observed effect in basically the same way and influence is channeled through virtually a single causal pathway.

Another possible research focus is the influence of international regimes on the political status of a domestic political system, or of domestic political

systems at large, rather than on the power distribution within it. Hence, one may inquire into the level of democracy and human rights in political systems, or even attitudes of a population toward democracy and human rights, as witnessed by suitable indicators (Hughes in this volume). In this case, the independent variable will almost inevitably be the universe of (unidentified) regimes, rather than any set of precisely identifiable ones.

International system. Finally, international regimes may exert influence on the international system at large. Regimes may contribute to eroding state sovereignty (Litfin 1997). They might have reduced the level of conflict in East-West relations prior to the political turn in the Soviet Union (Rittberger 1990). The emergence and importance of non-state transnational actors, such as non-governmental organizations (Princen and Finger 1994, Price 1998) and “epistemic communities” of scientists (Haas 1992), is attributed to the proliferation of international regimes. Regimes may also foster the relevance of international law and the “juridification” of international relations (Keohane et al. 2000). Research on the broader consequences of international regimes therefore might well contribute to the study of overall change in the international system.

A significant change of international society only rarely will be caused by a single regime. Studies intending to identify measurable systemic effects will usually take a larger set, or even the whole universe of regimes as the independent variable. The aggregate effects of all relevant East-West regimes may have reduced the intensity of conflict between the two military blocs before 1990. Or the aggregate effects of all international regimes and organizations may have contributed to stabilizing peace.

However, occasionally a single regime may serve as the suitable independent variable. Once again, one may think of GATT/WTO as an extraordinarily important international regime that may have significantly empowered multinational corporations, which are a type of internationally operating non-state actors, vis-à-vis the states, which are the traditionally most important actors. A study also may take a single regime as its independent variable and explore a causal pathway by which the international system is affected. For example, Litfin (in this volume) argues that the regime on global climate change forces member states to take into account scientific knowledge when determining their action and in this way changes existing sovereignty patterns.

As we move along from the exploration of regime externalities and interaction to the assessment of regime consequences on domestic society and the international system, the complexity of the dependent variables increases significantly. In order to grasp broader consequences, the

independent variables usually also will tend to be more highly aggregated. We may well explore the externalities generated by a single regime, or even by an important component of a regime, that are observable within one or a limited number of issue areas beyond its own domain. Likewise, research on regime interaction will frequently deal with a constellation in which a single regime influences a single target regime. It may also usefully address interaction at the level of components, for example if we study the broader effects on a target of the emissions trading system envisaged within the Kyo-

dep. V indep. V	other issue area(s)	(other) regime(s)	domestic poli- tical system	international system
part of regime one regime	externalities	regime interaction		
set of regimes			domestic	systemic
universe of regimes			consequences	effects

Figure 9.1. *Priority areas of broader consequences research.*

to Protocol, rather than the effects of the entire climate change regime. In other cases, it will be sets of regimes whose externalities or interaction are explored, but these sets will still be composed of a comparatively small number of readily identifiable regimes. In contrast, we cannot expect to identify some highly aggregated domestic or systemic consequences at the level of the single regime, or even of a limited set of identifiable regimes. Surely, the effects produced by a single regime may be assumed to contribute in one way or another to the broader effect in question, but frequently they will be insignificant in isolation, and they are often difficult to disentangle from parallel effects caused by other regimes. Hence, broader consequences of these types will generally be driven by larger sets of regimes or even by the entire population of international regimes existing within the international system.

The main areas of current and presumably of future research on the broader consequences of international regimes are summarized in Figure 9.1. The rows identify the major independent variables, the columns the major dependent ones. Research on the impact of one or more international regimes beyond their own domains as well as research on the interaction of regimes tend to concentrate on comparatively limited sources of influence. Their main independent variable is a single regime, or a component thereof,

or a limited set of readily identifiable regimes. In contrast, studies exploring regime consequences for domestic political systems and for the international system will tend to be based on an independent variable that comprises a larger set, or even the entire universe, of regimes.

4. METHODOLOGICAL PROBLEMS

The study of the broader consequences of international regimes does not seem to require a completely new methodology, or methods entirely unknown to the well-advanced analysis of simple effectiveness and regime analysis at large. Nevertheless, despite the wide array of differing research interests, each of which poses specific analytical problems, broader consequences research differs systematically from the study of simple effectiveness in a number of important respects.

