Psicología Política, Nº 27, 2003, 79-91

INTEGRATIVE COMPLEXITY OF WESTERN AND TERRORIST LEADERS IN THE WAR AGAINST THE AFGHAN TERRORIST REGIME

Peter Suedfeld
The University of British Columbia

RESUMEN

La complejidad integradora, una medida de procesamiento cognitivo de la información, en estudios anteriores ha detectado cambios relacionados con las crisis internacionales: plantea niveles relativamente altos en las comunicaciones de los líderes en la fase previa a una resolución pacífica, disminuciones unilaterales en los momentos previos a un ataque sorpresa y disminuciones bilaterales antes del estallido de una espiral bélica. El estudio actual mide los niveles de complejidad integradora, previos al ataque terrorista del 11 de septiembre en EE.UU. y durante el año y medio del contraataque en Afganistán. Las medidas de la complejidad de las comunicaciones de los líderes de cuatro naciones occidentales (US, Inglaterra, Francia y Alemania), la OTAN, los talibanes y Al-Qaeda señalan algunos rasgos nuevos relacionados con características específicas de los líderes y su nación u organización. En general, sin embargo, el modelo de cambios de complejidad es muy similar a los encontrados en las guerras anteriores.

ABSTRACT

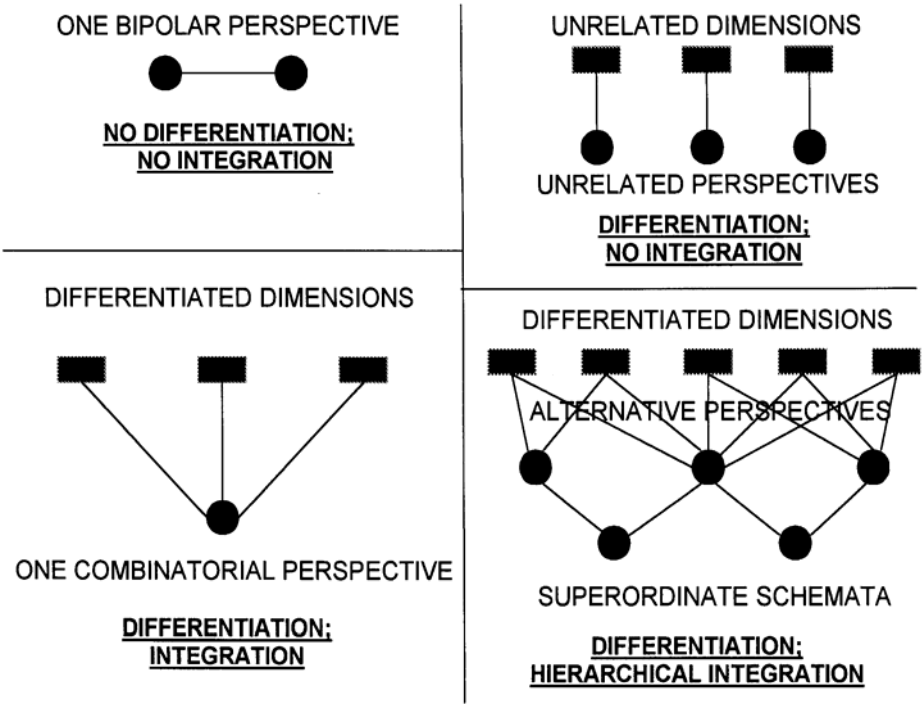
Integrative complexity, a measure of cognitive information processing, has in past studies shown reliable changes associated with international crises: sustained relatively high levels in the communications of leaders prior to a peaceful resolution, unilateral decreases on the part of a nation's leaders prior to its launching a surprise attack, and bilateral decreases before the outbreak of an escalation spiral war. The current study measured integrative complexity levels before the Sept. 11, 2001 terrorist attack in the U.S. and during the ensuing 1-1/2 years of the coalition counterattack in Afghanistan. Complexity measures of the communications of leaders of four major Western nations (the US, the U.K., France, and Germany), NATO, the Taliban, and al-Qaeda indicated some novel features associated with the specific characteristics of individual leaders and their nation or organization. In general, however, the pattern of complexity changes was highly similar to those found in previous wars.

