

ARTICLE

Rethinking Actor and Order with Complexity Theory: A Novel Approach to Diplomacy

Şuay Nilhan AÇIKALIN*

Abstract

This paper aims to analyze how changing patterns about notions of “actor” and “order” in international relations inform the practices of diplomacy through the framework of complexity theory in an age of uncertainty. To this end, concepts in complexity theory—nonlinearity, network, emergence and co-evolution—are used as analysis tools to revisit actor and order. The main findings of the research suggest that changing global dynamics lead to the emergence of a complex adaptive international system encouraging scholars and practitioners to rethink actor and order. Four findings about the practice of diplomacy also emerge due to this new theoretical analysis: First, understandings of order in the international system have evolved to reflect a more regional-centered approach rather than a global one. Second, the diversification of actors and interactions in the international system directly change the nature of diplomacy, now conceived as a process that evolves in a networked-based relationship. Third, the dominant consequences of participating in a complex, adaptive system are interdependence and co-evolution between actors within diplomacy. Lastly, policymakers have increased their ability to navigate inherent uncertainties and expand the purview of diplomacy to include non-traditional diplomatic agents.

Keywords

Complexity theory, diplomacy, co-evolution, international system, network

* Associate Professor, Ankara Hacı Bayram Veli University, Department of International Relations, Ankara, Türkiye. E-mail: suaynilhan@gmail.com. ORCID: 0000-0002-5361-7667.

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Introduction

International relations (IR) can be deemed a dynamic and fluid branch of the social sciences. Although it is a young field compared to other social science fields, its theoretical and practical discussions have generated a notable accumulation of knowledge. IR's main concepts, such as order and actor, have been the focal point of various theories and approaches. Prevailing questions include how international order emerges and changes over time and how diversity and interactions among actors influence international relations and the practice of diplomacy. Although there is a broad literature about these concepts and questions, very few studies have attempted to understand the new dynamics of the international system and the changing nature of the practice of diplomacy. Indeed, IR theories have always struggled to bridge the gap between reality and theorizing.

The end of the Cold War triggered a rethinking of international relations from a broader sense of understanding due to changing social, economic and political dynamics, along with discussions of globalization and glocalization. In this respect, whatever the outcome of the international system debate, most IR researchers are revisiting their approaches in light of more complex, multifactor-structured, interconnected and nonlinear assumptions to better understand the system's changing dynamics and their consequences. These developments have compelled academics and practitioners alike to approach international relations from a multidisciplinary perspective.

Complexity theory (CT) and its properties have emerged as a tool with which to understand social phenomena in the last two decades, and may also be an alternative tool to bridge the present gap in the IR literature. CT is an umbrella approach for all nonlinear approaches.¹ Nonlinearity, network, emergence and co-evolution are essential concepts that elucidate the understanding of complex systems, and thus may be used to revisit order and actor in IR.

The practice of diplomacy has a long history that has evolved as actors have diversified through time. As well as the concepts of order and actor, IR theories fail to adequately address the implications of the practice of diplomacy, which is why complexity theory is both helpful theoretically and brings new understanding to the practice of diplomacy.

With this in mind, the present article revisits IR's notions of order and actor through the lens of complexity theory and its properties to provide a new angle for diplomacy and diplomats. The first section presents a broad summary of the debates in traditional IR theories about order and actors. The second part offers an explanation of complexity theory and its five main components: multi-actors, nonlinearity, network, emergence and co-evolution. The third section presents an analysis of the concepts of order and actor with reference to the properties of complexity theory within a complex, adaptive international system approach. The fourth part touches upon how networks are influential in diplomacy, while the final section imagines the implications of CT for the practice of diplomacy, particularly in terms of the concepts of interdependence and co-evolution.

