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Logics of mind and international system: a journey with Robert Jervis

THIERRY BALZACQ AND ROBERT JERVIS

Abstract. The following exchange builds upon, and reassesses, the intellectual trajectory of Robert Jervis since *The Logic of Images*. It is organised around three interrelated sections that, tentatively, squeeze out the gist of Jervis' contribution to IR during his three and half decades of remarkable scholarship. The purpose, however, is not to offer a comprehensive view of Jervis' work; instead I want to set signposts that will help us get smoothly into his 'system of thought' and substantiate the salience of his account. In the first section, we concentrate on issues of images and (mis)perceptions. Here, Jervis reasserts that political psychology, a crucial site of relevance of actors' behaviour, is perfectly amenable to a rigorous analysis, and should thus be granted a pivotal role in understanding the dynamics of world politics. Insights of political psychology, with their various implications, are taken up into the next section, the rationale of which is to dialogically sketch out the paradoxical ethos of deterrence theory. The third section, on complexity theory, brings forward the breadth of Jervis's reorientation, characterised by a systematic integration of various ideas that have been at the centre of his endeavour since the 1980s. We use contemporary world politics as a thread that connects the aforementioned segments of the discussion and thereby gives the journey its overall coherence.

Images, (mis)perceptions, and false dilemmas

Balzacq. Few people know or fail to take heed of it, but your intellectual venture started with something of a glitch; you strayed from understanding how actors drew inferences to predict others' behaviour towards focusing on analysing how they projected tailor-made images to induce desired outcomes. To what extent, if at all, has this unforeseen albeit temporary inversion influenced your intellectual orbit?

Jervis. It was indeed highly consequential, but it was not entirely accidental. Being born in 1940, I grew with the Cold War and nuclear weapons and from as far back as I can remember was fascinated by the Soviet-American duel. In college, the three books that influenced me the most were Glenn Snyder's *Defense and Deterrence*, Tom Schelling's *Strategy of Conflict*, and Joseph Berliner's *Factory and Manager in the USSR*. All three were highly strategic, stressing how actors responded to incentives that others set and sought to influence others' behaviour by leading them to believe that the actor would behave in a certain way. So when I started working on problems of perception for my dissertation it did not take long for me to revert to my more strategic instincts. In this, I was also strongly influenced by Irv Goffman's *Presentation of Self in Everyday Life*, which I quote in the prefatory page of *Logic of Images*.

As you imply, while I originally thought that exploring how actors sought to influence others' perceptions would merely be one chapter, it became apparent that the topic was simply too large and complicated for that. Exploring it was very important for my intellectual development. Although I had previously been interested in strategy and deception, I really had not thought about these subjects seriously until I did this research. I found the work very hard for two reasons. First, little had been explicitly written about the question that drove my study: 'What is the logical status of various kinds of behaviours (including statements and symbolic acts) as evidence for how the actor will behave in the future?' In other words, how can perceivers infer whether another state is likely to be aggressive or not, and, conversely, what should a state do to convince the other side that it is not aggressive or project some other desired image, which may or may not be correct? Following Schelling and, in quite a different way, Goffman, I was led to develop a theory of what would later be called signalling (although my own conception divides into the categories of signals and indices), and to place deception and possibility of deception at the centre of my focus. This was pretty much new territory, and fortunately I was not well enough socialised in the discipline to be particularly worried about wandering around in the wilderness.

Second, realising that states only signalled because they wanted to produce an effect led me to a form of analysis that I think can immodestly be described as premature rational choice combined with premature social constructivism. That is, while my reasoning proceeded through informal deduction, I was very aware that many behaviours had meaning only because of implicit understandings among the actors on what they meant. But this did not necessarily make for less conflict; indeed, it gave actors the tools by which they could seek to deceive and exploit each other. So when in 1980s and 1990s many people came to see rational choice and constructivism as starkly opposed to each other, I thought this was fundamentally misconceived, and I am glad to see more scholars now marrying the two, as Barry O'Neill did very nicely in *Honor, Symbols, and War*, for example.

Logic of Images also solidified my interest in strategy and national security policy, something that has stayed with me throughout my career, and involved ways of thinking that would come in very handy when I started working on *System Effects*.

Balzacq. While making it clear that your own solution to the problem is still tentative, you nonetheless try, in 'Signaling and Perception', to deepen the initial intuition that, if we are to get a clear picture of international interactions, and hence construct an analytical framework for International Relations, both how actors are perceived and what they 'see' in others should be studied in conjunction, without nonetheless reducing one to another.[1] Would you mind expanding on the potentials yielded by this new avenue?

Jervis. This is near and dear to my heart, because 'Signaling and Perception' is the major project that I am working on when I am able to resist the temptation to write about current world politics. As you know, signalling is a major approach to

[1] Robert Jervis, 'Signaling and Perception', in Kristen R. Monroe (ed.), *Political Psychology* (Mahwah, NJ: L. Erlbaum, 2002), p. 12.

economics (its founders won the Nobel Prize couple of years ago) and political science. But as rigorous and intriguing as this literature is, I think the central distinction between 'cheap talk' and 'costly signals' misses a great deal of what is happening. Even if it did not, this literature by and large omits the central point that whatever impact signals have depends on how they are perceived. Of course we can make *a priori* assumptions about this and go on our merry way developing ever more complicated models, but this seems to me at best a first step if not a false step. We need to understand how signals are perceived; furthermore, signallers' behaviours are based on their estimates of how perceivers will interpret their messages.

So what we really want to do is to look at how one actor behaves in order to convey certain messages and impressions and then look at how perceivers interpret this (of course different perceivers can see the same behaviour quite differently, as Jonathan Mercer shows very nicely in his important study of reputations). We also need to see how actors estimate how their messages have been interpreted. We can further try to see how the target state responds and how the other side interprets this. Of course the actual historical research is difficult. The results would not be unambiguous, and generalisations will be hard to develop, but I think we will learn a great deal from this approach. At least some historians will see this as telling them that have been speaking prose all of their lives, and especially now that multi-archival studies are becoming more common, we political scientists can take advantage of much of their research. I hope we can sensitise historians to the theoretical questions involved, to the benefit of both disciplines.

