READING BETWEEN THE MATRICES:
CONFLICTING STRATEGIES IN
THE STRATEGY OF CONFLICT

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Thomas Schelling is one of the first writers to apply game theory to the study of international relations and his 1960 work, *The Strategy of Conflict*, is the first book in which he does this. As such, this work is a seminal text in what is currently one of the dominant family of approaches to international relations theory -- rationalism. This paper offers a close reading of *The Strategy of Conflict* which highlights the many significant tensions the text is heir to and seeks to demonstrate that in many places and on many important questions, Schelling's arguments undermine themselves. Read in this way, *The Strategy of Conflict* is not just one of the seminal works in the rationalist tradition of international relations theory, but is also a testament to the limitations, difficulties and perhaps even impossibility of using game theory to explain international relations.

**The tradition: a morality tale**

If Schelling can convincingly be read in this way, as being critical of certain rationalist ideas about international relations, then this paper also raises questions about the way Schelling, or at least *The Strategy of Conflict*, has been received and transmitted by the tradition of international relations theory. His work is usually taken, both by those who have and those who have not read it, to advocate vigorously a game theoretic approach to the study of international relations. However, it will be argued here that such an interpretation of the book can be sustained only by a highly selective reading which systematically ignores or diminishes its powerful arguments against a rationalist, formalistic, deductive approach to the understanding of international relations.

Therefore this paper aims to do for Schelling's *The Strategy of Conflict* what Rob Walker has done for Machiavelli's *The Prince*, Michael Williams for the work of Rousseau, and Richard Ashley for Waltz's *Man, The State and War* -- that

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3 As just one instance of this, consider Johan Galtung's review of *The Strategy of Conflict* on its publication where he describes Schelling as contributing "greatly to the theory of games." (*American Journal of Sociology*, July, 1961, p.118.) The reviewer of the book for *Current History* describes the work as "Another technical study . . . [which] represents an effort to apply the mathematical theory of games to Cold War bargaining techniques." (April, 1961, p.242). One exception to this is Timothy W. Luke who sees in Schelling's work an "... implicit anticipation of the semiotic perspective," but here Luke only cite the 1966 work *Arms and Influence* to support his characterization of Schelling ("What's Wrong with Deterrence?", pp.207-229 in *International/Intertextual Relations*, James Der Derian and Michael Shapiro, eds., Lexington Books, Lexington, Massachusetts.) But it is more usual to see Schelling listed along with game theorists. See, for example, Roger Hurwitz, "Strategic and Social Fictions in the Prisoner's Dilemma." pp.113-134 in Der Derian and Shapiro, op. cit., footnote 1, p. 131.


6 Richard Ashley, "Living on the Borderlines: Man, Poststructuralism and War", pp. 259-321 in Der Derian and Shapiro, op. cit.
is, to challenge the reading that is so readily accorded these texts. In the case of Schelling, however, (and also Waltz), what is particularly striking is the rapidity with which a single reading has come to be the definitive one, for it is only three decades since The Strategy of Conflict was published. This paper, also like the work of Walker and Williams, raises some wider questions about the way the canon is produced and reproduced in the study of international relations.\textsuperscript{7}

Apropos of this wider question, it is noteworthy that the continuous reading and rereading of classical texts and reckoning over what they said and what they meant that characterizes other branches of political theory is curiously and disturbingly absent from international relations theory. At least two significant dangers accompany this complacent transmission of the tradition. One is pedagogical. Such complacency discourages the exercise of critical awareness in reading of texts and if there is one thing the political theorists agree upon -- but this is an enormous if -- it is that the skill or reading texts critically and responsively, and not assuming their meaning to be secured before they are read, is valuable and should be cultivated. This concern with pedagogy is relevant to academics and students alike -- I do not assume that such a concern is limited to the theorist's role as teacher but also holds for his or her development as a thinker.

The other major danger derives from the fact that these canonical texts play a part in constructing the world of international relations as we live it daily -- they shape explicit ideas and tacit presuppositions about the dynamics of world politics, about relations among citizens of different states, nations or racial groupings, about the relationships between citizens and political decision-makers, about responsibility for the outcomes of international politics, and so on.\textsuperscript{8} Single, closed readings of texts passed down without demur, serve to confirm dominant views of international politics by default by precluding any questioning of them. Such a practice is detrimental to those who would preserve as well as to those who would change aspects of world politics because in either case it is not possible to understand any phenomenon without also having some sense of its other -- of what is excluded or denied by it.\textsuperscript{9} Such understanding is not a sufficient but is probably a necessary condition of action that seeks either to defend or reform social structures, practices or attitudes.

In connection with these dangers, I would argue that one of the most interesting and valuable consequences of the recent post-structuralist approach to international relations theory has been the attention paid to the classical textual foundations of the discipline and the disturbances of canonical readings of the canon that this close scrutiny has occasioned. As James Der Derian describes this approach, its

organizing strategy is to deconstruct or denaturalize through detailed interpretation the inherited language, concepts and texts that have constituted privileged discourses in international relations . . . The method is to disturb habitual ways of thinking and acting in international relations. The goal is to provide new intelligibilities and alternative possibilities for the field.\textsuperscript{10}

\textsuperscript{7} Walker, op. cit., p. 26, and Williams, op. cit., who comments

. . . that any attempt at all has been made to understand Rousseau's vision of the interstate relations of his time without adequately discussing his vision of society and the state is, to say the least, surprising. Yet this is almost without exception what the realists have attempted to do."

\textsuperscript{8} Cf. pp. 13-14 of Michael Shapiro's "Textualizing Global Politics" pp.11-22 in Der Derian and Shapiro, op. cit.

\textsuperscript{9} ibid. p.15.

\textsuperscript{10} p.4 of James Der Derian, "The Boundaries of Knowledge and Power in international relations" pp.3-10 in Der Derian and Shapiro, op. cit. Cf. p.8 and p.28 of Walker, op. cit.
However, in contrast to DerDerian, I would characterize the disturbance of habit and the generation of new possibilities as both being goals of the post-modern approach and claim that there is no single method by which this may be done -- the means are multiple and may vary from critic to critic or several may be employed by the same writer in a single text.

