



Regime Complexes as a Model of Multilateral Governance: The Case of the Environment

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1 INTRODUCTION

In the early 2000s, scholars working on multilateralism in the environmental field realized that governance on specific topics, such as genetic resources (Raustiala & Victor, 2004), was not organized around a unique international institution anymore. Rather, several institutions were responsible for creating norms and rules on the same specific topic, without clear hierarchy among them: this is how they discovered and created the “regime complex” concept. Since then, regime complexes have been identified as governance arrangements dealing with a high number of specific topics, including climate change, forests, fisheries and, outside the environmental realm, trade, intellectual property rights or human trafficking.

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In less than 20 years, the regime complex concept has become an important concept in international studies. But what are precisely regime complexes? How has the concept evolved? What does it tell us about multilateral governance?

This chapter precisely aims at answering these questions. It presents and questions the contributions of the regime complex concept to our understanding of multilateral governance. In order to do so, the first part presents the definition of regime complexes as well as the evolution of the concept through time, as the original concept has created many conceptual rhizomes. The second part explains what regime complexes tell us about global governance, using examples from the environmental field, that is the field in which research on regime complexes has been the most active so far. The third part reflects on the use of the regime complex concept outside of the environmental field. Such use has been, so far, more limited, which enables us to reflect, also in the conclusion, on the limits of the regime complex concept as well as on its potential for studies of multilateralism.

2 REGIME COMPLEXES AS A RECENT INNOVATIVE CONCEPT TO DESCRIBE GLOBAL GOVERNANCE

The regime complex concept comes from earlier work on international regimes defined by Stephen Krasner as “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations” (Krasner, 1982: 185). Traditionally, international regime studies have concentrated on the analysis of unique and specific international organizations, conventions, protocols or treaties, on a specific issue area, such as the Antarctic Treaty, the World Trade Organization or the Geneva Conventions. Progressively, however, scholars including Ernst Haas (1980) or Oran Young (1989) started to realize that different international treaties were not in isolation from one another but could enter into interactions.

Building on the work of these specialists of international regimes’ interactions, Kal Raustiala and David Victor, who were interested in biodiversity issues and in particular in the specific topic of genetic resources’ governance, suggested to label “regime complexes” situations in which several international regimes were governing the same specific topic. More precisely, they defined a regime complex as “an array of partially overlapping and nonhierarchical institutions governing a particular issue-area”

(Raustiala & Victor, 2004: 279). They identified several international regimes dealing with the plant genetic resources' issue including the biodiversity, the intellectual property rights and the agriculture regimes.

While this first step was crucial in opening a new research domain on regime complexes, several uncertainties remained with regard to the nature and number of institutions involved, as well as to the consequences of regime interactions within regime complexes for multilateral governance. To fill these gaps, in early 2010, a group of international scholars interested in regime complexes organized a workshop followed by a special issue on the concept, to refine the initial definition into: "a network of three or more international regimes that relate to a common subject matter; exhibit overlapping membership; and generate substantive, normative, or operative interactions recognized as potentially problematic whether or not they are managed effectively" (Orsini et al., 2013: 29).

What these scholars wanted to insist on was the historical affiliation of regime complexes to international regime's studies, meaning that their consequences for the effectiveness of global governance was a key question; as well as on the fact that regime complexes are governance structures, meaning that they are more than the sum of their constitutive parts. Instead of analyzing regimes one by one, a regime complexes' lens requires to look at the networks of international regimes evolving around a specific topic. Networks between international institutions were found to be twofold: horizontal thematic networks that link regimes on different issue areas; and vertical networks based on overlapping state membership between these different regimes (Gomez-Mera et al., 2020). For example, four main international regimes deal with forests issues, namely trade, climate change, biodiversity and indigenous rights, and many states are members to these different regimes at the same time (Dupuits, 2021).