Balzacq. Psychology is apparently the thread that bridges the gap in our abilities to capture the strategies of actors. More intriguing, it helps us understand, as it were, that actors differ not only in terms of their material capabilities, but also along the lines of 'situational variables'.[2] I wonder whether you could capitalise upon this and perhaps reiterate how it inveighs against the view held by realism and its proponents.

Jervis. I don't think it is only the heavy investment I've made in political psychology that leads me to believe that it really is a thread that runs – or should run – through the study of politics. It strikes me as crazy to assume that people are all alike or that they perceive the way some scholars think they should. I guess I am not sure how much this means that I am not a Realist. Bill Wohlforth has done a very good job of melding realism and perceptions, although some reply that the latter undercuts the former. I hope that others will follow variants of Bill's path and, more generally, try to incorporate or at least take account of political psychology. As it is now, when political psychology in IR is not put in a ghetto, it is too often brought up in the context of 'Prospect Theory vs. Rational Choice'. There simply is much more to it than this, and I hope that the publication of the *Oxford Handbook of Political Psychology* and Rose McDermott's forthcoming *Political Psychology in International Relations* will help lead to a more productive orientation.

Balzacq. Put in slightly different terms, what you argue, against neo-utilitarian theories, is that neither actors' type, nor their preferences, are static. As a consequence,

[2] Robert Jervis, 'Signaling and Perception', p. 12.

you claim that under anarchy actors are not necessarily in a Prisoner Dilemma setting. This *seems* to align you with what is known today as a rationalist, soft or Wendtean constructivism. In addition, to substantiate the questions that naturally arise, you have, on various occasions, laid emphasis on the role of ideas, the power of knowledge, and the formation of preferences, values and interests through interactions. Do you, as hinted at, regard yourself as a constructivist? Or, do you see any difference between your own work and the constructivism endeavour?

Jervis. Your question has a couple of different although related parts. Let me start by talking about the problems with the concept of actor 'types' which is so common in current discussions of signalling based on economic theories. I do not want to completely deny the existence and importance of categorising actors – much of IR, including my own work, is based on distinguishing aggressive from *status quo* states, and others like Randy Schweller have developed more elaborate and perhaps more useful typologies. But the dominant thinking about the types has real problems. First, it assumes that actors are dispositionally rather than situationally driven, something that social psychology has called into question. That is, to understand how actors behave, we may need to look more to the situations they are in than to their outlooks and motives. Theories of IR that address the external sources of behaviour of course do this. Second and relatedly, an actor can change her type, most interestingly through behaviour that epitomises her type. Thus it is not stretching things too much to say that before fighting and losing the war in Vietnam the US was a 'tough' type (that is, willing to run high risks and pay high prices to oppose the spread of Communism), but the experience of the war changed the US into a 'tender' type – which in turn changed as a result of the Soviet behaviour growing out of the perception that it could now take advantage of the US.

A state can also change its type as its leader changes. Thus the last US shift I referred to was accelerated if not caused by Ronald Reagan's defeat of Jimmy Carter in 1980. Even more dramatically, Gorbachev's ascension to power radically changed the Soviet type, as Reagan acknowledged in his famous remark in Red Square that his criticism of the USSR as an Evil Empire no longer held because that was in 'another time, another era'.

The fact that types can change through action, interaction, and ideas provides a link to constructivism, as you suggest. Many aspects of my work are indeed constructivist if we define this term fairly loosely. This is most obviously true of *Perception and Misperception* and *System Effects*. After giving a talk about images about 8–10 years ago a graduate student came up to me and said excitedly, 'You seem to have become a constructivist!' In fact I had merely summarised some of the arguments from my earlier work on perception.

Of course there are differences between the work that I and others have done in political psychology and constructivism. The latter pays less attention to individuals and is more concerned with a variety of social processes. I do think the latter are very important and regret that psychology has taken such a cognitive and individualist turn to the neglect of what used to be the thriving approach of social psychology. But many constructivists and other students of the power of ideas ignore relevant political psychology and so often are simplistic or reinvent the wheel. The concept of identity plays a large role in much constructivism, and while this is

often useful I think it too could draw more heavily on psychological studies of self-images. But some work in this area is very good, for example works by Michael Barnett, Alexander Wendt, Bruce Cronin, Mlada Bukavansky, and Ted Hopf (I am happy to say that the latter three are Columbia Ph.Ds).

Balzacq. Many have the feeling that certain academic journals have been impervious to constructivism and that it is still regarded, mainly in the US, as a marginal approach. How do you feel about this?

Jervis. There is a bit, but only a bit, to this. It is true that constructivism is more prominent among European scholars, and so not surprising that it appears with great frequency in journals like the *European Journal of International Relations* or the *Review of International Studies,* and infrequently in the *American Political Science Review* or *International Security*. In part, this reflects self-fulfilling prophecies and patterns of self-selection as authors send their manuscripts to journals in which similar pieces have appeared in the past. But there is a fair amount of constructivism in *International Studies Quarterly*, *International Organization*, and even *World Politics*. Political Science is a very diverse discipline in which almost everyone feels in the minority, if not persecuted. About fifteen years ago *ISQ* had a special issue devoted to constructivism in which many of the authors complained that they could not publish in major journals like *ISQ*!

Balzacq. To come back to the mechanism of perception, if both perception and actor's type vary over time and context, and, as suggested, given the looming risk of 'perceptual biases' is there any room for anticipating actor's behaviour? Or, is there a way to avoid both 'situational reductionism' *and* misperception?

Jervis. Inferring actors' intentions certainly is difficult. In many cases, even after the fact we cannot be sure how an actor would have responded had others behaved differently. There are raging debates about German intentions before World War I and over whether different British policies could have avoided the conflict. We are sure to be arguing about Soviet and American intentions during the Cold War for the next 50 years, and I think the debates will subside not when they are settled, but when people get tired of them. So we really have to take pity on the poor actors who have to decide in real time with much less information. Furthermore, for reasons of both their individual psychology and domestic politics, they often have to act as though they are certain of the validity of their beliefs about the other and have to do so even when they do not argue and believe that they have 'dominant strategy' – that is, that their behaviour is designed to produce the best outcome no matter what the other side's type is, as I discussed in chapter 3 of *Perception and Misperception*. So I think actors are often going to be wrong even if they do the best possible job. Scholars often are insufficiently aware of these difficulties. Thus at least in the American textbooks Neville Chamberlain comes down to us as a closed-minded fool, but if you have read his speeches or records of his cabinet meetings, you know that he is in fact extremely intelligent and has a very good understanding of world politics. He just happened to be wrong, an error that perhaps lasted as long as it did in part because he knew he was smarter than everyone else in the room.