**Continuing to read philosophers in a certain way**

The "method" employed in this paper to challenge the dominant reading of Schelling is inspired by the work of Jacques Derrida and in particular his idea of deconstruction. According to Derrida

One can say a priori that in every proposition or in every system of semiotic research . . . metaphysical presuppositions coexist with critical motifs. And this by the simple fact that up to a certain point they inhabit the same language. Doubtless grammatology is less another science, a new discipline . . . than the vigilant practice of this textual division.\(^{12}\)

And, the previous point about post-structuralism's multiplicity of methods notwithstanding, as Donna Gregory observes,

This strategy of counterposing a text's own logics to the explicitly stipulated views of its authors . . . [is an] analytic move common to post-structuralist writers.\(^{13}\)

Following Derrida, however, I am reluctant to use the term "method" to describe the practice of deconstruction because it could connote an unduly mechanistic or ritualistic way of reading texts. A deconstructive reading of a text is not produced by entering the text armed with a battery or ready-made techniques for dismantling its internal logic. Instead such a reading needs to be much more sensitive to the particularities of the text under study. As Ashley describes it

Rather than impose alien standards to pass judgement on a discourse, deconstruction appeals to a discourse's own terms to show how it undermines, undoes and displaces its own most central and certain voices.\(^{14}\)

Therefore, the term deconstruction describes more a critical orientation to a text than a specific method for destroying it. A deconstructive reading combines a careful knowledge of any text's dominant grammar and logic with a refusal to let these determine absolutely the interpretation of it. With a deconstructive disposition texts are read, in the first instance at least, deferentially although the reader remains attentive to those fissures and crevices where the text's dominant logic fails. On this understanding, deconstruction is not a type of vandalism done to texts but nor does it assume that a text is or should be a uniform, fully coherent statement purged of all tension or contradiction. Rather there is an awareness that at any time a text may undermine its own central propositions. The text's own deviations from its dominant logic are not discounted by the deconstructive reader as regrettable flaws in an otherwise rigorous reasoning process, but rather signify

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13 Donna Gregory, "Foreword" in Der Derian and Shapiro, op. cit. p. xvii.

14 Ashley, op. cit. footnote 319, p. 58.
the complexity and ambiguity involved in attempts to make or communicate meaning. The points of liability that deconstruction may disclose in a text illustrate that things are not as tidy, straightforward or univocal as they might, on a conventional reading, seem.

**In a nutshell**

Although it is a compilation of ten essays, some of which had been published separately prior to *The Strategy of Conflict*, several key themes recur throughout this book and lend it a certain coherence. The major ideas are relevant to this discussion can be summarized as follows.

- It is possible, and analytically useful, to classify a set of human interactions as bargaining relationships. No matter which milieu such exchanges occur in and no matter who the interacting entities are, there are certain features of the bargaining relationship per se that pertain to all these situations. The corollary of this is that certain dynamics operate in all such situations and it is possible to outline what rational behaviour would be in such situations, irrespective of their particular details. As Schelling writes,

> The philosophy of the book is that in the strategy of conflict there are enlightening similarities between, say, maneuvering in a limited war and jockeying in a traffic jam, between deterring the Russians and deterring one's own children or between the modern balance of terror and the ancient institution of hostages.\(^{15}\)

- The defining feature of a bargaining situation is interdependent decision-making. This means that the rational strategy for either player depends on what the other does. Moreover, each player knows that his or her actions affect and are affected by the other's, so the players have a mutual recognition of their importance for and dependence on one another.\(^{16}\)

- Up until now, the utility of game theory's application to political science has been limited by its preoccupation with zero sum games. Most social and political relationships are not based on pure conflict and so are not illuminated by the zero sum form.\(^{17}\) Schelling advocates the marginalization of the zero sum model so that it comes to be seen as a limit case on the continuum from pure conflict to pure cooperation. At the polar end of this spectrum is the assurance or pure coordination game, where both players' interests are identical and entirely harmonious.\(^{18}\) It is the space between these extremes that Schelling wants to open up to analysis and he employs the idea of the mixed motive game for this.

- Mixed motive games are characterized by their players having some common and some conflicting interests -- the relative proportion of either motive determines on which part of the continuum the situation belongs.\(^{19}\) In international relations, the best example of a pure conflict situation is a war in which each side is bent on the extermination of the other. Most other exchanges between states, even in the military sphere, such as deterrence, limited warfare or disarmament, display a combination of interests in cooperation and competition and so are better depicted as mixed motive games.\(^{20}\) However,

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\(^{16}\) Schelling, op. cit., p.9, p.16, pp.21-22, pp.86-87.

\(^{17}\) ibid., p. 83.

\(^{18}\) ibid., p.83.

\(^{19}\) ibid. p.87.

given its emphasis on mixed motive games, it would seem that the book is somewhat mistitled. It is not solely about conflict but about conflict and cooperation. Nor is there any single dominant strategy in such mixed motive games, for the optimal strategy in any game depends upon the blend of motives. Thus a more accurate, if less elegant, title would have been *Strategies of Conflict and Cooperation*.

