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Canadian Federal Elections: Motive Profiles and Integrative Complexity in Political Speeches and Popular Media†

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ABSTRACT Materials from the popular media and the speeches of federal party leaders, appearing approximately 2 months before the election in the 10 Canadian federal election years 1945–74, were analyzed for motive imagery (need for achievement, power, and affiliation) and integrative complexity. Media items were significantly higher in affiliation and power imagery and significantly lower in achievement than leaders' speeches. There was a significant correlation between the overall imagery content (motive richness) of the media samples and the winners' speeches, but not the losers' speeches. Liberal candidates were significantly higher than Conservatives in affiliation imagery and in integrative complexity.

RÉSUMÉ Des documents issus des médias et des discours des chefs de partis politiques fédéraux étant apparus approximativement 2 mois avant les 10 élections canadiennes, ayant eu lieu entre 1945 1974, sont analysés en ce qui concerne leur imagerie motivationnelle (besoins d'accomplissement, de pouvoir et d'affiliation) ainsi que leur complexité intégrative. Les documents issus des médias étaient significativement plus élevés en imagerie d'affiliation et de pouvoir et significativement plus faibles en imagerie d'accomplissement que les discours des chefs politiques. Une corrélation significative fut obtenue entre l'ensemble du contenu de l'imagerie (la richesse de la motivation) des documents issus des médias et les discours des chefs politiques, mais seulement pour les candidats élus. Les candidats libéraux démontrèrent une imagerie d'affiliation et une complexité intégrative significativement plus élevés que ceux des candidats conservateurs.

The study of election outcomes can be approached from a number of disciplinary foundations: historical, economic, sociological, political, and psychological. In this paper, we focus on psychological factors that may influence the outcome of Canadian federal elections, with special emphasis on the major party leaders who are the actual or potential Prime Ministers of the country. Unlike in the United States, there has been little systematic work in political psychology in Canada; for example, in contrast to the voluminous psychological work on U.S. Presidents, research on Canadian Prime Ministers has been almost exclusively historical and biographical (Ballard & Suedfeld, 1988).

Political psychology, in general, has changed greatly in the past decade with the development of many new techniques that are based in the tradition of experimental psychology but address the larger issues of the nonlaboratory, political world. Such methods have led to systematic, objective, and quantitative investigations using replicable schemata and procedures. In recent years, such approaches have generated

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a dozen or more specific techniques and have begun to claim a niche as a separate field of cross-disciplinary study, termed *historiometry* (Simonton, 1984). The techniques typically measure psychological variables "at a distance" from archival sources. The research has included complicated time-series analyses to identify, for example, relations between societal factors such as international conflict, economic and political revolution, or form of government on the one hand and individual behaviour, such as artistic productivity, on the other (Porter & Suedfeld, 1981; Simonton, 1977); personality characteristics of significant world and national figures (Hermann, 1977; Simonton, 1986a); information processing patterns of politicians and other leaders, and changes in those patterns as a function of events (Ertel, 1986; Suedfeld & Tetlock, 1989); and the true attitudes of leaders about each other, even in the face of attempted concealment (Ramirez & Suedfeld, 1988).

Studies of high-level political leaders have been based on the three major historical theories of leadership: "great man" theories, Zeitgeist theories, and interactionist theories (cf. Simonton, 1986a). The first has led to attempts at identifying personality traits of leaders that might be related to success (Simonton, 1986b); the second, to attempts at identifying societal trends and conditions (Held, 1983); the third, most recently, to studies examining matches (or mismatches) between leaders and followers, or leaders and environments, on relevant factors.

In this last tradition, Winter (1987) has based an analysis of American political success on the archival measurement of three well-known motivational factors: the needs for achievement (nAch), affiliation (nAff), and power (nPow). Achievement refers to a concern for excellence and improvement; affiliation refers to a need for establishing, maintaining, or restoring friendly relations among persons, groups, or nations; and power refers to a desire for control, impact, or influence over others. Originally scored from TAT stories, the motives can now be scored reliably from a wide variety of written and spoken materials by the use of a scoring scheme developed by Winter (1983).

