
Pessimistic Explanatory Style in the Historical Record

CAVing LBJ, Presidential Candidates, and East Versus West Berlin

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ABSTRACT: *The habitual way people explain causes (explanatory style) as assessed by questionnaire has been used to predict depression, achievement, and health, with a pessimistic style predicting poor outcomes. Because some individuals whose behavior is of interest cannot take questionnaires, their explanatory style can be assessed by blind, reliable content analysis of verbatim explanations (CAVE) from the historical record. We discuss three examples of CAVing archival material. First, shifts to a more optimistic style in Lyndon Johnson's press conferences predicted bold, risky action during the Vietnam War, whereas shifts to pessimism predicted passivity. Second, analyses of presidential candidates' nomination acceptance speeches from 1948 to 1984 showed that candidates who were more pessimistically ruminative lost 9 of the 10 elections. Third, explanatory style and its relation to depressive signs was considered at a societal level. There were more behavioral signs consistent with depression among workmen in East Berlin than in West Berlin bars. This finding corresponded to a comparatively more pessimistic explanatory style in East Berlin newspaper reports concerning the 1984 Winter Olympics. We suggest that pessimism and its consequences can be quantified and compared, not only in contemporary individuals but also across time and culture.*

Can pessimism and its consequences be measured across historical periods and cultures? One tool for measuring pessimism is the habitual way people explain the events that befall them, their "explanatory style" as found in archival documents. One way to measure the consequences of pessimism is to observe the symptoms of learned helplessness—passivity, poor achievement, and depressive signs—as they are found in the historical record. With these tools we can try both to test theories of explanatory style and to predict real-world behavior over historical periods and across cultures. In this article, we first present the theoretical background and describe our tools. In doing so, we detail a new method, the content analysis of verbatim explanations (CAVE), which allows blind, reliable ratings of archival material for explanatory style. Then we present three brief examples: President Johnson and the Vietnam War, prediction of who will win modern presidential elections, and pessimism in East

and West Berlin. Our story begins with explanatory style and its relation to learned helplessness.

Explanatory Style

Psychologists have frequently argued that causal beliefs affect behavior (see reviews by Harvey & Weary, 1984; Heider, 1958; Kelley, 1973; Kelley & Michela, 1980; Kelly, 1955). One approach taken by researchers studying causal explanations is to ask if individuals differ in their habitual style of explaining the events that befall them (e.g., Ickes & Layden, 1978; Peterson & Seligman, 1984). If so, then explanatory style becomes an individual difference of consequence. All the behaviors and outcomes affected by particular explanations may be influenced by explanatory style, which helps to determine the actual causal explanations offered in particular situations.

The reformulation of the learned helplessness model accords central status to causal explanations and explanatory style (Abramson, Seligman, & Teasdale, 1978; see also Miller & Norman, 1979, and Roth, 1980). The reformulated model proposes that causal beliefs affect the nature of helplessness following bad events (Abramson et al., 1978). As such, they predict a potent psychological state, one that may underlie failure (Dweck & Reppucci, 1973; Peterson & Barrett, 1987), depression (Seligman et al., 1988), illness and disease (Peterson, Seligman, & Vaillant, 1988; Schmale, 1972), and even death (Jemmott & Locke, 1984).

According to the reformulation, one critical factor that contributes to where and when the symptoms of helplessness will occur is the particular causal explanation made by the individual for bad events. When failure occurs, a person asks why it happened. Certain answers to this question lead to pervasive helplessness, whereas others do not. Three dimensions of causal explanation are claimed relevant. First, causal explanations may refer to factors that are stable across time or unstable. The more enduring the cause, the more long-lasting the helplessness following bad events. Second, causal explanations may refer to global factors present in a variety of domains or to specific factors relevant only to the particular outcome. Global explanations result in generalized helplessness, whereas specific explanations do not. Finally, causal explanations may refer to factors internal to the person, such as ability or effort, or they may refer to external

factors, such as other people or the situation. If the individual interprets bad events internally, the symptoms of helplessness following these events include self-esteem loss.

When individuals habitually see the causes of bad events as stable, global, (and internal), ("It's going to last forever," "It's going to undermine all that I do," and "It's me") and they see the causes of good events in the opposite way, we say that their explanatory style is *pessimistic* or depressive. We use the term pessimistic because a style that projects ongoing bad events far into the future (stable) and across all endeavors (global) seems to capture what is ordinarily meant by pessimism. When individuals see the causes of bad events as unstable, specific (and external) and see the causes of good events in the opposite way, we say the style is *optimistic* or nondepressive.

In their research program investigating helplessness and depression, Peterson and Seligman (1984) used a self-report questionnaire to assess explanatory style (the Attributional Style Questionnaire; ASQ; Peterson et al., 1982). Studies showed explanatory style as measured by the ASQ to be an important correlate and predictor of depression following bad events. In a meta-analysis of 104 studies involving 15,000 subjects, Sweeney, Anderson, and Bailey (1986) reported that explanatory style both for good and bad events was a highly replicable correlate of depression. Robins (1988) found that among those studies of high statistical power, explanatory style for bad events correlated significantly with depression in every instance.

The ASQ presents hypothetical events, good and bad, to people who write down the one major cause of each event as if it has happened to them. Then, they rate each cause they have provided on 7-point scales in terms of internality (= 7) versus externality (= 1), stability (= 7) versus instability (= 1), and globality (= 7) versus specificity (= 1). Evidence for the reliability and validity of this questionnaire is reported by Tennen and Herzberger (1986).