Key words: integrative complexity, national leaders, Sept 11, 01 terrorist attack, counterattack

A number of research groups have devoted several decades of work to studying the information processing characteristics of national and international leaders during periods of crisis and difficulty. The current investigation is in the tradition of focusing not on what leaders say or think, but in how they respond to the situation –that is, in the cognitive *structure* underlying their speeches and writings, rather than in the *content* of those communications.

The structural variable that is assessed in this research is integrative complexity. Complexity can be scored in almost any verbal material, whether written or spoken, produced in response to specific questions or spontaneously: test completions, letters, diaries, interviews, press conferences, books, articles, memos, diplomatic notes, military orders, reports, debates, and so on practically *ad infinitum* (Suedfeld, 2003; Suedfeld, Tetlock, & Streufert, 1992).

Figure1. Integrative Complexity Schema



Complexity is a joint function of two aspects of the structure of thought. One is the recognition that a topic has more than one dimension or quality, or that more than one legitimate perspective on it can exist. This component is called *differentiation.* The other is that the differentiated dimensions, qualities, or perspectives are perceived as related to each other and/or to some overarching conceptual schema. This component is called

integration. Obviously, differentiation is a necessary although not sufficient condition for integration: without differentiation, there is nothing that can be integrated. Figure 1 is a graphic representation of the major levels of complexity.

Among other projects, we and other researchers have tracked the integrative complexity of leaders involved in international confrontations. Some of these culminated in surprise strategic attacks; some in an escalation spiral leading to inter-nation war; others were resolved through negotiations; a few long-term rivalries involved periodic wars against a background of chronic hostility and low-intensity violence not reaching the level of all-out war. A few examples of the crises that we have studied are shown in Table 1.

Table 1. Examples of international crisis

Category	Example	Year
SURPRISE STRATEGIC ATTACK	North Korean invasion of South Korea [a]	1950
CONFLICT SPIRAL WAR	Outbreak of World War I [b]	1914
PEACEFUL RESOLUTION	Cuban Missile Crisis [b]	1962
LONG-TERM RIVALRY	India vs. Pakistan [c]	1947

[a] Suedfeld, P. & Bluck, S. (1988). Changes in integrative complexity prior to surprise attacks. *Journal of Conflict Resolution, 32*, 626-635.
[b] Suedfeld, P. & Tetlock, P.E. (1977). Integrative complexity of communications in international crises. *Journal of Conflict Resolution, 21*, 169-184.
[c] Suedfeld, P., Jhangiani, R., & Weiszbeck, T.L. (2003, July). *Integrative complexity of leaders in the confrontation between India and Pakistan*. Paper presented at the annual meeting of the International Society of Political Psychology, Boston.

After the terrorist attacks of September 11, 2001, complexity was for the first time measured in leader communications during an unconventional warfare situation. The study (Suedfeld & Leighton, 2002) sampled materials from the first four of the five phases of the conflict, as shown in Table 2.

The current study extends the period of data collection to two additional phases. One is the end of the ground war, with the installation of the post-Taliban government and the return of the former king to Afghanistan, around May 1, 2002. The other is the post-war phase, from early May of 2002 to the end of that year.

Table 2. Afghanistan war timeline

• Baseline	2001 before Sept. 11
• Attack	Sept.11 to 15, 2001
• Coalition-Building	Sept. 16 to Oct. 6, 2001
• Counterattack	Oct 7, 2001 to May 1, 2002
• Post-War	May 2 to Dec. 31, 2002

Method

As shown in Table 3, the level of complexity is scored on a seven-point scale (Baker-Brown, Ballard, Bluck, de Vries, Suedfeld, & Tetlock, 1992). Odd numbers identify the four major nodes (see Fig. 1); even numbers (transitional scores) indicate that there is some indication of the next higher score, but that it is not clear enough to raise the score to that level.

Unlike in the previous study (Suedfeld & Leighton, 2002), the current one concentrates on Western leaders. Scores were derived for the highest officials of four major Western nations: the United States, the United Kingdom, France, and Germany. NATO was included, as a Western multinational military and diplomatic entity. Scores of the Afghan terrorist leader-

ship of the Taliban and al-Qaeda were also calculated where available. In this case, because of the scarcity of scorable material, the communications of several major figures, not only the top leader, were scored (cf. Suedfeld & Leighton, 2002).