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Actor and Order in IR: From Past to Present

The conceptualization of order and actor is a widely discussed problem in the field of IR. First of all, world order itself is a contentious concept, difficult to tie down to a single definition, but is often used in the discipline of IR.² Within the various definitions of order that will be discussed in this section, rare junctures have been considered to determine order in international relations. These turning points occur during periods of great upheaval and change in the international system, when the old order is shattered by war, and powerful actors (generally states) attempt to re-establish basic organizing principles and arrangements as a new order. Second, the definition of actors is one of the main focal points of IR theories, and is the subject of ongoing ontological and epistemological debates regarding who can act, and how, in international systems. The problem of actor is highly correlated with the level of analysis in the discipline, which makes discussions about actors additionally contested.

As mentioned above, different IR theories define “order” and “actor” in different manners in terms of how they are structured through rules, interactions, institutions, laws and norms within the developing and perpetuating patterns of relating and acting referred to as the international system.³ Starting with the most famous approach, Realism suggests that coercion, hegemony and balance of power are the main determinants of order.⁴ Realists claim that state power creates and maintains order, and adjustments in state power distribution are ultimately responsible for changes in order. Realists consider the state as the principal actor in the international system, although they accept that there are other actors with comparatively limited power, which are not their focus in analysis.

Similar to Realism, Neorealism, especially as theorized by Waltz, proposes that non-state actors are obvious, but prefers to focus on the structural relationship between actor and system where the hegemonic state employs power capabilities to organize relations among states, and creates and maintains order.⁵ Liberalism questions the state-centrism of Realist approaches in light of the rise of non-state actors such as multinational corporations (MNCs), international and supranational organizations and the transnationally organized groups that emerged during the post-WWII period.⁶ Deudney and Ikenberry extend the actor definition of Liberal theory to include a liberal international order that is composed of three elements: international law, free trade and international norms.⁷ Later, Constructivists suggested that actors other than states matter in international politics, and that what actors do is heavily impacted by who they are and how they view themselves and others. This self-reflexive turn also formulates actors’ perception about order, which involves changes in state social behavior that influence state perceptions of the international order, as well as state behavior.⁸

As a reaction to traditional IR theories and their assumptions, as briefly outlined above, Critical theory emerged as an umbrella term for theories that address actors who are frequently ignored by traditional theories, like women and those from the Global South. Akin to the perception of actors in CT, there is a claim that traditional IR theories are unjust, as is the international order, from an emancipatory perspective.⁹

Desperate Need to Rethink IR Theory and the Practice of Diplomacy

Two vital inferences are required to rethink IR theory and its implications for diplomacy. First, alterations to the definition of concepts within different theoretical frameworks can be deemed a result of catastrophic events such as war and ongoing epistemological and ontological discussions. “Traditional” or “mainstream” approaches to IR traditionally argued that there is a visible order in world affairs, from which we may offer explanations and make predictions. The notions that IR is “based on law-like regularities that allow the possibility of making claims about how the ‘international’ system works” and the belief that “there is an external reality of which we can have knowledge...” are the main properties of these theories.

Yet globalization and highly complex social realities have proven that the traditional IR theories are insufficient to explain the highly complex social realities¹⁰ that reflect the structure of the international system and its actors:

“Like other complex ecosystems, such as the nervous system or a rain forest, the international relations system is succumbing to its complexity laws. A central administrator rarely guides the communal actions that characterize development processes in complex organizations.”¹¹

Events like 9/11 and global economic crises are concrete cases of unpredictability; they reveal how the dynamics of the world are made up of a complicated mixture of order and disorder.¹² These and other realizations have rendered IR theory particularly receptive to new concepts and ideas from the field of complexity.

Second, interference, mostly related with the practice of diplomacy, is also worth a mention. Diplomacy, at its core, is the peaceful handling of interactions by and among international players, at least one of whom is generally governmental.¹³

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Settings and actors in diplomacy can't escape the changing nature of the international system. However, the literature about diplomacy, the practice of diplomacy and IR theories have had a mutually incognizant relationship for a long time. Diplomacy, according to most IR theories, is superfluous. Because of this, the practice of diplomacy has not played a big role in the inter-paradigm disputes of the last few decades.¹⁴ The glaring gap between theory and practice is related to the deficiency of IR theories in explaining the realities of the international system.