For multilateral governance, such structures of regimes mean that if one of the regimes changes, or one element of these regimes changes, it is the whole structure that can evolve. Defining regime complexes as networks of international regimes also helped characterize the nature of the governance structure around specific topics of multilateral governance: regime complexes could be found at different stages including atomization, competition, specialization and integration (Morin & Orsini, 2013). Atomization means that a regime complex is particularly fragmented with no precise structure. Competition appears when part of the institutions involved in the complex interact and compete for the

governance of specific issues. Specialization might follow competition and leads to the creation of a sort of division of labor between the different institutions involved in the complex. Finally, integration might happen when specialization leads to the emergence of a clear structure within the regime complex, with an integrated governance of the specific issue at hand. Integration as a last stage does not always happen and most regime complexes' forms enable the emergence of "contested multilateralism" (Morse & Keohane, 2014) with tensions that can potentially emerge at different stages of the development of the regime complex.

Collective thinking is diverse and some scholars took a different path to the regime complexes one, preferring to rather talk about "institutional fragmentation" patterns, rather than real governance structures (Biermann et al., 2009). They thought it was too premature to clearly identify governance structures organized around specific topics. Moreover, for them, the regime complex concept was somehow too deterministic, while international actors themselves (mostly states and international organizations) were often not aware of the existence of multilateral structures. Considering that "fragmentation" of global governance was still dominating (Kellow, 2012), they preferred to refer to the broader terms of "architectures of global governance" rather than to more narrowly defined regime complexes (Biermann & Kim, 2020; see also Chapter 3 in this book on global health multilateral governance).

Several scholars, inspired by the extended work by Edgard Morin (1990, 2007) on complexity, also started to envision a potential link between regime complexes and the notion of complex systems. A common mistake in the interpretation of the regime complex concept is to believe that regime complexes are complex, in the sense of complicated. Rather, as mentioned earlier, "complex" in "regime complex" refers to the existence of a structure, a complex, that links different governance institutions together. While regime complexes are not necessarily complex, they, however, could share a number of similar characteristics with complex systems defined recently as "open systems—that is, exchanging information with their environment—that include multiple elements (units) of various types intricately interconnected with one another and operating at various levels" (Orsini et al., 2020: 1010). One indeed recognizes in the definition the reference to several units that are linked together.

In particular, complex systems have three properties that distinguish them from other forms of governance: self-organization, emergence and

adaptation: “overall, thinking in terms of complex systems invites us to give up on prediction, to dissociate management from control, to be attuned to unintended consequences, and to rethink the role of power. The world is not a machine, for better or for worse” (Orsini et al., 2020: 1011). Interested in the unpredictable but adaptive nature of complex systems, several scholars of regime complexes started to work on complex adaptive systems (Kim & Mackey, 2014). It can indeed be that some regime complexes become adaptive systems, but not all regime complexes are of this nature. Actually, Marielle Papin believes complexity and complex system science can be used as umbrella concepts to host the different formerly used concepts of “regime complexes”, “fragmentation” or “institutional interactions” in the same collective framework (Papin, 2020).

While institutional fragmentation or complex systems refine the regime complex concept, they still build on it and do not replace it. After all, “the concept (*of regime complex*) has become a central element of the theoretical repertoire of global governance” (Gomez-Mera et al., 2020: 137). Moreover, all these concepts share one central common denominator: global governance is now networked across different international institutions, with social network theory often suggested as a key method associated with such conceptualizations (Kim, 2020). More interestingly, the concept has not only been actively discussed theoretically in academic debates, it has also been used as the framework for a plethora of empirical studies, in particular in the environmental field. We develop the empirical contributions of the regime complex concept in this field of global governance in the next section.

