Chapter 5 Cleopatra's Nose and Complex International Politics

Dylan Kissane

Abstract This chapter outlines what a theory of international politics founded on this assumption of complexity would involve. It begins by discussing the attributes and properties of a complex political system, with particular attention paid to the actors, their interrelationships and how one theorises what, for Waltz and others, which has always appeared impossible. It continues by applying this proposed theory to three key cases that have been denied consistent explanation by realist theorists in international relations. These three cases, namely the outbreak of World War One, the political integration of the European continent and the post-Cold War security landscape in Europe, demonstrate the utility of a complex approach in cases where realist theory has significant difficulty in explaining fully the catalysts and circumstances of international political evolution. The discussion that follows the presentation of these three cases highlights the efficacy of the complex approach while also admitting to the important problems that the approach also engenders for the theorist, particularly in relation to medium-term and long-term prediction. Though real and valid criticisms of the proposed paradigm are prevalent, it will be argued that they are insufficient to invalidate the approach as a whole, particularly when the long realist record of prediction is so woeful. In concluding the chapter it will be argued that the complex approach proposed offers the theorists real advances over predominant realist theories and that theoretical transition and paradigmatic shift is not only possible, but necessary.

Keywords Complexity \cdot International relations theory \cdot Realism \cdot Structural realism \cdot Neorealism \cdot Anarchy \cdot Chaos

D. Kissane (⊠)

5.1 Introduction

Le nez de Cléopâtre, s'il eût été plus court, toute la face de la terre aurait changé. Blaise Pascal

Lorenz (1963) first described what would later become popularly known as 'the butterfly effect' in a short article in the Journal of Atmospheric Sciences nearly fifty years ago. His explanation of sensitive dependence to initial conditions and his suggestion that, in deterministic nonperiodic systems, precise long term forecasting was impossible were ground breaking in studies of the weather and were quickly applied, in congruent or analogical form, to fields as diverse as biology, physics and, indeed, international politics (Skinner et al. 1992; Stöckmann 1999; Kissane 2006). Yet the notion that very small events could have very significant implications is nothing new; indeed, folklore holds that something as simple as a single horseshoe nail could be enough to see a kingdom fall to a rival in battle (Gleick 1987). In the realm of the historical, Pascal's famous suggestion that, had Cleopatra's nose been shorter, the face of the world would have changed draws on similar inspiration, if supported more with philosophical flourish than Lorenzian differential equations. One of the central theorists in the discipline of international politics, Morgenthau (1970), sympathised with Pascal's proposition, yet demanded to know how such thing might be systematised and integrated into a theory of politics. Lacking an answer, Morgenthau's theoretical ambitions were dampened, according to Waltz (1988), who himself would go on to argue that it was not the role of theory "to explain the accidental or account for unexpected events".

Yet if such events are essential parts of a wider, wholly complex system, then to exclude them from a theory will render that same theory unreliable. The very theories that Morgenthau and Waltz put forward, respectively realism and structural realism, have proved themselves unable to predict either the very small that they would reject as impossible to systematize or the very large, such as the collapse of a superpower, which had been described in terms that would make it beyond unlikely just a few years before it would become a reality. Waltz (1979), famously, argued in his canonical structural realist book *Theory of International Politics* that "few states die", citing the Soviet Union as an example of an entity likely to last at least 100 years; the USSR would fall little more than a decade later. The realists who would diverge from Morgenthau and Waltz, among them John Mearsheimer, Fareed Zakaria and Stephen Walt, fared little better in explaining and predicting the international system. Mearsheimer's oft-cited article on Europe's likely post-Cold War geopolitical landscape, 'Back to the Future: Instability in Europe after the Cold War' (1990), rests as an example of fundamentally flawed strategic analysis from an offensive realist perspective. Zakaria's neoclassical realist approach "returns repeatedly to a core claim of democratic peace theory", an approach that is far from realist, far from rigorously theoretical and problematic in its implications (Legro and Moravcsik 1999). Even realists who found their work on the more rigorous and fundamentally realist game theory of the prisoners dilemma find that the anarchy they describe does not match the realist world they seek to describe, this is clearly evidenced by clear moves among proponents to adjust games to reflect the emergent cooperation so often encountered.