The gap between theory and diplomacy in practice directly reflects on diplomats who, as a profession, conduct major official social, economic and political relations on behalf of their countries. Increasing complexity and diversity in the international system has brought in non-traditional diplomatic agents from various sectors, and the state-centric perspective has started to lose its importance.¹⁵ Not only are non-traditional diplomatic agents involved in diplomacy, the skills required by professional diplomats have changed to accommodate and effectively work in this unpredictable international system—a non-traditional ecosystem. Thus, a nonlinear approach should also address this gap between practice and theory.

Complexity Theory: Concepts and Beyond

Newton described a universe comprised of particles made of the same material that move in absolute space and time under the control of forces that obey unchanging and universal rules. Mathematically, these laws could be represented precisely. In other words, the Newtonian paradigm views the world as a perfect watch, a mechanism governed by predictability and absolute order. Social science did not escape being viewed from the basis of Newtonian laws. Locke and other early political and social thinkers tried to “reduce the patterns observable in society to the behavior of its members” by following Newton's lead.¹⁶

However, scientific developments in the 20th century, especially relativity and quantum mechanics, proved that there are limits to the clockwise and linear universe where some phenomena are orderly—and others disorderly. The phrase “complexity theory” has come to refer to a variety of approaches that originated in the natural sciences involving

non-linear, complex and chaotic systems, in contrast to Newtonian science that posits path dependency and predictability.

Complexity is especially sensitive to systemic features and relationships, refuting the reductionist claim that complex systems can be fully comprehended by analyzing their individual pieces. The field of complexity studies poses questions about the inter-twining or inter-connectivity of elements within a system and between a system and its environment. Heterogeneity or diversity in the numerous subsystems of an organization is the focus of complexity theory.¹⁷

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Five main concepts have been developed within CT: *complex adaptive system, multi-actor, nonlinearity, network, emergence and co-evolution*.¹⁸ First, many natural systems (brains, immune systems, ecologies, societies) and, increasingly, many artificial systems (parallel and distributed computing systems, artificial intelligence systems, artificial neural networks, evolutionary programs) are characterized by seemingly complex behavior that emerges as a result of often nonlinear spatiotemporal interactions among a large number of component systems at various levels of organization. *Complex adaptive systems* (CAS) are dynamic systems that can adapt to and evolve with their surroundings. It is critical to understand that a system and its environment are inextricably linked, and that a system will constantly adapt to a changing environment.

Second, a *multi-actor* structure can be considered one of the main sources of unpredictability in a system, sourced from interactions across time and space, influencing and being influenced. Actors interact with each other in a *nonlinear* way in endless loops. The nonlinear relationship between actors is considered to be a source of unconventional rules, in contrast to the path dependency structure. Nonlinear interactions create feedback loops in the system which are neither beneficial nor negative in and of themselves. 'Positive' feedback loops are those that establish attractors, or self-reinforcing linkages among co-evolving agents, so that the system creates more of the same behavior.¹⁹ 'Negative' feedback

loops interrupt the existing pattern and generate novelty, leading to innovation in the best-case scenario or putting the “brakes” on what could otherwise become a disastrous spiral in the worst-case scenario. In simple terms, positive feedback means more leads to more, while negative feedback means more leads to less.

Third, *emergence* is one of the distinguishing properties of complex systems; this term is used to describe the patterns, structures and properties seen at the level of the system that cannot be deduced by examining the individual component elements alone.²⁰ Put more simply, synergism is a function of emergence, in which system-wide traits emerge from interactions among components rather than superposition.