3 THE EMPIRICAL CONTRIBUTIONS OF A REGIME COMPLEXES’ PERSPECTIVE ON GLOBAL ENVIRONMENTAL GOVERNANCE

The environmental field has so far been the favorite empirical realm for regime complexes’ studies. Regime complexes’ scholars have indeed been working on regime complexes on the topic of genetic resources (Gehring & Faude, 2014; Morin & Orsini, 2014; Oberthür & Gehring, 2006; Raustiala & Victor, 2004), climate change (Abbott, 2012; Earsom & Delreux, 2021; Keohane & Victor, 2011), fisheries (Hollway & Koskinen, 2016), forests (Giessen, 2013; Orsini, 2013,

2017), arctic ocean governance (Young & Kim, 2021) or energy (Van de Graaf, 2013). The empirical test of the concept enabled them to identify key features of multilateral governance through the lens of regime complexes.

First, while “most regime complexes are the unintentional results of successive interactions” (Gomez-Mera et al., 2020: 141), they represent a new playing field for innovative actors’ strategies within global governance. When no unique regime enjoys a monopoly on governance issues, actors can play with different institutions, pushing their interests across different venues at the same time. By doing so, they can perform forum shopping (Kellow, 2012; Raustiala & Victor, 2004), forum shifting (Dupuits, 2021; Van de Graaf, 2013) and forum linking (Dupuits, 2021; Orsini, 2013).

Forum shopping consists in “a strategy of selecting arenas because of the benefits conferred by institutional characteristics and using these to progress or inhibit the development of policy initiatives” (Kellow, 2012: 333): actors “shop” the venue that better corresponds to their interests. For example, business groups have been quite active in practicing forum shopping within the genetic resources’ regime complex, trying to use intellectual property and trade venues to counter the development of rules on benefit sharing within the Convention on biological diversity (Orsini, 2013).

Forum shifting consists in changing the venue in which international discussions occur. Among others, one way of practicing forum shifting consists in creating a new venue. This is precisely what happened when Germany, joined by a handful of other states, decided to push for the creation of a new international organization within the energy regime complex, the International Renewable Energy Agency (created in 2009), as it believed that the International Energy Agency was not engaging enough with the important topic of renewable energy (Van de Graaf, 2013).

While the former two strategies tend to potentially disrupt the existing balance within a regime complex, forum linking “occurs when actors seek to connect previously conflictive or disconnected arenas in order to serve their own interests” (Dupuits, 2021: 569): they try to create more coherence within the regime complex. For example, from 2015 and on, indigenous peoples have practiced forum linking between climate, biodiversity and indigenous rights’ regimes by pushing the specific topic of

their territorial security, at the crossroad of all three international regimes (Dupuits, 2021).

Forum shopping, forum shifting and forum linking are not necessarily exclusive and can therefore be combined or practiced by the same actors through time (Orsini, 2013). For instance, Dupuits (2021) explains how the failure of indigenous peoples to have territorial security recognized as a key issue in international processes through forum linking pushed them to practice a vertical forum shift to “move (*of*) territorial security issues from international climate arenas towards other arenas or more regional and local priorities” (Dupuits, 2021: 577). They also practiced a horizontal shift at the international level, trying to move their concerns from climate arenas (after the 21st Conference of the parties to the United Nations Framework Convention on Climate Change in 2015) to biodiversity arenas (at the 13th Conference of the parties to the Convention on biological diversity in 2016).

Just as regime studies were initially state-centric, regime complexes’ studies were also initially concentrating on states. But empirical proof of the concept soon revealed that the forum shopping, forum shifting and forum linking strategies were also performed by non-state actors. Non-state actors can even happen to develop their own institutional initiatives, parallel to governmental ones, to create proper “transnational regime complexes” such as the transnational regime complex on climate change. Within this complex, the World Resources Institute and the World Business Council for Sustainable Development, two key transnational actors, created the Greenhouse Gas Protocol, in 1998, to provide to business and governments standards and training on greenhouse gas emissions (Abbott, 2012). As a result, regime complexes were found to favor multiple strategies and multiple actors in global governance, leading experts to conceptualize “hybrid institutional complexes” as global governance formats “that comprise heterogeneous interstate, infra-state, public–private and private transnational institutions, formal and informal” (Abbott & Faude, 2022: 264).