All these different realist approaches fail in similar ways to explain international relations. What explains realism's predicative failures? What accounts for the problems that realists encounter in explaining international politics in anything other than the short-term? And why have adjustments to fundamental realist assumptions failed to overcome these problems, even when such adjustments render the realist approach, at least in the eyes of some (Legro and Moravcsik 1999), not even realist at all? This chapter argues that the fundamental reason that realists cannot consistently explain or predict international relations is because they make an incorrect assumption about the nature of the international system. It is not, as is claimed by every realist and, indeed, many liberalists and constructivists, too, anarchic. Instead, the international system is essentially and profoundly complex. This complex international system has qualities that are significantly different to those systemic qualities assumed by realists to exist in anarchy. It is a system, for example, where assessments of state actors alone are insufficient to explain and predict the international politic. Indeed, it is a system where broadening the realm of theoretically significant actors to include international institutions, security alliances and even non-governmental organisations is still too narrow to account for the change—evolutionary or revolutionary—in the system and amongst the actors. Instead it is a system with properties that demand the theorist to consider all elements of the international environment including those that seem so small as to be impossible to operationalize. The assertion of a complex international system such as this, then, demands an attention to political detail that Blaise Pascal might have endorsed, systematising both the details and the broad strokes to deliver an analysis that better describes, explains and predicts what is encountered in the international system.

This chapter outlines what a theory of international politics founded on this assumption of complexity would involve. It begins by discussing the attributes and properties of a complex political system, with particular attention paid to the actors, their interrelationships and how one theorises what, for Waltz and others, which has always appeared impossible. It continues by applying this proposed theory to three key cases that have denied consistent explanation by realist theorists in international relations. These three cases, namely the outbreak of World War One, the political integration of the European continent and the post-Cold War security landscape in Europe, demonstrate the utility of a complex approach in cases where realist theory has significant difficulty in explaining fully the catalysts and circumstances of international political evolution. The discussion that follows the presentation of these three cases highlights the efficacy of the complex approach while also admitting to the important problems that the approach also engenders for the theorist, particularly in relation to medium-term and long-term prediction. Though real and valid criticisms of the proposed paradigm, it will be argued that they are insufficient to invalidate the approach as a whole, particularly when the long realist record of prediction is so woeful. In concluding the chapter it will be argued that the complex approach proposed offers the theorists real advances over predominant

realist theories and that theoretical transition and paradigmatic shift is not only possible, but necessary.

5.2 A Complex International System

In a 2003 interview Waltz argued that the first step in theorising international politics was to define the zone of study, that is, the system under investigation. The difficulty in doing this for the international political system is that politics is, almost by definition, a sprawling landscape. As Waltz (2003) puts it:

International politics is something that's influenced by everything else – a national economy, national politics, international politics – and it's all interrelated, there's no way of separating it. So the first requirement was to develop an idea of the structure of international politics, which would make it possible to think of international politics as a subject matter that could be studied in its own right.

Waltz alludes to this complexity but, in seeking theoretical parsimony, aligns his structural realist approach with existing paradigms of international relations that saw the international system as simply anarchic. Indeed, while admitting to the complexity of the system, Waltz chooses to ignore most of it and instead develops a theory based on state actors under anarchy. Influential as it has been—and Mearsheimer (2006) claims that since publishing *Theory of International Politics* almost every theorist in the field has been either agreeing with or responding to Waltz—it is clearly a denial of the complexity that even the strictest of realists knows that it exists in the international system. Thus, while Waltz is correct to assert that the first step in theorising international politics is to develop a notion of its structure, his understanding of the structure and assertion of an anarchic world system is wrong.

Instead of anarchy which, classically, implies a lack of overarching authority for actors in the international system, the international system must be thought of as complex. But what is complexity and what does one mean when a system is described as complex or complexly interdependent? Bernard Pavard (2002) provides a very useful definition of a complex system in a 2002 article:

A complex system is a system for which it is difficult, if not impossible to restrict its description to a limited number of parameters or characterising variables without losing its essential global functional properties.

In a later collaboration with Julie Dugdale, Pavard (COSI Project 2005) adds that it is necessary:

...appropriate to differentiate between a complicated system (such as a plane or computer) and a complex system (such as ecological or economic systems). The former are composed of many functionally distinct parts but are in fact predictable, whereas the latter interact non-linearly with their environment and their components have properties of self-organisation which make them non-predictable beyond a certain temporal window.

Pavard and Dugdale's definitions of a complex system serve as a useful basis for theorising the complex nature of international politics, though there are a number of terms utilised in the extracts above that deserve some further explanation in the context of inter-state and international system level political interactions.