The CAVE Technique

The concept of explanatory style was developed to investigate how contemporary individuals differ in their ups and downs—their proclivity to helplessness. In our studies of pessimism across time and cultures, we suggest that the same clinical concept of explanatory style that predicts individual differences in depression, achievement, and health can be used to study the ups and downs of nations, their leaders, and the appeal of the leaders to their constituents. We have had to use blind content analysis, rather

than questionnaires, for these studies. This technique, like the questionnaire, was first developed to study depression in the clinic.

Peterson, Luborsky, and Seligman (1983) developed a content analytic method to supplement the ASQ, and it seems to be as satisfactory and much more general in applicability. "Subjects" who are famous, dead, uninterested, hostile, or otherwise unavailable can be studied as easily as students in introductory psychology classes or depressed patients completing the ASQ so long as they have left some verbatim record. Causal explanations are ubiquitous in verbatim records. They appear in interviews, letters, diaries, journals, school essays, and newspaper stories, in short, in almost all verbal material that people leave behind. In such material, they appear at roughly the rate of one per 100 words. It is these records that we content analyze.

Content analysis of public records is not a new research technique, although it has never been a fashionable one. Freud (1939, 1947) applied his insights to historical subjects as diverse as Moses, DaVinci, and Woodrow Wilson (Freud & Bullitt, 1967), but he lacked the systematic, blind, and reliable methodology of modern content analysis. Modern researchers have worked productively with such a strategy (e.g., see reviews by Allport, 1942; Holsti, 1968; Krippendorf, 1980; McClelland, 1961; Runyan, 1982; Simonton, 1981; Tetlock, 1984; Viney, 1983; Winter & Stewart, 1977; Wrightsman, 1981). Nevertheless, the technique is infrequently used, and not just because it is painstaking. Instead, researchers are skeptical of content analysis because of connotations of bias and fuzziness. However, the field of content analysis, and the use of the CAVE technique, have come a long way from the first application by Freud of clinical constructs to the study of history. The CAVE technique overcomes bias and perhaps fuzziness as well. It is unobtrusive, non-reactive, reliable, and blind. Unlike the ASQ, it deals with real events, not hypothetical ones. The actual technique has two steps. First, causal explanations must be extracted from the document. Second, they must be rated on 7-point scales according to their stability, globality, and internality.

Extraction of causal explanations. To identify a causal statement, one looks for good or bad events from the perspective of the subject under study. Once an event is located, one looks for an attributed factor that covaries with it. Sometimes the explanation is transparent, and sometimes it must be inferred from clues, such as statements beginning with "because . . .," "as a result of . . .," "this led to it . . .," and so on. Using stringent criteria, independent judges agree more than 90% of the time that a particular causal explanation is present (e.g., Peterson, Bettes, & Seligman, 1984).

Once identified, a causal explanation and the event it explains are extracted and copied verbatim. We then mix the event-explanation units (coded for identification) with many other units from other subjects and sources. Three or four blind and independent judges then rate each unit according to the three dimensions.

This research was supported in part by United States Public Health Service Grants MH-19604, MH-40142, and AGO-5590 to Martin Seligman and by the MacArthur Foundation, Network on Determinants and Consequences of Health-Promoting and Health-Damaging Behavior.

We thank the undergraduate members of the helplessness seminar at the University of Pennsylvania whose diligent work as raters of verbatim documents has made this program of research possible.

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Rating causal explanations. Judges are trained by being given the instructions from the Attributional Style Questionnaire (Peterson et al., 1982) with elaboration of what the dimensions mean and ample illustration of how actual event-explanation units have been rated in the past. Training to the point of good reliability takes less than a day using a manual (Castellon, Schulman, & Seligman, 1986). Thus, stable versus unstable explanations reflect whether the cause persists (= 7) or is transient (= 1). A major clue to the stability of a cause is whether the explanation is phrased in the present tense (stable) or in the past tense (unstable). Globality versus specificity of the cause reflects the degree to which it affects all domains and outcomes (= 7) or is highly limited (= 1). Internality versus externality reflects whether the cause implicates something characteristic about the speaker (= 7) versus situational characteristics (= 1).

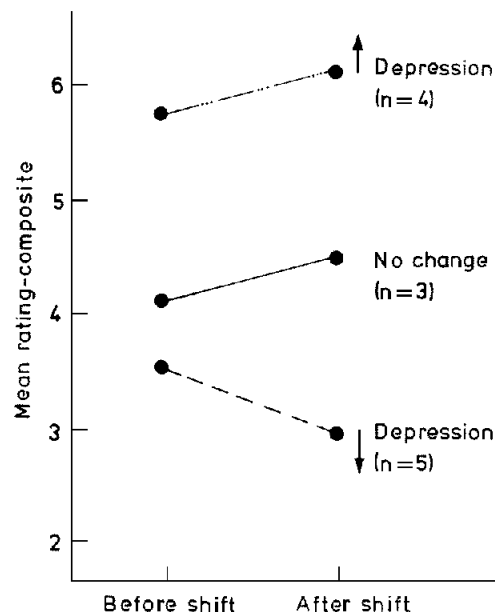
When the ratings of the judges are combined, and reliability estimated by Cronbach's alpha (1951), figures approach .80 to .90 for each of the three dimensions (Peterson & Seligman, 1984).