The role of these motives in economic development and personal behaviour has been the focus of a long line of innovative research originated by McClelland and his colleagues (e.g., McClelland, 1961, 1975; Stewart, 1982). It has been suggested that the three motives are important to the relations between leaders and followers (see Winter, 1980). The combination of high nAch and nPow is seen as important to the social system in general (Parsons, 1952), pertinent to leadership outside the political domain (Varga, 1974), and specifically relevant to the role of the national leader (Burns, 1966). The nAff and nPow combination has also been studied in relation to leadership, both outside the political arena (McClelland, 1975; McClelland & Boyatzis, 1982) and with specific reference to American presidential nominees (Case, 1980).

Winter's (1987) study addressed the issue of leader characteristics versus leader-follower congruence as predictors of popular appeal (electoral success). Motive profiles of the leader were derived from verbal imagery in the first inaugural addresses of 32 American Presidents. Followers were studied indirectly, by inferring motives in the general population from motive imagery that appeared in popular media. To this end, Winter scored motive imagery in a selection of popular novels, children's readers, and hymns.

Electoral success was measured by the number of votes and margin of victory of the winning candidate and the success of other candidates of the same party in

congressional elections. Expert ratings of presidential greatness and of various occurrences during the President's term (e.g., war and the avoidance of war) were also correlated with motive imagery profiles.

Of the several interesting findings described in the paper, the major conclusions are that:

> ...among American Presidents at least, leader appeal is a function of how well the leader's own motives fit the motive imagery profile of the times. Presidential leadership performance, however, is a very different matter. Both rated performance and several of the most significant outcomes were functions more of leader attributes (especially power motivation) than of leader-situation match. (Winter, 1987, p. 201)

The match between the successful candidate's motive imagery and that of the popular media predicted the electoral success of the President himself; but it did not extend to a "coat-tail" effect for congressional candidates of the party. Moreover, this match had no relation to actual performance while the President was in office; there, the individual motive characteristics of the person became crucial.

The current study tests the generalizability of Winter's (1987) ideas to a political system that is in many ways similar to, yet in other aspects different from, that governing U.S. presidential choices. Specifically, we ask whether the characteristics of the leader or leader-follower congruence is the more important predictor of success in the Canadian context. In Canada's parliamentary system, the Prime Minister is the leader of the party whose candidates win a majority of the seats in the legislature. At the same time, Canada is a federal democracy with many cultural similarities to the U.S. Thus, Canadian data are highly appropriate to test whether Winter's (1987) findings are specific to a particular political system or more generalizable. This is particularly interesting when one notes that neither of the alternative hypotheses noted by Winter predicted the success of the presidential candidate's congressional running mates.

Another generalizability issue arises from Winter's (1987) choice of popular productions. Novels are usually read by relatively small, and perhaps unrepresentative, segments of the society in general. Children's readers may reflect something in the popular culture, but that something may be an ideal or a result of ideological, political, and economic trade-offs in the textbook market, rather than actual current values. Hymns may reflect a highly biased sample of attitudes and restrict the relevant audience to observant members of certain religions. To avoid these problems, our study used more widely disseminated media materials: newspapers, mass-circulation magazines, comic strips, and popular songs.

In addition to motive imagery, we also analysed our samples for integrative complexity. This is a cognitive structure variable, essentially independent of the content of thought. Low levels of complexity are characterized by categorical (undifferentiated, black-white), rigid thinking guided by preexisting categories and schemata. People operating at higher levels show, first, increasing differentiation (perceiving subtle differences among viewpoints, and legitimacy in a variety of positions) and then integration (the ability to generate interactions and syntheses among different approaches and to respond flexibly to changing situations).

As was the case with motive imagery, complexity had first been measured in experimental situations (in this case, by a paper-and-pencil test, Schroder, Driver, &

Streufert, 1967), with scoring later adapted to be applicable to archival materials (Suedfeld & Rank, 1976). Level of complexity in archival materials is now assessed in accordance with a detailed scoring manual (Baker-Brown, Ballard, Bluck, deVries, Suedfeld, & Tetlock, 1986).

The application of the integrative complexity construct in the political context is not novel. It has been shown that integrative complexity is responsive to environmental circumstances, such as international crises (Levi & Tetlock, 1980; Raphael, 1982; Suedfeld & Tetlock, 1977; Suedfeld, Tetlock, & Ramirez, 1977), domestic political upheavals (Ballard, 1983; Porter & Suedfeld, 1981), and leadership role demands (Levi & Tetlock, 1980; Suedfeld & Rank, 1976; Tetlock, Hannum, & Micheletti, 1984).

