PIN-Points

The Processes of International Negotiation Program

Network Newsletter 30/2008



















Conflict and Cooperation

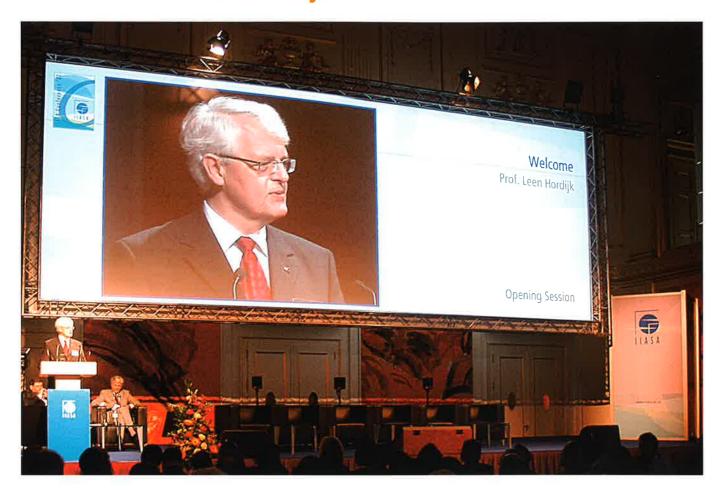
Negotiating with Terrorists • Chemical Weapons Convention • IIASA Conference Revisited • Concept: Cooperation • Nanjing Roadshow • Taiwan Negotiation Studies



International Institute for **Applied Systems Analysis** IIASA www.iiasa.ac.at

From the PIN Steering Committee

Farewell to Leen Hordijk, Director of IIASA



As this issue of *PINPoints* goes to press, Professor Leen Hordijk, the Director of the International Institute for Applied Systems Analysis (IIASA), in Laxenburg, Austria, is about to leave the Institute. Professor Hordijk, a scientist of world renown, has been at the helm of IIASA for six years, an international organization whose leadership he took over at a difficult moment of its existence. Last November IIASA celebrated its 35th anniversary, and for the Director this event was certainly a highlight of his term of office (see photograph above). Under his leadership the prestige of IIASA as an international organization has increased. It is now a world-class actor in the field of interdisciplinary scientific studies on environmental, economic, technological, and social issues in the context of the human dimensions of global change. Leen Hordijk may justly take personal satisfaction in this.

From the very beginning of his tenure at the Institute, Professor Hordijk has been

a staunch supporter and friend of the Processes of International Negotiation (PIN) Programme which forms an integral part of IIASA. He has been fully aware that the activities of the PIN Program, which conducts and propagates research on a broad spectrum of topics related to the processes of international negotiation, fit perfectly into IIASA's overall ambition, namely, to deal with the most important problems besetting the world at the beginning of the 21st century

If one accepts the assertion that negotiations constitute an indispensable tool for the peaceful settlement of international disputes one will readily admit and agree with Professor Howard Raiffa, IIASA's first director and PIN's *spiritus rector*, that there is value in having a branch within the Institute that is dedicated to negotiation research and to the dissemination of knowledge about negotiation.

As we see Professor Hordijk moving from IIASA to new horizons, the members

of the PIN Steering Committee wish to seize the opportunity to express their heartfelt gratitude to him for his deep understanding of the challenges with which the PIN Program is constantly faced. He has always understood PIN's particular needs and enhanced the interface it enjoys with other IIASA programs.

We certainly wish him the very best. With the experience he takes with him from IIASA, he is certainly well equipped for his new responsibilities. We from the PIN Steering Committee are convinced that his excellent negotiating skills will be a formidable asset in his new position.

Rudolf Avenhaus, Jacob Bercovitch, Franz Cede, William A. Donohue, Guy Olivier Faure, Victor Kremenyuk, Paul Meerts, Gunnar Sjöstedt, and I. William Zartman

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The Geneva Negotiation Day

11 February 2008, Geneva Centre for Security Policy, Geneva, Switzerland

Around 100 diplomats, researchers, and representatives from international organizations and nongovernmental organizations, as well as interested students participated in "Geneva Negotiation Day," hosted by the Geneva Centre for Security Policy (GCSP) on 11 February 2008.

According to GCSP, more than 17,000 international meetings are held each year in Geneva—the seat of the European headquarters of the United Nations and of many other intergovernmental organizations—with the participation of more than 100,000 diplomats, delegates, and officials from all over the world. Negotiation skills are thus considered to be important assets; hence, the decision to hold Geneva Negotiation Day. Ambassador Fred Tanner, Director of GCSP, opened the workshop by stressing the significance of negotiations in the changing security environment. Paul Meerts also underlined the emergence of new issues and the need to attract the attention of policymakers.

The workshop, focusing on multilateral diplomacy, covered the following topics:

- Some Basic Elements of Negotiation Analysis (Victor Kremenyuk)
- Cooperation and Negotiation: When do States Cooperate and Why? (I. William Zartman)
- Formal Models and International Negotiation (Rudolf Avenhaus)
- EU-NATO Relations as a Negotiation Experience (Franz Cede)
- Negotiating Sustainable Development: The Case of Environmental Goods and Services in the Doha Round (Gunnar Sjöstedt)
- Negotiating Conflict: External Intervention in African Conflicts (Mark Anstey)
- Negotiations on Disaster Relief (Paul Meerts)

Among the topics emerging at the workshop was the description of negotiation as a "flow of communication" among different stakeholders. The role of scientists is to identify the problems and formulate probable scenarios; decision makers can then take decisions based on the framework provided to them by the scientists.

One of the points made was that states will begin to cooperate to produce new gains when these cannot be reached by working



Viktor Kremenyuk, Franz Cede, Bill Zartman, and Rudolf Avenhaus at the Geneva Negotiation Day.



Geneva Centre for Security Policy, Geneva, Switzerland

unilaterally or when the costs of noncooperation are too high. Negotiation can also take place when states are in "deadlock" or when their vulnerability causes unacceptably high costs, placing them in a "mutually hurting stalemate." However, negotiation actors can find themselves in asymmetrical positions, where different strategic positions are preferred by different parties. It was stressed that it is not only the complexities in negotiation that are important, but also the obviously banal issues, such as the problems caused by the ambiguity of language (for instance, the use of the word "direct" during the negotiation round on natural disaster relief in the 1970s).

The format of the workshop was not that of an expert teaching students, but rather of experts sharing their knowledge with those in the practical field. During the breakout sessions and the closing plenary, the participants were given the chance to share their experiences and thus actively contribute to the discussion. Several questions were raised regarding, for instance, the importance of culture (e.g., a common culture among negotiators), the impact of the individual negotiators on the overall process (personal skills), the identification of the "other" in negotiation and whether it would make a difference if there were no distinguishable "other."

The participants were also able to get a general overview of the PIN books published to date at a small book exhibition.

Ariel Penetrante

Note: Geneva is the largest United Nations duty station outside the UN headquarters in New York and a focal point for multilateral diplomacy, servicing over 8,000 meetings a year. Several international intergovernmental and nongovernmental organizations (NGOs) are based or have major representative offices in Geneva, including the International Civil Defence Organization, International Labour Organization, World Health Organization, and World Trade Organization. NGOs such as the International Committee of the Red Cross, World Council of Churches, World Organization of the Scout Movement, CARE International, and *Médecins sans Frontières*, have also chosen Geneva as their headquarters.

Concept: Cooperation

cooperation is defined as a situation in which parties agree to work together at some cost to produce new gains for each of the participants that would be unavailable to them by unilateral action. Its constituent elements are: working together, agreement to do so (not just coincidence), cost, and new gains for all parties. (This definition is not too far from, but a bit more specific than, Webster's: "an association of parties for their common benefit: collective action in pursuit of common well-being." "Gains" mean not only material gains, but also perception of progress toward goals. Thus, cooperation is more than simply the opposite or absence of conflict, as some binary codings indicate. It is a conscious, specific, positive action.

The analytical question then becomes, Why, when, and how do parties agree to pay the cost of working together to produce new gains? Answers to the guestions come from a number of different schools of analysis, providing different implications for the practice and analysis of negotiation. One school looks at the nature of political aggregates such as states, seeing specific behavior inherent in their sovereign nature. Another discerns differing state actions inherent in the nature of the inter-state system and in states' response to innate inter-state conflict. And a third is based on evolutionary behavior in human societies designed to preserve the species. Distinct though these schools may be, they have a considerable degree of overlap and conjuncture.

The Nature of States

A common reason for cooperation is interdependence. States are not alone: they need the active or passive help of others in order to achieve their goals, most notably to help assure their security, to establish rules of international behavior, for commerce and as partners in managing international economic relations, and to help protect from public bads such as environmental risks. Calculations of efficiency accompany the needs generated by interdependence: states may believe that it would cost them less to achieve their goals by cooperating with others, than to act alone. Behavioral scientists debate whether cooperation is innate or learned, whether it is genetic or social, related to justice ("what I deserve")

or fairness ("what's best for all of us"), hence, whether it is based in inherent tendencies toward selfish or unselfish behavior (Bowles 2006; Choi and Bowles 2007). The key to cooperation is reciprocity, that is, an assurance of similar, beneficial return behavior in the future. Selfish states bury conflict if (as long as) the other party does so too, and unselfish states bury conflict because the other party does so too.

Some scholars believe that states are defensive, self-identifying, and self-interested entities, whose leaders are responsible only for their populations' security and welfare, and are therefore in competitive or conflictual relation with other states. Notions of inherently selfish behavior or "cooperation for us" include acquisition, effectiveness, and efficiency (Lax and Sebenius 1986). Acquisition refers to the need to create value where the desired ends are unavailable to the individual party. Effectiveness refers to the need to work with other parties to create that value and accomplish certain goals, when parties cannot achieve their ends unilaterally. Efficiency refers to the need to reduce costs—primarily transaction costs—in working with other parties, so that the wheel of concerted action does not need to be reinvented each time. These three needs—elusive ends, scarce means, reducible costs—drive parties to work together over a short or longer time, depending in turn on their estimates of the other parties' proclivities to do the same thing.

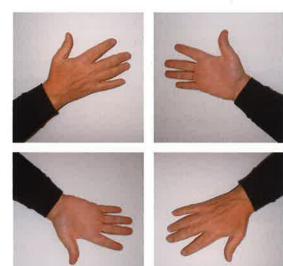
Other scholars, however, question the view that international relations are charac-

terized by a Hobbesian "state of nature" and inherently conflictual (Stein 1990). The notion of innate sociability runs through Grotius, Pufendorf, and Montesquieu to Adam Smith, where it forms the basis of mutual regulation and gains through trade. States cooperate when they can achieve gains through trade, an economic concept that has equal meaning in politics and that encapsulates the basic notion of negotiation through compensation. Indeed, the early state period after the Peaces of Westphalia in 1648 was the same time when the French term *négoce* (business)

was being transformed into *négociation* (diplomacy) (de Callières 1716/2000; de Felice 1778/1976), whose basic idea is giving something to get something, the definition of trade on which subsequent prescriptions for negotiation are founded.

Notions of inherently unselfish behavior or "cooperation in us" include requitement, reputation, and fairness (Vogel 2004; de Waal 1992; Sober and Wilson 1998). Requitement is the expectation of reciprocity, negative and/or positive, an inherent quality in social relations and in most ethical systems. *Reputation* refers to the expectations parties create about themselves, operating in two directions in support of cooperation: as images that parties tend for purposes of self-esteem and as bases for others' actions. Fairness, a loose form of justice, involves the expectation and behavioral norm that parties are due to receive treatment corresponding to some universal notion of equality, either as numerical individuals or as deserving actors (Zartman et al. 1996; Albin 2003). These three qualities, and perhaps others in support, provide a network that lies at the basis of claims of inherency in the tendency to cooperate.

As the debate continues over whether cooperative behavior is innate or learned, the search for the etiology and the means of cooperation must take both into account. But the difference between the two assumptions is not as great as is often assumed. For those who see cooperation as innate, it is the alternative to conflict, whereas for those for whom it must be learned, it is because otherwise they would be consumed by conflict. Either way, cooperation is the antidote to conflict.