- In a mixed motive game a player can have an interest in cooperation even if its partner, with whom it is in partial competition, benefits more from the exchange than it does. The rationality of such cooperation depends on whether the player gains more for itself with cooperation than it would without. Thus there is an attribution of rational egoism to players of mixed motive games. As Schelling writes,

  > . . . winning in a conflict does not have strictly competitive meaning; it is not winning relative to one's adversary. It means gaining relative to one's own value system.\(^{21}\)

- Because in many social situations, players have some shared interests and know themselves to have them, the process of coordinating expectations is crucial in achieving mutually acceptable outcomes. This interest in coordinating expectations in mixed motive games highlights a salient difference between rational strategies in these games as compared with zero sum games. In mixed motive games it can be useful for one player to keep the other as fully informed as possible about its intentions, moves, and so on, for when such information is available it can be easier to coordinate expectations. In a pure conflict relationship, by contrast, it is never, or rarely, in player's interests to disclose information about its intentions, motives, moves or capabilities.\(^{22}\)

   At one level all this seems fairly straightforward, and, as game theory goes, relatively unobjectionable. However, when we look more closely at the details of Schelling's arguments it becomes apparent that some of the demands he makes of the game theoretic approach far exceed, and indeed subvert, the very features that make it what it is and distinguish it from other approaches to the explanation of social and political relationships. Thus I agree with Martin Shubik who, when reviewing on its publication, claimed that there was actually very little game theory in the book. In Shubik's opinion,

   > . . . this book would have been a much stronger contribution had most of the references to game theory been deleted. Although the formal structure of that topic could have been of assistance to the type of analysis presented by Schelling, there is little evidence that it has been used . . . [the book's] weakness lies in the author's apparent lack of appreciation of the power of the methodology which has already been developed and which could have been of considerable use in furthering his own analysis.\(^{23}\)

   However, unlike Shubik, I do not attribute Schelling's failure to produce a robust game-theoretic analysis of international relations to his ignorance of, or unwillingness to exploit the existing methodology. Rather I would contend that, as laid out in at least, Schelling's explanatory framework and the requirements he makes of an explanation of bargaining situations are so riddled with tensions and contradictions as to be unworkable within the parameters of game theory.

### Out of bounds by game theory's rules?

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One of the criticisms of much previous game theory that recurs throughout The Strategy of Conflict is that it has been conducted at too high a level of abstraction. In contrast, Schelling insists upon the centrality of context in explaining social and political interaction.

... we change the character of the game when we drastically alter the amount of contextual detail that it contains or when we eliminate such complicating factors as the players' uncertainty about each other's value systems. It is often contextual detail that can guide the players to the discovery of a stable, or at least mutually nondestructive, outcome.

This insistence, however, represents the crucial point of liability in Schelling's work, for to insist upon the importance of context to the extent that he does, is to undermine the formalistic technical and deductive features that are so constitutive of game theory.

This emphasis on context, and even on the apparently minor details thereof, is well illustrated in Schelling's discussion of how players coordinate expectations. He points out that in actual situations the frequency with which the actors' expectations can converge around a single point is far greater than an objective calculation of the random likelihood of this occurring would suggest. This is because of the power of what could be termed local knowledge -- although this is not Schelling's terminology -- in such situations. When actors know one another well enough they can predict with some success how the other will act. Moreover, in situations of interdependent decision-making, prediction requires not only that actor x know actor y well enough to anticipate what he or she will do but also that actor x can imagine what actor y will think actor x will do while knowing that actor x will also be trying to make the same convoluted calculations.

Thus it would seem to follow that the likelihood of expectations converging when actors cannot communicate directly with one another will vary with their level of intimacy and the degree of empathy between them which allows them to intuit what the other might do in a situation of uncertainty. Schelling acknowledges this when he writes that

... coordination is not a matter of guessing what the "average man" will do. One is not, in tacit coordination, trying to guess / what another will do in an objective situation; one is trying to guess what the other will guess one's self to guess the other to guess and so on ad infinitum.

Outcomes that are contingent upon such finely tuned knowledge of another are hardly susceptible to formal modelling. On this point, Schelling writes that most situations

... provide some clue for coordinating behaviour, some focal point for each person's expectation of what the other expects him [sic] to expect to be expected to do. finding the key, or rather finding a key -- any key that is mutually recognized as the key becomes the key -- may depend upon imagination more than on logic, it may depend on analogy, precedent symmetry, aesthetic or geometric configuration, casuistic reasoning and who other parties are and what they know about each other.

(This last reference to who the parties are and their level of familiarity also lends support to the point above about the importance of the degree of intimacy and empathy between the players.)

24 Schelling, op. cit., p.9, p.119.
25 ibid., p.162.
26 ibid. p.57.
28 ibid., p.57. Cf. p.69.
As Schelling's reference here to anything that is mutually recognized as the key being so suggests, outcomes that depend upon such finely tuned mutual understanding are not susceptible to calculations of probability made from disengaged standpoint either. This means that, according to Schelling, the game theorist has to know the details of the situation he or she is casting as a game almost as intimately as the participants themselves. The attempt to explain or predict the outcome of such a situation from the outside, to take the "view from nowhere", as it were, is useless. As he writes:

...we have to recognize that the kind of things that determine the outcome are what a highly abstract analysis may treat as irrelevant detail.

And a little further on:

There is...no way that an analyst can reproduce the whole decision process either introspectively or by an axiomatic method. There is no way to build a model for the interaction of two or more decision units, with the behaviour and expectations of those decision units being derived by purely formal deduction.

Therefore context is of critical importance in two senses -- the context in which the actors find themselves is an important determinant of their decision making and the theorist trying to model that decision-making must also have a high degree of awareness of the peculiarities of their context.

**Archi-bargaining**


30 ibid., p.162. Cf. here what Graham Allison says about the difference between the rationalist (Model I) and bureaucratic models in their explanations of state decision-making, ...analyses that concentrate on processes and procedures of organizations, or on pulling and hauling among individuals, demand much more information... For a Model I analyst, information about a split between McNamara and the Joint Chiefs over the proper response to Soviet missiles constitutes gossip or anecdote but not evidence about an important factor... Model III's delineation of positions and its attention to the advantages and disadvantages of various players, strikes other analysts as an undue concern with subtlety. (p.111 in "Explaining the Cuban Missile Crisis" pp.105-119 in *Conflict and Conflict Management*, R.O. Matthews et al., eds., Prentice-Hall, Toronto, 1984.)

31 ibid., p.163.