First, the situations bringing about broader consequences are usually significantly more complex than those generating simple effects. While the exploration of simple effectiveness regularly addresses regime effects on a single issue area, the assessment of externalities will frequently deal with a number of different issue areas on which a given regime has an impact. Likewise, an interaction situation may involve a whole set of regimes influencing each other's institutional development and performance. Any assessment of the domestic consequences of international regimes or of their effects on the international system at large obviously must handle highly complex dependent variables. A higher level of complexity renders the isolation of clear-cut causal effects more difficult. Compared to the study of simple effectiveness, the exploration of broader consequences will therefore more often have to rely on the careful disaggregation of independent and dependent variables in order to isolate causal effects.

Second, the broader consequences of one or more international regimes will frequently be more remote than effects within their own domains. After all, international governance institutions are usually established in order to bring about particular effects within their own domains, while their broader consequences constitute more diffuse side effects possibly spread over a number of different targets. Moreover, these targets usually will be affected more directly by other drivers so that any analysis is prone with a possibly high number of intervening variables. The consequences of the ozone regime for the state of the ozone layer may be assumed to be easier to observe than its effects on other issue areas or affected target regimes, let alone its effects on domestic society or the international system, *because* it is a major cause of change within its own domain, while it will merely be one among numerous other drivers of change with respect to other targets. Hence,

broader consequences research will have to invest more attention to the careful isolation of comparatively remote and diffuse effects.

Third, broader consequences will be generated by chains of causation that are on average longer than those bringing about simple effects. To be sure, this is not always the case. If intensified regulation beyond the nation-state gradually deprives domestic legislatures of power and thereby tacitly changes domestic political systems (Breitmeier in this volume), the causal pathway is short and readily observable. Yet, broader consequences do not only comprise first-order effects, they may well be caused by second- or higher order effects (e.g., an effect of the climate change regime on international trade that generates effects on air pollution). Externalities of this type are caused in a pathway that may involve a number of different issue areas. Likewise, changes of domestic political systems or even of the international system generated by international regimes are frequently channeled through comparatively long causal chains. The longer a causal chain, the more difficult it is to trace, because an observed outcome is affected by more intervening variables and may be attributed less clearly to the independent variable(s) chosen.

Fourth, a clearly identifiable and limited independent variable—be it a regime, or a component of a regime, or even a set of readily identifiable regimes—allows us to employ the qualitative methods most widely used in regime analysis. Methods for attributing changes of the dependent variable to the independent variable include the construction of counterfactual scenarios (Fearon 1991), the exclusion of alternative explanations (Bernauer 1995: 373; Bierstecker 1993) and, more generally, the search for causal pathways (Hovi in this volume). In contrast, some research on broader consequences deals with independent variables at a comparatively high level of aggregation. Studies of this type will frequently not allow concentration on single regimes and the particular causal pathways that are operative. Instead, they may have to resort to quantitative analysis.

These general problems appear in differing combinations and intensity in research addressing the four main areas of broader consequences research. In the remainder of this section, I will discuss the problems for each of these areas separately.

The evaluation of “externalities,” that is of the impact of a regime, a regime component, or a set regimes beyond its own domain, is, like the dominant branch of effectiveness research, in the first regard related to the output side of international regimes. Generally, the evaluation of externalities may not seem to be entirely different from assessing the impact of a given regime within its own domain. Yet, at close inspection it turns out to be prone to two analytic problems. One relates to their empirical mapping

of externalities and the other to their scoring into an integrated overall assessment of social benefits (Underdal et al. 2000: 17 – 18).

The problem of complexity of the analytic situation may be readily dealt with by its appropriate disaggregation. If an international regime causes side effects in, say, five other issue areas, these externalities may be assessed one after the other. What makes the assessment of a regime's externalities difficult is the fact that they will usually be less significant than the regime's impact within its own domain. Hence, mapping of externalities is hampered by the possible insignificance of regime-generated change compared to changes caused by other drivers. Moreover, it will be prone to second- or higher order effects that necessarily involve longer chains of causation. The general advice to deal with these problems is to concentrate on immediate rather than remote effects and to keep causal chains as short as possible. Research should start with the most significant and readily traceable externalities and gradually work toward a more comprehensive assessment.