Fourth, unique interactions between actors, between actor and system, and between actor and universe naturally compose *networks*. Networks can take many different forms, but they all consist of nodes and links and are organized horizontally without hierarchy. Nodes can be corporate actors (states or organizations) or individuals. Networks are not merely collections of components, but also interactive agents that self-organize to produce a shared ecology for the larger system. Simply put, there is natural representation of a complex system by means of a network structure.²¹

The last feature of complexity theory is *co-evolution*, which emphasizes that there is no such thing as a self-evolving organism. Co-evolution, as defined by Mitleton-Kelly, is “the evolution of one domain or entity (that) is partially dependent on the evolution of other related domains or entities, or one domain or entity changes in the context of the other(s).”²² Co-evolution refers to a framework for 1) antecedent conditions; 2) co-evolving activities, actions and processes; and 3) their outcomes.²³

Rethinking Actor and Order in a Complex, Adaptive International System

To address the difficulties of studying international relations through the lens of traditional theories, and to bridge the gap between theory and practice, a growing number of scholars have embraced paradigm

change, recognizing the need for flexibility in theoretical discussions and/or the imperative to develop other theories and approaches. In this respect, following the catastrophic paradigm shift in the natural sciences, complex systems have attracted attention in the social sciences.²⁴ A remarkable amount of literature has emerged about understanding the international system and complex international phenomena that shape perceptions of actor and order, although there are some methodological and ontological limitations.

In order to understand the implications of complexity theory for actor and order, the structure of the international system itself should be the starting point. From a complexity theory perspective, the international system is a complex adaptive system.²⁵ Tóme and Açıkalin suggest that the international system includes various independent and interdependent actors, from sovereign states to individuals, transnational social movements, international/regional organizations, NGOs, transnational organized crime networks, transnational terrorist groups and multinational corporations.²⁶ In addition to addressing a diversification of actors, complexity theory implies that these actors interact with each other in a nonlinear trend with infinite numbers.²⁷ Further, the interactions and societal processes that arise between actors are realized through social construction by the system itself, which is in turn dictated by the self-interests of actors.²⁸

Regardless of their size and influence, every political action of actors in the international system has unintended consequences that shape the actions of other actors. In contrast to traditional approaches, CT emphasizes how local interactions can take a central role; this can be formulated in IR as follows: even ordinary individuals are influential in a complex adaptive international system with sensitive initial conditions to create a new order (butterfly effect).²⁹ A concrete example of this process is the Arab Spring, which started with Bouzazi's self-immolation.³⁰

From this interpretation of complexity theory, the multi-actor and nonlinear relationship structure of the complex international system reflects on the understanding of order in the complex in-

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ternational system. As a property of complexity theory, emergence in particular has undeniable implications while rethinking order in terms of the multi-actor structure and nonlinear relationship. As Gunitsky points out, emergent qualities imply that the attributes of the international system cannot be derived purely from the characteristics of its constituent parts, in contrast to Waltz.³¹ Through this emergence, a phase transition occurs that modifies the initial, lower-level states of the system. One of the distinguishing features of CAS is its capacity to adapt, fluctuating between chaos and order. Emergence renders CAS irreducible; higher-order levels cannot be reduced to their original lower-level states due to their emerging features. As a result, CAS avoids the status quo while preventing utter disorder by functioning between chaos and order. This self-organizing equilibrium enables CAS to learn and grow into a new order.³²

As mentioned above, interactions between and nonlinear relationships among actors have implications for change in international relations through both positive and negative feedback loops by self-reinforcing and self-dampening in the international system.³³ Examples of both positive and negative feedback can be found with long-term and short-term consequences. Band-wagoning policies by states are one of the long-term impacts of positive feedback loops when a state aspires to join an alliance, and when a state relies on a more powerful partner within an existing alliance for security. Deutsch cites the 1914 armament race and the escalation of mobilization orders throughout Europe as examples of 'positive' feedback, in which an initial action becomes self-reinforcing and creates consequences that increase over time.³⁴ There is no doubt the 1914 arms races triggered World War I and the catastrophic events that paved the way for WWII and a new order in the international system.