The first use of archival material. The CAVE technique was first applied to transcribed psychotherapy sessions, in this case with a single patient noteworthy for his sudden, unpredictable mood swings in and out of depression, (Peterson, Luborsky, & Seligman, 1983). Can causal beliefs predict such swings? Mr. Q., our subject, could not take the ASQ before each session because these sessions were now long in his past. So the CAVE technique seemed an appropriate procedure to test the hypothesis that shifts to depression would be preceded by (relatively) stable, global, and internal explanations for bad events, whereas shifts away from depression would be preceded by (relatively) unstable, specific, and external explanations for bad events.

Peterson et al. (1983) obtained transcripts from sessions in which mood shifts occurred: four sessions for increased depression, five for decreased depression, and for comparison purposes, three sessions in which no shift in mood occurred. Causal explanations were extracted from the 400 words spoken by the patient immediately before and after the mood shift. The hypothesis was supported as shown in Figure 1. Highly pessimistic (stable, global, and internal) explanations preceded depression, whereas unstable, specific, and external explanations for bad events preceded drops in depression. Causal explanations during sessions in which no mood shift occurred were intermediate. There was no overlap in the range of scores of causal explanations before swings to more versus less depression; that is, prediction was perfect.

So our use of the CAVE technique began as an attempt to predict from their explanatory style the ups and downs—the proclivity toward helplessness—of depressed patients. In the studies that follow, we try to see if the same construct, explanatory style, can be used to study the ups and downs of world leaders, the appeal of the leaders to their societies, and the degree of optimism or pessimism of societies themselves. The success in predicting the depressive symptoms of a single patient sug-

Figure 1
Means of Internal, Stable, and Global Ratings of Mr. Q's Explanations Before and After Sudden Mood Swings



Note. From "Attributions and Depressive Mood Shifts: A Case Study Using the Symptom-Context Method" by C. Peterson, L. Luborsky, and M. E. P. Seligman, 1983, *Journal of Abnormal Psychology*, 92, p. 100. Copyright 1983 by the American Psychological Association. Sessions were those in which Mr. Q became more depressed, less depressed, or showed no change. Numbers of sessions on which the means are based are in parentheses. Ratings are divided by three.

gested to us that we might be able to predict active or passive behavior of individual leaders by CAVing their pronouncements before they acted. This led us to the press conferences of Lyndon Baines Johnson (LBJ).

President Johnson and the Vietnam War: A Pilot Study

Does the explanatory style of a world leader foreshadow the actions he or she will take? The helplessness reformulation says that when individuals have a pessimistic style, they should be passive, indecisive, and ready to give up. When they have an optimistic style, they should be active, decisive, bold, and tenacious.

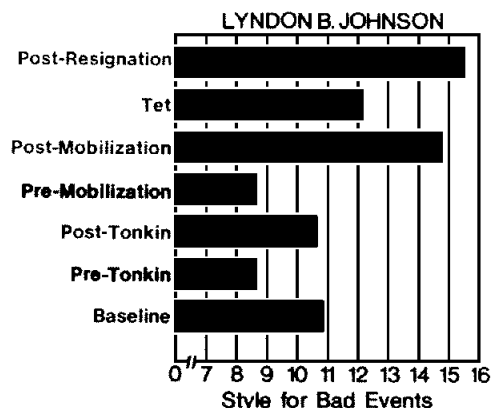
As a first pass at this question, Seligman and Hermann (1984) of the Mershon Center of Ohio State University analyzed 10 press conference transcripts from Lyndon Johnson while he was president of the United States. Hermann chose these transcripts to reflect four different points in LBJ's conduct of the Vietnam War. Two were chosen as baseline data: December 7 and December 18, 1963, soon after he assumed the presidency and well before the major events of the war. One was chosen from the period right before the Gulf of Tonkin resolution (July 20, 1964: just before the retaliatory attack) and one just after Congress passed the Gulf of Tonkin resolution (August 8, 1964). They predicted an op-

timistic style at these times because LBJ's actions were risky and bold, calling for a nondepressive (or even manic) style. Three more press conferences were chosen from the period of the major escalation in which LBJ sent a request for mobilization to Congress (July 9 and July 13, 1965: when the White House was debating whether to escalate, and July 28, 1965: one day after the decision to escalate was made). This was assumed to also be a period of active risk taking. Finally, three were chosen from the period of the Tet Offensive, when he chose not to run for the presidency again, a period that should reflect a passive and depressive approach (February 2, 1968: the beginning of the Tet Offensive, March 30, 1968: the day before LBJ announced his decision not to run for president, and March 31, 1968: right after LBJ announced that he would not run).

The CAVE technique was applied to this material. Two raters blindly and independently rated the 39 event-explanation units extracted for bad events. The findings are shown in Figure 2. These data seem quite orderly. At baseline, LBJ had relatively normal scores (composite for bad events of internal + stable + global = 10.8). Right before Tonkin (July 20, 1964), his score dropped dramatically into a very optimistic, perhaps manic, range (= 8.6), and it returned to normal (= 10.6) after the Tonkin resolution passed. Then, once again right before escalation (July 9 and July 13, 1965), explanations for bad events became optimistic (= 8.9 and = 8.3), sinking to pessimism after the decision to escalate (= 14.7, well into the depressive range). At Tet, it inched into the mildly depressed range (= 12.1), but right before the announcement not to seek re-election, it was at baseline (= 10.4). Right after the announcement, his scores were highly depressive (= 15.5).