The second analytical problem relates to the integration of the externalities of an international regime and its impact within its own domain into a comprehensive score. It is specific to a particular research design that intends to measure the effects of a social institution, but generates particular analytical difficulties for broader consequences research. The first step will be to distinguish between positive and negative externalities. This is comparatively simple for externalities that occur within the issue areas of other international regimes. In these cases, we know what the regime members collectively (although not necessarily all of them individually) consider as benign or malign. If the climate change regime has a degrading impact on tropical forests, and if regime members intend to protect tropical forests within the biodiversity regime, it will be safe to treat the observed effect as a negative externality. But what if it led to changes in agriculture, such as the replacement the production of rice by grain or the restructurement of farm sizes? Without a yardstick that is collectively agreed upon by the actors concerned, appraisal of the direction of side effects will be difficult. Hence, it may be fruitful to relate the exploration of impact externalities as far as possible to the analysis of interaction between regimes. The other, even thornier issue is the attribution of values to different externalities and a regime's impact within its own domain. It is the question of how much protection of the global climate justifies the degradation of a square mile of tropical forest.

The analysis of regime interaction is heavily process oriented. Interaction may occur through rather different causal pathways, including ones that involve the creation of externalities beyond the domain of a given regime. However, the emphasis is put on the interference of a process of governance by another process of governance. Therefore, interaction always includes an

input dimension. The central problem for the analysis of regime interaction is the fact that interaction situations are frequently complex (Gehring and Oberthür in this volume). More often than not influence is not well directed and asymmetrical. It may run back and forth between the regimes involved (Young 1996). For example, the global London dumping convention and the regional Oslo dumping convention co-developed for almost thirty years and may be expected to have exerted multifaceted influence on each other. Other situations include a whole set of regimes that affect each other in different—and usually unknown—ways. In these cases, the regimes involved constitute the dependent and the independent variable at the same time. This constellation precludes any serious causal analysis (see Carlsnaes 1992). Even a situation limited to two regimes will be too complex for causal analysis, if the institutions affect each other reciprocally or if influence is channeled through more than one causal pathway. Therefore, many studies exploring complicated regime interaction situations do not reach far beyond description and are not able to respond to the core question of this strand of research: under which conditions and transmitted by which causal mechanisms do international regimes interact, rather than merely co-exist ?

To allow causal analysis, the variables must not be too highly aggregated. A complex interaction situation may always be disaggregated into a number of cases of interaction that include not more than two regimes and have a clear direction of influence running from the target regime toward the source regime. Accordingly, a set of regimes should be disaggregated into a number of bilateral relations. For example, if we explore the consequences of one source regime on a whole set of target regimes, it will almost always be better to disaggregate the multi-regime interaction into a number of bilateral ones (see Gehring and Oberthür in this volume). We may investigate the influence of the Basle hazardous wastes regime on the development of several regional seas regimes by exploring in depth its effect on each regional seas regime separately. We might then discover that the situation includes additional cases of interaction, for example ones between the regional seas regimes in question, or ones feeding back from these regimes to the original source regime. Thus we may identify quite a number of separate incidents of interaction, each of which is based on a clear causal chain. Likewise, it may be useful to disaggregate interaction patterns between two regimes into more limited incidents, especially if feedback processes occur over time. While the appropriate unit of analysis is a single case of interaction rather than interaction between two or more regimes at large, the interaction pattern of the overall situation will become apparent as soon as the cases are re-aggregated.

Disaggregation of complex situations into a suitable number of clear-cut cases of interaction will usually contribute to isolating causal effects and

clarify, albeit probably not shorten, the length of causal chains. Moreover, it allows us to start with an assessment of the most clear-cut cases and the most readily traceable causal pathways and gradually work toward more difficult cases. Thus, disaggregation contributes to mitigating the problems of remoteness of causal influence and of long causal pathways.

The analysis of domestic or systemic effects of international regimes is also highly sensitive to the problem of complexity. Situations may be difficult to examine as to the causality of influence because they involve many regimes and different causal pathways. Studies with a trend-discovering design that are directed at exploring causal pathways rather than measuring aggregate effects (see Breitmeier and Litfin in this volume) may thus be well advised to limit their analysis to either a single regime or a single type of causal pathway at a time. However, more often than not, domestic and systemic effects will hardly be attributable to a single regime. The assessment of regime consequences for domestic society and the international system deals not only with highly complex dependent variables, it will frequently also require a comparatively highly aggregated independent variable. In these cases it may be useful to employ quantitative rather than, or complementary to, qualitative analytical methods. Resort to the statistical assessment of effects and the successive exclusion of alternative explanatory variables opens broader consequences research for the analysis of aggregate effects that are difficult to approach by qualitative methods. For example, Hughes (in this volume) explores whether observed changes in life expectancy and attitudes toward democracy may be attributed to the existence of the universe of regimes.