Table 3. Integrative complexity scoring system

Score	Characteristic
1	Undifferentiated, No Integration
2	Transitional
3	Differentiated, No Integration
4	Transitional
5	High Differentiation, Low Integration
6	Transitional
7	High Differentiation, High Integration

Our sources were written or videotaped statements, interviews, and press conferences. Some included question-and-answer sessions from the audience. For materials in languages other than English, official translations were used. Transcripts were obtained from a variety of academic institutions, news organizations, and official government Internet web sites by a research assistant familiar with complexity coding and the experimental design. Scorers had gone through a training workshop and reached a level of at least r=0.85 with expert scoring on a set of test paragraphs. For reliable scoring, at least ten randomly selected paragraphs were used for each data point.

Results and Discussion

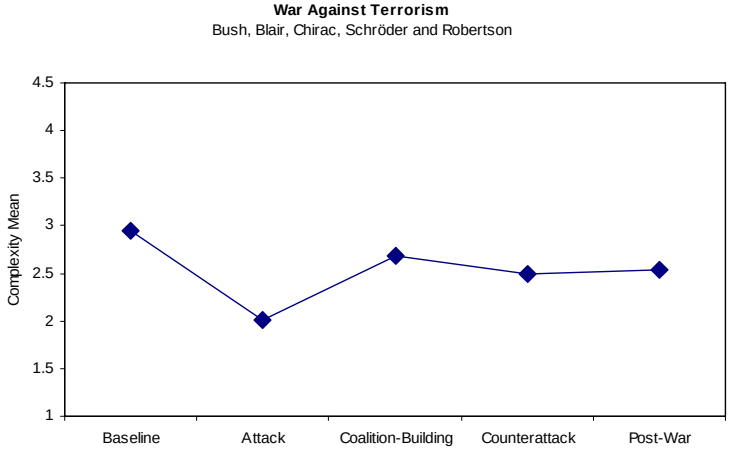
Figure 2 shows the integrative complexity scores of the five Western leaders. Overall ANOVA showed significance for the Leader main effect, $F(5,527)=9.53$, $p<.001$, and the Leader x Phase interaction, $F(16,527)=2.21$, $p=.005$. The main effect for Phase was not significant, $F(4,257)=1.23$.

Suedfeld and Leighton (2002) had found evidence of post-9/11 "disruptive stress," a drop in complexity frequently found when high and continuing demands made by the situation deplete the leaders' cognitive resources.

This was found in all of the leaders.

Our current study, of Western leaders only, shows the same pattern: high complexity during the baseline period, a steep decline in the few days following the attack, and the predicted recovery to higher levels as they began to plan a coalition to counter the terrorist regime in Afghanistan. A minor decrease occurred during the counterattack. Through the post-war period, complexity remained quite high (mean of 2.5), although not as high as before 9/11.

Figure 2. All Western Leaders: Mean Complexity



We now examine further disaggregated graphs of complexity changes among the Western leaders, in order of immediate and central involvement in 9/11 and the war in Afghanistan.

President Bush's complexity was very low and stable during the first three phases. There could not be a major decrease from baseline to 9/11 because of an obvious floor effect, but there was a small decline. The expected increase during coalition-building did not occur, a finding that calls for further investigation. During the counterattack, however, his complexity rose to 2.5. It stayed in that range throughout 2002.

The increase disconfirmed two of our earlier hypotheses: that Mr. Bush's low complexity was either a stable personality characteristic, or the reflection of conservative beliefs involving low value conflict (Suedfeld & Leighton, 2002).

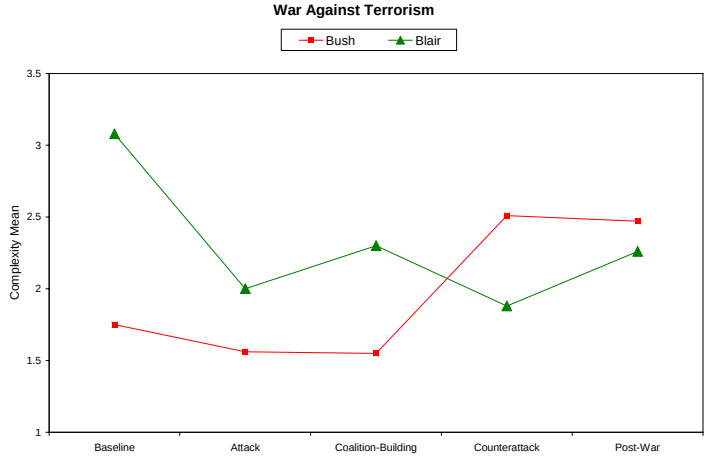
Our third hypothesis now seems more plausible: that the president's early low level of complexity was due to disruptive stress caused by his serious political difficulties beginning with the contested election results of