Balzacq. Throughout *The Logic of Images* and *Perception and Misperception*, it occurs to me that the issue of deceptive signalling between states is handled with extreme care.[3] Thus, some may still wonder: how possible is cooperation if actors always run the risk of being misled by others' gestures or cheap signalling?

Jervis. Yes, deception is at the heart of both books. Actors often have high incentives to deceive, and because perceivers know this, they must discount lots of information, just as Stalin rejected the reports from his atomic spies until they were confirmed at Hiroshima. Of course this argument was hardly new when I made it; it is a staple of Realism and it surprises me that scholars over the past ten or twenty years needed to rediscover the importance of deception. Some governments seem to put much more effort into deception than others, although our knowledge here is quite limited. It appears that the USSR engaged in deception on quite a constant basis, although we are only beginning to get the information we need to study this. Nazi Germany of course practiced deception, not only in successfully projecting an image of peacefulness and insecurity, but in first disguising its rearmament efforts and then in exaggerating them. But here and elsewhere it takes two to tango: Britain and France were perceptually ready to see Germany as aggrieved and seeking only limited changes in the *status quo*.

In fact, as your question indicates, I am surprised that states are not as sensitive to the possibilities of deception as I would expect. *Logic of Images* described many cases where what later would be called cheap talk in fact had significant influence. As we look at declassified American intelligence documents, it is similarly clear that their authors rarely asked themselves whether the information they were relying on might be Soviet disinformation. They are not alone: the marvellous British deception of Germany during World War II by the use of 'turned' German agents worked much better than anyone expected. Much of the reason for this is that intelligence analysts become psychologically and politically invested in their sources and methods. They probably could not do their very difficult jobs if they constantly asked themselves whether they were being deceived.

One could argue that stressing the possibilities of deception would make the world less stable and more dangerous if decision-makers actually paid much attention to this claim. Maybe international politics and domestic social life is as open and stable as it is in part because people aren't as worried about deception as a coldly logical analysis would lead one to think they should be.

Balzacq. I see a huge implication here. Fear can transform a gesture into a cheap signal and thereby elicits unexpected answers. However, many students of security dilemmas often overlook the emotion variable. In contrast, you have recognised that dynamics of misperception are also driven by emotions, and yet devoted little time to the scrutiny of such pervasive factors. Why?

Jervis. You are quite right: *Perception and Misperception* completely put aside emotions; indeed one chapter denies the importance of wishful thinking. This was a

[3] See Robert Jervis, *The Logic of Images in International Relations* (New York: Columbia University Press, 1989), 2nd edn.; Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976).

major blunder. Part of the reason for it was that the dominant psychology of the time was purely cognitive; part was my personal desire to conclude that what Herbert Simon called bounded rationality ruled the world. Had I been a bit older and more mature I probably would have realised that this was a foolish way to understand individuals and collectivities. Later, partly under the influence of Smith, Bruner, and White, *Opinions and Personality*; Janis, *Decision Making;* Lebow, *Between Peace and War;* Snyder, *Ideology of the Offensive*; and general mulling over a number of cases, I came to see the importance of emotions and what psychologists call 'motivated bias' which was a focus of *Psychology and Deterrence*, which I co-authored. In the past 15 years or so, psychologists have also paid much more attention to affect and to cognitive-affective interactions. Some of the most recent work in this vein draws heavily on neurobiology (for example, Marcus, Neuman, and MacKuen, *Affective Intelligence and Political Judgment*). Furthermore, prospect theory, one of the most popular and promising forms of political psychology, at bottom is a theory of what gratifies and pains us, and this is grounded at least implicitly in ideas about emotions. I would very much like to produce a study that shows how emotions and cognitions interact in politics, but at this point the challenge is simply too great.

Deterrence, nuclear revolution, and US posture

Balzacq. The paradoxes of the nuclear revolution are highlighted in *The Illogic of American Nuclear Strategy* and *The Meaning of Nuclear Revolution*. Do you think the mutual vulnerability that prevailed during the Cold War era made the world safer?

Jervis. I definitely do. Although the evidence is not so clear as to put it beyond dispute, several things point strongly in this direction and cast doubt on alternative explanations. First, the Cold War was more dangerous before the mid-1960s, when mutual second-strike capability became a reality. After then, there were no major superpower crises. The October 1973 Mid East war really was not such an event and while the Soviet fear that the US might attack in the 1983 NATO exercises is disturbing, even this was not as dangerous as the confrontations in the first 20 years of the Cold War when the US was not so vulnerable. (During this period, however, the Soviet did hold Western Europe hostage, and if there is validity to the logic that said the US valued West Europe so much that it would put its own cities at risk in the event of a Soviet attack on Europe, then the continent's vulnerability simultaneously acted as a restraint upon the US.)

Second, memoirs and declassified documents reveal that decision-makers on both sides were highly aware that a nuclear war would be an incredible disaster, and took great pains to be cautious. We now know that many public statements of recklessness did not represent private views, and may have been instances of Schelling's strategy of 'rationality of irrationality', in which a clever leader pretends not to understand the situation in order to increase the pressures on the other side to back down. (Nixon was perhaps the president most enamoured of this approach, and he probably did not know that the theoretician who best elaborated it was his nemesis, Dan Ellsberg. In a double irony, Ellsberg released the *Pentagon Papers* because he

thought that revealing the deceit behind Kennedy's and Johnson's policies would allow Nixon to disavow the policy and withdraw from Vietnam. But Ellsberg's theory that domestic politics drove US policy in Vietnam was incorrect, and Nixon reacted very differently.)