In general, LBJ's scores preceding risky action showed shifts to very optimistic scores, as the helplessness reformulation predicts. Periods after such action and times of giving up showed shifts to very pessimistic scores, again as the reformulation predicts.

Figure 2
Means of Internal, Stable, and Global Ratings of Lyndon Johnson's Explanations for Bad Events at Press Conferences From Different Periods



Note. Ratings are not divided by three.

These data are highly tentative. They are based on one leader. There were few event-explanation units. Furthermore, we do not know the inner working of decision making and its timing. We make no claim that the shifts in style *cause* the bold decisions, only that the shifts may be harbingers of boldness to come. The shifts in both LBJ's and Mr. Q's scores may reflect some unknown third variable, such as a biological change that causes both explanatory style change and mood and behavior swings. Further, both Mr. Q and LBJ, unlike most of our subjects (Burns & Seligman, 1988) did not have a stable *style*. Although both were consistent in their explanations at any given time, both swung dramatically over time, and it was this lability we exploited to predict their behavior. We do not know if intra-individual change can be meaningfully used with more stable subjects. So we cannot make any statistical inferences from the case study of LBJ, but the findings are orderly and mesh with those obtained for the individual patient described by Peterson, Luborsky, and Seligman (1983). Pessimistic explanations predicted a subsequent depressive behavior, while optimistic explanations predicted nondepressed behavior.

Oettingen and Seligman are attempting to replicate and extend these data more rigorously. For each president since LBJ, we pick as our criterion event front page headlines in the *New York Times* involving the president. Two political scientists, who are unaware of our hypothesis, rate the presidential action on a 1-10 scale for passive through active. We then move backward in time to the most recent press conference within three weeks and CAVE the transcript. We predict that a pessimistic explanatory style in a press conference will precede passive actions and optimistic style will precede bold actions.

Perhaps it might be possible to predict the activity-passivity dimension of the actions of leaders before they act by CAVING their statements. Might it be possible to predict how voters will react to such leaders from the content analysis of the leaders' speeches?

Pessimistic Rumination Predicts Electoral Defeat of Presidential Candidates (1948-1984)

Do Americans elect as their president a leader who gives voice to the most optimism for the future? Hofstadter (1963) argued that American pragmatism has been associated with a streak of anti-intellectual prejudice running through our country's history, and he analyzed the Jackson-Adams and Eisenhower-Stevenson elections in this light. Zullow and Seligman (1988) argued that it is the intellectual's tendency to see the pessimistic side of issues, to doubt and to question that breeds this antipathy among voters. They hypothesized that other things equal, American voters will choose presidents who are optimistic and do not ruminate over bad events. They content analyzed speeches for these two styles using two concepts: *explanatory style*, which is the optimism or pessimism with which the candidate explains the causes of events; and *ruminat*ion (Kuhl, 1981, 1984; Zullow, 1984, 1985;

Zullow & Seligman, 1988), which is the tendency to dwell on conditions that are bad for the candidate or the country.

The introduction of a new variable, rumination, in this study in combination with explanatory style was not arbitrary. It was based on a program of research that seems to show that pessimistic explanatory style is not sufficient to produce depression. Only when such pessimism is frequently called to mind (rumination) does depression follow (Zullow, 1984). Individuals vary widely in the density of their causal explanations about bad events. Some individuals with a pessimistic explanatory style make very few such explanations, whereas others make many, ruminating frequently about bad events. People with a pessimistic explanatory style who spend a lot of their time ruminating should be more vulnerable to helplessness and depression than people who do not ruminate or who inhibit their rumination. In a three-wave longitudinal study, Zullow (1984) found that those people high in both pessimism and rumination later showed more depression, controlling for initial level of depression.

Zullow and Seligman (1988) content analyzed the 20 nomination acceptance speeches from the Democratic

and Republican conventions of 1948 to 1984. They used the nomination acceptance speech because it is a standard setting in which candidates outline their goals for the country and their view of the country's condition. It is also a speech that affects many voters because it receives a wide national audience, not only in newspapers but also, since 1948, on television.

They rated explanatory style as described above. In addition, two raters rated each speech for amount of rumination about bad events. Raters decided for each sentence whether it contained an example of rumination according to the system developed by Zullow (1985). An overall score for the frequency with which ruminative thoughts occur in the candidate's message was derived by dividing the total number of sentences containing ruminative thoughts by the total number of sentences in the speech.

Sample content-analyzed excerpts. To clarify how the content analysis was performed, Table 1 contains rated excerpts from the 1952 acceptance speeches of Dwight D. Eisenhower and Adlai E. Stevenson. Eisenhower's speech was relatively nonruminative and optimistic, whereas Stevenson's was relatively pessimistic and ruminative.