32 The term "archi-writing" is a Derridean neologism. One of Derrida's main arguments is that it is not possible to draw a strong distinction between speech and writing, even though this has been attempted repeatedly throughout the Western philosophical tradition. Moreover, this tradition has privileged speech over writing as being more immediate and allowing for clearer, purer and more direct communication. This is why Derrida characterizes this tradition as "phonocentric." He challenges this strong distinction between speech and writing and contends instead that they share similar logics and dynamics -- that the way meaning is produced makes them more similar than different. As such speech is not the privileged activity vis-a-vis writing but becomes a sub-species of a wider category, archi-writing. As Culler describes it, "This possibility of being repeated and functioning without respect to a particular signifying intention is a condition of linguistic signs in general, not just of writing..." Writing-in-general is an archi-écriture, an archi- or proto-writing which is the condition...
As forementioned, Schelling claims that actors can coordinate expectations much more frequently than might be expected even in situations where they are prevented from communicating directly. This brings to the fore what is often taken to be a salient distinction in game theory -- the difference between tacit and explicit bargaining. In explicit bargaining the actors can negotiate directly with one another through conversation. In tacit bargaining they cannot and are restricted to communicating through other signs, such as the moves they actually make. Prima facie it would seem that these represent two quite different types of situations with different logics pertaining to each. It would also seem that the explicit bargaining circumstance would represent the ideal form and the tacit the inferior one, deficient in contrast to the fuller, freer explicit from. As Schelling notes

There is no apparent need for intuitive rapport when speech can be used and the adventitious clues that coordinated thoughts and influenced the outcome in the tacit case revert to the status of accidental details.\(^{33}\)

However Schelling does not accept this hierarchy of bargaining forms nor even that there is necessarily a strong distinction between the two. Instead he claims that explicit bargaining is a subset of the broader category of tacit bargaining. Thus even bargaining games that belong to the explicit subset have all the features of tacit bargaining and these features remain important in the explicit bargaining process. Therefore all bargaining is always already tacit and some has the added dimension of allowing conversation.

\[\ldots\text{since even much so-called "explicit" bargaining includes maneuver, indirect communication, jockeying for position, or speaking to be overheard, or is confused by a multitude of participants and divergent interests, the need for convergent expectations and the role of signals that have the power to coordinate expectations may be powerful.}\]^{34}\]

Thus tacit bargaining is a form of archi-bargaining, as it were, and examining its features tells something about all bargaining relationships. Therefore Schelling asserts that

\[\ldots\text{any analysis of explicit bargaining must pay attention to what we might call the "communication" that is inherent in the bargaining situations, the signals that the participants read in the inanimate details of the case \ldots tacit and explicit bargaining are not thoroughly separate concepts }\ldots\]^{35}\]

Schelling also points out that although explicit bargaining is usually taken to provide more direct and transparent interaction because it allows speech, in practice speech can be used to deceive. To get a better sense of a player's real motives and intentions it is necessary to attend to his or her gestures as well as words. In this he would concur with Wittgenstein's assertion that "Our talk gets its meaning from the rest of our proceedings."\(^{36}\) This point provides a further reminder of the importance Schelling attributes to context -- the interpretation of words should take place against the background of the deeds that accompany them. Actions may reinforce the claims, promises or threats issued verbally, or they may contradict them.


\(^{33}\) ibid. p.67.

\(^{34}\) ibid. p.74.


In either case, actions are an important source of information about the other -- like words they are ways in which actors express and disclose themselves. Schelling also acknowledges though that, like words, actions can be designed to deceive and conceal. Thus he is not establishing a new hierarchy between words and deeds with deeds being fuller, truer and more transparent manifestations of the actor's intentions but rather collapsing any strong distinction between them and implying that both function as signs.

Indeed, at one point when it looks as if Schelling is just about to erect such a hierarchy, suggesting that while both words and deeds convey information, deeds are more likely to be an actor's authentic self-expression because they are more costly than "cheap talk," the possibility of such a distinction quickly evaporates for he acknowledges that some words are costly too -- those that take "the form of enforceable threats, promises, commitments and so forth." Thus Schelling is here adumbrating a version of Austin's speech act theory, for what he is describing are performatives even if they are not so labelled. For Schelling however, any analysis of how to do things with words could equally be described as being one of how to say things with deeds.

The tacit dimension

Given Schelling's emphasis on context in explaining social interaction and his interest in the tacit dimensions of any bargaining exchange, it would not be too farfetched to consider him as belonging to that cluster of twentieth century thinkers who may be called the "theorists of the background." This group includes writers like Martin Heidegger, Ludwig Wittgenstein, John Dewey, Hans-Georg Gadamer, Charles Taylor and Thomas Kuhn. Despite the several and salient differences among these writers, one of the things they share is an awareness of the importance of the taken for granted, often unarticulated background assumptions that inform social action and make interaction, communication and meaning possible. The significance of any sign -- word, deed, gesture or symbol -- relies not just on its meaning but also on the background milieu against which it shows up. This enabling background often works imperceptibly; while it allows things to show up

37 Schelling, op. cit., p.117.

38 loc. cit.

39 ibid., p.117.

40 This is the title of a book by John Polanyi, Doubleday, New York, 1966.

41 My reasons for characterizing Dewey, Taylor and Wittgenstein in this way should be apparent in the text. For Heidegger, see Being and Time, J. Macquarie and E. Robinson, translators, Harper and Row, New York, 1962, and also Hubert Dreyfus, Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I, MIT Press, Cambridge, Mass., 1991. Kuhn's argument about the role of paradigms in natural science can be read as a theory of the background because a paradigm, once it has attained dominance, becomes part of the taken-for-granted background of scientific practice. Its premises can be unearthed and examined if challenged but, according to Kuhn, this is fairly rare and occurs mostly in times of epistemological crisis. For the most part the premises of the paradigm remain beyond scrutiny but underpin day-to-day scientific inquiry and testing. As noted these are all twentieth century thinkers but Tracy Strong characterizes Friedrich Nietzsche as a philosopher of the background too. See Friedrich Nietzsche and the Politics of Transfiguration, University of California Press, Berkeley, 1975, pp.78-84. This argument about the background as a condition of possibility for knowing the world can be seen as an alternative to the foundationalism that characterized modern Western epistemology from Descartes to Kant.
and bear significance it is not always evident that such possibilities are conditional upon this background milieu and it often goes unrecognized. In most instances the background functions like the reliable help; that is so hard to find these days -- it keeps things running smoothly and goes about this work so unobtrusively that its operations are unnoticed. Some indication of this is evident in Wittgenstein's description of his own philosophy.

\[\ldots\text{we are not contributing curiosities however, but observations which no one has doubted, but which have escaped remark only because they are always before our eyes.}\]  

These background assumptions are usually unarticulated but can be unearthed, articulated and examined albeit not all at the same time. Some things must remain in the background as a condition of the possibility of others showing up or being articulated.