The important feature of every negative feedback is that it reacts to counterbalance, rather than trigger, any changes in the environment. Negative feedback is central to the homeostatic systems that actively maintain the relatively stable conditions necessary for survival. During the Cold War, strategic policy deterrence was primarily geared at stopping hostile power centers—the Union of Soviet Socialist Republics (USSR) and its allies, Communist China and North Korea—from at-

tacking the U.S. and its close allies.³⁵ In this regard, the Cold War itself can be considered a long-term example of negative feedback. Although two superpowers competed with each other, this competition created unexpected equilibrium. The resulting equilibrium in the order of the international system lasted for almost 50 years within a bipolar world. It should be noted that because no third country acquired capabilities similar to those of the United States and the Soviet Union, the bipolar system itself has endured. Thus, positive feedback loops in the complex international system are prone to involve change and the emergence of new order, while negative feedback loops maintain the existing order.

Furthermore, complexity theory suggests that multiple subsystems at sublevels in a complex system influence the system's emergent behavior and outcomes. As is known, level of analysis has been always an issue in IR when analyzing change; analyses that only embrace the individual, state and system generally neglect regions that play vital roles as subsystems of global order.³⁶ Although different parameters are used to define regions as subsystems in IR, the post-Cold War era was marked by self-organizing regions that comprised both continental regional international subsystems (Europe and Southeast Asia) and littoral regional international subsystems (Pacific Rim, Baltic, Caspian).³⁷ For example, Karaca and Yüce assert that the South and East Asia sub-systems have dominant positions on international petroleum and natural gas transportation lines, as well as leading economic structure in global goods exports and imports, constantly increasing energy demands, and a legal framework organized for international finance and investment centers. This makes them one of the determinant regions in the global order from a relatively wider point of view.³⁸ Regions as subsystems and their actors are capable of learning and behavior that modifies their own environment and in turn affects the global order.

Role of Networks in the Complex Adaptive International System

Although the term “network” is relatively new in international relations, the significance of new information technologies was soon recognized. The complex adaptive international system as explained above

includes numerous actors, from states to multinational corporations and international organizations, with interactions propelled by communication and financial flow. Networks are an undeniable reality in the complex adaptive international system in which these actors are embedded. Technology has dramatically improved the ability of peoples and groups to interact across borders, and has expedited and magnified the strength of all types of social and political networks.³⁹

Considerations emerging from interactions in a “networked world” must include this larger knowledge of networks when dealing with foreign policy issues. When networks are defined, they may mean multiple things. However, we think of a network as a collection of interconnected entities—in this case, states and non-state actors.⁴⁰ From this point of view, rethinking the behavior of actors and diplomacy in a networked world occurs through the concepts of power, cooperation and rivalry.

Hierarchies and networks have different distributions of power. Power in hierarchies is distributed vertically, whereas in networks power is proportional to centrality and the degree of connectedness, with the most powerful nodes being those with the most connections. In other words, power in networks does not imply the ability to command or control others, but rather the ability to interact with and thereby influence others.⁴¹ This is why actors in the complex adaptive international system will pursue and use power through their interactions. Networks impact the behavior of actors and the consequences of their actions. An actors’ behavior is also influenced by the dyads that comprise the network. As a result, explanatory power is assigned to both the network and dyad levels. In addition to this, networks can be used as a source of power for actors in the complex adaptive international system. In this regard, information flows between actors in the network play a crucial role. Bearce and Bondannella suggest that “the more institutionalized states’ networks are, the more power these networks have in influencing their member states’ interests. Through information flows, international networks of states provide greater information about the state of the world, including information about member-states’ capabilities, intentions, and so on.”⁴²