Third, in crises that did occur, we now know that each side would have been willing to make additional concessions if that had been necessary to end the confrontation. This is true for the Cuban missile crisis and the second Berlin crisis (1958–1963), for example. None of this is to say that the situation was entirely safe, that I think the world is now more dangerous because the Soviet Union has dissolved, or that I agree with my colleague and friend Ken Waltz that spreading nuclear weapons around the globe will bring peace. But I do think mutual vulnerability – what is called the nuclear revolution – did help keep the peace between the US and USSR.

Balzacq. As you have depicted it, what I find particularly intriguing in the idea of deterrence is that the very condition that makes mutual security possible always lies with the opposite side. The security of A lies with B, and the security of B lies with A's intentions and capabilities. To some extent, under deterrence, the possibility of security rests with the other, which calls for a moral type of responsibility on both sides. Please comment.

Jervis. I have not thought of this as much in moral terms as in pragmatic ones, but the two may indeed blend into or reinforce each other. I can't be secure if you are very insecure, because if you are you might strike first in desperation; I can't provide for my own security by protecting myself, but only can gain it through the chance – which doesn't have to be great – that I will destroy you, in which case you will also destroy me. In this way, in providing for our own security, we must safeguard the other as well. Ronald Reagan came to understand this when he learned how worried the Soviets were in the 1983 military exercise I referred to previously. This not only gives each side a stake in the other's security, but as you suggest may lead each to gain some identification with the other since they both face the same menace and to come to see that they share a responsibility for avoiding war.[4] I think the records now available do indicate that decision-makers had a feeling of kinship with their opposite numbers. They and only they knew what it was like to live with this awesome responsibility.

Balzacq. The actuality of deterrence remains intellectually engaging. For instance, earlier in 2002 the Bush administration issued the Nuclear Posture Review (NPR) that reasserted US confidence in nuclear weapons as a means to deter chemical and bacteriological attacks.[5] Some fierce opponents claim that nuclear weapons are

[4] This point is well made by Gottfried van Bentham van den Bergh in *The Nuclear Revolution and the End of the Cold War: Forced Restraint* (Houndmills, Basingstoke: Macmillan Press in association with the Institute of Social Studies, 1992).

[5] The NPR relies on a triad of capabilities: first, nuclear and non-nuclear offensive strike systems; second, active and passive defences; third, reshuffled military technological capabilities that allow the US to tackle the manifold contingencies that predate the contemporary international system. A particular emphasis is put on the development of effective intelligence and planning systems, as well as updated command and control structures. For a good discussion on myths and overlooked realities embodied by US NPR, see Richard Sokolsky, 'Demystifying the US Nuclear Posture', *Survival*, 44 (2002), pp. 133–48.

useless at best. Do you think the reliance on nuclear capabilities is able to reap benefits, if it ever could, to US National Security against asymmetric threats?

Jervis. I am ambivalent on this point. I do not think the US needs to rely on nuclear threats to deter chemical and biological use by others. If we are dealing with non-state actors, they may simply be impossible to deter because we can't find them or hold at risk things that they value. And if we are dealing with 'rogue' states we can do all the damage we need to do with conventional weapons. But at least at this point, it is very difficult to physically destroy chemical and biological stockpiles using conventional explosives, especially if these weapons are buried deeply underground. In that case, it is quite possible that only a small specially constructed nuclear warhead could reach the target and destroy the chemical or biological agents without spreading them into the atmosphere. Despite this, however, I think the major American interest is in keeping the nuclear threshold as high as possible to discourage leaders around the world from thinking about the uses to which nuclear weapons would be put. The US should then seek to reinforce what is inaccurately called the nuclear 'taboo' (I say inaccurately because when something is taboo one does not make cost-benefit calculations about it – you don't calmly think about whether to sleep with your sister). Interestingly enough, I have found a pretty wide consensus on this position among experts across the political spectrum.

Balzacq. It might be argued that the US should set a threshold of damage (loss) beyond which the use of nuclear power against those who have affected the life of its nationals would be legitimate. Do you think that makes sense?

Jervis. It probably does, and I think it represents what would be likely to happen. That is, I doubt if the US would use nuclear weapons in response to a chemical or biological attack that killed only a handful of people, or even a couple of hundred. But if such an attack killed, say, 500,000 Americans, I think there would definitely be a nuclear response. Of course exactly where this threshold is I cannot say, and it might differ from one leader to another. In fact I doubt if any person would know ahead of time exactly where his or her threshold would be. In the event of a large-scale attack, emotions would surely weigh very heavily. This is not to say that an emotion-based response would be wrong or to hold up unemotional calculation as the model of rationality. As I noted earlier, as we learn more about the role of emotions, it becomes clear that we cannot even imagine life, let alone sensible life, without their playing a large role.

Along these lines, I do not think it is inappropriate to acknowledge that when I started to think more seriously about the use of WMD in connection with serving on a Defense Department panel, I found the experience both emotionally unsettling and intellectually challenging. After pretty much stopping thinking about nuclear weapons with the end of the Cold War, I had forgotten how unpleasant it was to think about nuclear war every day.

Balzacq. The 2003 war on Iraq, led mostly by the Anglo-American coalition, has caused worry around the world, though for varied reasons and/or interests. Do you agree with these alarmed voices that such a war could create counteracting behaviours and thus drive many countries to seek nuclear capabilities in order to avoid any

external interference? In other words, is there any risk of sustained practices of nuclear proliferation from states that fear foreign political interventions in their domestic politics?

Jervis. As you know from my articles, like most Realists I opposed this war on the grounds that Iraq was not a major threat to American interests even if it had WMD (like everyone else, I assumed it had chemical and biological weapons and was actively pursuing a nuclear programme), did not support significant terrorism, and that the replacement of Saddam's regime, however justified on moral grounds, would not produce a benign transformation of politics in the Middle East. (By the way, only motivated bias can explain why opponents and, especially, proponents of the war perceived no value trade-offs and instead had multiple independent reasons for their positions.) I also was concerned about the effect this would have on non-proliferation, although I think judgments are not easy here. On the one hand, I think potential proliferants like Iran will increase their estimates of the probability that the US will attack them if it believes that they are on the verge of getting nuclear weapons. This could deter them from pursuing such a programme. On the other hand, the American willingness to fight Iraq shows that the US has a very expansive definition of its important interests and is hard to deter. This means that even countries that are not 'rogues' now have strong incentives to get nuclear weapons as quickly as possible while the US is still so heavily involved in Iraq that it cannot politically or militarily afford to fight another war.