Integrative complexity was scored in the current study for several reasons. One was to assess whether there was a relationship between electoral success and leader-follower (i.e., popular media) congruity in complexity level. Further, we wanted to test whether significant differences in complexity existed between successful and unsuccessful candidates, incumbents and challengers, and/or between leaders of the two major parties. Finally, correlations between complexity (cognitive structure) and the three motives (content), whether in leaders' speeches or popular media materials (or both), were also of interest.

Method

Materials were obtained for the 10 Canadian federal election years between 1945 and 1974. For each year, two types of material were collected:

1. Speeches of party leaders. In each year, four to six complete speeches were scored for motive imagery and 40 randomly selected paragraphs, the basic scoring unit, for integrative complexity. At least two, and usually three, speeches delivered in the 2 months prior to the date of the election were obtained for the leaders of the two major parties, the Liberals and the Conservatives (now Progressive Conservatives), which are, respectively, centre-left and centre-right in the political spectrum. These were for the most part provided by the National Archives (Ottawa). Although we wanted to include the three major party leaders, speeches from the socialist CCF (Co-operative Commonwealth Federation) and its successor, the New Democratic Party, were available for only half of the years covered. As a result, only one CCF candidate is represented in the data, Coldwell, included as the opposition candidate in the 1957 election because insufficient Liberal material was available for that year. The Liberal candidate was Louis St. Laurent, who by the following year was replaced as party leader by Lester Pearson. Table 1 identifies the candidates whose speeches were scored and presents mean scores on each measure. Motive scores are the mean number of times imagery is present in 1,000 words; complexity scores are mean ratings of paragraphs on a 1–7 scale of increasing integrative complexity.

2. Popular media. To represent the popular media, we used sources that appeared more relevant to the thinking of the electorate than some of those used by Winter (1987): commonly read newspapers, comic strips, magazines, and the most popular songs of each year were used. To ensure geographic representation, newspapers were chosen from large cities in five regions (the Vancouver *Sun*, Edmonton *Journal*, Toronto *Globe and Mail*, Montreal *Le Devoir*, and Halifax *Chronicle*). The front page and comics section of each were collected for the same period as the speeches above, with the exception of the comic-less *Le Devoir*. Two pages of a randomly selected major story in each of two magazines, *Maclean's* and *Reader's Digest* (Canadian edition), were also scored. *Maclean's* was chosen because of its focus on Canadian society and the *Digest* because it has been among the top-selling magazines in Canada continuously since 1945 (IMS/Ayer, 1985). The dates of the selected newspapers and magazines were the closest possible to exactly 2 months before the election date: e.g., if the election was held on November 20, we chose publications dated as close as

TABLE 1
Election Years, Candidates, Parties, and Mean Scores

Year	Candidate/Party	Aff	Ach	Pow	Cxy
1945	MacKenzie King/L	3.5	3.9	6.3	1.60
	Bracken/C	3.4	7.5	8.1	1.70
1949	St. Laurent/L	2.5	4.9	5.2	1.40
	Drew/C	1.7	2.5	7.1	1.30
1953	St. Laurent/L	1.7	2.7	3.8	1.75
	Drew/C	0.3	2.1	5.7	1.65
1957	Diefenbaker/C	0.6	0.0	5.7	1.30
	Coldwell/CCF	1.3	1.7	3.4	1.20
1958	Diefenbaker/C	0.7	11.7	5.2	1.50
	Pearson/L	2.9	4.9	4.2	2.35
1963	Pearson/L	4.1	3.7	6.1	1.60
	Diefenbaker/C	3.0	5.5	6.7	1.65
1965	Pearson/L	1.9	4.7	6.3	1.60
	Diefenbaker/C	1.6	1.9	6.1	1.65
1968	Trudeau/L	2.4	2.3	3.3	1.85
	Stanfield/C	1.2	5.4	5.5	1.15
1972	Trudeau/L	2.0	5.7	5.9	2.30
	Stanfield/C	0.8	2.7	4.6	1.40
1974	Trudeau/L	1.4	2.2	5.6	1.75
	Stanfield/C	2.2	1.6	4.8	1.50

Note. Winners are listed first. L = Liberal, C = Conservative, CCF = Co-operative Commonwealth Federation.

possible to September 20. The lyrics of the three most popular songs of the year (Lax & Smith, 1984) were also used. In total, five front pages, four comics sections, four pages of magazine articles, and three popular songs were scored for each year. The total texts were scored for motive imagery, and 20 randomly selected paragraphs per year were scored for complexity.