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PIN Points



Central Europe after the Peace of Westphalia

The Nature of the State System

Essentially, the various schools of international relations differ only in their perspective: Realists take a short-term and Liberals a long-term view. However, the difference in perspective produces important differences in behavioral interpretations. The Realist believes that cooperation is not sustainable but occurs only on a momentary basis, as long as benefits are present and up-to-date (Waltz 1954). Parties have a tendency to cheat and free-ride as soon as they can gain greater benefits from doing so than from cooperating. Problems of information cannot be overcome reliably, as states will cheat when it is in their interest to do so; all that can be done is to understand when cheating is likely and to take appropriate safeguards. Indeed, Realism, by its shortterm "rational" tendency to defect, actually reduces the benefits of cooperation, by enhancing fear of defection.

Liberals believe that states cooperate in the expectation of benefits from future cooperation, as well as current payoffs (Milner 1992). In addition they hold that anticipated reciprocity provides benefits from reputation and relationship that are not only less precise but tie states into patterns of behavior. Information can play a role in sustaining this expectation, as the greater the reliable information on future reciproc-

ity, the greater the chances of cooperation lasting. As it is inefficient to negotiate the terms of reciprocity each time, states institutionalize their cooperation through regimes, laws, and organizations. In successive, essentially ad hoc negotiations, the wheel of cooperation has to be invented each time, whereas regimes are established and corrected by negotiated principles that do not have to concern themselves with the immediate details of individual cases. Essentially regimes establish formulas for cooperation, leaving the details to their application, while "reinvented" cooperation needs to negotiate both formula and details (Spector and Zartman 2003). Thus, Realists take measures to guard against foreseeable defection, whereas Liberals emphasize measures to prolong foreseeable cooperation.

Yet cooperation is more than just about defection and reciprocity, despite much of the current focus; it is about benefits—their creation and their allocation. The mechanisms by which cooperation is established carry high transaction costs; it is always quicker to act by oneself, and beyond that, costs rise in proportion to the number of parties. Theoretically, however, costs should fall in relation to the number of issues, as more issues provide more trade-offs and a greater chance to attain "comparative advantage" deals at the Nash (1950) Point—the point where the product of the outcomes is maximized—according to Homans' (1960) Maxim—"The more the items at stake can be divided into goods valued more by one party than they cost to the other and...[the reverse], the greater the chances of a successful outcome" (Avenhaus 2007). These negotiations deal with the twin aspects of cooperation, value making and value taking, referring to integrative and distributive negotiations. Cooperation, as noted, occurs to create beneficial outcomes that the parties cannot create alone, but it is also needed to allocate those benefits: there is always a distributive as well as an integrative aspect to cooperation.

Beyond creation and allocation of costs and benefits, cooperation is also about underlying or overarching values as an element that separates Realists from Liberals. For cooperation to be more than a single engagement, as Realists see it, it must rest on and contribute to a community of values. Thus negotiations on cooperation relate not only to the specific stakes and

measures of the encounter but also to the pact-building relationship and reiteration, that is, to shared decision making. In reality, the two necessarily overlap, as ad hoc cooperation in an area not governed by previously negotiated regimes does not occur in a vacuum, but in a context of norms, expectations, and precedents that act as a proto-regime.

The Nature of Social Evolution

In recent times, growing scholarship in evolutionary studies has focused on the same question of cooperation, often working through game theory and its Prisoner's Dilemma Game (PDG) (Axelrod and Hamilton 1981. Maynard Smith 1982: Clements and Stephens 1995, Dugatkin 1997). While the analysis has dealt with human evolution, it comes to a conclusion similar to that of international relations, with mutatis mutandis of significance. The primary evolutionary answer is found in kin cooperation (Hamilton 1964). Such kin selection or inclusive fitness does not depend on reciprocity but rather draws on group altruism, in which the individual does not benefit but his group does. While it might seem that this explanation of cooperation would not apply to states, in fact it does, as states seek to establish their "families" ethnically, regionally, or ideologically in order to promote cooperation, solidarity, and support. In fact, ethnic and regional cooperation is often based on "protection of the species," and ideological kin cooperation can even be seen to foster not only "kin" protection but expansion.

The second evolutionary explanation of cooperation in evolution is reciprocity (Trivers 1971). The variously refined PDG strategies of tit for tat, tit for double tat (Axelrod 1984) and win-stay/lose-shift (Nowak 1993) and the looser notion of reputation (Nowak 1998) all operationalize the Shadow of the Future. These strategies have not been the basis of an empirical analysis of international cooperation, but the general notion of reciprocity is solidly anchored in reality. In the PDG the search for a jointly beneficial agreement is overshadowed by the danger of defection to a unilaterally better outcome and, in the end, by inevitable mutual deadlock. In this light, states cooperate when, and only when, they have established relations of trust or punishment, through negotiation. Inter-state analysis shows that the PDG model demonstrates that negotiation can build trust as the means to reaching an agreement, neither as a precondition nor as a result but as a necessary part of the process, required for its end but not for its beginning.

Not only is the Shadow of the Future a powerful motivation for parties to build a reputation for themselves and a relationship with others as a reason for cooperating; the Shadow of the Past also operates. This should not be surprising; it is the same type of reasoning, mutatis mutandis, that has characterized evolutionary studies of cooperation: Cooperation results from expectations of reciprocation, the Future Shadow (Trivers 1971), or from kinship, the Past Shadow (Hamilton 1964). Of course, evolutionary studies explain the latter as an effort to propagate the species, and studies show that cooperation is more likely among states initially or inherently inclined to cooperate and among one's own kind, which provide a reason to trust. In sum, states' tendency to cooperate differs according to their past relations with each other as well as their prospect of future relations or reciprocity ("vertical" Shadows of the Past and Future), and also according to their current prejudices or kin bias (a "horizontal" shadow)

But there is another situation that is equally or more insightful for state cooperation, the Chicken Dilemma Game (CDG), where the search to avoid that deadlock as the worst outcome shows no clear strategy as to how to either achieve that goal or reach a jointly beneficial agreement. The Chickens in their Dilemma tell that cooperation comes when deadlock is the worst outcome, worse even than holding out for one's own position. In other words. states reach out toward cooperation when they find themselves in a mutually hurting stalemate (Zartman 1997; 2000). Such a situation does not tell when the parties will achieve that realization, or more specifically where they will end up, but it does indicate that in the absence of a dominant solution they will begin to think, and eventually seek to define a way out of the stalemate. In game theoretic terms, in the presence of two Nash equilibria, they will seek to create new outcomes at the Nash Point that turn the game into an Angels' Project (northwest corner high), a situation of mutual cooperation that avoids the risk of individual defection—if only through free riding—only by means of longer-range

cooperative thinking embodied in a relationship (Avenhaus 2007). Such efforts are outside the CDG scenario, game theorists are quick to point out, but they can be read into the scenario or into the uncomfortable situation it portrays. While most of the use of game theory in international relations and evolution alike has been based on the "other" big Dilemma, the PDG, the arguably more helpful scenario of a CDG produces insights of positive policy usefulness. CDG also points to useful strategies in building cooperation, notably those that emphasize the painful unacceptability of non-agreement and those that identify a focal point or salient solution as a Nash Point to win parties away from their unilateral preferences.

The Nature of Negotiation

The lessons for negotiation are already encased in these theoretical approaches to cooperation. Reciprocity is encouraged by negotiating institutionalized relationships. Formulas are defined by identifying the terms of exchange that produce gains through trade. Building reciprocity (relationship) and communality (kinship) are sound elements in negotiating satisfactory outcomes. Mutually hurting stalemates move conflicting parties toward cooperation.

1. William Zartman

Further Reading

Albin C (2001): *Justice and Fairness in International Negotiation*. Cambridge University Press.

Avenhaus R (2007): "Nash's Bargaining Solution," *PINPoints* 29:7–9, IIASA, Laxenburg, Austria.

Axelrod R, Hamilton WD (1981): *Science* 211: 1390.

Axelrod R, Hamilton WD (1984): *The Evolution of Cooperation*, Basic Books, New York, USA

Bowles S (2006): *Science* 314:1569 (8 Dec) Clements KC, Stephens DW (1995): Mutualism and the prisoner's dilemma, *Animal Behavior* I. 3:527-35

Choi JK, Bowles S (2007): *Science* 318:636 (26 Oct)

De Callières F (1716/2000): *On the Manner of Negotiating with Princes*. Houghton Mifflin

De Felice FB (1778/1976): Negotiations, or the Art of Negotiating, in IW Zartman

(ed) *The 50% Solution*. Doubleday Anchor

de Waal FBM (1992): *Chimpanzee Politics*.

Cape

Dugatkin LA (1997): *Cooperation among Animals*. Oxford University Press

Hamilton WD (1964): *Journal of Theoretical Biology* VII: 1
Homns GC (1960): *Social Behavior*. Har-

court, Brace and World Hammerstein P (2003): Genetic and Cultur-

al Evolution of Cooperation. MIT Press. Lax D, Sebenius J (1986): The Manager as

Negotiator. Free Press.
Maynard Smith J (1982): Evolution and the

Theory of Games. Cambridge University Press Milner H (1992): International Theories of

Cooperation, *World Politics* XXXXIV 466–496. Nash J (1950): The Bargaining Problem,

Econometrica XVIII 1:155–162.

Novak M, Sigmund K (1993): Nature 364:

Novak M, Sigmund K (1998): *Nature* 393:

Sober E, Wilson DS (1998): *Unto Others: The Evolution and Psychology of Unselfish Behavior.* Harvard UP.

Spector BI, Zartman IW (eds) (2003): *Getting it Done: Post-Agreement Negotiations and International Regimes.* USIP (for PIN)

Trivers R (1971): *Quarterly Review of Biology* XXXVI 35

Vogel G (2004): The Evolution of the Golden Rule, *Science* 303: 1131 (20 February)

Waltz K (1954): *Man, the State and War.* Columbia University Press.

Zartman IW (1997): "Ripeness," *PINPoints* 11:2–3.

Zartman IW (2000):. "Beyond the Hurting Stalemate: Ripeness Revisited," in Paul

Stern and Daniel Druckman, eds, *International Conflict Resolution after the Cold War.* National Academies Press.

Zartman IW et al. (1996): Negotiation as a Search for Justice, *International Negotiation* | 1:79-98.

Other PINPoints articles on Concepts appeared in no. 29 (2007) on Nash's Bargaining Solution, no. 28 (2007) on Demonization, no. 24 (2005) on Mutually Enticing Opportunities, no. 18 (2003) on the Toughness Dilemma, no. 14 (2000) on Negotiability, and no. 11 (1997) on Ripeness.

PIN Road Show in Nanjing, China

Approximately 80 students, professors, and other interested participants gathered on 27 October 2007 in the auditorium of the John Hopkins Center in Nanjing to listen to and get actively involved in the topics presented by the PIN members. A few months earlier, the PIN Steering Committee was invited by the Center to hold one of their Roadshows in China, and the group gladly accepted. Professor Huang and Professor Jan Kiely, the two Codirectors of the Center, warmly welcomed the group and hosted various wonderful dinner events with traditional Chinese meals and the company of enthusiastic scientific staff and students. As usual, the Roadshow consisted of presentations by the various PIN members, followed by breakout sessions and a final report session. The group was this time joined by collaborator Professor Jacob Bercovitch of the University of Canterbury, New Zealand, who presented an easy-to-understand grasp on the topic of International Mediation. William Zartman spoke on Negotiation and Conflict Resolution with a special focus on negotiation tactics and the value of trust building. Victor Kremenyuk gave his talk on Negotiation Methodology. He joined Franz Cede in the later breakout session to discuss the topic of law between East and West, the consequences of the fall of the Berlin Wall and the role of multipower players. Rudolf Avenhaus, the statistician of the









Nanjing Impressions

group, presented a topic referring to the title of one of PIN's latest published books: Formal Models of, in and for International Negotiations, where, among other things, he explained the problem of the so called Prisoner's Dilemma. Paul Meerts took a close look at Negotiating Security in Asia, presenting the delicate handling of human rights within the negotiation process. The

final report session nicely rounded up the day, with the PIN members holding the IIASA flag high and paving the way for interested future YSSPers. Special thanks for their help in organizing the event and for making the group feel at home, go to Wang Yu, Rachel Shoemaker, and Julie Sisk.