For the analysis of the broader consequences, this approach poses two major problems, both related to the establishment of causality. First, effects at a high level of aggregation may generally be attributed to a number of independent variables. An important task will be to control as many of these variables as possible sufficiently well to isolate the influence of regimes as the explanatory factor of interest. Otherwise, one will merely identify room for possible influence of the universe of regimes on some highly aggregated social indicators, which may be filled as well by a number of rival explanatory factors. Second, correlation does not yet say anything about the direction of causal influence. Are more favorable attitudes toward democracy caused by the existence of international regimes, or is the emergence of regimes, for example in the area of human rights, better explained by changes in these attitudes? Since the direction of causality is essential for consequences research, it may be necessary to complement statistical analysis with the construction of causal models that may be tested subsequently.

The analysis of systemic effects of international regimes poses another, more specific problem. The international system is not fully independent from its components, including international regimes. It does not need further elaboration that regimes form parts of the institutionalized international system and are thus nested within an even larger international institution (Buzan 1993; Young 1996). There is nothing special about this kind of nesting of institutions. Think of a political party that is part of a national political system. What matters here is that the higher order institution changes automatically with any modification of a lower order institution. The international system is automatically affected by the establishment of an international regime or the adoption of a significant decision within a regime, much as the political system of a nation-state changes more or less profoundly with the foundation of a new political party. If an international regime encourages actors to adopt collective decisions by arguing rather than pure bargaining, it contributes to "rationalizing" collective decision-making within the international system in the Habermasian sense (Habermas 1981). If it opens collective decision processes to non-state actors, it contributes to undermining the predominance of state actors. It is important to recognize that these changes of the international system are mere *aggregate descriptions* of developments occurring elsewhere, rather than separate systemic effects, because the cause and the target variables are not independent of each other. Only if actors behave differently *because there are so many regimes in the international system* that provide opportunities for action to non-state actors, or that rationalize interaction in a Habermasian sense, we will be faced with an originally systemic effect.

Therefore, we should be clear, when analyzing systemic effects, whether we mean effects that occur at a lower level within the system, that is within one or more international regimes, or whether we mean original modifications of the international system beyond the aggregate effects attributable to the individual regimes. If we take the international system as the aggregate of developments taking place at a lower level, then the system will change all the time. Therefore, it is of little interest to state that some effect occurring at the regime level changes the international system. Rather, we will want to discover *trends* of more profound systemic change of which a regime-level effect is a mere indicator. If we are looking for original systemic effects, we must conceptualize the system separately from its components.

The detection of profound trends of systemic change is hampered by the fact that the international system is unique and we lack an immediate comparison that might inform us what a profoundly changing system looks like. Accordingly, we are faced with the problem of anticipating future

outcomes on the basis of minor indicators in the present or immediate past (see Walter and Zürn in this volume). In the first step, we may identify an institutionally driven causal mechanism that changes the nature of interaction prevailing within the international system. Does a particular regime favor scientifically based over interest-based interventions? Or is it particularly open to influence of otherwise weak actors (such as NGOs or small states)? This step involves two analytical problems. The identification of changes in the regular interaction requires a standard of what is to be expected "normally." Usually we do not dispose of an empirical standard that would tell us how international actors behave on average. Therefore, we need some model of regular behavior that must be sufficiently realistic to be useful. If we take a crude rational choice standard of unilaterally chosen strategic action, we will see modifications almost everywhere. If we *assume* that actors regularly behave according to norms (logic of appropriateness) (March and Olson 1989) and communicative action (Risse 2000), and that non-state actors are widely recognized as relevant participants (Keck/Sikking 1998), we might not find any significant modification of standard behavior. The second analytical problem is related to the impact of changes in interaction on the output in terms of regulatory decisions or norms. The mere presence of NGOs or scientists in regime negotiations does not necessarily indicate that these actors influence the output significantly. Once again, we need a counterfactual analysis ("how would states have done in the absence of non-state actors") and the exclusion of alternative explanations ("might states have achieved a similar result on their own?")