Scoring for integrative complexity was performed by three qualified staff members using a standard scoring manual (Baker-Brown et al., 1986). They had gone through the training procedures for motive imagery developed by Winter (1983). The scorers had reached a minimum reliability correlation of .80 with expert scoring in all four scoring categories (nAch, nAff, nPow, complexity).

Table 2 lists the subcategories scored under each of the three motives, and Table 3 presents examples of motive imagery from the various sources. All scoring was done blind as to the origin of the material, which was presented in random packets with names, dates, titles, and other identifying material deleted. When questioned, scorers were not able to identify the authors of campaign speeches.

Results

The media's scores on the four measures (three motives and complexity) showed no significant correlations with those of either victorious or defeated party leaders. However, there was a significant correlation ($r = .54, p = .05$) between the media and the winning leaders in what we term *motive richness*, the total amount of motive imagery summed across the three motives. The match between the victorious candidate and newspaper articles showed reliable associations on power imagery ($r = .71, p = .01$) and complexity ($r = .72, p = .01$). The only significant correlation involving the leader of the losing party was with magazine articles, on complexity ($r = .70, p = .01$).

TABLE 2
Motive Imagery Subcategories[a]

Power
1. Strong, forceful actions that inherently have impact on others.
2. Control or regulation.
3. Attempts to influence, persuade, convince, make a point, argue.
4. Giving help, advice, or support that is not explicitly solicited.

Achievement
1. Adjectives that evaluate performance positively.
2. Goals or performances described in ways that suggest positive evaluation.
3. Mention of winning or competing successfully with others.
4. Negative feelings about failure, doing badly, or other lack of excellence.
5. Unique accomplishments.

Affiliation
1. Expression of positive, friendly feelings toward other persons, nations, etc.
2. Sadness or other negative feeling about separation or disruption of a friendly relationship.
3. Affiliative, companionate activities.
4. Friendly, nurturant acts.

[a]After Winter (1982).

TABLE 3
Examples of Motive Imagery

Speeches
Power: This is going to be...one of the most important campaigns that this party has ever fought in the history of the whole party...
Achievement: You know we elected three in Quebec in the last election and we intend to do better.
Affiliation: ...if we love our old people and those who can't fend for themselves...

Mass Media
Power: The man who led the war against CBC and fell heir to its spoils was an aggressive young entrepreneur from Toronto.
Achievement: ...the frontline surgeons perform operations with endurance and ingenuity no less than technical skill.
Affiliation: Come let me love you. Let me give my life to you.

Note. Critical portions are underlined.

Table 4 presents mean scores on complexity and motive imagery for the popular media sources included in this study, calculated in the same way as the political speech scores shown in Table 1. Comparing imagery and complexity in the popular media and in political speeches, we found that the media were significantly higher than the speeches on nAff, $F(1, 18) = 50.26$, $p < .0004$, and nPow, $F(1, 18) = 4.19$, $p = .056$, but lower on nAch, $F(1, 18) = 4.71$, $p < .05$. Leaders of victorious and defeated parties or of incumbent and challenging parties did not differ from each other significantly on any of the measures. However, Liberal leaders showed reliably higher complexity, $F(1, 18) = 12.09$, $p < .005$, and nAff, $F(1, 18) = 7.22$, $p < .02$, than Conservatives.

The pattern of raw motive scores within types of source shows that, overall, the media ranked achievement lowest of the three motives. nAff and nPow were not significantly different. Both were significantly higher than nAch: with $df = 18$ in all cases, nAff vs. nAch, $t = 5.85$, $p < .0004$, and nPow vs. nAch, $t = -5.58$,

TABLE 4
Mean Scores, Mass Media Sources

Source	Ach	Aff	Pow	Complexity
Newspapers	1.05	1.33	5.83	1.62
Magazines	2.12	1.16	6.09	2.13
Comics	1.92	8.95	15.54	1.74
Songs	2.77	17.09	3.11	1.62
M	1.97	7.13	7.64	1.78

$p < .0004$. Popular songs showed a predominance of affiliation imagery. Newspapers, magazines, and comics all emphasized nPow above the other motives.