Tanja Huber





The PIN Group at work and at leisure

IIASA's 35th **Anniversary**: PIN's Contribution

PIN Points

It was after almost five years of negotiation (1967–1972) between the Soviet Union and the United States that the two superpowers agreed to establish a joint research center to concentrate on "nonpolitical" issues of global importance such as food, energy, population, and environment. The idea was originally discussed between the then Soviet Prime Minister Alexey Kosygin and U.S. President Lyndon Johnson at a meeting in Glassboro, New Jersey, in October 1967. Both leaders had a joint interest in preventing inadvertent nuclear war, reducing military confrontation, and cooperating more closely to solve alobal issues.

That "joint research center," IIASA, last November celebrated its 35th anniversary, and it has been one of the most fruitful products of that meeting. The three other are the successful U.S.—Soviet negotiations on reducing the risk of nuclear war risk. strategic arms limitation, and the resolution of some regional conflicts.

Experts from East and West were "in at the start" of a whole range of IIASA research programs, with around 17 nations joining the USA and USSR in this endeavor, and IIASA membership continues to grow to this day. The Processes of International Negotiation (PIN) group was one of the founding research programs.



October 1967: U.S. President Lyndon Johnson and Soviet Prime Minister Aleksei Kosygin and their diplomatic and military advisers meet at Glassboro, New Jersey



The IIASA conference on Global Development: Science and Policies for the Future took place on 14 and 15 November at the Vienna Hofburg Palace.

IIASA has established high intellectual and ethical standards in its research. Its programs were associated with studies of the systemic approach to decision making—something typically used today at advanced schools of management worldwide and pioneered by the Harvard School of Business Administration, the intellectual home of the first IIASA Director, Professor Howard Raiffa.

Professor Raiffa, a well-known authority on business management, always included the study negotiation in business management studies (Raiffa, 1982). As the first Director of IIASA in 1972–1975 he vigorously promoted research on major issues, like energy, food, and environment in tandem with efforts to develop approaches based on the systems and decision sciences

> (SDS). One reason for doing this was to synchronize the processes of decision making in the Soviet Union and the USA. His belief was that for international issues to be solved, negotiation had to be included in the decision-making process.

> For a long time both the USA and the USSR understood negotiation analysis as being primarily the study of each other's negotiation behavior (Binendijk, 1987). Indeed, this attitude was visible when the first contacts on negotiation studies between the Soviets and Americans took place at IIASA in early 1980s. The participation of experts from Canada (Gil Win

ham, Dalhousie University) and Switzerland (Daniel Frei, UN Institute on Disarmament) could not change this initial position: the discussions centered mainly on how to identify the basic elements of the negotiation style of the two superpowers and how to make them comparable.

However, the participation of leading authorities on negotiations and conflict management like Thomas Schelling, Roger Fisher, and Bill Ury, helped IIASA broaden its research task on negotiation analysis. They asked questions such as: What should the relationship be between the formulation of strategies to solve global problems and negotiation? What is or should be the process of decision making in negotiations (in the spirit of Getting to Yes [1981])? What type of communication takes place in negotiations? It would be wrong to imagine that IIASA brought all these questions from first principles through to full fruition, but all were essentially at the heart of the research strategy on negotiations undertaken by Processes of International Negotiation.

Negotiation and the Strategy of Solution

There is an obvious relationship between looking for ways to solve international problems (i.e., problems that cannot be solved by any one nation acting unilaterally) and the potential for negotiation. The relationship can be described as a sort of normative one in which the solution



Nobel Prize winner Thomas Schelling at IIA-SA's 35th Anniversary Conference

strategy sets strict goals for the negotiation: what it wants from the negotiation, what the outcome should be, and what should be included in that outcome. The classic conflict analyst and Nobel Prize winner Thomas Schelling put it very clearly in his Strategy of the Conflict (1959): conflict negotiation should serve the strategy of winning. And if this strategy provides a chance of winning the conflict without violence, then all the better. More generally, if a negotiation can help achieve the desired goal, then it should be regarded as a dignified and appropriate means of solution.

In other words, negotiation is a strategic solution tool. The relation between strategy and negotiation is quite unequivocal: the strategy used to solve the problem under dispute sets the goal (which is what the strategy prescribes), while negotiation is the instrument that is supposed to help to achieve the goal. The strategy of the desirable solution formulates the desirable outcome, shapes the contours of the agreement that would be regarded as a success, and thus delineates a possible agreement—something with which the negotiators can compare the result that they have actually obtained. It is important to emphasize this element because there are cases of negotiations in which the outcome depends mainly on the process and in which it is hard to formulate the exact result in advance. What we are talking about here is the type of negotiation in which the

strategy formulates—in advance—the outcome.

What is important to understand in this case is that an agreement may—though not necessarily— be regarded as the most desirable result: in negotiation, as in science, a negative result (absence of an agreement) is also a result. A negative result may, at least, help both sides to better understand the true magnitude of their problems. As an example, the case of a long and tiring process in negotiations at the UN Disarmament Conference in Geneva may be cited: the process continued for decades without a visible result but played a major role in bringing the both superpowers closer on the matters of arms control. In international, as opposed to domestic negotiations, a nation's decision to solve a certain problem is frequently only a prerequisite of a desirable outcome, not a quarantee. The real result will largely depend, first, on a nation's ability as a salesman (to sell its proposal) and, second, on how the process of negotiation evolves. The participants will still have different priorities, but what seems reasonable and logical to one does not necessarily look the same to the other. These are the circumstances under which the possibility of a compromise may be lurking.

The relationship between a strategy for solving a problem under dispute and a negotiation outcome has been studied in depth several times within PIN. The year 2005 saw the publication of *Peace versus* Justice: Negotiating Forward- and Backward- Looking Outcomes (edited by I. William Zartman and Victor Kremenyuk). This work analyzed the relationship between the different modes of ending conflicts (end of violence, cease-fire, comprehensive peace agreement) and the differences in the negotiation processes. The other work in which the same relationship between the strategy of solution and the process of negotiation was studied is the very comprehensive SAGE Handbook on Conflict Resolution to be published in 2008 (editors J. Bercovich, V. Kremenyuk, and I. William Zartman).

A specific study of the relationship between the goals of the strategy of resolution and negotiation was one led by Ambassador Franz Cede and Professor Guy Olivier Faure on "failed" negotiations—talks that did not end in an agreement. This study aims to analyze several cases of negotiations where, for different reasons, the participants could not come to a definite understanding. The principals of the study wished to discover how far negotiation failure might be explained by the failure of the diplomats and how far it was attributable to the decision makers having set the wrong task. The work on failed negotiations is scheduled for publication in either late 2008 or early 2009.

Clearly, the growing number of global issues—climate, environment, production and distribution of energy or food, immigration, proliferation of drugs and weapons of mass destruction—demands global solutions. Currently the focus in the search for these solutions is on identifying what stage of "ripeness" they are at and on the interplay of the interests of the major actors in international life. But a practical solution to these issues—judging by the speed at which they are developing-may become urgent and, in that case, studies of the negotiation process will be vital.

Against such a background, the recent advice of the IIASA Council that cooperation between PIN and other IIASA programs should be accelerated seems entirely relevant and to the point. Efforts should be made to coordinate what PIN has been doing in terms of developing negotiation analysis and what the other programs may need, for example, proposals for ways of optimizing the implementation of IIASA research findings. Just using the imagination for a moment, a clear and comprehensive global agenda could be drafted identifying actors, their interests and positions, possible forms of negotiations, and desired (or necessary) outcomes. The idea at this stage is rather raw and far from being appropriately formulated, but it has good prospects for gaining the attention of the international community.

Negotiation as a **Decision-Making Process**

Howard Raiffa in his classic work on negotiations, Art and Science of Negotiation, emphasized that negotiation is an "interactive decision-making process." This is completely correct. What, after all, is a negotiation but an attempt by two or more sovereign actors to solve an issue in which their interests are at stake through a joint decision. They must agree on a strategic course of action, including the distribution both of inputs and responsibilities, and turn this into a formal legally binding agreement.

Though it sounds simple, this formula can be applied to almost every case of negotiation in history.

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So what is the best procedure for decision making, either domestic or international? First of all, the problem in question must be identified. The negotiators must try to agree on what they are going to discuss and whether this discussion will help. Very often, especially in sensitive areas, it is impossible for different parties to come to the same understanding of the problem without a special or lengthy effort. For example, one area where cooperation has been developing for several years is the seeminaly straightforward one of international terrorism and the struggle against it. Different nations, because of differences in their history, traditions, and ideology, will, in specific cases of terrorism, see totally different images: what is considered as a simple case of terrorism in one nation may be presented as a legitimate fight for freedom in the other.

This means therefore that decision making must sometimes begin with negotiation to identify the subject to be agreed upon—and it may stay at that stage for years. There is nothing untoward in nations talking to each other about touchy issues, but unless this is accompanied by the possibility of an agreement, doing so may simply compromise the idea of cooperation. To get out of this sort of impasse, official agencies very often turn to the services of unofficial negotiators: NGOs, groups of experts, wellknown personalities. As an agreement on the subject of a negotiation usually does not entail heavy commitments, such methods do work.

It is a different story when, in search of a joint decision, the negotiators move to the critical stages that lie beyond identifying the subject to be discussed, namely, to defining their interests and their final goal. Here they switch to the essence of the negotiation, mentioned above: the formulation of the strategy that will carry them from the desirable goal to the desirable outcome through the search for an agreement. And here the other parts of the decision-making procedure become much more visible: the earmarking of resources and the elaboration of individual negotiation strategies.

This part of the study of negotiations is somewhat better developed than others because of the significant input it has received from the systems and decision sciences (SDS). The identification and expla-

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nation of the possible choice variables at different stages of the negotiation process (bifurcations) are an excellent way of formalizing and quantifying the way negotiation operates. PIN has researched this topic guite recently, for example, in its book on formal models, Diplomacy Games (edited by R. Avenhaus and I. William Zartman), published in 2007.

Mathematical models mainly help to describe the processes of decision making in negotiations. They do not, however, touch upon such aspects of the decision-making process as the relationship between the negotiator and the decision maker, the role of the diplomat, the effects of globalization (which raises the problem of sovereignty), the legal aspects of the negotiation process, and many other issues, all of which show how far contemporary decision making has shifted from the "debates among sovereigns," as they were called at the beginning of the post-Westphalia world in the 17th century, toward the rule of consensus and the negotiations rationale, as they are sometimes called today.

At the heart of the issue is the problem of bringing together two interrelated processes: the attempt to base a decision on a firm rational basis and the attempt to continue to view the negotiation as a demonstration of sovereignty and goodwill. This brings us to another rather important point: the so-called "open-ended negotiation," namely, a negotiation in which the strategy of resolution does not insist on some firm and rigid outcome and gives the negotiators a chance to use their skills and capabilities to work out an agreement.

Howard Raiffa called his classic work on negotiations, The Art and Science of Negotiation. This title conveys the idea that the negotiation is very often a creative area of human activity: something that gives able and imaginative people a chance of winning in sometimes hopeless circumstances. One example of this is the success of the head of the French diplomacy, Charles Talleyrand, at the Congress of Vienna in 1815. The area of decision making in negotiation is one of the most promising for international negotiation analysis as it touches



Ten- nation disarmament conference opens in Geneva, 14 March 1962. A view of a section of the conference chamber during the opening part of the meeting. Among representatives seated at the desk at left are Ambassador V. A. Zorin, Permanent Representative of the USSR to the UN. and Mr. A.A. Gromyko (second from left), Foreign Minister of the USSR.