Table 1
Content Analysis of Excerpts From Nomination Acceptance Speeches of 1952

Dwight D. Eisenhower	Adlai E. Stevenson
Ladies and gentlemen, you have summoned me on behalf of millions of your fellow Americans to lead a great crusade—for freedom in America and freedom in the world.	I accept your nomination—and your program.
I know something of the solemn responsibility of leading a crusade. I have led one.	I should have preferred to hear those words uttered by a stronger, a wiser, a better man than myself. [rumination]
I take up this task, therefore, in a spirit of deep obligation.	None of you, my friends, can wholly appreciate what is in my heart. [rumination]
Mindful of its burdens [rumination] and of its decisive importance: I accept your summons.	I have not sought the honor you have done me.
Our aims—the aims of this Republican crusade—are clear: to sweep from office an Administration which has fastened on every one of us the wastefulness, the arrogance and corruption in high places, the heavy burdens and anxieties which are the bitter fruit of a party too long in power. [rumination; explanation for negative event: 1-internal, 3-stable, 6-global]	I could not seek it because I aspired to another office, which was the full measure of my ambition. [rumination; explanation for negative event: 7-internal, 2-stable, 3-global]
The road that leads to November 4th is a fighting road. [rumination]	One does not treat the highest office within the gift of the people of Illinois as an alternative or a consolation prize.
In that fight I will keep nothing in reserve.	I would not seek your nomination for the Presidency because the burdens of that office stagger the imagination. Its potential for good and evil now and in the years of our lives smothers exultation and converts vanity to prayer. [rumination for both sentences; both sentences count as one explanation for negative event: 1-internal, 7-stable, 7-global]
I have stood before on the eve of battle.	That my heart has been troubled, that I have not sought the nomination, that I could not seek it in good conscience, that I would not seek it in honest self-appraisal, is not to say I value it the less. [rumination; explanation for negative event: 7-internal, 6-stable, 7-global]
In this battle to which all of us are now committed, it will be my practice to meet and talk with Americans face to face in every section, every corner, every nook and cranny of this land.	
Rumination = 3/10 sentences = .300	Rumination = 6/9 sentences = .67
Pessimism = (sum internal + sum stable + sum global)/no. of explanations = (1 + 3 + 6)/1 = 10.00	Pessimism = [(7 + 1 + 7) + (2 + 7 + 6) + (3 + 7 + 7)]/3 = 15.67

Pessimistic (stable plus global plus internal) rumination predicted who lost, and by how much, even controlling for initial levels of support. In 9 out of 10 elections, the candidates higher in pessimistic rumination lost. In addition, the difference between the two candidates in terms of pessimistic rumination at the time of the conventions predicted who lost support in the fall campaign and how much support they lost, controlling for other variables such as incumbency.

Binary Predictions

The candidates higher in pessimistic rumination lost 9 of 10 elections. The 1968 election was the exception. In that election, Humphrey was only slightly lower in pessimistic rumination than Nixon. Humphrey, however, began his campaign after the Chicago riots with a deficit of 16.2% in the polls, and during the shortest period between the conventions and election in recent history, he pared that gap to 0.8%. The correct number of win-lose predictions, 9 out of 10, was significantly greater than the 5 of 10 that would be expected by chance ($p < .03$).

Correlational Results

Rumination and pessimism were not significantly correlated ($r = -.13$), showing that these two variables were not redundant. The difference between the two candidates in the z score for pessimism plus the z score for rumination (*diff/pess/rum*) correlated significantly with both the margin of victory in the popular vote (*vote/spread*, $r = .65$, $p < .05$), and with the change in spread from convention polls to election ($r = .73$, $p < .02$). This means that candidates who were much less pessimistically ruminative than their underdog challengers retained and even increased their lead to win landslide victories, as can be seen in Figure 3. Examples of this tendency were Eisenhower's victories over Stevenson in 1952 and 1956 (Eisenhower was much lower in pessimistic rumination than Stevenson and won two landslide victories), Johnson's victory over Goldwater in 1964, Nixon's victory over McGovern in 1972, and Reagan's over Mondale in 1984.

Furthermore, underdog challengers who were much less pessimistically ruminative than the leader cut into the leader's margin and upset the leader in the general election. Examples of this were Truman's upset of Dewey in 1948, in which Truman started out behind by 13% and won by 4.5%; Kennedy's upset of Nixon in 1960, in which Kennedy started out 6.5% behind and yet eked out a victory, and Reagan's upset of Carter, in which he started out 1.2% behind and won by 10.6%. Underdog challengers who were close in level of pessimistic rumination to the leading candidate tended to gain support and nearly upset the leader, examples being Humphrey's gains in support in 1968, starting out 16.2% behind and finishing 0.8% behind, and Ford's gains in 1976, with Ford closing in from 20% behind to 2% behind.

Two other variables could give an alternative account of the relationship between pessimistic rumination and electoral outcome. One is incumbency. As incumbents,

presidents might be less likely to ruminate pessimistically because their power generates optimism. The other is being behind in the polls at the time of the acceptance speech, which might cause candidates to ruminate pessimistically. This variable was approximated using the spread between the candidates in the Gallup poll immediately following the last of the two nominating conventions (*poll/spread*).

The partial correlation of *diff/pess/rum* with the spread in the popular vote—controlling for incumbency status and the spread in the polls (*poll/spread*)—was highly significant ($r = .89$, $p < .01$). The partial correlation of *diff/pess/rum* with the change in spread from convention to election, controlling for incumbency and for *poll/spread*, was also highly significant ($r = .88$, $p < .01$). This shows that being low in pessimistic rumination relative to one's opponent was strongly associated with gaining support during the subsequent fall campaign. This was especially true for candidates low in pessimistic rumination who began the race with a handicap in the polls: Truman in 1948, Kennedy in 1960, Humphrey in 1968, Ford in 1976, and Reagan in 1980.