Second, and related to this first result, a regime complexes’ perspective enabled to empirically refine our understanding of power in multilateralism. If actors and strategies become multiple, where does power lie? While initial theoretical studies expected that traditionally powerful players would still be central in regime complexes (Drezner, 2009), with regime complexes even reinforcing the power of the already powerful ones, empirical studies in the environmental field have shown that regime

complexes can benefit actors with different skills, who are not the actors that were believed to be the central ones in the field. Indeed, regime complexes is likely to favor actors' craftiness (Holeindre, 2017) while their force becomes less relevant.

Using social network analysis and centrality measures, Hollway and Koskinen (2016) analyze bilateral and multilateral fisheries agreements as a regime complex, finding different power patterns depending on the governance scale, i.e., the bilateral or the multilateral parts of the regime complex. The European Union and Russia are the central players in the bilateral complex. In addition to geography, the explanation relies on the numerous agreements the European Union has with non-adjacent African states. It also relies on the fact that "bilateralism appears to be the preferred choice of larger, fishing-intensive states" (Hollway & Koskinen, 2016: 293). This finding seems to confirm that powerful states are the most central in the complex. However, both authors also find that, within a more global picture, small states are at the center of the multilateral elements of the complex, and "especially those with experience of local marine stocks being threatened" (Hollway & Koskinen, 2016: 293). In that case, power distribution can be explained by the fact that such states count on collective action to help them protect their fisheries' resources. Apparently small players are found to be able to identify the networks of multilateral agreements as an opportunity for them to improve their fisheries governance.

In the same line, but working on non-state actors' strategies in regime complexes, Orsini (2017) shows that, once they manage to have enough resources to participate in multiple international venues (once they pay what has been identified as the "negotiation burden"), non-governmental organizations are well equipped to navigate the different institutions of the forest regime complex, and on this aspect are more skilled than business groups. This is partly explained by their capacity to "see" the different components of the regime complex and push for their interests throughout the different venues, while businesses tend to concentrate their lobbying efforts at the national level of policymaking and still act on venues separately and somehow miss the overall picture. They also tend to underestimate the importance of environmental venues as counterparts to trade and intellectual property rights' venues.

Such changes in power dynamics are partly explained by the fact that regime complexes enhance the legitimacy of global governance (Faude & Große-Kreul, 2020). Indeed, the presence of several institutions forces

international players to justify their actions, especially when these actions create negative spillovers across existing institutions. Such justifications reinforce the importance of norms, at the detriment of interests. The authors take, among others, the example of the World Trade Organization Appellate Body and its decisions on environmentally motivated trade restrictions. Because it had to justify the potential interactions between trade and environmental issues, the World Trade Organization Appellate Body strengthened the relation between both (Faude & Große-Kreul, 2020: 436–437; see also Chapter 10 in this book). These empirical evidences have led to more general modeling confirming for instance that weak actors are more likely to benefit from regime shifting, compared to strong actors (Verdier, 2022).

This does not mean that power dynamics are not at play any more within regime complexes. Some institutions are still more central, and therefore powerful, in specific regime complexes. For example, Morin et al. (2017a) show how social sciences are still underrepresented as epistemologies within the profiles of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services' experts, a science policy boundary organization at the center of the biodiversity regime complex. This is understandable as the platform deals mostly with natural science issues, but what is more striking is that the profiles of the experts within social sciences, economics and management are nearly the exclusive competences represented: this illustrates the dominance of the trade regime within the biodiversity regime complex. Also, research by Delreux and Earsom on the European Union in the climate change regime complex investigates the responsiveness of the European Union, that is its potential to navigate the climate change regime complex. It shows that not all international actors can practice responsiveness as it requires key resources, being: "not so much a passive reaction, but rather a reflection of how the European Union as an international actor approaches international climate governance" (Earsom & Delreux, 2021: 712). Power dominance is still visible. It can also take the shape of the partial diffusion of topics across international institutions dealing with important global problems. This is the case of the incomplete "climatization" of global politics, whereby specialists have noticed the incomplete climatization of fossil fuels' governance, while fossil fuels are the first drivers of climate change. Such incomplete climatization, they claim, "perpetuate(s) existing infrastructures and create(s) new lock-ins that displace the problem without contributing to its resolution" (Aykut et al., 2017:

189). Regime complexes' studies have the merit to shed new light on power dominance and to highlight new explanations for such dominance.