So other countries are placed in a real bind. It is interesting that Iran did agree to take steps that will slow its progress toward nuclear weapons, and I think the reason for this is not only the lessons Iran took away from the overthrow of Saddam but a second-order consequence of the American policy as well. The Europeans and Russians are very anxious that the US not repeat this adventure in Iran and so were more willing to bring pressure to bear on that country than they were in the past. But it would be very premature to think that Iran has given up its nuclear ambitions, and unless it can have a rapprochement with the US, it will seek to gain a strong deterrent. Furthermore, the fact that the US both greatly overestimated Iraq's WMD programme and distorted intelligence to bolster its policy has undercut the degree to which other states will be willing to accept American intelligence assessments in the future. This means that unless the International Atomic Energy Agency (IAEA) or some other international organisation supports it, any future American claim that Iran is pursuing nuclear weapons will be met with widespread scepticism, if not disbelief.

Balzacq. The difference between 'deterrence by denial' and 'deterrence by punishment' has been much discussed, but worth re-examining. By reiterating your position on this, do you regard the 2003 Iraq war as a specific, 'new' kind of deterrence? What, if any, are the implications of this mode of action for deterrence theory?

Jervis. Although the concept of 'deterrence by punishment' as developed by Schelling has had lots of proponents, myself included, it may be that it works only under unusual conditions. Bob Pape's thorough investigation (*Bombing to Win*) argues that when airpower works, it does so predominantly through reducing the adversary's capability, not convincing him that he will pay an unacceptably high price for

continuing the struggle.[6] The run-up to the war in Iraq presents a number of puzzles for most of our theories of coercion. The US had enormously more military power than Iraq; it is hard to see how Saddam thought he might have been able to defend against the US; American threats seemed credible to most of the world; and yet the threats failed and force had to be used. Of course the American attempt was not of deterrence, but compellence. Furthermore, the US was trying to get Saddam to do something he very much did not want to do – that is, give up all his WMD programmes (I'll come back to another puzzle here in a minute). Indeed, Saddam had to wonder whether even this would have been sufficient to satisfy Bush. So perhaps the American threats failed not because they lacked credibility, but because they lacked the necessary complementary promise to refrain from using force if Saddam complied. Nevertheless, the failure of coercion is striking and not easy to explain.

It is even harder to explain why Saddam did not make a greater effort to show that he did not have a WMD stockpile (assuming that he actually did not have one). Almost everyone, including people like me and countries like France, which opposed the war, believed that Saddam had large stockpiles of chemical if not biological weapons. Perhaps he thought that the only thing that might save him would be a bluff: the US might be restrained if it feared a chemical or biological retaliation, and if it thought Iraq was defenceless, it would not be satisfied, but instead would not hesitate to attack. In any event, this whole episode underlines the enormous gap between abstract bargaining theories and the reality that involved complex and idiosyncratic beliefs, perceptions, images, and calculations. Much as I like parsimonious models, international politics – and indeed much of life – resembles the story and movie *Rashomon* in that each participant in the interaction sees it and the other actors in his or her own way.[7]

Balzacq. Condoleeza Rice has claimed that the role of the policymaker is to '*always* look at what is a threat'.[8] Given the difficulty to determine threat by using objective yardsticks, do you think states should put a substantial part of their resources in tracking down what a threat *really is*? In addition, what do you think of the 'new economy of diffuse threats' that seems to be crippling the international system since 9/11?

Jervis. In international politics, it is always difficult to tell how paranoid you should be. I was struck by this when I worked out the differences between the spiral model and deterrence in *Perception and Misperception*, and I keep returning to it. It is easy to say that states tend to overestimate threats (actually getting evidence to confirm or disconfirm this plausible proposition could be quite difficult), but the world would have been a better place if Chamberlain had been more suspicious of Hitler and if Bush and Rice had worried more about the terrorist threat before September 11. Judging intentions is very hard and in fact evaluating capabilities may be almost

[6] For the exact reference, see Robert A. Pape, *Bombing to Win: Air Power and Coercian in War* (Ithaca, NY: Cornell University Press, 1996).

[7] The interrogations of Tariq Aziz are shedding some light on these questions: Steve Coll, 'Hussein Was Sure of Own Survival', *Washington Post*, 3 November 2003.

[8] Emphasis added. Condoleeza Rice: '16 Words Dispute Enormously Overblown'. Available from: <http://www.pbs/newshour/bb/international/july-dec02/rice_9–25.html>. Accessed 1 August 2003.

as difficult. (With all its technical prowess, the US greatly underestimated the number of intermediate range missiles that the Soviet had deployed in East Europe in the 1980s, for example.) So it is not surprising that decision-makers are often wrong.

In the current context, uncertainty has led Bush and his colleagues to conclude that any chance of a WMD attack is simply too great to tolerate, given the amount of destruction that would be entailed. They feel terribly vulnerable, as Bush has explained in numerous speeches, in part because deterrence does not seem to be effective. So I think they are not deeply disturbed by the fact that Saddam does not seem to have had stockpiles of chemical or biological weapons. For them, the mere possibility that he had them, or the greater probability that he would have developed them in time, justifies the overthrow of the regime. I wouldn't want to say that this is irrational – it does have a coherent logic to it – but, as you say, it makes it impossible to develop sensible guidelines about what threats are remote enough so that they can be put aside. When combined with the Bush administration's second image theory of foreign policy – the belief that the cause of evil foreign policy behaviour is an evil domestic regime – it generates a truly revolutionary foreign policy that has not only the effect but the intent of deeply disturbing the international *status quo* and the prevailing rules of the game. As an observer of international politics, I find this fascinating, partly because it violates the expectations of some of our theories (while conforming to others, such as the basic Realist idea that an actor left unchecked by countervailing power will eventually run amok, as Ken Waltz has been reminding us since the end of the Cold War). I also think it is going to lead to a profound failure and that it will be difficult to pick up the pieces later, in part because both allies and adversaries will have seen the fallacy of the comfortable notion, widespread among liberal academics, that international institutions, democratic processes, shared norms, and intelligent long-run self-interest will ensure the taming of American power.