Zullow and Seligman (1988) suggested that a candidate's speeches influence what the voters expect of that candidate's tenure in office. Other things being equal, people then vote for the candidate who engenders in them more optimistic expectations.

It is important to note that these results, strong as they are, emerged from a speech that may have been partly written by a speechwriter. That does not matter, however. It is important only that the voters hear a difference in pessimistic rumination between opposing candidates and that the two candidates create different levels of optimistic expectations. This analysis rests not on the true personality of the candidates but only on the appearance.

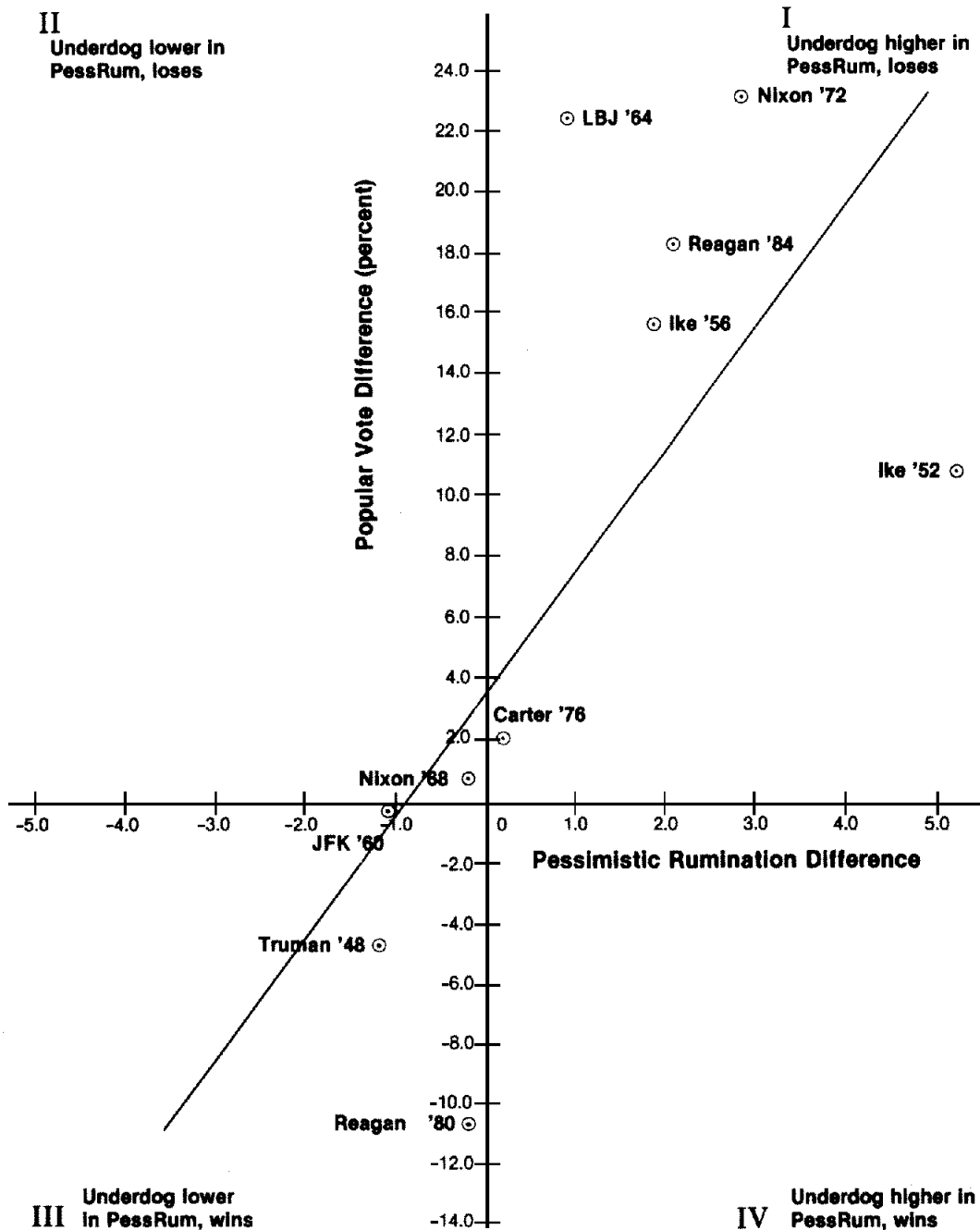
In conclusion, we suggest that content analysis reveals that a specific stylistic aspect of presidential candidates predicts who wins or loses. Dwelling on a pessimistic view of America's problems strongly predicted subsequent electoral defeat. For the last 40 years, the American electorate has chosen the candidate whose speeches best convey optimism for a better future.

Zullow and Seligman are presently trying to replicate this back through 1900, as well as trying to predict present-day electoral results using these variables. We tentatively suggest that both the study of LBJ's press conferences and of the last 10 presidential elections show that the explanatory style of individuals, as extracted from archival data, can be meaningfully related to the leader's behavior and to the voters' behavior. Can *groups* of individuals, or even cultures, be meaningfully characterized by their explanatory style as derived from the historical record?