The first of these terms is 'system' itself. As Jay Goodman (1965) argued half a century ago, the word system has often been deployed in international theory in varying ways and led to a situation where, even then, there was a danger of the 'fire' of the system "more smoke than light on the nature of international politics". Goodman contends that the word system is deployed in one of three ways: the descriptively, as in the pointing to a group of bonded units; explanatively, where the system is assumed to have an impact on the elements in the system; and methodologically, wherein a theorist claims to elaborate or utilise a particular system of investigation. For Waltz and the structural realists the word system is always employed explanatively and, in assuming a complex system, the same use of the word is implied. The nature of the international system affects the interactions of the elements within it and understanding the nature of the system is essential to theorising, describing, explaining and predicting events within the system.

The second term requiring definition and clarification is Pavard and Dugdale's reference to 'parameters and characterising variables'. In the context of a complex international system the parameters must include the bounded system itself—though this is obviously wider than the state system assessed by the realists and neorealists, for example—and the actors considered significant within that bounded theoretical space. In a system where, in Waltz's own words, the subject of the theory is "affected by everything else" then these actors cannot be limited to only the states, as realists argue, or to states and institutions, as some liberals argue. Instead, it must include any actor, be it state, institution, corporation, NGO, terrorist group or even a single individual, which impacts, with or without intent, the international political system. The number of actors in a complex system is essentially unknown; certainly if individual humans are included then the system counts its constituent actors in the billions rather than the hundreds of states typically assessed by realists, or the half-dozen major powers that some, including this author (Kissane 2005), have held to define the international landscape in the past.

The third term requiring clear definition is the reference Pavard and Dugdale make to a complex system's 'global functional properties'. This is, in a way, a confirmation that, of Goodman's three uses of the word system in international relations theory, a complex system implies adherence to the explanative sense. This is not a novelty, of course: as stated earlier neorealists and offensive realists, among others, have argued that the properties of the international system affect the actions and interactions of the elements within it. Yet it is necessary to bear in mind that the properties of a complex system affect all of the actors in the system (that is globally) and that the particular properties of the system are significant in their own right. Indeed, just as the implications of anarchy are held to be significant drivers of state actions by realists and liberals alike, the properties of a complex international political system are held to have significant effect on the actors within that system, the decisions those actors make and the ramifications of those decisions on other

actors and the stability of the system as a whole. Thus, having defined the system as complex, identified the actors within the system and noted that the properties of the system impact directly on those actors, it is necessary to outline exactly what the particular properties of a complex system are.

Pavard and Dugdale have argued, and this author has previously endorsed, four key properties of a complex system: non-determinism and nontractibility, limited functional decomposability, distributed nature of information and representation, and emergence and self-organisation (Kissane 2011). Each of these separately are significant but, in combination, speak to a system that is fundamentally different to the anarchy of the realists, liberals and even constructivists.

Turning first to non-determinism and nontractibility, it is clear that the reductionist turn in international political theory is being rejected in its entirety. As Pavard and Dugdale note, in a complex system "it is impossible to anticipate precisely the behaviour of such systems even if we completely know the function of its constituents" (Kissane 2011). Obviously, then, assessments of the state or the institution in international politics and attempts to classify such actors based on the basis of their presumed behaviour is unlikely to be rewarding if the system is complex. Indeed, knowing all about the actors, their functions, their capabilities, their needs, desires and goals, their national interests or their history of previous interactions is all of little use to understanding and predicting the behaviour and interactions of those actors in a complex future. The non-deterministic nature of the international system means that prediction in anything other the very short term is likely to be fraught with risk and—in the long term—of no practical use at all. A complex system cannot be predicted, this reality being just one of a number of departures from the reductionist, positivist anarchic systems beloved and endorsed by traditional theories of international relations.

The systemic property of limited functional decomposability reinforces this antireductionist, post-positivist position. When Pavard and Dugdale state that the system cannot be decomposed they mean that it cannot be taken apart, understood in its separate parts then reassembled in part or in whole in order to provide an understanding of the greater system. They offer the example of a car as a simple system: it can be broken down into its various components—transmissions, wheels, motor, doors and chassis—and when the function and working of each of these are understood separately and in relation to each other it is possible to both predict and understand the working of the entire vehicle (Kissane 2011). A complex system denies such decomposition; instead we can allude to its complexity, as Douglas Adams did, with reference to an animal: should you decide to take a cat apart and see how it works, the first thing you have on your hands is a non-working cat. Pavard and Dugdale explain:

A principal obstacle to the functional decomposability of complex systems is the dynamic and fluctuating character of its constituent functions. The interaction with the environment, as well as the learning and self-organisation mechanisms makes it unrealistic to regard such systems as structurally stable (Kissane 2011).

The theorist assessing a complex international system must avoid analysing the goals and motivations, the inner workings and political objectives, the leadership and material capabilities of the actors within that system for, even if a total understanding of all of these is achieved, it will not aid in understanding the system as a whole or in developing a means to explain the interactions between the actors existing in it. Indeed, the attempt to decompose the system in search of systemic understanding leads only to error, as the history of failed predictions by realists and liberals alike has demonstrated with frequency across the discipline's history.