'Clouds not clockworks': contingency, curvilinearity and IR

Balzacq. *System Effects* has clinched a tremendous number of awards and excellent reviews including a strong endorsement by Glenn Snyder.[9] But, as it surfaces in your acknowledgements, you found it hard, at least at the beginning, to convince people how worthy a project it was. To what would you attribute these initial reluctances? How do you feel the book has impacted the discipline?

Jervis. I'm glad you asked. Lots of people have told me how much they enjoyed those lines in the acknowledgment, and I like them so much let me quote them for those who have missed them: 'At lunch with junior colleagues a number of years

[9] To date, *System Effects* has been awarded the following prizes: Co-winner of the 1998 Best Book Award of the Political Psychology Section of the American Political Science Association; the 1998 Lionel Trilling Award presented by Columbia University, with Honorable Mention; the 1997 Association of American Publishers Award for Best Professional/Scholarly Book in Government and Political Science, one of *Choice's* Outstanding Academic Books of 1998. See Robert Jervis, *System Effects: Complexity in Social and Political Life* (Princeton, NJ: Princeton University Press, 1997).

ago, I mentioned that a journal had just rejected my latest article. They could hardly disguise their relief at learning that this doesn't happen just to them. In this spirit I would like to say that several private foundations and public funding agencies declined to support this research.' All this is true, except that the emotion displayed by my younger colleagues was more glee than relief.

I didn't try to publish sections as journal articles, but the basic idea first appeared in a book of essays in honor of Tom Schelling and the referee, who was an economist because almost all the other essays in the book were from this discipline, said that what I was doing was not social science. I definitely think it is, and much of the inspiration came from the work of Schelling and Albert Hirschman, who are very creative economists. But many people are puzzled by the book because it does a number of odd things – it seeks to combine arguments about the emergent properties of systems with an analysis of microfoundations; it discusses a range of system dynamics that produce complexity while simultaneously seeking to avoid trendy claims for chaos or wholes being greater than the sum of their parts; it combines economics and psychology; it draws heavily on evolutionary and ecological thinking in biology without centring on a few well-known scientists like the late Stephen Jay Gould (although I do think his work is excellent and very useful); it argues that systems thinking is so counter-intuitive that even excellent system theorists often fall into the trap of simpler analytic devices; it argues that standard comparative methodologies and notions of causation often are misleading while simultaneously trying to retain some aspects of our sense of causation (some of my students think I was too cautious and conservative here, and they may be right); I sought to develop some detailed applications to IR while other chapters reached much more broadly. So I probably confused lots of people.

Nevertheless, I think it is my most interesting book, with relevance to people in several disciplines, and I have been gratified to have had responses not only from political scientists and historians, but economists and biologists as well. This book also was strongly influenced by Chick Perrow's *Normal Accidents* and was very well received by sociologists like Diane Vaughan (author of the fascinating and important study of *The Challenger Disaster*) who work in this vein. I see a fair number of citations to the book, but I can't say that it has greatly changed the way most people do research or think about the world. I don't blame them; there isn't one simple theory that can be applied. I would love more people to read it anyway, but it doesn't fit in any simply category even within IR (is it Realist, Liberal, or Constructivist? – I guess it is an odd combination of all three) and of course it is very hard for people to find the time to read things outside of their sub-fields.

Balzacq. Do you think it is time for students of International Relations to resort to systems theory?

Jervis. I'm not sure that an additional systems theory is likely to be highly productive, but I think that a systems approach or perspective is. Of course the best known, and I think best, system theory is Waltz's. This has been enormously productive, as even his strongest critics acknowledge, if in no other way than by building their arguments in opposition to his. But Waltz makes it clear that his theory only purports to answer a small number of very important questions. I think it is noteworthy, however, that not only in his writings in the wake of the Cold War, but

also in *Theory of International Politics*, Waltz noted the likelihood that if American power were unchecked by a peer, it would eventually expand and engage in foolish adventures. I don't think we will or should neglect this theory in the future, and a very nice book is under preparation by a classical historian, Arthur Ekstein, applying Waltz to the Roman world.

Nevertheless, as Waltz tells us, it is hard to get many specific propositions from his theory. Thus I think it should be supplemented – not replaced – by perspectives that look at a level between that the structure of the system (as Waltz defines it) and the characteristics of the units. Glenn Snyder does this very successfully in *Alliance Politics*, a study that is dense but repays careful reading. He focuses on the level of relations. In a somewhat similar way, I tried to locate a variety of dynamics such as forms of positive and negative feedback (and feedbacks that do not fall into either category) that we can see operating in a variety of contexts. Being sensitive to these systemic processes leads to many insights and deepens our understanding of evolving interactions of all sorts.

Of course I am biased, but I also think this perspective is useful for policymakers. Let me take two examples that don't appear in my book. If schools are rewarded for lowering the drop-out rate, it is predictable that records will be fudged (to put it politely), as they were in Houston where the apparent success contributed to Bush appointing Rod Paige to be Secretary of Education. If teachers are judged on the basis of test scores, it is predictable that they will cheat (to put it impolitely) for their students and that achievement in subjects not the target of high-stakes testing will go down. To change areas, making drugs illegal not only means that the drug-trade will be a great source of income for criminals, but also that we are likely to see an increase in civil unrest and terrorism abroad because we are not only alienating peasants who resent the local government's attacks on their livelihood, but also providing a lucrative opportunity for thugs, rebels, and terrorists (often overlapping categories). This doesn't mean that we shouldn't test or make drugs illegal, but just that these costs should be factored in and that a wise policymaker has to be ready to deal with these indirect consequences.

Balzacq. To push along methodological lines that affect the way we study systems: with noticeable exceptions, there is a growing (or an enduring) divide between European and American ways of studying International Relations and Political Science. Whereas the former concentrates on qualitative methods, the latter focuses on quantitative ventures. Is it a new trend? Do you see any risk associated with such a trend? Is there any safety in numbers for IR students?