Pessimism in East and West Berlin

Oettingen, Seligman, and Morawska (1988) attempted to answer this question by comparing East and West Berlin for depressive signs and for explanatory style. They chose these two cultures in order to control for a large number

Figure 3
Popular Vote for President as a Function of Candidates' Difference in Pessimistic Rumination



Note. Underdog or favored status was based on polls taken after candidates were nominated. High pessimistic rumination difference and high popular vote difference indicate an advantage to the favored candidate. Low pessimistic rumination difference indicates an advantage to the underdog.

of variables that might influence explanatory style. The fewer differences there are between two cultures, the more interpretable a comparison of explanatory style would be. East and West Berlin are in the same geographic place, their citizens share the same dialect, they have the same weather, they have a similar gene pool, and they share

the same history and culture through 1945. They differ in political conditions since 1945, and so any differences in pessimism or depression are most likely to be caused by the political situation. Oettingen et al. (1988) quantified depressive signs in relation to pessimism in East and West Berlin. By observing workmen's behavior in bars, they

found more signs consistent with depression in East than in West Berlin. Hypothesizing that these depressive signs would correspond to comparatively more pessimism in East Berlin, they measured explanatory style in both cultures from newspaper reports of the 1984 Winter Olympics.

One straightforward way to measure depression in Berlin would be to give depression inventories to randomly sampled Berliners in matched parts of the city. Another would be to compare the prevalence of depressive disorder and suicide. Unfortunately, these strategies cannot yet be used.

Therefore Oettingen et al. (1988) observed the frequency of behavior consistent with depression in comparable public social settings in East and West Berlin. They randomly chose bars in industrial areas, where workmen drink beer after work. They tried to match these bars by social class (working class), kind of work (industry), and sex of the patrons (male). The areas were physically adjacent, separated only by the Wall. Observations were made during the same weather conditions and during the same week to avoid a seasonal or holiday effect.

They observed behavior related to the expression of depression (Ekman & Friesen, 1974, 1975; Riskind, 1983). They reliably quantified facial expression (mouth upward versus downward), posture (slumped or not), number of "adaptors" (hand adjustment movements, e.g., scratching the head), number of "illustrators" and "emblems" (hand movements that illustrate the conversation), number of smiles, and number of laughs.

The observer walked into a bar, seated herself in a free corner, and chose as her subject the nearest person whom she could watch without affecting his behavior. She observed each person for five minutes and then chose the next nearest person, who was not a member of the former group. In total, she observed 55 persons in 17 East Berlin bars and 24 persons in 14 West Berlin bars.

The workmen in East Berlin bars showed much more behavior consistent with depression than the West Berlin workmen, who had more frequently upturned mouths ($p < 0.001$) and less slumped posture ($p < 0.001$). West Berliners used more illustrators ($p < 0.003$), but the number of adaptors did not differ significantly. West Berliners smiled and laughed more often ($p < 0.002$). Interrater reliability was shown to be high.

These results show more behavior consistent with depression in East than in West Berlin workmen. Oettingen et al. (1988) therefore predicted comparatively more pessimistic explanatory style in East Berlin. The most straightforward way to test this would be to give questionnaires to randomly sampled East and West Berliners, but this method cannot yet be used. The CAVE technique, however, made it possible to measure explanatory style unobtrusively.

Oettingen et al. (1988) used the reports of the 1984 Winter Olympics from the sports pages of the East and West Berlin newspapers. The Olympic games were one of the rare occasions that were reported in both East and West Berlin papers at the same time, thus yielding stan-

dardized material. Oettingen et al. (1988) extracted 381 explanations from three East Berlin papers and three West Berlin papers. They scored them for good versus bad events from the point of view of the country and rated them on the 1 to 7 scale for internality, stability, and globality. As a check on reliability and bias, 105 statements were given to another rater who was blind to the source of the statements. Interrater reliability was high.

East and West Berlin reports differed strongly in explanatory style. When good events were explained, the causes invoked were much more optimistic for West Berlin than for East Berlin newspapers ($p < 0.001$). When bad events were explained, West Berlin reports tended to be more optimistic. These differences in optimism stemmed from differences in the stable and global dimensions as there were no significant differences in internality. Figure 4 shows these results along with some of the depressive sign results.