A clear statement of the importance of the background and of its intersubjective character is offered by John Dewey when he writes that

\[\text{The things which we take for granted without inquiry or reflection are just the things that determine our conscious thinking and determine our conclusions. And these habits which lie below the level of reflection are just those which have been formed in the constant give and take of relationships with others.}\]

The importance of the background is also explored by Wittgenstein in On Certainty where he argues against the possibility of radical scepticism. In the following passages, this enabling background is called a world picture.

\[\ldots\text{my picture of the world} \ldots\text{is the inherited background against which distinguish between true and false}\]

\[\text{I have a world picture. Is it true or false? Above all it is the substratum of all my enquiring and asserting. / The propositions describing it are not all equally subject to testing.}\]

\[\text{What stands fast does so, not because it is intrinsically obvious or convincing: it is rather held past by what lies around it.}\]

\[\text{What I hold fast to is not one proposition but a nest of propositions.}\]

\[\underline{\text{References}}\]


45 ibid., #162, p.23.

46 ibid., #144. Cf. #225.

47 ibid., #105, p.16.
All testing, all confirmation and disconfirmation of a hypothesis takes place already within a system . . . The system is not so much the point of departure, as the element in which arguments have their life.48

The argument made above about our inability to scrutinize all the elements of this background simultaneously is evidenced in Wittgenstein's claims that

. . . whenever we test anything, we are already presupposing something that is not tested.49

and

. . . the questions that we raise and our doubts depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn.50

As Taylor explains it in "Interpretation and the Sciences of Man"51 (sic), this background consists of a web of shared meanings that are created and reproduced inter-subjectively and are independent of any single individual although they are activated by and through individuals.52 Things which are shared in this way are thus qualitatively different from things which he elsewhere describes as convergent.53 Convergent meanings are those which individuals happen to share, but could just as easily not. They are more random and incidental than shared meanings and are not constitutive of a community or group in the way shared meanings are. With convergent meanings, there is no sense that the meaning exists for us, that it belongs irreducibly to a we. Two individuals could differ over matters that are simply a question of convergent meaning but still belong to the same community whereas adherence to certain shared meanings defines individuals' membership in a group or community.

However, it should be noted here that it is not always possible to infer adherence to shared meanings from individuals' discovery that certain meanings are shared -- if for example they are articulated for the first time -- awakens individuals to their joint membership of a community. Thus for Taylor, shared meanings can be implicit or explicit -- in the latter case they are described as common. The defining characteristic of common meanings is not just that they belong irreducibly to a we, but that those who share them know themselves to do so.54 Meanings can go from being shared to common if they are articulated for then they move from the tacit background of our understanding to the foreground of conscious awareness.55

48 ibid., #105, p.16.
49 ibid., #163. Cf. #167, #337, #344, #354, #519.
50 ibid., #341, p.44.
52 ibid.

53 "Irreducibly Social Goods."
Despite his terminology I would argue that when Schelling refers to the convergence and coordination of expectations as if this were a process occurring between two discrete and autonomous individual entities, it makes more sense to think of his work relying on notions of shared meanings, inter-subjectivity and the tacit background of understanding. On this reading then, Schelling is exempt from one of the criticisms Roger Hurwitz levels at game theory in general -- its neglect of shared values.\(^\text{56}\) This is apparent in Schelling's forementioned argument about the surprising frequency with which actors can converge upon a common point in a situation of uncertainty and restrained communication. It makes sense to see such convergence as being made possible by the background assumptions that actors in a given situation share, for were they not shared in this lasting way, action that relies upon them would be much rarer. Conversely, the less actors have in common, the less they belong to a "we" no matter how expressly articulated, the less likely is such tacit coordination.

Some indication of the importance of shared meanings can also be inferred when Schelling writes that

> Among the possible sets of rules that might govern a conflict, tradition points to the particulate set that everyone can expect everyone else to be conscious of as a conspicuous candidate for adoption; it wins by default over those that cannot be readily identified by tacit consent.\(^\text{57}\)

This point is echoed in his discussion of the conventions of limited warfare.

> . . . what we are dealing with in the analysis of limited war is tradition. We are dealing with precedent, convention and the force of suggestion. We are dealing with the theory of unwritten law.\(^\text{58}\)

And

> The fundamental characteristic of any limit in a limited war is the psychic, intellectual / or social characteristic of being mutually recognized by both sides as having some kind of authority, the authority deriving mainly from the sheer perception of mutual acknowledgement, of a "tacit bargain" . . . . The authority is in the expectations themselves, and not in the thing that expectations have attached themselves to.\(^\text{59}\)

However, it should also be noted here that Schelling's argument about the importance of what can be called shared meanings is not implacably conservative; he does acknowledge that such meanings can be destroyed and new ones created.\(^\text{60}\) Newly created shared meanings are more likely to be common, i.e., explicitly acknowledged, than tacitly shared. Only after they have gained wide currency can they slip into the background milieu of the taken-for-granted.

If my claim that Schelling's convergent meanings or expectations can be better understood as shared meanings is a feasible one, its significance is more than semantic. As Taylor notes, the analysis of shared or common meanings requires a collectivist ontology, a notion of subjectivity that operates at the level of the "we", no matter how extensive, rather than just the "I".\(^\text{61}\) However, the ontology of rationalism is an individualist one, for rationalism takes the individual human actor to

\(^{56}\) Hurwitz, op. cit., footnote 21, p.133.