Turning to the property of the distributed nature of information and representation we find reinforcement of the two notions detailed above with the addition of implied issues for elements and actors within the system itself. Information in a complex system is necessarily broadly distributed and sufficient information to predict the future shape and shifts in the system are neither maintained by any single actor nor able to be accessed by any single actor. Decisions are based on limited information about the system and its actors and are, thus, always in danger of delivering alternative outcomes to those envisaged by the actor making the decision. In addition, for the theorist can never competently predict the future state of the system as they will never have access to all of the information about the system. In a complex system where global conflicts can be sparked by the actions of a single aggrieved individual, the theorist cannot realistically claim to have enough information to predict the shape of the system or the likely effects of any action by any actor. As this author has argued elsewhere, Actors seek to advance their own interests as they conceive of them, and actors interact with imperfect knowledge of each other's preferences and aspirations. Unlike a simple system consisting of only known quantities, predictable futures and limited choices for actors, the complex international political system so broadly distributes information about the system and its actors that few quantities can be accurately tracked, few futures are predictable with any confidence (Kissane 2011).

The final property of a complex system is that of emergence and self-organisation and, like the other properties of complex systems, it has significant ramifications for understanding the shape and shifts of international politics. Pavard and Dugdale describe emergence as:

Emergence is the process of deriving some new and coherent structures, patterns and properties in a complex system. Emergent phenomena occur due to the pattern of interactions...between the elements of the system over time. One of the main points about emergent phenomena is that they are observable at a macro-level, even though they are generated by micro-level elements (Kissane 2011).

Though the previous properties of a complex system have made clear that prediction is functionally impossible in a complex system the notion of the emergence of coherent structures and behaviours is not necessarily contradictory. Some interactions in complex systems occur regularly and in similar ways, sometimes so regularly and so similarly that the emergent behaviours appear normal, even natural. Identifying these emergent behaviours and noting the regularity with which they occur does not imply that such behaviours take on the status of a theoretical law;

indeed, nothing more is implied other than that certain behaviours in a complex system tend to recur. In the context of the international political system, we can identify emergent behaviours as realists have done with their studies of balancing and deterrence or as liberals have argued exists in the link between democratic governance and the recourse to war with other democracies. That the international political system self-organises into a certain level of security and stability is no accident; the properties of this system, like any other complex system, are such that it is highly likely to occur.

Thus, when we propose a complex international system as an alternative to the anarchic international system of Waltz, the realists, the liberals and the constructivists, we are proposing a system with specific properties that fundamentally restrict what a theorist can hope to achieve while also expanding the number of actors that the theorist must consider. Instead of a system of nation-states under anarchy we have a system of billions of individuals, states, corporations, NGOs, institutions and groups of all of these that interact in billions of dyadic, finitary and (potentially) infintary interrelations daily. The system is non-deterministic, nontractable and cannot be decomposed to find meaning in its parts nor reduced in an atomic manner to provide a means to describe the qualities of the system as a whole. Information in a complex system is distributed and no single actor can have complete information about any interaction in which it engages while, in a similar way, the theorist cannot ever be sure, even with the benefits of time, distance and hindsight, that they have all the relevant information on which to draw conclusions about behaviour past or behaviour future. Yet despite these difficulties for the theorist seeking to describe, explain and predict complex international politics, the fourth property of complex social systems offers some hope: in complex systems certain behaviours emerge and repeat over time as the system self-organises around certain of these emergent behaviours and systemic norms. Thus, there is hope for the theorist after all as these emergent behaviours can be identified and probability functions developed to aid in international decision making efforts on behalf of international actors and watchers of international actors.

But while the complex international system has been presented as an alternative assumption for theorists of international relations, is it any better at actually explaining what takes place in the international system? In the section that follows this chapter will consider three cases where existing, anarchy based theories of international politics failed to explain the reality that emerged. Turning first to the explanations for the outbreak of World War One, then turning to the emergence of European cooperation in the shape of the European Union, and finally considering the post-Cold War security landscape in Europe, this chapter will demonstrate the superior explanations offered by a complex approach to international affairs and the promise that the assumption of complexity has for theorising international politics.