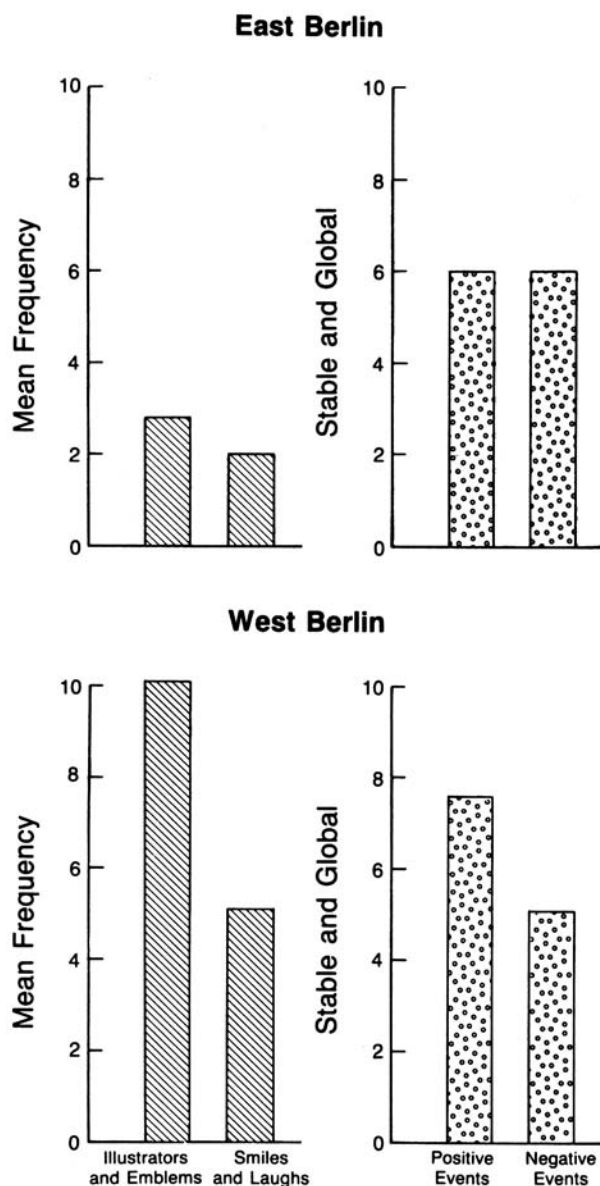
These results are surprising, first because East Germany won 24 medals in the 1984 Winter Games (West Germany won only 4 medals), and second because the East German newspapers are state run. Both factors should have biased East Berlin papers toward more optimism, but they did not. This suggests that the underlying explanatory style in East Berlin newspapers may be even more pessimistic than this study indicates. The tone of daily messages may play a role in how individual pessimism is acquired. If this is so, and East Berliners daily read more pessimistically toned news than West Berliners, they would be more influenced toward individual pessimism.

It is important to differentiate what these data show from what they do not show. They demonstrate cross-cultural differences in public behavior consistent with depression in East and West Berlin, and they demonstrate differences in pessimism in news reporting about the Olympics. They do not show what the causal relations are among behavioral signs of depression, explanatory style, and the political systems. By using the matched cities and standardized documents, many of the possible causal hypotheses (different weather, different language, different location, etc.), were eliminated, leaving the difference in the political systems as the main causal hypothesis.

Because the two cultures stemmed from one, the difference in the two political systems or their consequences since 1945 seems responsible for the contrast in both depressive behavior and explanatory style. However, it is not clear which aspects of the difference in political systems were causal. Differences in standard of living, openness of expression, bureaucracy, and even differences in movies, newspaper reports, and music are all possible causes. The data are, of course, silent on which consequences entailed by the difference in political systems are causal.

The data are also silent about the causal relationship *between* explanatory style and behavioral signs of depression: Did explanatory style in the newspapers influence behavioral signs of depression among the individuals or

Figure 4
Mean Frequency of Behaviors Consistent With Depression in Workers and Pessimism (Stable plus Global) in Olympic Newspaper Reports in East and West Berlin



did individuals' depressive behavioral signs influence explanatory style in the reports, or both?

Finally, the data do not tell—directionally—if East Berliners are pessimistic and depressed, West Berliners optimistic and nondepressed, or both. Oettingen et al. (1988) do not have absolute standards of comparison. Further, the data do not tell us the direction of change since 1945. Have West Berlin Olympic reports become more optimistic or East Berlin Olympic reports more

pessimistic over this period of time? Content analysis of sports reports over time will bear on this issue.

General Discussion

We see these illustrative studies as preliminary explorations of a new method with potentially wide application. Laboratory and longitudinal studies of contemporary individuals have suggested that explanatory style as measured by questionnaires measures the tendency to helplessness and that this state affects depression, health, and achievement. The studies we reported in this article show that verbatim records (speeches, press conferences, and newspaper reports) can be used to make inferences about the explanatory style of individuals and groups who will not or cannot fill out questionnaires. The studies suggest that explanatory style can be blindly and reliably measured in historical documents as well as by questionnaires filled out by contemporary individuals, and the studies suggest that CAVE has validity as well. We found that in the case of Lyndon Johnson, the activity or passivity of his subsequent presidential actions validated his drastic shifts in explanatory style. We found that the voting of the American electorate validated the differences in style between the candidates in the last 10 presidential elections. We found that the behavioral signs consistent with depression among workmen in East and West Berlin bars validated the differences in explanatory style between East and West Berlin Olympic reporting.

We are mindful that such studies evoke more questions than they answer. In their present form, such studies demonstrate that historical documents generate meaningful patterns of explanatory style and behavior indicative of pessimism and optimism. They do not demonstrate causal relations, although if the historical data are carefully selected and subjects chosen to provide controls for relevant third variables, the causal possibilities can be greatly narrowed. However, they do allow the statement of causal hypotheses about pessimism and its consequences that can then be tested by a sensitive use of psychological, sociological, and historical data sets.

In conclusion, we suggest three things. First, convergent measurements of the unobtrusive sort used in these studies may allow for the quantitative investigation of pessimism and its consequences from historical records across cultures and across historical periods. Second, theories of pessimism and its consequences can be tested using historical data. The technique has a third use as well: It need not be restricted to historical data, but can be applied to predict the behavior of contemporary individuals who will not take questionnaires.

Do we have a prediction of who will win the 1988 presidential election and by how much? Yes—it is in a sealed envelope in the hands of the editor of this journal.

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