\(^{57}\) Schelling, op. cit., p.91.

\(^{58}\) ibid., p.260.

\(^{59}\) ibid., pp.260-261.

\(^{60}\) ibid., p.264.

\(^{61}\) "Interpretation," op. cit., p.40.
be the basic unit of social action and explanation, and requires that collective action or social structures be ultimately accounted for in individual terms, i.e., as analytically decomposable and reducible to individual choices and practices. From this perspective, shared meanings are best comprehended as the aggregate of individual (or convergent in Taylor's usage) meanings. Thus the latent ontology discernible in Schelling's work differs from that of game theory in general

Thus the latent ontology discernible in Schelling's work differs from that of game theory in general . . . where agents are isolated individuals with external and accidental relationships . . . created by the contradictions and convergence of their respective goals and goal pursuits. Of course, the question that arises from this claim that there is a latent collectivist ontology discernible in Schelling's work that provides the logical conditions of possibility for some of his explicit propositions is: So what? What is the "cash value" of such a contention? What impact does its recognition have on the conduct of international relations inquiry? One consequence of this idea is that it signals the existence of a major gulf between Schelling's work and that of game theory and the rationalist tradition in general. This could suggest one of two things. Either Schelling is an outlier as game theorists go or maybe other game theoretic/rationalist approaches also rely on a hidden but potent collectivist ontology. It is interesting to note in this regard that this second possibility can be inferred from Keohane's forementioned attempt to assess the relative merits of the rationalist and what he calls reflectivist approaches to international relations theory. What emerges from Keohane's article is that the rationalist approach is not ultimately independent of reflectivism but must be grounded in the sorts of social forces that only reflectivism addresses. His argument is that individual actors' preferences and choices can be explained only with reference to social institutions, which, in turn, are interwoven with social practices. Such forces exist independently of any particular individual actors and so no satisfactory account of them can be offered by rationalism because of its individualist ontology. Therefore, as I read him, Keohane is implying that rationalism and reflectivism are not, in the last analysis, separate and competing approaches to the explanation of social action that offer rival accounts of the same range of phenomena but that rationalist explanations necessarily repose upon reflectivist ones. Rationalist explanations necessarily have a much more limited domain than reflectivist ones and thus cannot stand alone as comprehensive accounts of social action. And, underlying the reflectivist approach is a collectivist ontology so that, in the last analysis, rationalism, despite itself, is grounded in a collectivist ontology.

. . . rationalist theories of specific institutions have to be contextualized before they are empirically useful; that is, they must be put into a prior framework of institutions and practices . . . at some point one must embed the analysis in institutions that are not plausibly viewed as the product of human calculation and bargaining.

Although the concerns of the current discussion do not justify a detailed discussion of what impact the recognition of a collectivist ontology might have on international relations theory in general, some brief remarks are warranted. With regard to the issue Keohane goes on to discuss -- international institutions, their genesis, evolution and durability -- an analysis informed by a collectivist ontology would probably talk about such institutions with the vocabulary of John Ruggie rather than Oran Young. While Young's widely-cited definition of regimes as "social institutions around which actors' expectations

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62 Cf. Axelrod, op. cit., p.6, p.24. As such, rationalism is a form of what Ashley describes as behaviouralist narratives (op. cit., pp.275-276.)

63 Hurwitz, op. cit., p.120.

64 Keohane, op. cit., p.385, p.389.

65 ibid., p.390.
converge\textsuperscript{66} is compatible with an individualist ontology of international relations in its portrayal of regimes as things created by the voluntary actions of individual states. Ruggie discusses regimes in terms of intersubjectivity and shared social purposes.\textsuperscript{66} This view of regimes would be unlikely to treat them as living and dying according to the interest and intentions of individual states but as capable of acquiring a power and legitimacy of their own and of shaping and constraining the actions of even the most powerful states. The recognition of a collectivist ontology would also be compatible with the sort of description Hedley Bull gives of the international system, i.e., as a society of states rather than the mere sum of its individual parts.\textsuperscript{67}

However, no matter what the particular effects of the awareness that an alternative to an individualist ontology is available to the study of international relations might be, its overall impact would be considerable. This is because all the methodological warfare that goes on in international relations theory is always, albeit if only implicitly, a dispute about ontology. Methodological questions can never be resolved at the epistemological level alone because any contention about how to best understand something presupposes some notion of what that thing is and, therefore, why it is better understood in one way than another. The wider recognition of the possibility of a collectivist ontology would therefore bring into the foreground of debate some of these important, but currently underlying, questions.

**Identical actors or actors with identities?**

It can also be argued that the degree to which such taken for granted, shared meanings exist in any bargaining situation will vary not just with whether the two actors belong to some community but also with the type of actors they are. Thus the likelihood of expectations converging, or of tacit meanings being shared, will differ when we are dealing with members of a family, anonymous motorists or two or more states. And, not only will the probability of shared meanings surfacing differ but the ways in which these meanings are shared and the ways in which the actors know, or discover them to be so, will differ too depending on the type of actors involved. Therefore it would seem that by extending the logic of Schelling's position, the key features of any bargaining situation become -- who the actors are, how well they know one another and what the ways in which they know one another are. This contention is lent some support by Schelling's claim that

\[\ldots\text{in the mixed motive game, two or more centers of consciousness are dependent on each other in an essential way. Something has to be communicated, at least some spark of recognition must pass between the players,}\ldots\text{both players are dependent on some degree on the success of their social perception and interaction.}\textsuperscript{68}\]

Presumably a face-to-face relationship between family members or friends will involve a different sort of mutual recognition and knowledge and produce a different process whereby expectations are coordinated than the more distant way in which two motorists decide who will pass first or two panhandlers who will have which side of the street. These different ways of knowing and cooperating with the other will differ again from the ways in which two states know and interact with one another. The type of knowledge available to the states of one another are myriad and far exceed the sorts of understanding any two individuals can have of each other. Thus the sorts of interaction any two entities engage in will differ significantly


\textsuperscript{68} ibid., p.163.
according to what sorts of entities they are and as such the bargaining situations engaged in by each type will differ considerably and perhaps radically.