5.3 'A Damn Fool Thing in the Balkans'

The events leading up to the outbreak of World War One are one of the more studied series of events in international politics. The entangling alliances, the massing of forces, the first truly global struggle in the modern world and the crumbling of empires that followed in its devastating wake all serve to hold the interest of scholars and students of history and politics even nearly a century after that late June day in 1914. The assassination of Austro-Hungarian heir Franz Ferdinand and his wife in Sarajevo is held to be the catalyst that set in motion the mobilisation of troops across Europe and late the world, setting the stage for what would become World War One. Indeed, in typical accounts of the outbreak of the war it is held that Austria-Hungary was drawn into conflict with Serbia by the assassination; Russia mobilized to assist Orthodox Serbia; Germany moved to support Austria; France, bound by treaty to Russia, moved to counter the German threat; and Britain moved to support neutral Belgium and, in some interpretations, France (Kissane 2006). For realists and liberals alike there seems to be a certain inevitability about this march to war. The balance of nation-states and empires in Europe and the Near East was so fine as to see any small event push them all into war, making prescient Otto von Bismarck's prophecy that 'some damn fool thing in the Balkans' would be enough to launch Europe into chaos.

Realist accounts of the outbreak of World War One are satisfying on a superficial level: entangling alliances, states committed by treaty and grand strategy to the fight, the rampant nationalism that fuelled the appetite for war and an unbalanced balance-of-power European system are all held to be satisfactory explanations for the outbreak of the war. Yet while the realists can describe the broad strokes of the system in the weeks, months and years before the war began, they have little explanation for exactly why the assassination of Ferdinand was the specific catalyst or why, for example, cooler heads in Russia did not prevail. Indeed, as Stephen van Evera (MIT 2003) has maintained, the French and British could have and even should have said to the Russians "Hey you guys! Put a collar on the Serbs! They're out there shooting Archdukes!" Instead, Europe quickly found itself at war, the severity and extent of which they were sorely underprepared for. Realists, then, can explain the broad strokes but not the catalyst; the big picture but not the fine points that give the painting its shape. As has been held elsewhere, the reason for this inability to explain or predict the actions of a small group of assassins in Sarajevo may have a lot to do with the realist assumption of anarchy and the assumptions about the international system that assuming anarchy imposes on realist theorists of international relations.

In an anarchic system where states are the primary actor significance and causal explanation is attached to the large swathes that cut their way through the system. Great Power Politics becomes the basis for explanations, imperial overreach becomes a causal factor and sub-state events and actors are marginalised. The distribution and strength of the German army, for example, is identified as a key strategic factor while the motivations and personal animosity of Ferdinand's

assassin, Gavrilo Princip, is relegated to little more than proximate cause, if that, in realist accounts of the war's outbreak. Russet (1962), for example, details many 'causes' of World War One while concluding that the assassination of the Archduke was nothing more than a 'surprise'. But what a surprise, one without which it could be reasonably argued that the entire war might not have been launched at all (Kissane 2006). Anarchy prevents the realist from engaging in any real way with the proximate cause of the war and the sub-state level issues that combined to provoke the conflict. This is something that is not found when a theorist or analysts assumes complexity.

Indeed, as described above, the assumption of a complex system demands an assessment of what Russet termed the 'surprise' of the assassination of Ferdinand and his wife. When the international system is assumed to contain billions of individuals and groups all interacting in political space it is clear that analysis must reach below the state level and examine the specific circumstances that led to the assassinations in Sarajevo. One might enquire as to the significance, for example, of the date of Ferdinand's visit to the city being, as it was, the feast of St Vitus, an important saint in the Serbian Orthodox Church. One might wonder, too, how the proximate events surrounding the assassination appear incredibly important: the failed assassination attempts earlier in the day and the injuries that resulted leading to Ferdinand's visit to a hospital and revised route through the city; the wrong turn made by the couple's driver which left their car stationary on a street; and the serendipitous melange of events that saw that stationary car come to rest right in front of an otherwise dejected would-be assassin named Gavrilo Princip who needed to do little more than extend his arm through the car's open window to achieve what his co-conspirators had failed to do earlier in the day. Where realists label such facts 'surprises' or ignore them altogether, content with grand strategic explanations for the outbreak of the war, in a complex system such incidents, in specific combination, serve to provide the real explanation for the war. Indeed, without this largely unpredictable, sub-state sequence of events, it remains impossible to determine with any certainty that the war would have begun that summer or even at all. In Pascalian terms, the wrong turn made by Ferdinand's driver is analogical to the length of Cleopatra's nose: we know not what the world may have looked like had it been a little different but we know it would have changed.

5.4 Rectifying History's Greatest Mistake

On the night before his state joined the European Union, Lithuanian President Arturas Paulauskas remarked:

History will rectify its greatest mistake tonight: Lithuania, the geographical centre of Europe, is returning to Europe. Today, we are saying to the old continent: Hello Europe, we are coming. We are coming to live together, to work together, to create together, yet to remain ourselves (BBC 2004).