Power was also the dominant image in the speeches of every one of the politicians in the sample, with achievement second in every case. Speeches showed significantly higher scores for nPow than for either nAch ($t = -2.24$, $p < .05$) or nAff ($t = -8.53$, $p < .0004$) and higher nAch than nAff ($t = -2.49$, $p < .05$). Within political speeches, nAff was significantly correlated with complexity ($r = .47$, $p < .02$). There were no other significant correlations between the measures either within political speeches or within popular media.

Discussion

In view of the differences in design and analysis, our study cannot be considered a replication of Winter's (1987). However, both addressed the question of the kind of theory that best predicts the electoral success of national leaders. Both studies found support for an interactionist approach, in that a match between a candidate and popular media on some kind of combined measure of motive imagery predicted victory. This is somewhat surprising, given the common assumption that in the American presidential system the persona of the nominee is more important than the political party, with the reverse being true for the Canadian parliamentary system. Winter did not find a coat-tail effect; that is, motive imagery similarities between the presidential candidate and the popular media did not predict the success of lesser candidates in the party. In contrast, our results in some sense are a coat-tail effect, since the Prime Minister's election is a byproduct of the success of his party. Whether these discrepant results reflect differences in the voting behaviour of Canadians and Americans in the two political systems or in the measures of congruence used in the two studies (or some combination of these factors) is unclear.

Our data imply that the party leader's expressed and implied motives do significantly influence the outcome of elections. This may be due to the attention that the media pay to the leader, which perhaps outweighs the information available about local candidates so that voters base decisions on the perceived qualities of the leader rather than on those of their own potential Member of Parliament. It is also possible that the congruence between the motives of party leaders and local party candidates (and members of the party caucus) plays a role in allowing the leader to hold that position in the first place.

Both our study and Winter's (1987) found that the predictor of success was not a single leader characteristic nor a leader-follower match on a single characteristic. In both studies, the predictor was a composite score that combined all three of the measured motives. What was important in Canadian elections was congruity between

the total motive imagery of the candidates and that of the popular media. We have termed this measure *motive richness* to indicate that it refers to a level of imagery activation, rather than to a content-based motive profile. Winter calls his measure the *summed discrepancy/congruence score*; this procedure and our own motive richness construct raise the question of what is actually being measured when the indices of three supposedly independent and distinct motives are added together.

We think of motive richness as an overall level of motivational energy or action-orientation. This energy or orientation seems relevant to political campaigns, where specific policies or issues may become secondary to an image of dynamism and readiness to act vigorously in the pursuit of goals. However, our data imply that the optimal level of this construct for a politician is not too far removed from that of the electorate (or at least of the popular media supported by that electorate). The important thing is to be the right person in the right place at the right time; and being that right person seems to involve having a culturally normative level of motive richness.

Comparisons between popular media and speech imagery provide an interesting light on the Canadian scene. Not surprisingly, nPow was the most frequent imagery in political speeches. The surprise was that the popular media evidenced this motive at a significantly higher level than did the speeches. Our finding is particularly intriguing in view of the well-established association between nPow and political leadership, whether the latter is defined as being involved with and holding office in political organizations or seeking to become a political candidate (Winter, 1973). Of course, the media may be expressing a higher level of nPow than would be found among ordinary individuals in the society; neither we nor Winter had a direct measure of motive imagery levels found among ordinary individuals within the society. In addition, the occurrence of a campaign, featuring inspirational political speeches, may itself increase the level of nPow among the audience (Steele, 1977).

The nAff data are interesting. At least in a democratic election, which to some extent is a measure of popularity, the affiliation motive could be expected to be high among politicians wooing the voters. Yet, once again, the mass media reached significantly higher levels on affiliation imagery. It is possible that the widespread popularity and friendly image common to "good" politicians are not captured by the nAff scoring system, which is primarily concerned with interpersonal warmth. Where nAff is scored in the political realm, it is usually reflected in good relations or co-operation between nations. This is not the type of issue most closely related to election campaigns. Although politicians scored lower than our combined media source, individual media show varied results (cf. Table 4). One possibility for future research is to distinguish between entertainment media (in our study, songs and comics) and informative/didactic media (newspaper and magazine articles).

Political speeches were substantially higher than popular media on achievement imagery. Given that nAch denotes a concern with excellence and accomplishment, its relative salience shows Canadian political leaders favourably.

The party differences were also intriguing. Political stereotyping would probably have predicted our finding that Liberal Party spokesmen would evidence higher levels of nAff than Conservatives, the policies of the former seeming quite consistent with that profile.