Third, empirical studies using a regime complexes' lens in the environmental field have concentrated on formulating recommendations to improve global governance. Several have seen regime complexes as entities evolving according to the principles of organizational ecology (Abbott et al., 2016). Among these, division of labor has been observed, just as when different species specialize in specific ecological niches (Gehring & Faude, 2014; Pratt, 2018), with positive outcomes for global governance. Biermann and Kim (2020) have also identified important policy responses in the context of institutional fragmentation, that can help improve the coherency and therefore effectiveness, of global governance. This is the case of "policy integration", when one issue such as climate change is integrated in another one, such as energy (Dupont, 2015); of "interplay management" when for instance coordination platforms are created across international institutions such as the Inter-Organization for the Sound Management of Chemicals (Faude & Große-Kreul, 2020: 437); of "orchestration", when an overarching agreement is created to host other institutions on a given topic, this is to some extent the case of the 2015 Paris Agreement for climate change (Earsom & Delreux, 2023); of "governance through goals", which is a strategy that has been favored to improve the implementation of the sustainable development goals (Kanie & Biermann, 2017); of "hierarchization" such as attempts to develop global environmental constitutionalism to establish hierarchy in international environmental law, such as with the Global Pact for the Environment (Biermann & Kim, 2020: 283).

Such policy responses can help solve conflicts between the norms of different environmental regimes, as is the case between the REDD initiative on deforestation and forest degradation of the climate change regime and the norms of the Convention on biological diversity. Indeed, the implementation of REDD can be opposed to biodiversity rich policies (when tree monocultures are planted for reforestation) and to indigenous and local communities' rights (when initiatives exclude consultations with these populations) (Dupuits, 2017: 119–121). While institutional fragmentation can lead to conflicts and redundancies, it can also lead to synergies, reinforcing effects, cooperation and connectivity. Most importantly, a regime complex lens enables to keep adaptability and change in mind and "in certain fields, such as the governance of climate change, where uncertainty forces us to adjust governance at the same time as

knowledge evolves, understanding how systems of institutions adapt is crucial” (Papin, 2020: 84).

All three streams, of strategies, power dynamics and effectiveness, are not isolated one from the other. For instance, Kellow (2012) is optimistic about institutional fragmentation as it enables issues not to be overlooked as several institutions deal with the same topic; and as forum shopping can enable to push for new developments for global governance, making it constantly dynamic and adaptive. While the research above builds on the environmental field, the next section discusses its applicability to other fields of global governance.

4 FOR A GENERALIZATION OF REGIME COMPLEXES’ STUDIES

The environmental field has been a particularly exceptional empirical field to test the heuristic potential of the regime complex’ concept. This can be explained by several specificities of such a field of study. First, there exists no World Environment Organization, meaning that governance is more easily fragmented in the environmental domain. Second, due to the increasing importance of the ecological crises, institutions have proliferated within this field, creating more potential institutional interactions. Third, scholars of global environmental governance have been particularly interested in issues of effectiveness, and therefore concerned about the potential effects of institutional interactions. Finally, they have tended to borrow conceptualizations inspired by natural sciences such as adaptive governance systems, organizational ecology and complex systems that are very close to the regime complex approach (Gomez-Mera et al., 2020: 138). Now that the environmental domain has served as a pioneering field for regime complex studies, there is potential for it to inform other fields of global governance about the dynamics of multilateralism.