The mistake he refers to was the post-World War Two division of the European continent into socialist, Soviet-dominated east and a capitalist, US-backed west. The Cold War that had seen Lithuania, its Baltic neighbours and most other states in Eastern Europe fall under the control of the USSR had concluded and little more than a decade later the east and west of the continent were again one. The rhetoric of the Lithuanian leader is far from overstatement: the magnitude and speed of the change in European political relations and the wilful trading off of sovereignty that joining the EU demands of any new Member State were the latest in a series of steps that had produced a zone of peace and prosperity in a region that—earlier in the century—has been the site of the two largest conflicts in the history of mankind. This transformation and integration was welcomed by many and surprised most realists who sought to explain the series of decisions made by EU states which saw them yield progressively more of their sovereign powers to regional institutions of their own creation.

For the uninitiated, a little background on the speed and breadth of this transformation in Europe is useful. From the European Coal and Steel Community (ECSC) which brought about the political reconciliation of France and Germany and laid the basis for the economic integration of Western Europe, through the Treaty of Rome which established the European Economic Community (EEC) to the Maastricht Treaty which established the European Union (EU), the recent history of Europe has been one of continued and extensive economic and political integration (Gillingham 2002). Former rival states, including states that had made war on each for centuries in the past, built not only regional economic institutions but also an international parliament and a supra-state decision making body in the form of the European Commission. While in practical terms the integration of the continent has long been an aim of prominent Europeans including Charlemagne, Napoleon and Hitler, the post-World War Two integration of the continent from Britain and Ireland in the west all the way to the Russian border in the east is the first time that this integration has been achieved peacefully and with the consent of the people. Europe now sits as the most striking example of regional political integration on the planet and its success serves as an example to other regional integration efforts worldwide (Mistry 2000).

Realists have faced significant difficulties explaining the extent of European integration from its first steps through to the sprawling alliance of nearly thirty states of today. John Mearsheimer (1990) lampooned analysts who imagined "a new age of peace in Europe" and argued that "the prospects for major crises and war in Europe are likely to increase markedly". Realist Stephen Walt (1999) argued that he:

...has used structural theory to peer into the future, to ask what seem to be the strong likelihoods among the unknowns that abound. One of them is that, over time, unbalanced power will be checked by the responses of the weaker who will, rightly or not, feel put upon.

Walt and his fellow realists rejected the idea that any alliance between states can be permanent as interstate alliances are issue specific. As a general rule realists

remained generally pessimistic about the likelihood of peaceful integration and democratic transitions of the post-Socialist states of Central and Eastern Europe. Yet these realists seem, with the passing of time, to be proved more and more misguided. When even the pressures of the 2008 financial crisis failed to see significant cracks appear in the EU's institutional structures the impression an objective observer receives is one of continued integration, closer relations and the trading of significant national sovereignty for peace and economic advantage—something that the anarchy focussed realists reject as a strategy for states in a self-help environment.

Yet in a complex system such integration is not particularly surprising nor are the long term alliances that such integration engenders something that is problematic for theorists who assume complexity. It is only under realist anarchy that alliances are assumed to be short and issue specific; the assumption of complexity demands neither short term nor long term alliances of states and non-state actors. It is only under anarchy that security concerns are placed ahead of economic or cultural issues; complexity recognises that issues can be multifaceted and that no single issue rises above all others in every situation. It is only when one assumes realist anarchy that national sovereignty becomes the be-all and end-all of discussions of integration, allowing Mearsheimer and Walt, among others, to conclude that Europe and its institutions would soon revert to the balance of power politics of old. Indeed, under realist anarchy there is no evolution, no learning, no feedback and no way for states and their leaders to rise above past behaviour to new, more effective behaviours; the logic of anarchy that drives realists seems uncomfortable and ill-fitting in the face of European integration and it is of little surprise, then, to find that realists encounter significant difficulties in explaining the ever expanding zone of peace on that continent or the integration efforts it has sparked elsewhere. A theorist assuming complexity, on the other hand, would not share that surprise, confident that the sub-state causes and interactions among individual Europeans ignored by the state-centric realists will have some effect on the integration efforts and, at least in this case, a positive one.