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on the problems of symmetry/asymmetry, the specifics of national decision-making mechanisms, and the role of different factors, like power, culture, and multilateral-

PIN has paid significant attention to some of these aspects, for instance, Culture and Negotiation, edited by G. Rubin and G.O. Faure (1993); International Multilateral Negotiation: Approaches to the Management of Complexity, edited by I. William Zartman (1994), and *Power and* Negotiation, edited by I. William Zartman and G. Rubin (2000).

The Channel of Communication

It is clear that any negotiation is a twoor multi-way flow of information. The negotiators take part in an intense exchange of the knowledge they possess regarding how to solve the problem under debate, as well as the possible advantages they have, and their real or imagined interests. In contrast with areas of diplomacy where information is usually a state secret, in negotiation the information is abundant and the task of the diplomats is to collect, analyze, verify, and somehow manage it, while avoiding being buried under an avalanche of facts.

The problem of communication in conflicts has not been studied very often

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(Burton, 1969). The language of communication in negotiation, as well as in other similar situations, is complicated and multifunctional: it has to deliver necessary information to the other side(s), international observers, the media, the domestic audience. As negotiation is not an exercise in propaganda or public diplomacy, it has to use language that can be understood by those directly involved in it and that is very often unknown or unfamiliar to those who

The old term of "non-violent conflict" or confrontation without weapons mainly alludes to negotiation. Negotiation may develop as a conflict and as cooperation. If a conflict, then it involves a clash of positions and arguments which can be solved via a compromise or, on the other hand, by a freezing of the search for solution for guite a long period. If cooperation, then the issue can be solved successfully because of the overall favorable climate or because the arguments put forward are accommodating. Indeed, the message sent by each side may play a pivotal role.

At the same time, the problem of communication has acquired added importance. One of the explanations for this is the swift growth of the "newcomers" to the traditional negotiation tables (Kremenyuk, 2002). Another is the changing roles of the negotiators, as new nations and new issues

Negotiation as a strategic instrument, as a means of decision-making, and as a channel of communica-

(climate, energy, environment, sustainable development) come into play. A third is the growing complexity of the subjects and procedures of negotiations. A fourth is the radical growth in information flow space (Internet) and the potential for accessing new information from sources of qualified research and analysis (such as IIASA).

Somewhat unexpectedly, the problem of culture is now more visible than ever in negotiation analysis. Two things have contributed to this: one, the globalization of international problems which has made almost all nations interested in solving them, thus reducing the predominance of more developed nations; two, the self-esteem of the "newcomers" who no longer wish to be dependent on anyone and think they are competent enough to participate in the solution not just of their own, but also global problems. To a large extent this may, and should, be regarded as a legitimate response to those who identify the degree of "civilization" of a nation as being indelibly linked to its maturity.

Nevertheless, culture and its impact on the negotiation behavior of individual nations, especially those with a long historical record, have become important. This phenomenon has been already studied both in the book jointly edited by J. Rubin and G.O. Faure, Culture and Negotiation (1993) and in several chapters written by Guy

> Olivier Faure on Chinese negotiation behavior. The impact of culture is not in adding exotic features to a negotiation (though, of course, these exist) but mainly in an explosive growth of possible negotiation solutions and consideration of new types of experience that, until recently, were either unknown or ignored. One example is the search for ways of protecting the environment in the developed nations (or worldwide) and the experience of ancient civilizations that lived for millennia without posing a serious threat to nature.

> The problem of culture and its impact on the process of negotiation is not just limited to historical differences. It is much broader and more complicated because it is part of the process of globalization: the new nations come to international gatherings bringing with them a "blank slate" and fresh vision. Perhaps this will contribute to making global negotiations more practical and more appropriate.

Another case of the PIN's input into the study of the impact of culture in negotiation is the book edited by Gunnar Sjostedt on the role of professional cultures (2003).

Global Agenda and Global Negotiations

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It would seem that the international system is in a state of transition: from a world where individual interests and the decisions of individual nations has predominated toward a setting in which the interests of the global community and collective decisions will become the norm. From a historical point of view, this may become one of the most important transitions for the planet and a huge step toward the creation of the true global community. If that happens, it may perhaps be relevant to speak of an era of global government (and governance).

In the meantime, however, the world community is in a strange position: it continues to be governed by individual national governments, but the scope and nature of its problems exceed national boundaries and national capabilities. There are, of course, large and powerful nations capable of solving almost any problem, but even they are sometimes helpless and need the cooperation of other nations when they run into such difficulties as climate change, the high price of energy resources, the threat of proliferation of weapons of mass destruction, shortage of fresh water supply, and similar problems.

There are international organizations that take a certain amount of responsibility for the solution of international issues like security, trade, finance, law, and health protection. There are different international regimes and systems that also, while not actually making decisions, at least help to coordinate response to emerging problems. These organizations play a major role in making the life of humankind more comfortable and more manageable. However, it would be premature to state that there is a reliable mechanism in existence for dealing with all current and emerging problems.

The global importance of these problems is magnified by the growing interdependence of the current world system in political, economic, social, technological, and other terms. It is becoming ever more difficult to find solutions to the problems of individual nations that are not at the expense of weaker nations. The combination of interdependence, globalization, and con-

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tinuing individual state organization highlights the problem of finding appropriate negotiation systems and regimes.

Negotiation may thus have to acquire a new and somewhat non-traditional role. In principle, its three aspects, or dimensions, mentioned above—as a strategic instrument, as a means of decision-making, and as a channel of communication—could make it a powerful vehicle of global governance given the continued existence of individual national states. To achieve that purpose, a number of standing mechanisms and rules of conduct need to be elaborated and introduced.

This task may become one of the major tenets of the PIN Program at IIASA.

Victor Kremenyuk

Further Reading

Avenhaus R, Zartman IW (eds) (2007): Diplomacy Games: Formal Models and International Negotiations. Springer, Berlin, Germany.

Binendijk H (ed) (1987): National Negotiating Styles. Center for the Study of Foreign Affairs, Foreign Service Institute. U.S. Department of State, Washington DC, USA.

Burton JW (1969): Conflict and Communication: The Use of Controlled Communication in International Relations. Macmillan, London, UK.

Faure GO, Rubin J (1993): Culture and Negotiation: The Resolution of Water Disputes. Sage Publications, Newbury Park, CA, USA

Fisher R, Ury WL (1981): Getting to Yes: Negotiating Agreement without Giving In. Boston: Houghton Mifflin.

Raiffa H (1982): The Art and Science of Negotiation. Harvard University Press, Cambridge, MA, USA.

Schelling TC (1960): The Strategy of Conflict. Harvard University Press, Cambridge, MA, USA.

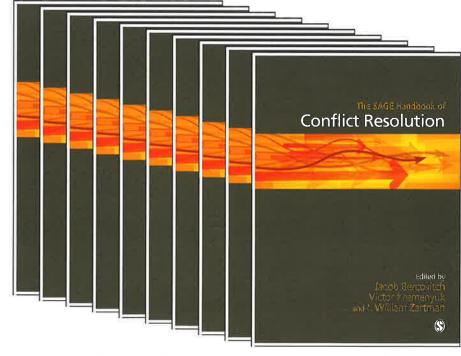
Sjostedt G (ed) (2003): Professional Cultures in International Negotiation: Bridge or Rift? Lexington Books, Lanham, MD, USA.

Kremenyuk V (2002): Newcomer at the Table: Russia as Partner in Negotiations. Institut d'Etudes Europeennes. Universite Catholique de Louvain, Belgium.

Zartman IW (ed) (1994) International Multilateral Negotiation: Approaches to the Management of Complexity. Jossey Bass, San Francisco, CA, USA.

Zartman IW, Kremenyuk V (eds) (2005): Peace versus Justice: Negotiating Backward- and Forward- Looking Outcomes. Rowman and Littlefield, Boulder, CO.

Zartman IW, RubinJ (eds) (2000): Power and Negotiation. University of Michigan Press, Ann Arbor, MI, USA.



The SAGE Handbook on Conflict Resolution, forthcoming 2008

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POST-AGREEMENT NEGOTIATION

Simulating Prospective Negotiations on the Implementation of the Chemical Weapons Convention (CWC)

Introduction

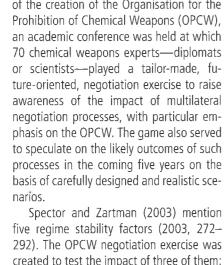
The Chemical Weapons Convention was signed in 1997, and the Organisation for the Prohibition of Chemical Weapons—the watchdog agency that implements it monitors how the States Parties to this disarmament treaty are transforming their solemn pledge to renounce chemical weapons into a verifiable reality.

Post-agreement negotiation has been dealt with extensively in the book *Getting* it Done: Postagreement Negotiation and International Regimes, edited by Bertram Spector and William Zartman (2003). The book provides us with interesting lessons for theory and practice, most of all in terms of achieving regime stability. As summarized in the introduction to the book: "The study of negotiation in general has increasingly come to emphasize that negotiation is not completed when the initial agreement is signed. Instead, its intended effect reguires continuing attention to implementation and postsettlement monitoring."

To commemorate the tenth anniversary of the creation of the Organisation for the

created to test the impact of three of them: process, stages, and stakeholders.

The OPCW game, like reality, reflected the struggle among nations in defence of their own national interest, striving for the common good or collective interest as they go along. The exercise was used as a





Flag of the Organisation for the Prohibition of Chemical Weapons (OPCW)

The Chemical Weapons Convention is an international treaty which bans the development, production, stockpiling, transfer, and use of chemical weapons, and also stipulates their timely destruction. The Convention entered into force in 1997 and mandated the Organisation for the Prohibition of Chemical Weapons (OPCW) to eliminate the scourge of chemical weapons forever and to verify the destruction of the declared chemical weapons stockpiles within stipulated deadlines.

The OPCW's inspectors monitor and verify the inactivation, and later destruction or conversion, of all declared chemical weapons production facilities, as well as the destruction of declared chemical weapons stockpiles. At the same time, OPCW inspectors verify the consistency of industrial chemical declarations and, together with the States Parties, monitor the non-diversion of chemicals for activities prohibited under the Chemical Weapons Convention.

States Parties undertake to provide protection and assistance through the OPCW, if chemical weapons have been used against a State Party, or if such weapons threaten a State Party.

The Chemical Weapons Convention calls for international cooperation in the peaceful uses of chemistry.



Chemical Weapons Convention Signature Ceremony, 13-15 January 1993, Paris

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vehicle to deal with world political complexity on a security issue of major concern to the world as a whole. Participants, diplomats. and academic experts in the field, bargained in five parallel workshops where they represented six OPCW member states, one from each continent: Brazil, China, France, Russia, South Africa, and the United States. These countries were selected on the basis of their regional distribution and their relevance to the OPCW. They can also be perceived as representing the position of other states that could not participate in the exercise, as having more than six parties participating creates unsolvable complexity and destroys the game. The topics chosen for discussion are seen by experts as relevant to the OPCW in the coming decade. Just as in reality, national and collective interests had to be balanced within the framework of an already existing regime based on a legal framework.

The negotiations were based on a fact sheet consisting of a single diplomatic text containing 20 contentious sentences. The contentious sentences were in parentheses. Participants had to decide on a sentence to be included in each set of parentheses (see *Table 1*). Each sentence was connected to value points indicating the priority of that part of the diplomatic text to the state represented at the table. The scores therefore naturally differed according to country, while the texts were identical for all delegations.

The game is, of course, an abstraction: first, because there are many other countries with many different opinions; and second, because the positions of countries in certain discussions have to be estimated and this is not necessarily in line with reality. Input by OPCW experts over a six-month period did, however, quarantee that substance came as close to reality as playable.

Substance

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The following issues came under discussion at the tenth anniversary

Destruction of chemical weapons after 2012

According to The Chemical Weapons Convention (CWC) all chemical weapons declared by the States Parties have to be destroyed no later than 10 years after the CWC came into force (i.e., by 29 April 2007). The deadline can be extended by a maximum of five years, but there are no provisions for any further extension. In the absence



Chemical weapons destruction facility in the U.S.

of a clear-cut prescription in the CWC, and if, as is likely, the destruction of chemical weapons by some States Parties is not completed by 29 April 2012, it will be up to the OPCW to find a solution.