2000 and the consequent shadow on the administration's mandate. This was exacerbated by 9/11, which was without a doubt more stressful for Americans than for any other nation. The terrorist strikes were directed against core symbols of the United States; and the initial strikes were followed by fears of more such attacks—no one knew when, where, or how—as well as the spate of anthrax bioterrorism in the US and the so-called Beltway sniper attacks.

However, once the coalition had been put together and the counterattack was progressing, President Bush's level of stress presumably went down. He could then muster the resources for the higher complexity involved in leading an alliance that not only dominated the defeat of the Afghan regime and the post-war reconstruction of Afghan society, but also the continuing world-wide military, diplomatic, and economic campaign against terrorism.

As an interesting side-note, this pattern is reminiscent of the *senior* President Bush's complexity changes before and during the Persian Gulf War of 1990-91. After an initial drop associated with the Iraqi invasion of Kuwait, George Bush continued to show fairly low complexity during the coalition-building period, and then went back up as the war approached, occurred, and ended in victory. In one article about that earlier war, we speculated that "this unpredicted and atypical finding reflects President Bush's growing confidence in the overwhelming military superiority of coalition forces and his certainty of victory when they went into action" (Wallace, Suedfeld, & Thachuk, 1993, p. 103). The same may have been true of his son a decade later.

Figure 3. Bush and Blair



Prime Minister Blair's complexity decreased from baseline to the period immediately after the 9/11 attack, rose slightly during coalition-building, and then decreased again during the counterattack. This pattern is consistent with previous results: leaders whose nation is the target of a surprise attack reliably show substantial reductions in complexity immediately after the onslaught (Suedfeld & Bluck, 1988). The present finding suggests that not only leaders of the target nation, but also their close allies, show this pattern.

The coalition-building interval marked the change from the alarm stage of stress adaptation to the stage of coping or resistance. According to our cognitive manager model (Suedfeld, 1992), such a period of relative calm enables the individual to muster sufficient psychological resources for higher complexity: information is sought and processed, multifactor plans are developed and assessed, different persons and interests are brought together and meshed, and preparations are made for action. When the assembly of the coalition forces had been completed, and military action began, the British government's need for complex problem solving decreased. After the end of the war, higher complexity again became appropriate as the coalition began to reorganize and rebuild the Afghan government and infrastructure. We had found a similar pattern in post-revolutionary governmental leaders (Suedfeld & Rank, 1976).

Figure 4. Central vs. Peripheral Western Leaders

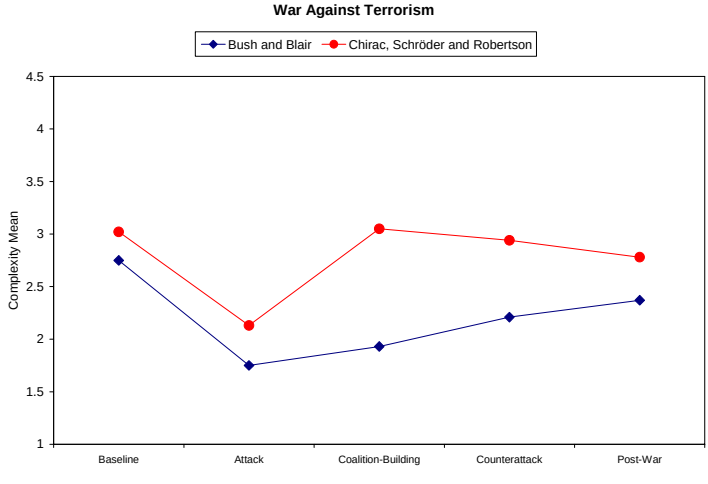
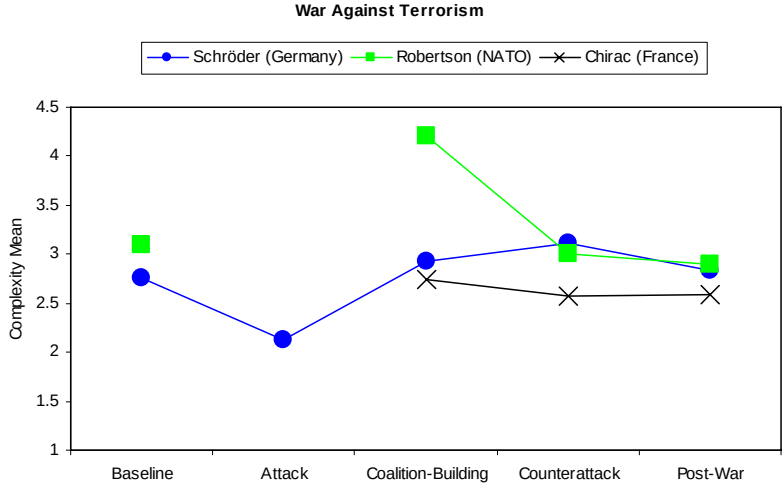