5.5 Back to 'Back to the Future'

In 1990 John Mearsheimer penned a widely-cited article as the Cold War edged towards a conclusion, the tile of which he borrowed from the hit 1985 film, *Back to the Future*. The article, which like the film provoked a sequel of its own, argued that the end of the Cold War and the withdrawal of the superpowers from Europe would see the continent driven into security competition. Mearsheimer offered four potential futures for Europe as well as specific policy prescriptions for the US government which, with the benefit of hindsight some two decades later, seem incredibly aggressive:

First, the United States should encourage a process of limited nuclear proliferation in Europe. Specifically, Europe will be more stable if Germany acquires a secure nuclear deterrent, but proliferation does not go beyond that point. Second, the United States should not withdraw fully from Europe, even if the Soviet Union pulls its forces out of Eastern Europe. Third, the US should take steps to fore-stall the re-emergence of hyper-nationalism in Europe (Mearsheimer 1990).

What caused Mearsheimer to suggest that the historic Central European geopolitical power which, for good reason, continued to be considered an existential threat by its neighbours to the east and west, should be encouraged to gain an offensive nuclear weapons capability? What made Mearsheimer push for the continued presence of US military forces in post-Cold War Europe in the face of a non-existent threat from the USSR? And why would Mearsheimer worry that hyper-nationalism would derail the peace that was predicted by others to be on the verge of breaking out? The answer, quite simply, is that Mearsheimer's reliance on a theory of international politics that assumes the international system is anarchic.

Like other realists, Mearsheimer relies on anarchy as a foundational assumption in his world view. He assumes that the normal condition of international relations is insecurity, that states are security seekers and that the self-help system that is anarchy does not encourage long term alliances or engender trust among states. Indeed, for offensive realists like Mearsheimer, every state is an existential threat to all others, for by virtue of their existence they constitute a threat to the survival of others. In such a system, then, Mearsheimer can envisage only four future conditions for post-Cold War Europe: a Europe free of nuclear weapons and where France, Britain and the USSR give up their existing stockpiles of nuclear arms; the nuclear weapons status-quo continuing but leading to increased instability and insecurity, particularly in Eastern Europe; a mismanaged and dangerously unstable and insecure process of nuclear proliferation in Europe; or, a process of wellmanaged nuclear proliferation across the continent (Mearsheimer 1990). All are considered less stable than Europe's Cold War balance between the US and the USSR and—after rejecting the idea that Europe could remain peaceful—Mearsheimer argues that the 'well-managed proliferation' scenario is the preferred future for a safe, secure and stable Europe. The reality, though, is that the rejected 'peaceful Europe' scenario is almost exactly what occurred.

Mearsheimer (1990) offers, and then rejects, what he terms an "optimistic scenario" that includes the following elements: a European community that grows stronger with time; common economic interests that encourage the Western European states to continue cooperating with each other despite the retreat of the USSR in the east; the German "threat" removed by integrating the German state more deeply into a common European architecture; an expansion of the European Community (EC) to include states in Eastern Europe; and a bolstered peace across the continent. Far from optimistic, this describes rather neatly what did happen in Europe after the Cold War. Mearsheimer's rejection of the possibility of an eastwards expansion by the EC and sustained peace in Europe rests on his assumption of an anarchic system, as he explains when he addresses what he calls flaws in the economic liberalism underpinning the optimism:

The reason is straightforward: the international political system is anarchic, which means that each state must always be concerned top ensure its own survival. Since a state can have no higher goal than survival, when push comes to shove, international political considerations will be paramount in the minds of decision-makers (Mearsheimer 1990, italics added).

One might wonder, though, if the optimistic scenario would have been fore-seeable if Mearsheimer had considered the international system as *something other than anarchic*. Indeed, if Mearsheimer had assumed a complex international system then his conclusions would have been very different, indeed.

As previously described, the assumption of complexity encourages theorists to consider sub-state actors in their calculations. Assuming complexity would have seen Mearsheimer recognise the strong opposition to nuclear weapons (and even nuclear power) in Germany at the end of the Cold War, as well as in other states (Kissane 2007). Constructivists, perhaps, might have been more open to acknowledging the significance of sub-state NGO and citizen opposition as a factor to consider when predicting patterns of proliferation in Europe but Mearsheimer, with his focus on an anarchic system of security seeking states, fails to comprehend the significance of such opposition, even in democratic Western Europe. Mearsheimer's anarchic vision of world politics forced him to consider the withdrawal of the Soviet Union from Europe as a shift in the European balance of power. He failed to neither consider the significance and influence of sub-state actors and groups in this withdrawal nor consider the 'pull-factor' that free-market capitalism remained for states of Eastern Europe newly freed from Soviet control. The broadening and deepening of European integration and the voluntary sharing of financial and political sovereignty with regional institutions was not foreseeable to realists like Mearsheimer as such decisions by states are seen as irrational in an anarchic realm where alliances are short-term and trust is scarce. By assuming complexity, however, the theorist is explicitly aware of the influence of sub-state groups on international political events and is open to futures like Mearsheimer's 'optimistic scenario' that would otherwise be closed to them. Predicting and explaining the Europe that emerged from the Cold War, then, is only possible for realists if one assumes something other than anarchy, and complexity may well be the systemic structure that can serve as this alternative for the discipline's predominant theoretical perspective.