In the complex adaptive international system, interconnected entities behave in networks based on cooperation or rivalry. In contrast to tra-

ditional IR theories, states as nodes create network behavior within international organizations through interactions. States do not solely act as rivals or cooperate but rather are involved in competition and cooperation at many scales at the same time. For example, cooperation describes the relational characteristics that exist between states where they are acting in networks such as the United Nations, the European Union (EU) or various regional organizations.⁴³ Cooperation does not take the form of simple collaborations in these networks. Instead, it is enacted through the interactions of evolving subgroups. Interestingly, in order to compete with one another effectively, those subgroups must develop cooperation within themselves, and they, too, may be able to improve the efficacy of their internal cooperation. Moreover, nested cooperation and rivalry between states as nodes with different sizes can emerge organically. Competition on bigger scales inherently develops collaboration at smaller scales because a group must cooperate in order to effectively compete with another, larger group (large-scale competition).

It should be noted that cooperation within networks lowers the cost of collective action, making large and disparate groups better able to organize and influence others than ever before. For example, although members of the EU have distinct and even competing interests between themselves, they have managed to realize common market and currency policies that allow them to compete with non-EU countries. To cite another example, Crooks and others highlight the United Nations General Assembly voting process as a tangible instance of a state-driven network that conforms to the clustering of states for Syria before and after the Arab Spring.⁴⁴

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Individuals are also nodes in networks in the complex, adaptive international system, and have undeniable power as such. Non-formal networks composed of individuals across the world can be considered a new path for public diplomacy. The basic form of this network model

includes conferences and international events, which foster the creation of networks between people through which states can informally pursue their public diplomacy goals. This is the sort of diplomacy that does not bind members of the international community.⁴⁵ Such flexibility is essential for the improvement of society-level interactions, although it is a long-term process when it comes to consequences. Such networks may reorganize themselves and evolve far more quickly than traditional hierarchies, especially in digital networks. The growth of social media has facilitated the rise of a bottom-up approach to international relations, driven by individuals who build networks that cross national lines.⁴⁶ Tahrir Square in Egypt at the beginning of the Arab Spring can be deemed as the most powerful case of how individuals can be effective actors through informal networks via Twitter and other social media platforms, as their coordination resulted in a butterfly effect across the region.⁴⁷

The last point regarding networks is that they do not operate separately in complex adaptive systems, but are all interconnected with each other while also having traditional hierarchies. This is why attempting to shape networks can have repercussions beyond causal relationships and, indeed, beyond state borders; change in one network may result in change within another in an increasingly networked world.⁴⁸

Implications of CAS for Diplomacy: Co-evolution and Interdependence

The international complex adaptive system and network-based relationships have implications for the practice of diplomacy. In the unpredictable structure of the complex adaptive international system, these implications should be examined within the framework of complexity theory, whose main features are interdependence and co-evolution.

First, interdependence in the complex adaptive international system is both a means and an end. This understanding of interdependence differs from the complex interdependence coined by Keohane and Nye in the 1970s, which had three key characteristics: multiple channels, absence of hierarchy among issues and the minor role of military force, reflecting the Cold war atmosphere. In contrast, interdependence in CAS

is sourced from non-linear interactions between an ever-larger number of different types of actors—which makes interdependence existentially important.

Second, actors are not only interdependent upon each other; complexity is a process that connects actors to a larger (international) system, which is why the two are intricately linked, and neither is reducible to the qualities of the other. When interdependence is an existential reality, actors in the international system intrinsically self-organize to adapt to the emergent dynamics of the international system. In this self-organizing process in relation to their interests, co-evolution is a mutual effect that changes the behavior of interacting elements within a social ecosystem. This mechanism connects adaptive actors in co-evolutionary connections with one another and the wider system. In this manner, co-evolution is essential to actors' survival through interactions; their isolation is almost impossible in the complex adaptive international system. Each actor's co-evolution strategies are determinant on the agenda for diplomacy and may yield cooperation, coordination or additional competition between interconnected agents related to changing dynamics. These strategies may in turn serve as the foundation of emergent properties and interaction with emergent phenomenon via feedback loops in the structure.⁴⁹

Due to interdependence and co-evolution, actors in the complex adaptive international system are more prone to be part of a co-evolution process where policymakers face concrete challenges that develop and pursue long-term goals. Policymakers should encourage the emergence of resilient processes of self-organization, rather than controllable processes, so that one has the “ability to cope successfully with challenging circumstances, to defy destructive pressures, and to construct new proficiency out of unfavorable conditions.”⁵⁰ To allow for adaptation and change, one must ‘create ambiguity’. More importantly, international players increasingly “orchestrate” others to achieve the goals of their collaborative agenda.