Figure 4 shows the difference between centrally and peripherally involved leaders. As in earlier studies (e.g., Wallace et al., 1993), the most

committed persons –in this case, Bush and Blair– functioned at lower complexity levels throughout all or most of this period than the three less engaged leaders: Gerhard Schröder, Lord Robertson, and Jacques Chirac.

Figure 5 shows the complexity scores of only the less centrally involved Western leaders. The only one of the three peripherally involved leaders for whom we have sufficient scorable data throughout the entire period is Gerhard Schröder, the German Chancellor. He showed the expected drop at the time of the 9/11 attacks, as well as the expected increase during coalition-building. His complexity then remained within the same approximate range during the counterattack and post-war phases. Despite considerable domestic political controversy, Schröder had initiated the first major deployment of German armed forces outside Europe in over fifty years. High complexity may be the problem-solving characteristic of a good cognitive manager under such conditions, which are challenging but not extremely dangerous.

Figure 5. Schröder, Chirac, and Robertson

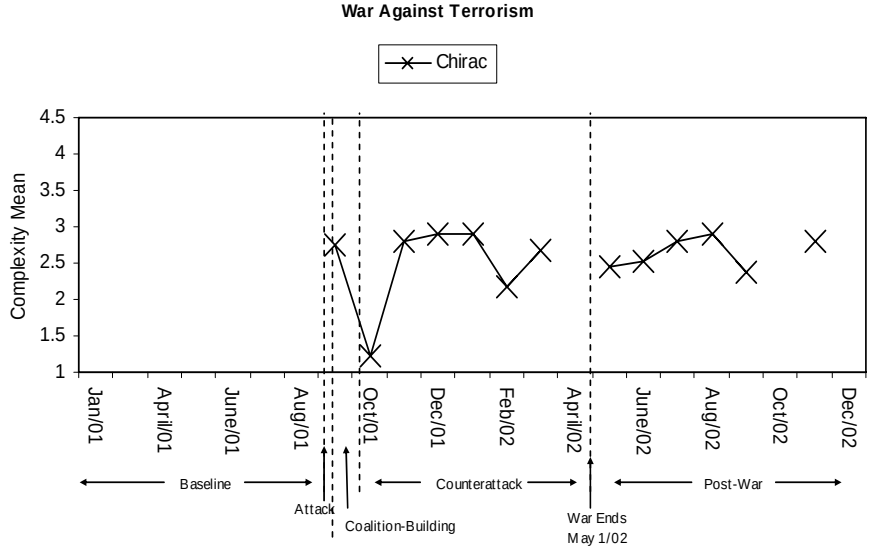


Lord Robertson, Secretary General of NATO, was not under direct severe stress, and had to mediate often inconsistent and sometimes conflicting views among his constituents. The diversity of interests that he had to reconcile was the highest of all of the subjects in this study. Not surprisingly, therefore, he reached the highest score recorded in this study, about

4.2, in the weeks of coalition-building following the terrorist attack. Even aside from that peak, he worked at around the 2.8-3.2 range most of the time, an impressively high level of complexity as well as consistency.