Decisions needed to be taken here on a possible role for the UN, the setting of a new deadline, permanent inspection in the remaining storage facilities, and subsidies for the destruction of chemical weapons by CWC States Parties.

Universality, international cooperation, and

Universal adherence is a core principle of the CWC. Experience from an OPCW Action Plan to promote universality has shown that some states face political and technical hurdles (e.g., enacting legislation, setting-up a national authority) before they can pass ratification/ accession through their parliament. The CWC also contains mechanisms to attract states to join it, including promises for enhanced international cooperation in such areas as chemical defence or other peaceful uses of chemistry. On the other hand, it imposes regulations/restrictions on exports of scheduled chemicals to non-parties. The OPCW planned trade sanctions regarding exports of schedule 3 chemicals to non-parties, but this was not agreed upon.

Decisions here needed to be made on sentences dealing with stopping the exports of Schedule 3 chemicals to countries that have not ratified CWC; those countries should be offered assistance in capacity building; States Parties will have access to protective equipment and technology; and a High Commissioner for Universality will be appointed.

Industry

The focus of OPCW inspections has, to date, been on CW destruction (75 percent of inspection resources). As CW destruction progresses. more attention is being paid to industry inspections. The following categorization of chemicals plays an important role: Schedule 1 are high-risk chemicals. They have very few legitimate uses. There are restrictions on production, uses, and trade. There is systematic verification. Schedule 2 are medium-risk chemicals. There is modest industrial production with regular on-site inspections. Schedule 3 are low-risk chemicals. They are basic industrial products with many applications and large production volumes. There are random inspections.

In addition, chemical plants producing certain organic substances (other chemical production facilities or OCPFs) are covered under a random inspection scheme, as some of them (perhaps 10 percent) can be used for the production of scheduled chemicals. The CWC uses a number of concepts for the selection of chemical plant sites for inspection, for example, their risk to the CWC, to maintain an equitable geographical distribution and, through random selection, to ensure the unpredictability and deterrence of the verification, and based on information available to the Technical Secretariat and proposals by States Parties (based on principles yet to be agreed upon).

Decisions here have to be made on the number of inspections, geographical spread of the inspections, and possible sanctions against companies that refuse to be inspected. It is also possible to decide here that no changes are needed.

Challenge Inspections

A challenge inspection (CI) is a CWC mechanism to resolve concerns about non-compliance. A CI can be requested by a State Party



Real inspection and verification exercises carried out by the OPCW in the Czech Republic, 1999

anywhere on the territory of another state party (irrespective of whether the location was declared, undeclared, military, civilian, secret), at any time, on short notice, and there is no right of refusal. The Executive Council can block a CI, but only if the request is frivolous, abusive, or outside the scope of the CWC. The inspected state party is under an obligation to provide access to the challenged facility; it can manage access to protect secrets unrelated to CW. A CI has not yet been invoked and States Parties have instead used bilateral mechanisms to clarify non-compliance concerns.

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Decisions needed to be taken on making challenge inspections a regular feature starting this year; the evidence required to ask for a challenge inspection and whether or not challenge inspections are a measure of last resort. It can also be decided that challenge inspections will not be mentioned in the final text.

Organizational issues

The CWC requires States Parties to implement a range of measures in support of CWC implementation (national authority, legislation and regulations, standing arrangements for inspections including two-year multiple-entry visas, declarations on a range of matters). There have been severe delays by some States Parties in implementing these measures. At the same time, some States Parties have been slow in reaching out to their industrial, scientific, and technical communities to explain the requirements of the CWC.

Decisions here need to be taken on possible sanctions against States Parties that do not grant two-year standing visas for

inspectors, publication of a CWC summary, and publishing of codes of conduct. In this section it is also possible to conclude that no changes are needed.

The Game Rules of the game

Words and points were fixed. They could be traded and interpreted, however. And as perceptions were different, based as they were on country instructions and individual assessments, competition and cooperation ensued and their collision created different negotiated realities.

Some sentences were mutually exclusive, for example, "Challenge Inspections must become a regular feature starting this year" cannot, logically speaking, go together with "Challenge Inspections should not be mentioned in our final single text." Some other sentences could clearly be combined in packages. However, the hottest discussions in the negotiations were on issues where some parties were of the opinion that combinations could be made, while others contended that it was not in their interest to have these trade-offs. As we will see later, this resulted in different outcomes in different groups. All delegations representing the same country in different negotiation forums (multiple OPCWs, so to speak), sometimes represented by one and sometimes represented by two negotiators, had identical instructions. But as the people were different in character and in skills, and as the "chemistry" in each "OPCW" varied, these minilateral negotiation processes produced different outcomes.

The value points form the mandate for the participants (see *Table 1*). Participants could only see their own mandate and not those of the other countries. We can now easily see from Table 1 that for the USA "OPCW will appoint a High Commissioner for Universality" is more important than for China, but the actors in the simulation had to find this out by using arguments. Mentioning of the points, or showing them, is in principle not allowed, except by the Chair, who knew every mandate. (This also reflects reality in which the Chair prepares the meeting thoroughly and discusses the different topics with the delegations.) Values of sentences ranged from 40 points plus to 40 points minus, indication the importance of certain sentences. The USA, Russia and China could earn and lose more points than Brazil, South Africa and France, as they had more at stake. Not all countries are equal. The points give a more or less realistic picture of the positions of countries. although of course in an extremely simplistic manner.

As mentioned before, participants had to negotiate the future of the OPCW on the basis of their different instructions. They were free to accept any outcome as long as it was within their mandate, meaning that overall they had to score zero points or more. Successful international negotiations can be described as a process where, at the end, the sum should be greater than the parts. In other words, by fighting over national interests, the "international result" is created. The harder the fight, the less likely it becomes that a multilateral interest will be the winner. In the OPCW game, the result for the organization is calculated by Table 1 Total Matrix and Optimal Solution

PIN Points

Intimal Solution	ΔZII	RUSSIA	CHINA	AFRICA	RRA7II	FRANCE	OPCW
Optimal Solution DESTRUCTION OF CHEMICAL WEAPONS AFTER 2012	UJA	NOSSIA	CIIIVA	AIRICA	DIVAZIL	TRANCE	OI CVI
Should be considered by the UN if not completed by 2012	25	20	15	-5	-5	20	70
Destruction will still be possible till 2017	40	20	-15	-5	-5		45
Only with permanent inspection team presence at all remaining Chemical	40	20	13	,		10	7.
Weapons Storage Facilities (CWSFs)	-30	-30	5	20	10	0	-25
CWC States Parties will subsidize the destruction of Chemical Weapons where needed	15	40	15	-5	15	10	90
UNIVERSALITY, INTERNATIONAL COOPERATION AND ASSISTANCE							
Countries that did not ratify will not receive schedule 3 chemicals anymore	-30	5	5	-20	0	10	-30
Countries that did not ratify should be offered assistance for capacity building	20	10	10	30	20	15	10!
States Parties will have full access to CW protective equipment	-	45	20	20	20	-	01
and technology	5	15	20	30	20		9!
OPWC will appoint a High Commissioner for Universality	30	10	0	-10	10	20	60
INDUSTRY							
The number of on-site inspections of chemical industries will be doubled	30	-10	-15	-25	-10	5	-2
Inspections of chemical industries are to be spread evenly over all member states	20	10	-20	-30	-20	5	-3!
Refusal to be inspected will be followed by sanctions against companies	25	-15	-25	-30	-15		-60
No changes are needed	-10	10	10	10	5	15	40
CHALLENGE INSPECTIONS							
Challenge Inspections must become a regular feature starting this year	10	-25	-30	-40	0	30	-5
Challenge Inspections are only allowed if there is enough evidence at hand	-20	5	25	25	15	-20	3(
Challenge Inspections are a last resort only to be applied in							
extreme cases	-5	15	25	25	15	-10	6
Challenge Inspections should not be mentioned in our final single text	-30	10	=10	25	0	-40	-4
opcw organizational issues							
Sanctions against States Parties not granting two-year standing visas for inspectors	10	-10	-30	-40	-10	0	-80
Parties should widely publish a CWC-summary in chemical labs and industry	40	20	10	-5	0	10	7!
Publish model codes of professional conduct to ensure							
compliance with CWC	40	0	5	0	0		60
No changes are needed TOTAL	-30 180	-10 165	120	20 90	20 90		-2! 73!

Table 2. Results from the five groups.

				SOUTH				No. of
Group	USA	RUSSIA	CHINA	AFRICA	BRAZIL	FRANCE	OPCW	decisions
I	140	145	135	95	95	80	690	10
11	180	165	120	90	90	90	735	11
	160	140	110	70	80	100	660	9
IV	230	165	85	35	60	100	675	13
V	145	130	80	80	70	70	575	8

PIN Points 30/2008 www.iiasa.ac.at/Research/PIN www.iiasa.ac.at/Research/PIN PIN Points 30/2008 the sum of the total of each country at the end of the game. *Table 1* shows the optimal solution, the best result for the OPCW. As we will see later on, only one of the five groups playing the game reached the optimal solution. In the optimal solution, a total of eleven decisions are taken (in bold in Table 1).

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Perception determines reality. How participants deal with their own mandate is one thing; how they perceive that of the others quite another. It is difficult to be satisfied with one's own result, if others seem to gain more, and, of course, vice versa. Concessions are easier to make when the feeling is that everyone has painful choices to make. Sensitivity to signals from other players can influence the flow of the game immensely, both positively and negatively. On the one hand, "winning" becomes easier; on the other hand the signals might distract from what really matters—one's own outcome and that of the OPCW. It is possible that in the given time of 90 minutes of actual negotiations, no outcome is possible. Not because anyone was actually below zero, but because of a feeling of relative deprivation. In the case of OPCW every group had an outcome, but the struggle between the different countries was clearly not the same for each group as we will see later.

Processes and outcomes

The five groups were negotiating in different spaces, both parallel to and independent from each other. In group II the chairman asked every country to state its position within the category "Destruction of Chemical Weapons After 2012." Starting with the round with South Africa, delegations explored very little. South Africa and Russia, for example only mentioned two of the four sentences explicitly. Russia said nothing about "Only with permanent inspection team presence at all remaining Chemical Weapons Storage Facilities," which was very important to them considering the minus 30 in their mandate. The full position of Russia on this sentence did not become clear until the very last moment, letting the USA do the work of keeping the sentence out of the declaration.

In later rounds, the openness of the participants increased. The cards came out on to the table; possibilities for consensus became visible. This was further enhanced by an excellent Chairman, who in his summaries after every round focused only on

positive statements. He closed discussion on certain sentences, avoiding a situation in which all is decided when everything is decided or an all-or-nothing discussion. Although, in theory, it is possible for a country to come back on a single decision before the negotiations are closed, in reality this is difficult to do without losing a great amount respect and prestige.

The atmosphere during the negotiations in group I was constructive. There was no conflict between the USA, China, and Russia. This may have been because the USA seemed distracted, lacking a clear strategy. Russia and China had the impression that they were doing quite well in the negotiations and strong statements were not necessary. Whether deliberate or not, at the end of the game the Americans had everything perfectly under control. By scoring 180 points they had the second best result of the five USAs, and the group as a whole had reached the optimal solution. The results for the OPCW were at their maximum. with 735 points. The results from all the different groups can be seen in *Table 2*.

Group I took one decision less then the optimal solution. They could not come to an agreement on "Destruction will still be possible to 2017." Group III could also not reach consensus on this sentence and also excluded from the text "challenge expectations are only allowed if there is enough evidence at hand." Group V took the fewest decisions and had the worst result for the OPCW as a whole. In comparison to

the optimal solution they could not reach consensus on "should be considered by the UN if not completed for 2012." "OPCW will appoint a High Commissioner for Universality," and "Challenge inspections are only allowed when there is enough evidence at hand". Finally, group IV took two decisions more than the optimal. They did the eleven as identified, but also included in the category "Industry," "The number of on-site inspections of chemical industries will be doubled" and "Inspections of chemical industries are to be spread evenly over all member states". They did this while also concluding "No changes are necessary" in the same category.