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In this respect, agents and tools of diplomacy are swayed by complex adaptive international systems with network-based relations. Diplomats are not solely professional diplomats anymore; all individuals can be considered diplomats when technological advances, particularly digitalization, impact how a diplomat's job is seen, and increase the number of local and international players who engage in effective activities. Their primary purpose is to foster multilateral contact among diverse entities, both at the official level and among specialists and public personalities from various areas in order to address specific problems and promote national interests. Reaching out to overseas audiences becomes more important for governments as a result of network diplomacy. Building partnerships with NGOs is no longer enough for governments. Facilitating relationships between different types of actors, including epistemic communities, is now in the interests of governments.

When it comes to the skill-set for new-generation diplomats who will engage in diplomacy in the complex adaptive international system and network, the increasingly specialized and technical nature of the discussions and negotiations mean that 1) more personnel with digital literacy are needed to staff foreign ministries; 2) diplomats need to be highly multitasking; 3) experts from various sectors must be brought in as technical advisers and consultants; 4) they should be flexible to accommodate new circumstances that can be revamped in the short term due to nonlinear relationships between actors; and 5) they should be able to cope with long-term, puzzling negotiation processes involving uncertainty. It should be underlined that they should not only keep up with new conditions, but should have the ability to manipulate uncertainties, which is the immanent characteristic of the complex adaptive international system, to their advantage.

Conclusion

International relations, along with the theoretical and practical aspects of diplomacy, is a dynamic field that includes various approaches and interdisciplinary discussions. Concepts of the international system, actor and order have been contested in terms of their definitions and relations with the notion of power. Traditional theories of IR have been challenged in recent decades, and there is already a gap between prac-

tice and theory. Today, the international system is more complex than ever, characterized by interdependence and nonlinear interactions between diverse actors. In order to grasp the new international system and its implications, complexity theory and its properties will help to redefine actor and order from a more realistic and holistic perspective.

As part of this effort, order and actor should be comprehended within a complex adaptive international system with multiple actors interacting through positive and negative feedback loops that determine changing patterns in the system. The emergence of a new order is due to the butterfly effect, with consequences arising even from simultaneous, small interactions among actors. Also, the self-organizing property of the system allows us to understand how order and change are related to the actors themselves. Within this new theoretical analysis, there are five main findings:

First, change and order are two sides of the same coin in the complex adaptive international system. In other words, order is not long-term equilibrium that can be disrupted at times; rather, change is the nature of the system itself. Second, all actors in the complex adaptive international system are also included in regions as subsystems. These subsystems have their own complex adaptive structure because this order is more regional-centered rather than global. Regions play key roles as subsystems to form the emerging global order. Third, the diversification of actors and their interactions in the international system create networks that are not hierarchical but rather nodal based. Network-based relationships directly affect actors' foreign policymaking and the understanding of power. Cooperation and rivalry between actors have a nested form, and are complimentary strategies for co-evolution. Fourth, the dominant consequence of having a complex adaptive international system and network is the creation of tremendous interdependence and co-evolution among actors; this has implications for diplomacy. Policymakers attempt to set long-term foreign policy goals, while change is normal and order can emerge at different times and scales; hence, controlling uncertainties is the priority for actors. Lastly, diplomats are not only traditional diplomats anymore—members of all professions (academics, students, artists, etc.) can be deemed to be non-traditional diplomatic agents that can represent and pursue states' interests in networks through multilateral diplomacy.

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