President Chirac's moderately high level of complexity did not change much during the last three phases of the war in Afghanistan. This is compatible with the relative lack of French involvement in the fight against terrorism. However, in spite of this relative stability, a more fine-grained analysis shows that meaningful fluctuations in his pattern do exist (Fig. 6). He recovered rapidly from his complexity drop shortly after the 9-11 attacks. France was only peripherally involved in the crisis, although some French naval and air forces did participate later in the war. Furthermore, Chirac has vacillated about the war against terrorism, and his course between support and withdrawal is also consistent with a higher level of complexity than either wholehearted participation or complete opposition.

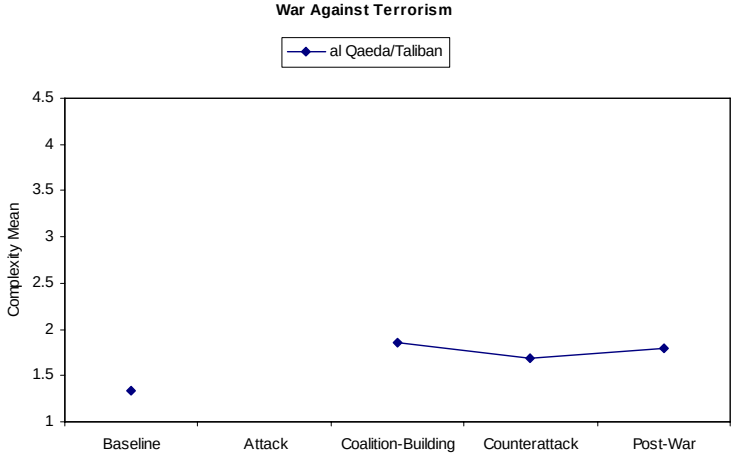
Figure 6. Jacques Chirac



As we know, balancing opposing needs and conflicting values requires complex information processing (Tetlock, 1986). Chirac had to do more balancing of this sort than other national leaders. France is part of the West, and has suffered terrorist atrocities; but it has historically been reluctant to integrate into the Anglo-American alliance, and now has a large Muslim population, many of them immigrants from North Africa.

Because of a scarcity of materials, the scores for the Afghan terrorist regime include second-rank as well as top leaders of al-Qaeda and the Taliban. As predicted, the Taliban/al-Qaeda group showed low complexity throughout. Fanatical devotion to an extremist ideology is theoretically consistent with very low trait complexity, but there have been no studies to examine whether the complexity levels of fanatics are impervious to situational influences. Our data (Fig. 7) seem to show that they are.

Figure 7. Leaders of the Afghan Terror Regime



There may also be a difference among types of extremists. In an earlier study, successful revolutionary leaders showed low complexity during the fighting, and an increase after they replaced the government they had struggled against (Suedfeld and Rank, 1976). Perhaps the Afghan terror leaders would have shown a similar increase had they tried and been successful in building a "normal" state regime. However, as a matter of historical fact, they showed no interest in such a task.

On the other hand, the revolutionary leaders in the earlier study were not terrorists. They fought conventional and/or guerrilla wars against organized government armies. Some, like the leaders of the American Revolution, were not even extremists in the standard sense of that term; but in any case, the terrorist mentality may be unique even compared to most revolutionaries. Thus, terrorist "revolutionists" may not show the same pattern even if they do win.

Alternatively, religious fanaticism may lead to less flexible cognitive processes than political extremism, so that no change could be expected from the Islamic terrorists regardless of the progress of their cause. Last, Bin Laden's own thinking may show chronic disruptive stress from his years of illness and surreptitious activities. His baseline level in this study was so low that a floor effect prevented any substantial decrease at any time during the period covered.

Conclusion

This study has some limitations in the restricted number of subjects and our inability to find scorable materials for every desired occasion. We continue to try to remedy this.

Two major conclusions emerge from the research:

1. Our data on the war against the Afghan terrorists essentially replicate previous findings from a variety of international confrontations and conflicts (Conway, Suedfeld, and Tetlock, 2001; Suedfeld, 2003). This was true for both the individual and the group level of analysis. The replications include a complexity decrease prior to the onset of armed conflict, an increase in complexity during the phase of strategic planning and coalition formation leading up to a counterstrike, and higher complexity among leaders whose nations are less centrally involved in the conflict.

2. The data support a number of our theoretical models: the cognitive manager model (Suedfeld, 1992), the disruptive stress model (Suedfeld and Tetlock 1977), and Tetlock's (1986) hypothesis of higher complexity as a function of conflict among important values.