I would argue that the corollary of Schelling's emphasis on what I earlier described as local knowledge -- that familiarity with another actor that makes cooperative action possible without articulated negotiation -- requires an abandonment of his tenet that we can meaningfully analyze something that is the bargaining relationship per se, irrespective of the milieu in which it occurs and of the type of actors it engages. To continue to talk in this way would be to indulge in the very abstraction Schelling criticizes and yet talking in this way is one of the defining features of the game-theoretic approach to the explanation of social action. Therefore Schelling's insistence upon the incorporation of more empirical detail into game-theoretical analysis would appear to undermine the methodological foundations of game theory because, to repeat, the centrality of local knowledge and the importance of contextual specifics in shaping bargaining outcomes would appear to render attempts at formal, deductive, acontextual and generalizable modelling futile at best and ridiculous at worst.

Thus there is a certain irony when, writing as a conventional game theorist, Schelling upbraids deterrence theory for its inelegance because praising theories that are elegant, lean and parsimonious is typical of the rationalist methodological-cum-aesthetic sensibility. I hope to have shown, however, that certain of Schelling's own methodological dicta militate against useful explanatory theory being appraised by this scale of values. The classical rationalist assumption is that simplifying situations, getting to their essentials, makes them clearer and more explicable, whereas as I read Schelling, he seems to be closer to the Wittgensteinian position which questions this association and suggests that sometimes it is seeing things in their complexity, detail, uncertainty and perhaps confusion that affords greater perspicuity. As such, Schelling would be more at home among theorists of language than game theorists.

It must be noted here though that this point about the difficulty of speaking about a bargaining relationship per se, irrespective of who or what sort of entities its protagonists are, is hardly a novel one in international relations theory. Many writers of different persuasion have cautioned against assuming that we can automatically extrapolate from individual or group behaviour to state behaviour. E.H. Carr's characterization of the state as a group person is one variation on this theme. Hedley Bull's argument that anarchy between states is different from anarchy between individuals is another. Susan Strange

69 ibid., p.vi, p.162.

70 ibid., p.7.

71 In this regard, it is unclear to me why criteria that may be appropriate for appraising evening dress -- elegance or good housekeeping -- parsimony -- are relevant to the analysis of international relations. I can only guess that it is assumed that theories that are lean expedite the advancement of learning because they are easier to grasp, apply and transmit. Perhaps too there is a fear that the acknowledgement of complexity will induce inaction and that this would be detrimental to an area of scholarship that aspires to being as policy relevant as does the study of international relations.


contends that bargaining between states is not the same as that between social groups like capital and labour. And of course there is Graham Allison's argument that bureaucratic politics is quite a different process from that of individual interaction. Thus it would seem that the burden of proof rests with those who posit the essential similarity of bargaining relationships in different milieus. To do this, game theorists must abstract considerably from the specific details of any bargaining situation. Yet, as has been shown, these details are, in Schelling's estimation, of crucial significance.

Irrational animals

Another way in which Schelling defects from the rationalist camp of social theory, at least in passages of *The Strategy of Conflict*, is with the rich and thick notion of rationality he employs. In general, the rationalist approach depicts reason to be an individual property that manifests itself in acting efficiently to achieve one's ends, order one's preferences consistently and maximize utilities. In contrast to this, for Schelling, reason is not the inalienable, immutable possession of individuals but also takes physical situations and institutional forms. Rationality is a variegated and protean quality and can . . . include such things as one's hearing aid, the reliability of the mails, the legal system, and the rationality of one's agents and partners.

Schelling observes that should game theory retain its notion of rationality as cool calculation applied to an internally consistent value system, this will limit the scope of the theory's application. Just how widely it would apply, how realistic it might be, is a matter of judgement. However, some indication of how broad a jurisdiction such an approach might enjoy in Schelling's estimation can be gleaned from his discussion of irrationality.

Rationality is a collection of attributes and departures from complete rationality may be in many different directions. Irrationality can imply a disorderly and inconsistent value system, faulty calculation, an inability to receive messages or to communicate efficiently; it can imply random or haphazard influences in the reaching of decisions or the transmission of them or in the receipt of conveyance of information, and it sometimes merely reflects the collective nature of a decision among individuals who do not have identical value systems and whose organizational arrangements and communication systems do not cause them to act like a single entity.

With such a panoramic view of irrationality, it is hard to envisage what sort of human behaviour would escape it purview! This suggests that the explanatory scope of any theory based on the traditional thin notion of rationality described above would be limited indeed. This passage illustrates the incredible irony of *The Strategy of Conflict*. This text, which is supposed to be a foundational writing in the rationalist tradition of international relations theory, and which affirms that "... the assumption of rational behaviour is a productive one" and useful in "the production of theory" is here caught implying that most, or at least much, human interaction is irrational. As such, this interaction is unlikely to be susceptible to the

76 Allison, op. cit.
77 ibid., p.18.
78 ibid., p.4.
79 ibid., p.16.
80 ibid., p.4. Cf. p.16.
machinations of game theory, for game theory is a heuristic device that is really only compatible with a rationalist ontology. Once the traditional rationalist presuppositions about human behaviour are questioned, let alone thrown into chaos as Schelling seems to do here, the explanatory utility of such a device is significantly reduced.

**international relations - an n-person game?**

The final feature of Schelling's analysis of international relations that militates against the application of game theory to it that will be discussed here derives from his ideas about the role of ordinary citizens in international politics. Early in *The Strategy of Conflict* he notes in passing that "... we are all, in fact participants in international conflict."  

This is a striking claim whose consequences for the study of international politics, and its ethics, would be enormous, yet Schelling neither pursues nor explains exactly what he means by it here. A version of this idea seems to emerge in his discussion of pre-commitment when he suggests that one way in which a decision-maker in a democratic state can commit him or herself irrevocably to a course of action is to publicize and seek popular support for it. Here Schelling argues that the feelings and beliefs of the domestic population, or prominent groups therein, can exert considerable influence over decision-makers and affect the outcome of international negotiations because the decision-maker can use the existence of such domestic pressure to indicate an enforced intransigence to his or her bargaining partners.  