A restricted number of other fields have already been analyzed in relation to the regime complex literature. This has indeed been the case as regime complexes in the environmental field include international regimes from other fields, meaning that research on environmental complexes is already producing results for other policy domains. The trade regime has been particularly intensely studied in relation to environmental issues, with research, among others, on the environmental provisions of international trade agreements, being bilateral or global trade agreements. The structure of all trade agreements including environmental provisions has

been studied as a complex system (Morin et al., 2017), with, among others, results on the dynamics of environmental provisions' diffusion, and on the major players hosting such provisions. Just as for the environmental domain, the trade domain is found to be highly evolving: "in this sense, systems of institutions have the property of autopoiesis, as they can generate more of themselves" (Morin et al., 2017 cited in Gomez Mera et al., 2020: 142).

Because regime complexes are about interactions between different regimes, methods and research endeavors to map regime complexes in the environmental domain have diffused to other fields. For instance, after the elaboration of the International Environmental Agreements Database in 2002 (Mitchell, 2020), that maps all existing international agreements dealing with environmental issues (more than 3000), researchers developed the TREND database (TREND for TRade & ENvironment Database) that, until 2022, identified about 300 different types of environmental provisions in more than 700 trade agreements (TREND, 2022).

Intellectual property rights' studies have also embraced a regime complex lens, following their discussion within the framework of the access to genetic resources' regime complex. As soon as Raustiala and Victor published their study about natural genetic resources and the question of their governance, Helfer (2004) analyzed the possibility of forum shifting across different regimes dealing with global health issues (see Chapter 3 in this book). The issue of access to genetic resources has also led to broader discussions on the important question of multilateral access to common goods such as medicines (Kuyper, 2015) or food (Margulis, 2013). These studies confirm the deliberative power of regime complexes and the key role non-state actors can play within these regimes.

The security field has been less inclined to engage with the regime complex literature, despite the fact that this literature proposes interesting new pathways. This is partly explained by the fact that, initially, scholars in the security field privileged studies based on the notion of inter-organizationalism, rather than on the concept of regime complexes (Biermann, 2009; Hofmann, 2009, 2019). Inter-organizationalism helped them analyze how different international organizations were interacting on global security issues, with the example of the interactions between the European Union and the North Atlantic Treaty Organization as a landmark example. However, despite its first analytical step toward the study of institutional interactions, inter-organizationalism still proposed a

limited reflection on the security field. First, inter-organizationalism was still centered on governmental and intergovernmental actors as the central actors of global governance while including non-state perspectives could have added some needed nuances: “as global issues become progressively complex, there is increasing demand to bring together multiple actors with distinct policy expertise to solve them” (Uji, 2022: 1). Second, inter-organizationalism pictured a security field dominated by rational and strategic perspectives of global politics, by predictable events, while regime complexes would inform us on the dynamic structures of such a field (Gomez-Mera et al., 2020: 140). Third, it also reflected a security field confined to one unique scale: the international level of policymaking while regime complexes call for polycentricity: “complexes underline both the fragmentation and polycentricity of global governance” (Papin, 2020: 83).

In parallel to inter-organizationalism, a few issue areas, more transnational in nature, have embraced a regime complex approach: studies on refugees and on human trafficking (Betts, 2010; Gomez Mera, 2016). Compared to more traditional security studies, the concept of regime complexes adds valuable new perspectives to such global governance efforts and in particular on issues regarding the lack of coherency between the norms adopted within different international institutions, norms that can be very detrimental to the implementation of human rights.