Jervis. I fear you are correct. While I'm all for diversity in the study of politics both because we do not know what the best approaches are, and even more deeply, no one approach is adequate for the range of questions we ask and phenomena we confront, a deep divide is likely to be unhealthy. This is not to say that individual scholars and the community of scholars should refrain from forthrightly pursuing their own agendas and ideas, and in doing so putting aside alternative approaches. But I think their work will be improved, and the community as a whole will make more intellectual progress, if there also is good knowledge of what others are doing and a healthy (if critical) dialogue among alternative approaches. I think that within the US there is now a pretty good dialogue, although of course it could be better.

Most American scholars know too little about what is being done in Europe however, and for most of us work that is not written in English is truly inaccessible. Even when it is in English, the frames of reference often are foreign to us.

Some of the differences seem to mirror broader differences in national styles and positions in the world. I do not think it is an accident, for example, that Realism with its stress on material power is more in favour in a strong country like the US than it is in the United Kingdom, and that scholars in that country would find attractive theories centred on the importance of ideas and norms, areas in which the UK can better contribute and compete. Ole Wæver explored some of the national differences in the analysis of international politics in the 50th anniversary issue of *International Organization* (which actually came out 52 years after the journal started, which may speak of international disorganisation), and the topic can be linked to the resurgence in the sociology of knowledge as applied to IR, as exemplified by Ron Robin, *The Making of the Cold War Enemy: Culture and Politics in the Military-Industrial Complex* and Ido Oren, *Our Enemies and Us: America's Rivalries and the Making of Political Science*, two very provocative and very flawed books.

To answer your last point, I fear that there is safety in numbers. Once several people pursue an approach or a question, it is perfectly acceptable for others to do the same without [even] questioning the premises, data, or asking deeper questions. 'Cumulation, Correlation, and Woozels' is one of my favourite (but least known) articles, if for no other reason that as far as I know I am the only political scientist to correctly cite this story about Winnie-the-Pooh and his friends thinking that they were on the track of an ever-growing number of Woozels when in fact they were only following their own tracks.[10] That is what we do all too often. For example, for years students of arms races treated available data on Soviet and American spending as though it were valid, even though the former was wildly misleading. Once a few people did this, others could safely follow with more complicated statistical tests even though they were being performed on data that was essentially fictional. (This is not to imply that there were many other ways to proceed.)

Similarly, once Jim Fearon produced a very nice article arguing that democracies find it easier to commit themselves than do autocracies because the leaders of the former will be punished by domestic constituencies if they break their word (yet another application of one of Schelling's important ideas), others treated this as though it were a proven fact and build more elaborate arguments around it. On the surface, this looks like the way science should progress. The problem is that there are plenty of reasons to think that the argument is incorrect (Why would public opinion punish a leader for abandoning a failing policy? Don't autocracies have important domestic constituencies?), and, even more strikingly, no evidence for the claim has been produced. Indeed during the debate over whether to send ground troops to Vietnam in 1964–65, several top advisors argued that it would be better to lose the war after making a major effort than to lose it without even trying. Furthermore, one of the major reasons for this preference was the belief that the American public would be more willing to accept a defeat after a major effort and commitment,

[10] My late friend Malcolm Kerr once wrote of Woozels, but unfortunately made the grave error of confusing this story with one about Heffalumps.

which flies in the face of most discussion of audience costs. Of course, these people may have been wrong, but even if they were it was their views and not ours that determined what the US would do. We might do well to remember that until recently it was believed that democracies had great difficulty in following a coherent and consistent policy because their responsiveness to public opinion made them fickle. After all, the US was born by breaking its first commitment – the treaty with Britain gaining American independence violated the promise to France not to make a separate peace.

Balzacq. In *System Effects*, many ideas that developed in your early career are unfolded and interwoven in greater depth. Where do you see *System Effects* fitting into your publication portfolio? To be more specific, do you consider it a (provisional) synthesis of central problems you have been mostly concerned with since *The Logic of Images*?

Jervis. To be honest, I'm not exactly sure exactly where it fits. It doesn't provide much of a resolution to many of the problems I wrestled with in *Logic of Images*, although I hope the current project on signalling and perception will. It clearly is consistent with my earlier ideas in being implicitly game-theoretic and strongly influenced by Schelling. As noted, my ideas were first outlined in a collection honouring Tom. I've tried to remember how I started this project, but simply can't. It does try to combine psychology with strategy, but also brings in elements from other disciplines such as biology that I had not worked with before and focuses on dynamic processes that had been beyond my focus if not completely out of my sight.

Balzacq. Two linked characteristics of complex system are very intriguing for understanding contemporary politics: non-linearity and non-additivity.

Jervis. I think they are, but also are easy to overlook or at least put aside in our research – and in our actions – because they are so hard to deal with. Non-linearity simply means that we can find all sorts of returns to scale. Even in very simple arrangements, the impact of an increase in factor A on B often is not uniform over its range. That is, at some points a small increase in A could have no discernible impact while at other points – in some cases, when a good deal of A is already present, or in others when A had previously been completely absent – the same increment will produce an enormous effect. Putting a little more heat into a pot of water usually will make it just a little warmer; if it is very hot already, however, that same increment can make it boil. Some animals and bacteria engage in what is known as 'quorum sensing': each individual will act in specified ways when and only when it senses that a sufficient number of others are present, thus permitting a sudden shift from one form or mode of behaviour to another. We all know about things or groups reaching a critical mass and the straw that breaks the camel's back, and we have statistical methods that can be used here, but we are prone to maintain simpler ways of thinking. These serve us well in a large number of cases (presumably that's why we think in these terms), but then we find ourselves being surprised by inflection points, breaking points, and, even more dramatically, points at which an increase in A leads to a change not only in the magnitude but also in the sign of the effect. Thus putting pressure on an actor at first may produce change in a desired

direction, but past a certain point (devilishly hard to specify ahead of time), leads to heightened resistance. It is not surprising that Hitler did not see this (and did not see that his behaviour had changed his environment) when he inferred from Chamberlain's previous retreats that Britain would back down over Poland as well.