The differences between the groups are striking. The amount of time for each group was the same, as was preparation time. The groups were similar in composition showing a balance between diplomats and scientists. Still, there is difference of 90 points between the USA in group I and the USA in group IV. The same groups also the strongest difference between South Africa (95 and 35, respectively), China (135 and 85, respectively) and Brazil (95 and 60, respectively). From this it is easy to conclude that the USA was very dominant in Group IV. A participant from the group said "The USA was really absorbed in their role and were very strong." It might also be concluded that South Africa was relatively weak in this group. At some point they were even below 0 and only by taking out "challenge



OPCW Executive Council session, The Hague, the Netherlands

inspections must become a regular feature" did they reach 35 points.

Group IV took 13 decisions and actually took two decisions that were illogical in the eves of the makers of the game. This is by no means a bad thing. Many multilateral negotiations end with a declaration with somewhat contradicting sentences. That this is not a good thing for the OPCW is reflected in the points which are lower than the optimal solution. More interesting is why it happened, as it was not necessary for participants to get a result above 0. As a matter of fact it pushed China, South Africa and Brazil much lower, Russia remained the same, France was marginally better off, leaving only the USA as the real beneficiary and probably also as propagator.

In group V it is remarkable that only eight decisions were taken. Here it seems that South Africa was strong. As the only country opposing a High Commissioner, it was the only country to profit from the decision. But if they had exchanged this for the sentence on evidence on Challenge Inspections, everyone would have been better off. That such an exchange was not made, perhaps because of time pressure, shows that decisions are not always rational. Or perhaps it is better to call it bounded rationality and rational ignorance.1 The negotiators, based on the information provided to them, made the most rational decision available to them—just as, in reality, people make judgments on the basis of personality, culture, perceptions, and group process as to whether they can be satisfied by a certain outcome.

The role of the Chairman is of great importance. Not surprisingly the Chairman of group II (optimal solution) said that it had been rather pleasant for him. The Chairman of group V said that they first dealt the "easy ones" and than the "difficult ones," which might explain why the trade-off between sentences was difficult to do.

Conclusions

The experiences with the OPCW and other comparable international hexa- and pentagames show that people matter. Though negotiators were framed in the same context of fixed substance and fixed priorities. their individual differences produced different substantive outcomes. These different

1 Coby van der Linde, 'Energy security in a changing world' in Paul Bracken et al. (eds): Managing Strategic Risk, Eurasia Group, 2005, page 244.

results were the consequence of their ability to be creative, to have different perceptions and therefore assessments. These, in turn, were based on differences in character, style, expertise, assertiveness, and perhaps culture. We cannot be sure about the last factor; it would be worthwhile to research this on other occasions. Interpretation of the text made the difference. Apart from individual human drivers, there is also something like a chemistry within the negotiation group. And, of course, the ability of the Chair to do a good job is paramount. The outcomes of the OPCW exercises reflect the impact of individual negotiators and the group dynamics. They roughly show the interrelationship between the number of decisions and the level of the scores. But this connection is not perfect. Outcomes depend on differences in packaging, and some series of trade-offs will not be as effective as others. Therefore, the factor of value creation is as important as the number of policy decisions made.

However, can we conclude something about the most likely outcomes of OPCW negotiations in the coming five years, within the grid of subjects and country positions created by the authors of the hexagame and choices made by the participants in the five negotiation groups? Indeed we can. If we take the subjects which ALL five groups wanted to integrate into the fictitious negotiated text—the overall consensus then we can conclude that the following decisions can be expected to be taken in

- 1. CWC States Parties will subsidize the destruction of Chemical Weapons where needed:
- 2. Countries that did not ratify should be offered assistance for capacity building;
- 3. States Parties will have full access to CW protective equipment and technology; 4. No changes are needed concerning on-
- site inspections of chemical industries; 5. Challenge inspections will be a last
- resort, only to be applied in extreme 6. Parties are advised to widely publish a CWC summary in chemical labs and in-
- 7. Parties are advised to publish model codes of professional conduct to ensure compliance.

Finally, two more decisions that might be expected, although they are less likely to be taken as we have consensus minus one between the groups: the UN should get involved if the destruction of CW is not completed in 2012, and the OPCW appoints a High Commissioner for Universality. Less likely, however, is that OPCW will accept destruction after 2017 and implement challenge inspections only in cases where enough evidence for illegal activities is at hand, as only three out of five OPCWs reached consensus on these two issues.

As far as the contribution to stability is concerned, in the sense of process-stages-stakeholders as factors assuring implementation of the Chemical Weapons Convention, it was found that they did indeed work as a stabilizing factor. The process was designed to force parties to acknowledge the questions on the agenda. The stages in this process, exploring-parkingdeciding, helped to push things forward. The stakeholders were forced to address the issues on the table. This resulted in a number of decisions for implementation, as described above. However, the process also provided an opportunity for procrastination. The stages could be used to slow down progress by focusing as much as possible on exploration and parking, leaving ample time for decision making. And the stakeholders had the means—consensus being the rule—to frustrate the outcomes they did not like.

Though, as we have seen, outcomes were indeed produced, they could not be regarded as very substantive. The Chemical Weapons Negotiations, as embedded and institutionalized in the OPCW, are indeed highly stabilized by process-stages-stakeholders, but to the extent that it slows down decision making and tends to freeze it. Stability seems to foster stagnation in this respect. It gets things done, but at a pace that endangers the effectiveness of the implementation of the Chemical Weapons Convention. In that sense OPCW is both an opportunity and an obstacle to banning chemical weapons from the Earth. But the organization at least provides us with the tools to contain the danger of chemical warfare and terrorism as much as politically possible.

Acknowledgement

The authors would like to thank Ralf Trapp, Arend Meerburg, Maarten Lak, OPCW staff plus secretariat who gave invaluable support in designing and implementing the exercise.

> Paul Meerts and Wilbur Perlot

Further Reading

Spector BI, Zartman IW (eds) (2003): Getting it: Done—Post-Agreement Negotiation and International Regimes. United States Institute of Peace Press, Washington DC, USA.

Krutzsch W, Trapp R (eds) (1999): *Verification Practice under the Chemical Weapons Convention—A Commentary.* Kluwer Law International, The Hague, Netherlands.

Yepes-Enríquez R, Tabassi L (eds)(2002) *Treaty Enforcement and International Cooperation in Criminal Matters, with Special Reference to the Chemical Weapons Convention.* T.M.C. Asser Press, The Hague, Netherlands.

Kenyon IR, Feakes D (eds.)(2007): *The Creation of the Organisation for the Prohibition of Chemical Weapons. A Case Study in the Birth of an Intergovernmental Organisation*. T.M.C. Asser Press, The Hague, Netherlands.

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OPCW headquarters, The Hague, the Netherlands

Comparable Games

In past years, other number games have been developed. The original one simulated a Council Working Group of the European Union trying to reach consensus on six issues concerning an external crisis in the Mediterranean. Participants seeing six boxes of five issues each, perceive six possible outcomes: one in each box. Those who think outside the box, will however find nine to twelve possible decisions. The greater the number of in-between outcomes, the better the individual scores of the countries and of the collective score of the European Union. By negotiating individual interests, the countries are deciding upon the collective value of the European Union. In this Pentagame the five delegations drafting a single "text" were France, Germany, Spain, the United Kingdom, and Sweden. The last country was the spoiler in a clearly biased situation, as different countries had different stakes and could therefore expect very different individual results. Unequal but fair. In other words: an equal outcome would not be the most effective result for the European Union as a whole. As the stakes of the countries are different, so should be their rewards. A sixcountry modification of this version has been used to prepare British and Finnish diplomats and civil servants for the EU presidencies of their respective countries. Variants were created in which this problem was dealt with in the context of the Security Council of the United Nations. Actors: China, France, the Russian Federation, the United Kingdom, and the United States. At the NATO Defence College a complete make-over was created by having six countries negotiate on a crisis in the fictitious island of Janubia, Simplified versions with fewer actors and issues were also made available.

To train Iranian diplomats at the School of International Relations (SIR) of the Iranian Ministry of Foreign Affairs, a variation on the Caspian Sea negotiation was initiated. In this version, the five littoral states of the Caspian haggle on five issues ranging from the legal status of the sea/lake to energy, pollution, security, and shipping. A total of 60 young attachés played the game in six parallel groups, with two people per delegation. The outcome was interesting: those who saw that Iran's best interests would be served by gaining concessions from the other negotiators at a later stage of the game, created good outcomes for the Islamic Republic

of Iran. Those who did not see the trade-offs and were stubborn in serious negotiations at the beginning of the exercise, did not score well for their country. Here the Iranian diplomats playing the Russians, Kazakhs, Azerbaijanis and Türkmen did better than those representing Iran. Lesson: if Iran waits too long to step into the Caspian (Khazar Sea) negotiations, the Russians will get their former Republics on their side, thereby isolating Iran. This situation came very close to reality. As negotiation is giving something in order to get something, concessions have to be made to enhance returns. If no concession is given, no rewards can be expected, and a potential win—win negotiation will then turn into a win—lose.

More recently Kosovo and Afghanistan versions of the game were developed. These are really zero-sum games in which reaching consensus is almost impossible. As a way out in the Kosovo game, you can try to reach agreement between the USA, EU, and Russia and then try to force Serbia and Kosovo into the solution. In the case of the Kosovo game played in Amsterdam by participants from the general public, people really got angry at some of their opponents. Emotions flared up. The contrary happened in a group of experts of the Organisation for Security and Cooperation at Stadt Schlaining in Austria. Though Serbs and Kosovars were participants in the course, they dealt with the exercise in a very professional way—looking for the best options on the basis of their estimated national interests. In the Afghanistan version two women playing the Taliban suddenly stood up from the table cause it was prayer time. They asked their brothers from Pakistan to join them. A few minutes later they were negotiating together bilaterally, leaving the other participants flabbergasted and increasingly angry. The EU asked the USA, which had just become Chairman. to discuss with the Taliban that this was not a proper way to act during negotiations. At least 30 minutes after that, or roughly half of the game time left, the atmosphere was ruined. Really ruined. The USA and the EU on the one hand and the Taliban were actually making covert nasty remarks toward one another every other sentence. No agreement was reached in the end. A revised version of the game, played as a test by the Senlis Council in Paris and performed in an international conference in Canada a few weeks later, ran much more smoothly and produced realistic outcomes for a possible peaceful process dealing with Afghanistan's future.

Negotiating with Terrorists: Conclusions from the New PIN Book

One of the most intriguing aspects of this elusive topic concerns the gray areas between limiting extremes. The subject itself is caught between two absolutes: states do not negotiate with terrorists and terrorists do not negotiate with states, and yet they do. The challenge is to find out when, how, and why, to understand under what conditions the process of negotiation fits the terrorist challenge. Underneath this contradiction lie other problematic gray areas in the conduct of that process, beginning with the distinction between talking and negotiating: States should talk, even if not negotiate, with terrorists, yet talking and negotiating overlap. Second is the distinction between ends and means: negotiations seek to eliminate the use of violence (means) but should not confront belief systems (ends), but in fact ends justify means. Third, one cannot negotiate with total absolute terrorists, but how can total absolutes be turned into negotiable types without negotiations? Fourth, moderation is both a condition and a process for negotiation, but how much moderation (precondition) is needed before negotiation or can it be attained (process) as a result? Finally, parties are always coalitions held together by purpose and legitimacy, but

how can moderate factions be enticed into negotiations without losing the unity and legitimacy of the whole?

Initiating the Process: Talking versus Negotiating

It is important to develop all contacts possible with all types of terrorists and their supporters. In practical/tactical situations, negotiation is what the terrorists want, and much of the actual negotiation process is devoted to maintaining contact, establishing stable relations with the terrorist, and bringing him to the negotiations he seeks. In political/strategic situations, the job is more difficult, but for that reason talking is crucial, to find out information, crystallize goals, develop interlocutors, and set up a negotiating situation if it is to materialize, as chapters in the forthcoming PIN book analyze in detail.