On complexity, our data are consistent with previous research on political conservatives and liberals, among ordinary citizens (Suedfeld & Epstein, 1973), U.S.

Senators (Tetlock, 1983) and Supreme Court Justices (Tetlock, Bernzweig, & Gallant, 1985), and British Members of Parliament (Tetlock, 1984). It is possible that there are ideologically based differences in complexity (Suedfeld & Tetlock, 1989). Tetlock's value conflict model (1983) proposes that political ideologies differ in the importance they attach to two central values, equality and freedom (Rokeach, 1973). Extreme ideologies hold one or the other of these to be paramount; all policies are evaluated simply on how they affect the maximization of the supreme value. In contrast, centrist positions (particularly centre-left ones) hold the two values in close balance, requiring the recognition of trade-offs and compromises in an integrative way.

Tetlock (1981; Tetlock et al., 1985) has also suggested a political role hypothesis that may explain complexity differences that at first glance seem to be based on ideology. Policy-makers (i.e., leaders in power) must achieve complex integrations of various views while observing practical and realistic limitations. Policy critics in opposition, on the contrary, can attack the ruling party without such trade-offs and restrictions. Thus, the group in power is moved toward higher complexity, with no such pressure on its opposition. This pattern had first been found among leaders of revolutionary movements (Suedfeld & Rank, 1976) and later among American and British legislators (Tetlock, 1983, 1984).

In our study, however, neither the incumbent nor the winning candidate was reliably more complex than the challenger or loser. The political role hypothesis, at least in its current form, does not explain the finding. It may do so in a chronologically extended form: the Liberals, who won 8 of the 10 elections studied here, may have attained a chronic policy-making outlook that permeated their approach even in the years when they were out of power (with the reverse pattern for the Conservatives).

Conversely, a party that consistently loses may feel a threat to its continued existence, at least as a major political force. Threat has been linked in several studies to reduced integrative complexity (Porter & Suedfeld, 1981; Suedfeld & Tetlock, 1977; Suedfeld et al., 1977). Since, as indicated above, the period studied here could fairly be called a Liberal era, the lower complexity of Conservative leaders may reflect this feeling of pressure.

The last possibility is that campaign speeches indicate not how the candidate thinks, but how he wants the public to think he thinks (Tetlock, 1981; Tetlock et al., 1984); and that for some as yet unknown reason, Liberals may be more eager to seem complex than Conservatives. There are no data in our study to test these alternatives.

In future research, both Winter's summed discrepancy/congruence score and our motive richness measure should be used to test the predictive power of the interactionist model of leader success. At this point, there is no evidence that motive richness is correlated with percentage of votes or margin of victory, nor that the congruence score can separate winning from losing candidates. Studies employing (and comparing) both of these measures may help to clarify these issues and the real role of motive imagery in electoral success.

References

Baker-Brown, G., Ballard, E.J., Bluck, S., deVries, B., Suedfeld, P., & Tetlock, P.E. (1986). *Scoring manual for integrative and conceptual complexity*. Unpublished manuscript, University of British Columbia, Vancouver, BC.

Ballard, E.J. (1983). Canadian Prime Ministers: Complexity in political crises. *Canadian Psychology, 24*, 125–129.

Ballard, E.J., & Suedfeld, P. (1988). Performance ratings of Canadian Prime Ministers: Individual and situational factors. *Political Psychology, 9*, 291-302.

Burns, J. (1966). *Presidential government: The crucible of leadership*. Boston: Houghton Mifflin.

Case, L. (1980). *Content complexity and nAch, nPow, and nAff in archival materials*. Unpublished manuscript, Macalester College, St. Paul, MN.

Ertel, S. (1986). Language, thought and culture: Toward a mergence of diverging problem fields. In I. Kurcz, G.W. Shugar, & J.H. Danks (Eds.), *Knowledge and language* (pp. 139-163). Amsterdam: Elsevier.

Held, J. (1983). *The cult of power: Dictators in the twentieth century*. Boulder, CO: East European Monographs.

Hermann, M.G. (Ed.). (1977). *The psychological examination of political leaders*. New York: Free Press.

IMS/Ayer (1985). *The IMS/Ayer directory of publications*. Fort Washington, PA: IMS Press.

Lax, R., & Smith, F. (1984). *The great song thesaurus*. New York: Oxford University Press.