Changes occurring within a particular regime automatically constitute changes of the international system, but they are normally of limited significance. In order to identify *significant* system-level effects, we must explore whether similar changes occur in other regimes, that is whether international regimes *systematically* modify the international system in the identified way. In the second step, we might thus substitute a particular regime with a larger set of regimes. We may quite confidently assume that East-West regimes generally reduce the level of conflict in comparison with the parallel non-regime situations (Rittberger 1990). But do regimes generally favor science-based over power-based decisions? Are they generally open to significant influence of nongovernmental groups? If not, we may still project an alleged trend into the future: Does the number of regimes with relevant properties grow over-proportionally? May it be expected to increase further so that it must be assumed to become a widespread phenomenon in the future? If we are able to respond to these questions in the affirmative, we may have discovered a system-wide *trend* of change that is still exclusively based on developments taking place at the regime level.

In order to identify original system-level effects, we must push the analysis one step further and ask whether the observed aggregate change leads to consequences beyond the effects that occur at the regime level. Can it be established that the behavior of states involved in the East-West conflict changed significantly *even in non-regime situations* because of the establishment of East-West regimes? This effect could not be attributed to the single regimes any more; it would constitute an additional effect that had to be attributed to the simultaneous existence of many regimes, that is, to the system. If internationally acting nongovernmental organizations could launch an attack on GATT/WTO or lead a campaign for a new regime against landmines (Price 1998), *because* they had acquired their ability to do so in the context of environmental and human rights regimes, we would have detected a new type of actor in the international system whose action had become independent of a particular regime. Only effects of this type are truly located at the system level.

5. CONCLUSION: THE FUTURE STUDY OF BROADER CONSEQUENCES

International regimes produce consequences that reach far beyond their own domains. So far, regime analysis has largely avoided tackling these broader consequences. It operated under the implicit assumption that the most important effects may be found within the issue areas governed by a given regime. However, the broader consequences of single international regimes or of the increasing population of regimes within the international system are far from negligible. In some cases, they may be as important as the simple effects. At the very least, they merit considerably more scholarly attention than they have received in the past.

International regimes may have important effects on very different targets. Their output in the form of material norms (rights and obligations) may affect the action of state-actors, transnational actors, and sub-national actors alike and cause secondary consequences on all levels of human interaction. Depending on their specific input of information, regimes also provide opportunities for action not only for states, but also for transnational and sub-national actors. Hence, the process of generating regulation becomes a factor that gains importance for certain types of consequence. Therefore, it seems advisable not to base research of broader consequences from its very beginning on an under-complex conception of international regimes that might prove to be too narrow to grasp important types of consequence.

Considering the almost unlimited expansion of this new area of research, any serious research program will have to concentrate on a number of important aspects. The present paper identifies four research priorities that either exist within the current literature or have been identified as meriting future attention. These priorities may be expected to constitute the core of dependent variables within the emerging new field of study. The exploration of the *externalities* produced by a regime beyond its "own" issue area constitutes an immediate extension of the existing research on the simple effectiveness of international regimes. A second research priority that has, in light of an increasing number of independently established international regimes, already attracted considerable interest of both scholars and policy makers is devoted to the study of *interaction between regimes*. Another strand of research focuses on regime effects on *domestic political systems*, and a last priority concentrates on exploring changes of the *international system* that may be attributed to international regimes. Whereas the exploration of externalities is closely related to the assessment of the simple effectiveness of international regimes, both the domestic effects of internationalization and globalization and the changing nature of the international system are intensely discussed in the literature. The study of the broader effects of international regimes may draw on these extensive research traditions. It promises to contribute to these literatures in particular by developing the role of regimes as drivers for processes of change, that is by emphasizing an independent variable that has gained comparatively little specific attention so far. Surprisingly, the analysis of regime interaction relies on the least well-developed conceptual foundation of the four research areas.

Generally, the exploration of the broader consequences of international regimes does not seem to require an entirely new methodology or methods that are completely unknown in traditional regime analysis. However, broader consequences research differs in a number of respects from the assessment of simple effectiveness. Situations will tend to be more complex, while effects will tend to be more remote than simple effects and rely on longer chains of causation. If we attempt to attribute broad changes of societies to the universe of regimes, all the analytic problems of quantitative macro-analysis will turn up.

Despite these analytical difficulties, the multifaceted and newly developing research area devoted to the study of the broader consequences of international regimes opens a fascinating and politically highly relevant new perspective on the effects of governance within the international system.

NOTES

- 1 This section draws on the discussion of the 1999 Oslo Workshop of the Concerted Action Network on the Effectiveness of International Environmental Regimes (Breitmeier 2000).

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