Talking is not negotiating. It can be carried out at lower levels, it does not involve legitimization and recognition, and seeks merely to exchange (or extract) information. And yet talking, often referred to as engaging, is opposed to a policy of isolat-

ing, and one element of engagement is the changing of images, ideas, and even goals, as well as exchanging views about them. So although officially, the distinction between talk and negotiation is sound, analytically the line between the two is blurred. Talking does not necessarily involve negotiation but is only the possible prelude to it. Indeed talking not only can prepare for negotiation but can also be the surrogate for negotiating, making specific deals unnecessary, as chapters in the forthcoming PIN book show.

Proposition 1: Talks and other contacts (engagement) are a prime means of dealing with terrorists, separate from but a precondition to negotiations.

Proposition 1a: Talking is inherent in negotiation, but negotiation is not necessarily inherent in talking.

Concluding the Process: Ends versus Means

The distinction is crucial. Basic guidelines insist, Do not negotiate belief systems, but rather Seek to deescalate the means of conflict from violence to politics, as chapters in the forthcoming PIN book discuss. The reduction of terrorism requires the breaking of the link between ends and means, whether the ends are downgraded or not. Yet ends justify means (as in many other instances, despite the mantra to the contrary), so the terrorist, convinced that his ends require or at least condone terror, has to be converted to a contrary conviction. Thus, a simple agreement to abstain from violence is shaky as long as it does not rest on further agreement that the ends do not require violence, and that requires getting into the belief system.

The dilemma is perhaps best handled by sequencing. Negotiations with terrorists can first be focused on downgrading the means, convincing the terrorist to give up violence as a means to attain his ends. To do so, the negotiator must offer alternative means, whether a radio broadcast in the case of a hostage taker or electoral participation in the case of a political movement. The negotiator can also emphasize the negative relation, that terrorists' means



Making societies safe by renouncing violence. Moderate Islamists in Algeria and Morocco have been rewarded with a place in the political system and even, in Algeria, in the government.

Negotiating with Terrorists (continued)

against negotiation, negotiators must then close ranks of legitimacy and purpose again around the new agreement.

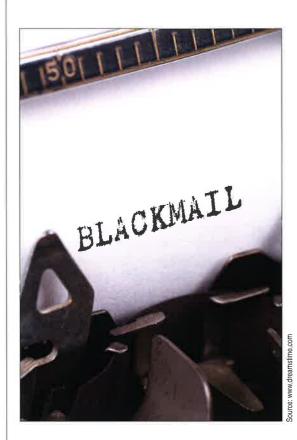
Improving the Process: Conclusion

There is no theory of negotiating over terrorism. Such negotiations simply lie on the fragile, delicate edge of the possible and exemplify the most tentative aspects of the general negotiation process. They are merely an extreme case of any negotiation situation, where the decision to negotiate is uncertain, the opening positions are far apart and there is no Zone of Possible Agreement (ZOPA) in between, the conflict is so conceived that there is no Mutually Hurting Stalemate or Way Out, and terms of trade, joint sense of justice, and consensus on the nature of the problem and its solution—all elements in a formula for agreement—are all absent. Ye't these are the lacunae that the negotiating process must overcome if it is to reach a successful outcome, and case studies in the forthcoming PIN show how it is possible.

Negotiation is not a reward; it is a cheaper way of attaining one's goals, on both sides. Of course, states have to declare a non-negotiation policy, lest they invite blackmail; terrorists do not have this problem. There is no doubt that the over all strategy should be two-handed, carrots and sticks, fighting terrorism and offering terrorists a way out. The terrorists already use one hand, the violent one, and so would be well advised to extend the other as well. Clearly, it is better to negotiate whenever possible. On one of the two hands, opportunities do not look good unless the present course is blocked, and so the basis of an effective policy is a vigorous interdiction of terrorist acts. There is no condoning violent acts against innocent civilians, or acts designed to create a state of terror in the general public. On the other hand. terrorists, like any other negotiating partner, must be bought off their current course by inducements, either to lower their ends or to change the means by which they attain them. Loathsome though they or their methods may be, if one is to lure them from their tactics and change their ways, they must be given something in exchange.

I. William Zartman

Formal Models for Hostage Negotiation with Terrorists?



In their Lessons for Theory: Framing Remaining Questions, drawn from the contributions to the PIN workshop on Negotiating with Terrorists Groups, I. W. Zartman and G. O. Faure point out that "theory is far out of reach on this subject." While this may be too modest a statement for nonformal theory, it is certainly true of formal theory. It may thus be of interest, and ultimately stimulating, for formal modelers to learn that several years ago two prominent

scientists made attempts in that direction. Even though they were talking about hostage takers and blackmailers, their subjects are so closely related to contemporary problems that it may be worthwhile to remind ourselves of their work.

In 1975 Ellsberg published Theory and Practice of Blackmail. He basically considers a situation where a first party, called blackmailer, tries to coerce a second party, called victim, in some way that is very unpleasant to the latter. This coercion may be the taking of a hostage to get ransom, occupying a piece of land belonging to a neighboring state. or anything along those lines. The victim may resist the coercion or comply with it. If he resists, the blackmailer may accept this resistance—set the hostage free or give up the occupation, or he may punish the victim—kill the hostage or just maintain the

occupation. For the outcomes of the two parties' three possible strategy combinations, namely, comply, resist, and accept, and resist and punish, Ellsberg discusses various possible payoffs, depending on the circumstances and on the expectations and preferences of the parties, and he discusses the possible solutions.

The analysis of a blackmail type of situation, as given by Ellsberg, is largely of a

Table 1. Payoffs to the two players, 0 < x < z, y < z, 0 < w, w < C.

Outcome	Kidnapper	Family
The kidnapper executes the hostage without taking the offered ransom	0	-W
The hostage is released for ransom payment \mathcal{C} , and the kidnapper is not caught	С	-C
The hostage is released for ransom payment \mathcal{C} , and the kidnapper is caught	-X	0
The hostage is executed after ransom ${\cal C}$ has been paid, and the kidnapper is not caught	- <i>y</i>	-W
The hostage is executed after ransom ${\it C}$ has been paid, and the kidnapper is caught	-Z	-W

non-formal nature. Its formal part is very simple: it does not contain dynamic elements like negotiations and it does not take into account the possible detection and punishment of the blackmailer after the compliance of the victim. From today's point of view, its value lies in the fact that it is, roughly speaking, the first time that formal models, in particular, game-theoretic ones, were applied to the analysis of any kind of blackmail, and its elements were clearly formulated: strategies, information structures, payoffs of outcomes. Interestingly enough. Nash equilibria (defined as a pair of strategies with the property that any unilateral deviation does not improve the deviator's payoff) were not determined explicitly even though this could easily have been done. Instead, solutions were discussed in a qualitative way.

A quite different, purely formal approach was used by Selten in his paper A Simple Game Model for Kidnapping in 1985, which goes as follows: a potential kidnapper decides whether or not to take a hostage from a family. If he decides not to do so, the payoffs to both the kidnapper and the family are normalized to zero. If he decides in favor of doing so, the kidnapper asks for some ransom (money) D > 0. The family offers the amount C with 0 < C < D. Having obtained this offer, the kidnapper decides with probability α not to accept, but to kill the hostage, and with probability $1-\alpha$ to accept: α is assumed to be proportional to the ratio C/D:

$$\alpha = a (1 - \frac{C}{D}), 0 < a < 1,$$
 (1)

Should the kidnapper accept the ransom C, he will either kill the hostage or he will let the prisoner go free. Thereafter, in both cases the kidnapper will be caught with probability q, 0 < q < 1. The payoffs to both players if the kidnapping takes place are given in *Table 1*.

If the game is represented in extensive form, a backward induction shows immediately that it is better for the kidnapper not to kill the hostage after having obtained the ransom C. This means that only the case where the hostage is set free after the ransom has been paid should be considered. Thus, the question remains as to which ransom C has to be offered by the family as a response to demand D, which amount D has to be demanded by the kidnapper,

and, above all, under what conditions the kidnapper will take the hostage at all.

The Nash equilibrium of this game is given as follows. Under the condition

$$-x q + \frac{a}{1+a} w < 0 \tag{2}$$

the kidnapper will not take the hostage, otherwise he will. If he does take the hostage, he will demand the ransom

$$D^* = \frac{a}{1+a} \frac{w}{1-q} \tag{3}$$

and the family will offer the same amount $C^* = D^*$. This means that according to (1) the kidnapper will not kill the hostage, $\alpha^* = 0$, and, as already said, he will release the hostage after having obtained the ransom.

Let us discuss these results. First, in equilibrium, the larger the loss of the family if the hostage is executed, the higher the postulated (and offered) ransom and the smaller the probability that the kidnapper will be caught. Moreover, this ransom increases with a: the fear of the family that the kidnapper will execute the hostage right after obtaining the family's offer increases their willingness to pay more. Second, the decision of the kidnapper to take the hostage depends on the sign on the left-hand side of (2). If the sign is positive. the kidnapper will take the hostage; this is the case the smaller the expected loss qx of the kidnapper is, and the larger w and aare. Finally, it is interesting that y and z do not enter explicitly into the result, but only implicitly via their relation x < z.

Of course, the model poses a special difficulty for applications, insofar as the payoffs to the kidnapper and the family (*x* and *w*) are compared with each other. How will the kidnapper determine what loss on his side (i.e., how many days in jail) corresponds to the pain of the family if one of its members is executed?

Returning to the issue of negotiating with terrorists, one may ask what the value of the two models for these very serious and complicated problems may be: do they really help to develop a formal theory if something like that is at all possible? The answer may be found in the recent Avenhaus and Zartman (2007) book *Diplomacy Games* which does not explicitly deal with this special subject, but elaborates in de-

tail the usefulness of formal models in international negotiations. The two models presented here do not provide concrete advice. Instead, they show what the modules of any analysis should be, what information has to be collected, what parameters, for example, payoffs and event probabilities, have to be estimated, and what might be considered a solution to the problem. The *Analytical Framework for Negotiation* as developed by PIN works here yet again.

Rudolf Avenhaus

References

Faure GO, Zartman IW (eds), *Negotiating* with *Terrorists*. Forthcoming.

Ellsberg D (1975): Theory and Practice of Blackmail. In OR Young (ed) *Bargaining:* Formal Theories of Negotiation, University of Illinois Press, Urbana, IL, USA

Selten R (1985): A Simple Game Model of Kidnapping. In R Selten, *Models of Strategic Rationality*. Kluwer Academic Publishers. Dordrecht. Netherlands.

Avenhaus R, Zartman IW (2006) (eds): *Diplomacy Games—Formal Models and International Negotiation*. Springer, Heidelberg, Germany.

PIN-Points

ocesses of International Negotiation Program Network Newsletter 30/2008

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Issue Editor: Franz Cede

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Negotiation Studies in Taiwan

egotiation studies in Taiwan at present $oxed{\mathsf{N}}$ can be understood at three levels: academic, governmental, and business. These are briefly depicted and reviewed below.

Academic Level

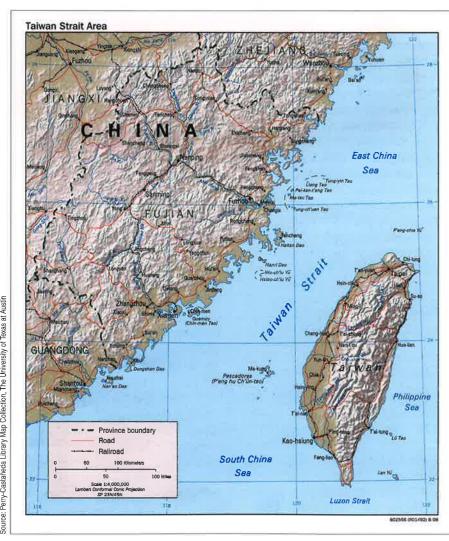
Negotiation studies in Taiwan are mainly at the level of colleges and universities in Taiwan rather than other educational settings. According to a recent Master's thesis entitled "Content Analyses of the Theses and Dissertation in the Research Field of Negotiation in Taiwan," (Huang, 2007) which focused on examining negotiation studies "in terms of four dimensions—volume, subject area, research method, and phase-modeling," negotiation studies in Taiwan have grown steadily in volume for the past four decades. The research was conducted and analyzed systematically regarding a total of 208 Taiwan negotiation theses and dissertations, the first MA thesis on negotiation having been completed in 1975 and placed in Taiwan's National Central Library.