The examination of individual complexity patterns as they change over time and across situations points the way to more fine-grained analyses in the future. These may shed more light on the interplay between dispositional and environmental influences on complexity of information processing, as well as on interpersonal and intergroup interactions as they affect fluctuations in complexity.

Equally interesting would be the study of complexity in conflict situations other than conventional civil or inter-nation wars. Future researchers may want to look further at the complexity of leaders as they cope with less conventional decision environments. These might include situations of significant violence that does not rise to the level of all-out war, as in the cases of France, Britain, and Israel trying in different ways to cope with Algerian, Malayan, and Palestinian terrorists; or, by contrast, conflicts in which there is an emphasis on nonviolent tactics, such as the Indian Congress Party's civil disobedience campaign against British rule.

References

Baker-Brown, G., Ballard, E.J., Bluck, S., de Vries, B., Suedfeld, P., & Tetlock, P.E. (1992). The conceptual/integrative complexity scoring manual. C.P. Smith (Ed.), *Motivation and personality: Handbook of thematic content analysis* (pp. 401-418). Cambridge: Cambridge University Press.

Conway, L.G. III, Suedfeld, P., & Tetlock, P.E. (2001). Integrative complexity and political decisions that lead to war or peace. In D.J. Christie, R.V. Wagner, & D. Winter (Eds.), *Peace, conflict, and violence: Peace psychology for the 21st century* (pp. 66-75). Englewood Cliffs, NJ: Prentice-Hall.

Suedfeld, P. (1992). Cognitive managers and their critics. *Political Psych.,13*,435-453.

Suedfeld, P. (2003). Integrative complexity in political contexts. In J. Kawata & Y. Araki (Eds.), *Handbook of political psychology* (pp. 52-62). Tokyo: Hokuju Shuppan. (in Japanese)

Suedfeld, P. & Bluck, S. (1988). Changes in integrative complexity prior to surprise attacks. *Journal of Conflict Resolution, 32*, 626-635.

Suedfeld, P., Jhangiani, R., & Weiszbeck, T.L. (2003, July). *Integrative complexity of leaders in the confrontation between India and Pakistan.* Paper presented at the annual meeting of the International Society of Political Psychology, Boston.

Suedfeld, P., & Leighton, D.C. (2002). Early communications in the war against terrorism: An integrative complexity analysis. *Political Psychology, 23*, 585-599.

Suedfeld, P. & Rank, A.D. (1976). Revolutionary leaders: Long-term success as a function of changes in conceptual complexity. *Journal of Personality and Social Psychology, 34*, 169-178.

Suedfeld, P. & Tetlock, P.E. (1977). Integrative complexity of communications in international crises. *Journal of Conflict Resolution, 21*, 169-184.

Suedfeld, P., Tetlock, P.E., & Streufert, S. (1992). Conceptual/integrative complexity. In C.P. Smith (Ed.), *Motivation and personality: Handbook of thematic content analysis* (pp. 393-400). Cambridge: Cambridge University Press.

Tetlock, P. E. (1986). A value pluralism model of ideological reasoning. *Journal of Personality and Social Psychology, 50*, 819-827.

Wallace, M.D., Suedfeld, P., & Thachuk, K.L. (1993). Political rhetoric of leaders under stress: Findings from the Gulf crisis. *J. of Conflict Resolution, 37*, 94-107.

Note: An earlier version of this paper was presented at the annual meeting of the International Society of Political Psychology, Boston, MA, July 2003. The financial support of the Humanities and Social Sciences Research Council of Canada, and the assistance of Elena Kerman, Aneesa Shariff, and Tara L.Weiszbeck, are gratefully acknowledged. Further information about the research program, the scoring of integrative complexity, and related matters is available from http://www.psych.ubc.ca/~psuedfeld/RESTlab/Complexity/index.html

Peter Suedfeld is Dean Emeritus of Graduate Studies and Professor Emeritus of Psychology at the University of British Columbia, Canada. His research focuses on how people cope with and adapt to extreme and challenging environments, including making critical decisions under stress, living in polar and space capsules, and surviving war and genocide. His most recent book is *Light from the Ashes: Social Science Careers of Young Holocaust Survivors and Refugees.*
Department of Psychology, University of British Columbia, 2136 West Mall, Vancouver, BC Canada V6T 1Z4.