5.6 Conclusion

Realism has consistently failed to describe, explain and predict the real currents of international politics and, while criticisms from liberal institutionalists and constructivists alike have pointed to many failings in the realist approach, the key failing remains axiomatic: the realist assumption of anarchy. Alternatives to the assumption of anarchy exist, however, and chief among them is the assumption of systemic complexity. Indeed, by considering examples like the origins of World

War One, the integration of Europe or the post-Cold War security landscape in Europe, it is easy to see why the assumption of a complex system can be useful to the theorist of international politics. Assuming complexity demands the theorist consider sub-state actors including NGOS, nations, corporations and even individuals, and that the theorist imagine what effects these actors might have on the wider politics regionally or even globally. Whether it is the motivation of an assassin in Sarajevo, the political integration of a continent more often at war than at peace, or the peaceful political landscape in Europe where realists could only imagine instability, insecurity and the proliferation of nuclear arms, complexity helps the theorist to better understand and explain the patterns and practices of international political life. Indeed, it is only by assuming a systemic state that one can fully realise what Pascal appealed to in his musings on Cleopatra for, under anarchy, the length of a single nose on a single face makes no difference to the evolution of the international politic while, for those who assume complexity, it might just make all the difference in the world.

References

BBC (2004) In quotes: Leaders hail new EU. http://bbc.in/GF7ZZe, accessed 15 Feb 2014
COSI Project (2005) An introduction to complexity in social science http://www.irit.fr/COSI/index.php, accessed 10 Oct 2013

Gillingham J (2002) European integration 1950–2003: superstate or new market economy?. Cambridge University Press, New York

Gleick J (1987) Chaos: the making of a new science. Palgrave, New York

Goodman J (1965) The concept of system in international relations theory. Background 8 (4):257-268

Kissane D (2005) 2015 and the rise of China: power cycle theory and the implications for Australia. Secur Challenges 1(1):105–121

Kissane D (2006) The Balkan bullet with butterfly wings. Cent Eur Univ Polit Sci J 1(4):85–106
Kissane D (2007) Offensive realism and central & Eastern Europe after the cold war. Cent Eur Univ Polit Sci J 2(4):381–402

Kissane D (2011) Beyond anarchy: the complex and chaotic dynamics of international politics. Ibidem, Stuttgart

Legro J, Moravcsik A (1999) Is anybody still a realist? Int Secur 24(2):5-55

Lorenz E (1963) Deterministic nonperiodic flow. J Atmos Sci 20(2):130-141

Mearsheimer J (1990) Back to the future: instability in Europe after the cold war. Int Secur 15 (1):5-56

Mearsheimer J (2006) Conversations in international relations—interview with John J. Mearsheimer (Part I). Int Relat 20(1):105–124

Mistry P (2000) Africa's record of regional co-operation and integration. Afr Aff 99(4):553–573 MIT (2003) Pearls of wisdom from Prof. Van Evera. http://stuff.mit.edu/afs/athena/course/17/17. 40/www/quotes.html, accessed 15 Feb 2014

Morgenthau H (1970) International relations: quantitative and qualitative approaches. In: Palmer ND (ed) A design for international relations research: scope, theory, methods, and relevance. American Academy of Political and Social Science, Philadelphia, pp 67–71

Pavard B (2002) Complexity paradigm as a framework for the study of cooperative systems. Revue d'intelligence artificielle 16(4–5):419–442

Russet B (1962) Cause, surprise, and no escape. J Polit 24(1):3-22

Skinner J, Molnar M, Vybiral T, Mitra M (1992) Application of chaos theory to biology and medicine. Integr Physiol Behav Sci 27(1):39–53

Stöckmann H-J (1999) Quantum chaos: an introduction. Cambridge University Press, New York Walt S (1999) The ties that fray: why Europe and America are drifting apart. Nat Interest 54(98/99):3–11

Waltz K (1979) Theory of international politics. Addison Wesley, Reading

Waltz K (1988) The origins of war in neorealist theory. J Interdisc Hist 18(4):615-628

Waltz K (2003) Being a political theorist. http://globetrotter.berkeley.edu/people3/Waltz/waltz-con2.html, accessed 15 Feb 2014