As *The Strategy of Conflict* argues, tying one's hands in this way and putting oneself beyond the reach of persuasion can be empowering in certain circumstances because it communicates to the bargaining partners that they must make concessions to accommodate their behaviour to yours since you have no room for manoeuvre or compromise.  

If the citizenry of a democratic state can enjoy this sort of influence over and participation in international politics, it would appear that the dynamics of international politics would be too many and too complex to be captured by any matrix or even decision tree. This is because the game-theoretic approach to international relations needs to depict the state as a unitary actor so that the requirements of this type of explanation can be met. These include the actor having - a capacity for rational calculation, knowledge of the range of possible outcomes and the relative value that could be attached to each, a consistent preference ordering, the ability to respond rationally and with a single action to the other player and so on. Without these, game theory is largely meaningless and, in turn, without the assumption that the state is a unitary actor, it is hard to appreciate how its actions could meet such requirements.  

Of course, one way for game theory to accommodate the sort of complexity that is opened up when international relations is seen to involve both bargaining between and within states is to employ the notion of multiple or nested games, so that any single actor can be playing several games at once. However, while the incorporation of such complexity might enhance the explanatory power of game theory, it does diminish some of its other appeals, such as its elegance and parsimony. More importantly though, such a treatment of complexity still assumes the state to be a unitary actor, albeit one playing several games simultaneously. Yet it is not clear whether such a postulate can remain intact once we allow, with Schelling, that ordinary citizens might exercise considerable influence over the process and outcomes of international politics. When international decision-makers cast themselves as citizens' representatives it is not clear any more even where the demarcation between state and society might be drawn. It may be that in such circumstances the state in the broad sense of the term, i.e., the whole society as opposed to the complex of institutions that administers that society -- may be treated as if it were a unitary

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81 ibid., p.3.
82 ibid., pp.28-29.
actor, but this seems to be stretching it.\textsuperscript{84} Such a depiction of the very real differences that exist within any society over almost any issue in international politics, be it something momentous like war with Iraq or more prosaic like farm subsidies or oil prices. It might be replied here that the state could still be perceived as a unitary actor if it represented the views of the majority within society on some international matter. If so, Schelling's claim that we are all participants in international conflict would have to be modified to read that we are such only if our view accords with that of the majority. However, I would suggest that in the last analysis, once the idea that ordinary citizens are participants in international conflict -- and presumably also cooperation -- is introduced and taken seriously, many of the explanatory prerequisites for the application of game theory to international relations have to be jettisoned.

\textbf{US = us?}

As citizens we may all be participants in international conflict but according to the traditional norms of social science, as authors of texts that seek to analyze and explain social behaviour, we should be nonpartisan; we should strive for objectivity, scientific detachment, and the "view from nowhere." With regard to this ethos, it is interesting to note that Schelling sometimes writes \textit{The Strategy of Conflict} as a United States citizen, as evidenced by his automatic association of the US with "us." Just one illustration of this comes when he refers to situations that would usually be characterized as conflict, like that between the Russians and us\ldots

\textsuperscript{84} Compare here Hurwitz's claim that for game theory, \ldots states are characterized as unitary actors. Otherwise it is possible to imagine a broadly based citizen's movement with sufficient power to sanction leaders in states who acted hostilely towards other states. (op. cit., footnote 14, p.132.) However I would submit that even if such a movement was domestically based it would still be hard to reconcile this idea with that of the state as a unitary actor.

\textsuperscript{85} ibid., p.207. Cf. p.6.
Some of the other examples I have come across are According to Model II's account of the crisis, our success included crucial organizational rigidities and even mistakes. Except for the routines and procedures that produced an inaccurate estimates of our capability for a surgical air strike, the probability of war would have been much higher. (Allison, op. cit., p.117.)

Within a few years of the end of the war, Germany, Japan and Italy had become close allies of the United States, while the Soviet Union had become our principal adversary. (Bruce Bueno de Mesquita, The War Trap, Yale University Press, New Haven, 1981, p.38.)

. . . the Japanese hoped to concentrate sufficient effort on the attack at Pearl Harbor to destroy our Pacific Fleet and to demoralize the American public . . . (ibid. p.85.)

The United States has accepted the Anglo-French order. We have not upset the working rules. (A.F.K. Organski, "The Power Transition" in International Politics and Foreign Policy, James Rosenau, ed., The Free Press, New York, 1961, p.317.)


Our foreign policy is in crisis . . . (Stanley Hoffman, Gulliver's Troubles or the Setting of American Foreign Policy, McGraw Hill, New York, 1968.)
one of the seminal articulations of this approach,\textsuperscript{87} also argued in that article that Schelling's work in game theory actually relied upon some insights of the classical tradition.

\ldots Schelling's illuminating observations about violence and international politics in every case have the status of unprovable and untestable judgements, that have not been and could not be demonstrated by his work in formal game and bargaining theory. Schelling happens to combine his interest in the latter techniques with a shrewd political judgement and a philosophical skill in thinking out problems in terms of their basic elements.\textsuperscript{88}

Here Bull is in effect arguing that the classical approach, with its emphasis on judgement, provides the implicit background that allows Schelling to make certain claims about how states interact. Thus game theory is again seen to repose upon something wider than itself which it does not acknowledge and which cannot be accounted for within its terms.

Given Schelling's imbrication in the classical tradition, it would seem that some of the neo-classical writers in international relations theory, like Alexander George and Richard Smoke, Ned Lebow and Janice Gross Stein, could claim to be his legatees with as much legitimacy as game-theoretic and rationalist writers like Robert Axelrod, Bruce Bueno de Mesquita, Glenn Snyder and Paul Diesing, and Steven Brams and Marc Kilgour might.


\textsuperscript{88} ibid., p.368.