Levi, A., & Tetlock, P.E. (1980). A cognitive analysis of Japan's 1941 decision for war. *Journal of Conflict Resolution, 24*, 195-211.

McClelland, D.C. (1961). *The achieving society*. Princeton, NJ: Van Nostrand.

McClelland, D.C. (1975). *Power: The inner experience*. New York: Irvington.

McClelland, D.C., & Boyatzis, R.E. (1982). Leadership motive pattern and long-term success in management. *Journal of Applied Psychology, 67*, 737-743.

Parsons, T. (1952). *The social system*. Glencoe, IL: Free Press.

Porter, C.A., & Suedfeld, P. (1981). Integrative complexity in the correspondence of literary figures: Effects of personal and societal stress. *Journal of Personality and Social Psychology, 40*, 321-330.

Ramirez, C.E., & Suedfeld, P. (1988). Nonimmediacy scoring of archival materials: The relationship between Fidel Castro and "Che" Guevara. *Political Psychology, 9*, 155-164.

Raphael, T.D. (1982). Integrative complexity theory and the forecasting of international crises: The Berlin conflict, 1946-1962. *Journal of Conflict Resolution, 26*, 423-450.

Rokeach, M. (1973). *The nature of human values*. New York: Free Press.

Schroder, H.M., Driver, M.J., & Streufert, S. (1967). *Human information processing*. New York: Holt, Rinehart & Winston.

Simonton, D.K. (1977). Creative productivity, age, and stress: A biographical time-series analysis of 10 classical composers. *Journal of Personality and Social Psychology, 35*, 791 804.

Simonton, D.K. (1984). *Genius, creativity and leadership: Historiometric inquiries*. Cambridge, MA: Harvard University Press.

Simonton, D.K. (1986a). Presidential greatness: The historical consensus and its psychological significance. *Political Psychology, 7*, 259-283.

Simonton, D.K. (1986b). Presidential personality: Biographical use of the Gough Adjective Check List. *Journal of Personality and Social Psychology, 44*, 149-160.

Steele, R.S. (1977). Power motivation, activation, and inspirational speeches. *Journal of Personality, 45*, 53-64.

Stewart, A.J. (Ed.). (1982). *Motivation and society*. San Francisco: Jossey-Bass.

Suedfeld, P., & Epstein, Y.M. (1973). Attitudes, values, and ascription of responsibility: The Calley case. *Journal of Social Issues, 29*, 63-71.

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. (1989). *Integrative complexity: Theory and research*.

Suedfeld, P., Tetlock, P.E., & Ramirez, C. (1977). War, peace and integrative complexity: United Nations speeches on the Middle East problem 1947-1976. *Journal of Conflict Resolution, 21*, 427-442.

Tetlock, P.E. (1981). Pre- to post-election shifts in presidential rhetoric: Impression management or cognitive adjustment. *Journal of Personality and Social Psychology, 41*, 207-212.

Tetlock, P.E. (1983). Cognitive style and political ideology. *Journal of Personality and Social Psychology, 45*, 118-126.

Tetlock, P.E. (1984). Cognitive style and political belief systems in the British House of Commons. *Journal of Personality and Social Psychology, 46*, 365-375.

Tetlock, P.E., Bernzweig, J., & Gallant, J.L. (1985). Supreme Court decision-making: Cognitive style as a predictor of ideological consistency of voting. *Journal of Personality and Social Psychology, 48*, 1227–1239.

Tetlock, P.E., Hannum, K.A., & Micheletti, P.M. (1984). Stability and change in the complexity of senatorial debate: Testing the cognitive versus rhetorical style hypotheses. *Journal of Personality and Social Psychology, 46*, 979–990.

Varga, K. (1974). nAchievement, nPower, and effectiveness of research and development. *Human Relations, 28*, 571–590.

Winter, D.G. (1973). *The power motive*. New York: Free Press.

Winter, D.G. (1980). Measuring the motives of southern African political leaders at a distance. *Political Psychology, 2*, 75–85.

Winter, D.G. (1982). *Manual for scoring motive imagery in running text*. Middletown, CT: Wesleyan University.

Winter, D.G. (1983). *Development of an integrated system for scoring motives in verbal running text*. Unpublished manuscript, Wesleyan University, Middletown, CT.

Winter, D.G. (1987). Leader appeal, leader performance, and the motive profiles of leaders and followers: A study of American Presidents and elections. *Journal of Personality and Social Psychology, 52*, 196–202.

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