Non-additivity refers to the fact that in many cases (specifying exactly when of course is the trick), we can't understand the impact of factors A and B on C by simply adding the impact of A by itself and B by itself. More complicated interactions are quite possible. Indeed, this is one of the things that gives a system its systemic quality. As every parent with more than one child knows, adding a sibling to the mix produces lots of changes. Although interactions with only two actors can be quite complicated, once we have more than this, as we almost always do, we cannot look at each set of bilateral relations separately.

As this comment indicates, I think that it is important for social scientists to focus more on interactions, both between any pair of actors over time and among larger number of actors. This is one of the driving insights of ecology, where we see that even small and apparently harmless changes such as the introduction of a new species or the elimination of an old one can set off quite astounding changes.

Balzacq. Some may argue that the linear creed, 'if the adversary is difficult when he is weak, it will be more difficult when he is stronger', is what led the Bush administration to take action against Iraq. In this specific case, in light of the war's troubled aftermath, do you see evidentiary support for interaction or system effects?[11]

Jervis. I'm not sure. The line you quote refers to dynamics like the security dilemma in which actors are troublesome if not troublemakers in large part because they seek security and so will be more accommodating when they are strong enough to protect themselves. It is very difficult to tell when the security dilemma actually is central and it is not surprising that actors often reach the wrong conclusion. When I drafted 'Was the Cold War a Security Dilemma?' a few years ago I interrupted my work on the conclusions to go out to dinner and when I came back realised that I had to tear out that section and much of the rest of the discussion and start all over.

In the case of Iraq, I don't think that many people see Saddam as having been primarily motivated by the desire to make his country and regime secure, although this may well have been part of the explanation for his invasion of Kuwait.

The aftermath of the war does reveal another form of the phenomenon you're asking about, however: defeating the organised Iraqi army turns out to be much easier than containing the insurgency, which presumably centres around former soldiers. Most of us thought that it was good news when many units of the Iraqi army faded away rather than putting up a fight. Now we see that it might have been better had these units stood and fought even though more Iraqis, Americans, and British would have died at the time.

We also see a couple of ways in which the American strength is a weakness. The military was so proficient at high-tech manoeuvres that it didn't pay much attention to counter-insurgency. When you can destroy the other side's army, you don't have to

[11] Robert Jervis, 'System Effects', in Richard Zeckhauser (ed.), *Strategy and Choice* (Cambridge: MIT Press, 1991), p. 114.

think about how you will win over civilian support. Furthermore, the tremendous strength and technological prowess led Americans to expect easy victories and Iraqis to expect that the US can readily restore services and security. The newspapers are full of quotes from Iraqi citizens to the effect that they know that the Americans could put things right if they tried because the US has so much power and skill. Here as elsewhere, overly simple notions of power mislead analysts and trap decision-makers, as scholars like my colleague David Baldwin has been pointing out for quite some time.

Balzacq. Some may construe the turn to complexity theory as another postmodernist view of world politics in which interaction outcomes are never straightforward. How would you react?

Jervis. The postmodernists have a point here but you don't have to be a postmodernist to reach this conclusion. Just as social psychologists showed that perceptions varied from one observer to another depending on cognitive predispositions and interests long before Edward Said popularised this notion, so the study of biological systems and the basic principles of game theory can lead one to see the complexities that interactions are likely to produce without delving into postmodernism. I hope that some of the discussion in *System Effects* will appeal to postmodernists because it does parallel some of what they are saying, but I also hope that it shows that complex interactions are not beyond the grasp of social science and that we can often understand what is happening by tracing the convoluted paths through which changes take place even if predictions may be beyond reach, in part because we're dealing with actors who have their own theories and who will act to defeat predictions whose outcomes they dislike.

Balzacq. Another surprising aspect of complexity theory is that it helps you reinterpret your own career under new light, that is, as somehow driven by Hirschman's 'hidden hand'.

Jervis. Albert Hirchman's concept of the 'hiding hand' is one of his many marvellous contributions, and it certainly applies here. As you know, he uses the phrase to point to a common feature in human endeavours where someone embarks on a course of action not knowing how difficult it will be, only to come to appreciate the situation when she had put in so much effort that retreat is out of the question and perseverance is the only option. So it is not surprising that many major endeavours like the space programme or going to graduate school are possible only because we underestimate the costs and obstacles when they start. This was certainly true for *System Effects*. I don't think I would have had the courage to begin the project had I known it would take almost a decade and involve research in such a wide range of pretty difficult fields. But in the end that was what made writing the book so much fun.

Balzacq. I am strongly tempted to complete this journey with a slightly modified variant of a question raised by John Ruggie a couple of years ago: despite perverse effects, what, in the Jervisean view, makes the international system hang together?[12]

[12] John G. Ruggie, 'What Makes the World Hang Together? Neo-Utilitarianism and the Social Constructivist Challenge', *International Organization*, 52 (1998), pp. 855–85.

Jervis. It is very hard to say. I guess it is interaction itself that maintains the system. This is not to argue that the current or any other international system is necessarily harmonious or stable, let alone ruled by shared goals. Sometimes actors are aware of being in a system and act to preserve the elements and forces that sustain it, as Paul Schroeder so well shows in his analysis of the relatively peaceful nineteenth century. Even without this, and even when conflict and bloodshed predominate, what is central in a system is that as actors pursue their individual goals and strategies they both must take account of what they expect others to do and confront the consequences of their own behaviour, which often turn out to be very different from what they expected. There is then [a form of] constant motion and change; models built on the assumption that processes go to equilibrium are often misleading. All this makes international politics full of surprises, which is one reason it is endlessly fascinating to study, if frustrating to live through.

Robert Jervis' Full List of Publications

Books – author

The Logic of Images in International Relations (Princeton, NJ: Princeton University Press, 1970). The second edition was published by Columbia University Press, 1989.

Perception and Misperception in International Politics (Princeton, NJ: Princeton University Press, 1976).

The Illogic of American Nuclear Strategy (Ithaca, NY: Cornell University Press, 1984).

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Books – editor

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