As demonstrated, the volume in the subject areas of politics, diplomacy, law and management, business and economics predominates over other subject areas, and the most utilized research methods lie in "the historical approach and the organizational approach" rather than "game theory, psychological approach, (and) content analysis approach" (Chung, 2001). As to the phase-modeling dimension, the thesis indicates that the problem-solving phase counts more than the initiation phase and resolution phase, both in theory and practice. Its findings also mention that "Western negotiation theories have dominated Taiwan negotiation academia for the past four decades." Coincidentally, this corresponds to the fact that even the latest translated work on negotiation from English into Chinese, as a research study and as a college negotiation textbook in Taiwan, is a rendition of Negotiation originally authored by Roy J. Lewicki, David M. Saunders, and Bruce Barry (Chen and Zhang, 2007). The reason why there have been fewer localized negotiation studies seems to be that negotiation as a whole has been regarded more pragmatically as an issue-centered communicative speech act with a view to meeting the immediate substantive interests in social contexts rather than pedagogically

as a discipline/course as established/offered in a negotiation curriculum design on campus.

In his article "Negotiation Theory and Practice: Negotiation Pedagogy in Business and Management School," Chung (2001) makes an elaborate survey on the negotiation-related courses taught at several major business and management schools from 1990 to 2000 in Taiwan. In addition to the negotiation curriculum design provided for business and management majors as described above by Chung, similar negotiation courses are actually offered as well to college students specialized in communication, humanities, foreign languages, applied linguistics, foreign diplo-

macy, international relations, and political science. Apart from colleges and universities, university-affiliated research centers in Taiwan, such as the Center for International Negotiations and Interpretations (CINI) of National Taipei University, of which the present writer is currently in charge, also offer regular domestic and international negotiation courses, workshop and training programs to out-of-campus students and conduct issue-centered negotiation studies. Independent research institutes, such as Chung-Hua Institution for Economic Research (CIER), have undergone similar negotiation programs and research projects as needed and appropriate since its establishment. There are, however, few studies



Negotiation studies in Taiwan have been primarily aimed at cross-strait negotiation. "Taiwan has long suffered diplomatic predicaments in negotiating political issues internationally because of China's claim (disputed completely by Taiwan) that 'Taiwan is not a sovereign state' and that 'Taiwan is part of China.'"

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Taipei, Taiwan

on how the findings of negotiation studies are applied to negotiation instructions at the academia curriculum design on or off campus in Taiwan.

That the problem-solving phase counts more than the initiation phase and resolution phase, as found by Huang's work, has also been echoed by other negotiation researches in Taiwan in the past two decades, particularly in respect of business negotiations in Taiwan because business negotiation practitioners are in more urgent need of reaching a mutually satisfactory agreement on various issues at the negotiation

Among the leading figures engaged in the negotiation studies at academia in Taiwan are: Dr. Ling-mei Huang (Imhuang@ cc.shu.edu.tw) of Shi Hsin University who has focused on negotiation and communication; Dr. Tsungting Chung (ttchung@yuntech.edu.tw) of National Yunlin University of Science and Technology on trade, economy, cross-cultural negotiation and mediation; Dr. Chung-Chian Teng (ccteng@nccu. edu.tw) and Dr. Kwei-Bo Huang (kweibo@ yam.com) of National Cheng-Chi University on political communication and political affairs negotiation respectively; Dr. Bi-rong Liu (brliu@ms22.hinet.net) of Soochow University on international negotiation, life negotiation and negotiation strategy and tactic: and Dr. Peter Y. H. Chen (vhpc@mail. ntpu.edu.tw) of National Taipei University on international negotiation, negotiation rhetoric, and negotiation interpretation.

There seems to be a lack, however, of an academic negotiation mechanism to integrate the scattered faculty professionals on negotiation in Taiwan to form a more effec-

tive and powerful coalition of teamwork of negotiation studies at Taiwan's academia. The establishment of a guasi-PIN Network to concretize and solidify such a coalition in Taiwan would thus seem indispensable in the future.

Governmental Level

Governmental agencies that have selfinitiated or sponsored negotiation studies in Taiwan are mostly issue-centered in a more case-by-case pragmatic approach than the academic institutes. Because of their policy-bound concerns, the governmental agencies will generally form a task force and conduct the assigned research by themselves or refer them to colleges or research institutes. Taiwan's Council of Agriculture, for example, appointed the Taiwan Institute of Economic Research (TIER) to conduct a research on Japan's fishery negotiation strategies and tactics in 2000 with a view to using its findings to improve and enhance Taiwan's fishery negotiation strategies and tactics.

It is worth noting here that facing the future urgent needs of negotiating trade and economy issues globally is vital for Taiwan. This is particularly so, given that Taiwan has long suffered diplomatic predicaments in negotiating political issues internationally because of China's claim (disputed completely by Taiwan) that "Taiwan is not a sovereign state" and that "Taiwan is part of China." A brand new negotiation office was thus established on 30 March 2007, with the name of MOEA (Ministry of Economic Affairs) Office of Trade Negotiations. It has focused on creating new mindsets and negotiating skills on trade and economic negotiations at the government level in Taiwan. This newly established agency is predicted to play a more active and contributive role on the international arena of trade and economic negotiations.

Because of the special stance between China and Taiwan, particularly between CCP (Chinese Communist Party) and KMT (Kuomintang) since 1949 (the year that divided two political entities across the Taiwan Straits), negotiation studies in Taiwan have been primarily aimed at the cross-strait negotiations ever since 1949. The historical breakthrough through the well-known Koo-Wang Talk held in Singapore in 1993, for example, triggered more negotiation studies in this connection. The present chief designer of the cross-strait negotiation in policies and practices at the governmental level is Taiwan's Mainland Affairs Council (MAC), working with its quasi-governmental agency, the Straits Exchange Foundation (SEF), acting as the only authorized negotiator talking directly with its Chinese counterpart, Association for Relations Across the Taiwan Straits (ARATS) on anything but sovereign issues. However, both SEF and ARATS have been somewhat dormant for quite a long time because of the somewhat passive attitude and unyielding Taiwan-centered ideology of the DPP (Democratic Progressive Party), the present ruling party to negotiate with China. Nevertheless, this stagnant crossstrait negotiation impasse is expected to be broken off since the recently won the landslide presidential election on 22 March 2008. Because of the many first-hand historical contacts between KMT and CCP



Taiwan Fugang Fishery Harbor. The Taiwan Institute of Economic Research is conducting research on Japan's fisheries to enhance Taiwan's fishery negotiation strategies and tactics.

since 1945, the new president elect to be sworn in on 20 May 2008 would definitely encourage and support "fresh" cross-strait negotiations studies in Taiwan both in theory and practice at the government as well as academic level.

Business Level

There have not been many non-governmental and non-academic negotiation studies in the business sectors in Taiwan, except for the fact that some leading business enterprises generally hold their negotiation studies on business-relevant and targeted issues in their R&D departments. It is observed that these business negotiation studies, which are completely different from those conducted at the academic and governmental levels, are more bound up with skills and tactics and have a more specific and pragmatic approach rather than theoretical orientation.

More practical workshops and training programs that are related to the World Trade Organization (WTO) and the organization of Petroleum-Exporting Countries (OPEC) issues are, and will obviously be appearing, on the most popular business negotiation agendas. It suggests further that these business negotiation studies cannot be considered complete and reliable without taking the legal documents into account. Kuang (1999) thus indicates that the contract negotiation has become a crucial

part of every business negotiation issue, including those presented, for example, by both the labor and the capital in collective bargaining in Taiwan. More negotiation studies on business negotiation practices and on issue-centered legal pluralism to support making a deal are required in the future.

Final Note

To sum up, negotiation studies in Taiwan are mainly led by colleges and universities, with scattered professionals around the island at the academic level; they are issue-centered, case-by-case engagements, whenever needed, at the governmental level with a particular convergence on the cross-strait negotiation between China and Taiwan. They are tied in with skills and tactics in business transactions, and also with cross-cultural communication at the business level.

As the study of Chinese negotiation behavior has become the focus in the conflict resolution and negotiation research, along with its growing influential position in political and economic arena, Taiwan, with its Chinese heritage and its Western experience and research training, can play a pivotal role and act as bridge in this field. It also appears that further negotiation studies in Taiwan are to be conducted to integrate all negotiation resources and professionals from the past to the present. Tai-

wan will join international conflict resolution professional bodies and organizations in this connection, in terms of exchange and coalition with a view to Taiwan making more comprehensive contributions to the field of negotiation studies in a global sense.

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National Taipei University

Reference

Chen PYH, Zhang, Q (2007): *Trans. Negotiation*. Taipei: Hua-Tai Publisher.

Chung T (2001): Negotiation Theory and Practice: Negotiation Pedagogy in Business and Management School. *Commerce and Management Journal*, 2(3) (September): 233-258.

Huang L (2007): Content Analyses of the Theses and Dissertations in the Research Field of Negotiation in Taiwan. Masters Thesis. Institute of Applied Foreign Languages, National Yunlin University of Science & Technology.

Kuang NJ (1999): *International Contract Negotiation Practices*. Taipei: CETRA.

Taiwan's Foreign Relations

The People's Republic of China (PRC) replaced Taiwan at the United Nations in 1971, and Taiwan's diplomatic position has continued to erode, as many countries changed their official recognition from Taipei to Beijing. As of March 2008, Taiwan had formal diplomatic ties with 23 countries. Taiwan has cultivated informal ties with most countries to offset its diplomatic isolation and expand its economic relations. A number of nations have set up unofficial organizations to carry out commercial and other relations with Taiwan. Including its official overseas missions and its unofficial representative and/or trade offices, Taiwan is represented in 122 countries. Recently, Taiwan has lobbied strongly for admission into the United Nations and other international organizations. The PRC opposes Taiwan's membership because Beijing considers Taiwan to be a province of China, not a separate sovereign state.

U.S. Department of State http://www.state.gov/r/pa/ei/bgn/35855.htm

PIN Books

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ISBN 1-4039-4161-0

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I.W. Zartman, editor, 1994, Jossey-Bass Inc. Publishers, San Francisco, CA, USA.
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Franz Cede was the legal adviser to the Austrian Foreign Ministry (1993–1999). He participated in numerous international conferences and bilateral negotiations and was a regular delegate to the General Assembly of the United Nations. In the UN Committee on the Peaceful Uses of Outer Space, Dr. Cede chaired two work-

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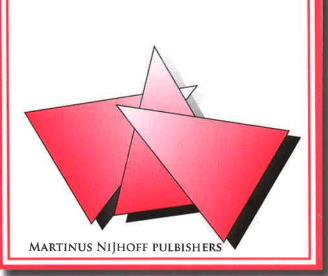


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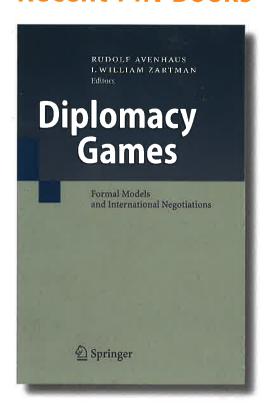
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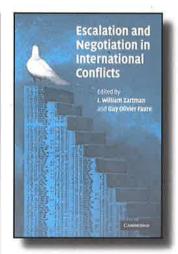
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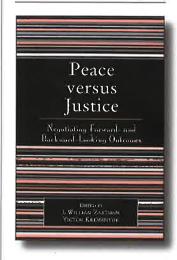
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