Only very recently have scholars tried to apply a regime complex lens to more traditional security issues, such as armament or geostrategic behavior. The obtained analyses are promising. Regarding armament, researchers have been studying the adoption of the arms’ trade treaty, that goes much beyond initial expectations: “the treaty has turned out to be much more than a lowest common denominator, an outcome most observers would not have expected given persistent reservations of great powers and gridlock on the global level” (Panke & Friedrichs, 2023: 3). What the authors demonstrate is how “regime complexity has been a crucial factor in the explanation for why the ATT (arms trade treaty) was concluded in the first place and why the outcome does not resemble a lowest common denominator” (Panke & Friedrichs, 2023: 4). More precisely, by embracing a polycentric view of the issue, their research shows the relevance of regional organizations, such as the European Union (EU), the Economic Community of West African States (ECOWAS) and the Caribbean Community (CARICOM), for pushing

for more ambitious global governance on arms trade such as “the inclusion of small arms and light weapons into the list of conventional weapons in the treaty’s scope and the inclusion of ammunition in a prominent Article in the ATT” (Panke & Friedrichs, 2023: 12). They also confirm that small states, such as Costa Rica, can be very influential in regime complexes, because “agency that exploits the opportunities provided by regime complexity matters” (Panke & Friedrichs, 2023: 12). Some, facing important national security challenges due to issues beyond the classical security domain, such as climate change, take the opportunity of issue linkages to switch from a sidelined role to a more central presence on the international scene. This has been the case of Bangladesh in climate change negotiations that switched from a vulnerable country role to the more pro-active presence as a “weak power”, leading climate adaptation policies and practices in the Global South. In addition, these countries strengthen the regime complex conceptual understanding by insisting on the heuristic value of the distinction between horizontal regime complexity and vertical regime complexity, that is complexity across issue areas and complexity across policy levels.

On geostrategic behavior, in their study of the geopolitics of the Arctic, Fravel et al. (2021) demonstrate how a regime complex perspective enables to identify a Janus-faced approach to international cooperation practiced by China in the region (see also Chapter 7 in this book). In particular, they find that “China relies on global regimes regarding navigation issues, prefers bilateral cooperation for purposes of resource extraction, and prioritizes Arctic regimes to justify the pursuit of dual-use scientific research” (Fravel et al., 2021). Including several institutions at different levels in the study clarifies the role of this major player in the region, a clarification that would not be possible by looking at international regimes one by one.

Overall, the use of the regime complex concept in the security field has been timid, while its systematic use would open new perspectives on change and adaptation. It would offer theories of change that studies of multilateralism often lack (Papin, 2020: 91), and offer new ways to describe global governance and generate plausible scenarios.

5 CONCLUSION

This contribution has tried to give justice to a plethora of concepts used within the literature dealing with multilateralism to describe the structure of global governance. Such concepts, such as institutional interactions, institutional fragmentation, regime complexity or complex systems, all share some common grounds and navigate around the initial concept of “regime complexes”. Indeed, any new theoretical refinement enabled scholars to better understand the specificity of the original concept of regime complex, that is still used as the reference. They tell us that multilateralism is a polycentric field, an evolving field and a field organized around a high number of institutions.

Applied to the environmental domain, its first domain of predilection, the regime complexes’ lens enables to picture precise actors’ strategies, to question power and to formulate recommendations to improve global governance. Interestingly, the use of the regime complex concept within the environmental field enables to shed light on its specificities, as well as on the current conceptual limits to understand global governance beyond the environmental field. While trade or intellectual property rights’ studies have engaged with the regime complex discussion, its use in the security domain is still timid, despite its promising analytical value.

Looking back at the central question specialists asked a decade ago on the concept of regime complex in the title of a 2013 *Global Governance* special issue: “Regime Complexes: A Buzz, A Boom or a Boost for Global Governance?” (Orsini et al., 2013), it is unquestionable that regime complexes have created a buzz, with regime complexes’ studies having boomed over the past ten years. As developed in this chapter, conceptual as well as empirical knowledge of regime complexes has developed in various ways, also demonstrating the dynamism of a reflective concept questioned and refined numerous times. What, however, do regime complexes still need to become a real boost for global governance? For this to happen, all fields of global governance would need to engage with the concept, for renewed perspectives on key challenges for multilateralism.

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