

IS THERE REAL OPINION CHANGE?*

Tom W. Smith

ABSTRACT

Public opinion research in general and the study of opinion change in particular have frequently been challenged as unreliable. Attitudinal measurements are characterized as merely reflecting non-attitudes, labile moods, and/or methodological artefacts. Given this basis, the measurement of opinion change is seen as a product of random variations and systematic biases rather than as reliably measuring true change. However, most opinion change is (1) not chaotic, but slow and steady and (2) largely explicable. Even opinion change that is rapid and/or multi-directional can be plausibly explained. Measurement variation does however often distort time series and greatly complicates the reliable assessment of true change.

Several veins of social science research question the reliability of opinion measures and the meaningfulness and utility of studying opinion change. Opinions are seen as largely composed of non-attitudes (Converse, 1970; Smith, 1984a; Bennett, 1992), labile moods (Almond, 1950; Page and Shapiro, 1992), and/or measurement artefacts (Turner and Martin, 1984). With opinions consisting of mostly unreliable chaff, there is then little substantial grain to measure. From these perspectives opinion change is potentially reduced to little more than random noise and is seen as largely erratic, inexplicable, and meaningless.

This chaotic view of opinion change bears little resemblance to the observed phenomenon. As I will elaborate in the paper:

- 1 Most opinion change is slow and steady.
- 2 Most opinion change is largely explicable.
- 3 Even opinion change that is the exception to the slow and steady rule is largely explicable.
- 4 Measuring opinion change rests on sound and consistent measurement.

In testing these propositions, I will examine a wide range of work from the field of survey research and will in particular consider the experience of the National Opinion Research Center's (NORC) General Social Survey which has been

* This report was done for the General Social Survey project directed by James A. Davis and Tom W. Smith. This project is funded by the National Science Foundation, Grant No. SES 9122462. An earlier version of this paper was presented to the World Association for Public Opinion Research Regional Seminar on Opinion Dynamics, Montreal, February, 1993.

monitoring social and opinion change in the USA since 1972 (Davis and Smith, 1992).

SLOW AND STEADY

Opinions usually do not change rapidly or erratically. They rarely gyrate wildly about, but typically march along at a regular pace in a consistent direction. An analysis of 137 attitudinal trends on NORC's General Social Survey (GSS)¹ that covered an average of 15 years found that 34 percent of the time series showed no statistically significant variation across time (i.e. the time series fit a constant model), 26 percent followed a linear trend, 15 percent had a significant linear component, but also had additional unexplained variance, and 26 percent had trends that were non-constant and non-linear.² Most of the linear change (i.e. times series with linear trends or linear components) was modest. It averaged only 1.1 percentage points per annum and only 6 percent of the linear time series had rates of change above 2.5 percentage points per annum (Smith, 1980b).

Similarly, a GSS-related study of 455 liberal/conservative trends covering the period from 1936 to 1985 with an average of 14.8 years per time series found that 10 percent were constant, 24 percent linear trends, 55 percent linear components, and 11 percent non-constant, non-linear. The linear trends averaged 1.3 percentage points per annum (Smith, 1990a).

EXPLICABLE CHANGE

Most time series can be readily explained by a few simple models of social change. Two models that explain moderate-to-long-term change are (a) cohort-education turnover and (b) structural shifts. The cohort-education model is the single most useful explanation for opinion change. It explains change as a function of two, inter-connected factors: cohort turnover and increases in years of school. This model is the very opposite of the chaos model for it explains opinion change as the result of turnover in the composition of the population and not in terms of individual change and because it can only explain slow and consistent change.

When looking at decade-to-decade change, often most of the change can be explained by this simple two-variable model. Examples of such successful applications of the cohort-education model are changes in race relations (Firebaugh and Davis, 1988), civil liberties (Davis, 1975), gender roles (Smith,

¹ The GSSs are in-person, probability samples of adults living in households in the USA. 18 cross-sections have been collected from 1972 to 1991 and many items were repeated from baseline surveys going as far back as the 1930s. For technical details see Davis and Smith, 1992.

² These statistical models are described in Smith, 1980b and Taylor, 1980.

1976; Mason and Lu, 1988), the legalization of marijuana (Duncan, 1985), and sexual morality (Cutler, 1985; Smith, 1992*b*). The general utility of the cohort-education model is demonstrated in two multi-item analyses by Davis (Davis, 1980; 1992). In the latter Davis fits cohort replacement models on 39 GSS variables over the period from 1972 to 1989 and finds an average shift due to cohort turnover of 13 percentage points. He goes on to characterize the impact of cohort replacement on opinion change as 'broad and persistent' and concludes that using this framework in studying opinion trends is 'not only profitable, but indispensable ...'.

Decade-to-decade change can also be explained by structural shifts in important social processes and conditions (Ogburn, 1922; Cochran, 1972). There are a variety of different structural changes that have remolded opinions. These include the shift from farms to suburbs, increased female participation in the labor force, and reductions in family size (Davis, 1980; Kiecolt and Acock, 1988). The impact of structural shifts on opinions tends to be more specialized and slower (because such shifts are more gradual) than cohort-education turnover. In addition, these shifts are limited and non-renewable. While there will always be new cohorts and the population turnover reaches 100 percent, structural shifts are not continuing and usually fall within more limited ranges (e.g. the percentage employed in farming fell from about 55 percent in 1870 to less than 5 percent a century later).

Other models are effective in explaining shorter terms and non-linear opinion change. These include certain cyclical and event-driven models. Many different cyclical models of change have been proposed (Smith, 1984*a*). They cover many different processes and range from daily to multi-generational in length. Many are not well-grounded in theory nor well-established in fact. However, at least two cycles are well-documented in contemporary America and have important impacts on opinion change. First there are a series of related political cycles that are created by the constitutionally mandated presidential and Congressional election cycle. Among the factors that are driven by the election cycle are media coverage, poll content, turnout rates, political expenditures, and presidential popularity (about which more will be said later).

The second is the business cycle which drives not only vast changes in economic activity, but also variations in social problems (e.g. alcoholism), psychological states (satisfaction and depression), and economically related evaluations and expectations (more below) (Smith, 1984*a*). These, and possibly other cycles, can explain much of the non-linear variation that the cohort-education and structural shifts models cannot explain.

A final powerful model is the episodic or event-driven model. Of course we expect most change to be driven by events in some general sense that events are the causes and opinion shifts are the effects. Here however we refer to discrete,

mass events that are almost universally known to people and which have a widespread impact. Examples are economic crises,³ assassinations, revolts, and wars. Presidential popularity (MacKuen and Turner, 1984; Edwards, 1990) and assessments of the most important problems facing the nation (Smith, 1980a; 1985a; 1985b) are examples of series significantly influenced by these types of events.⁴ The events model is particularly important for explaining large, short-term changes.

By applying the cohort-education, structural shifts, political and business cycle, and event-driven models of change, most opinion change in contemporary America (and probably elsewhere) can be explained. Other models that take into account international diffusion of innovation processes (Rogers, 1982) and the impact of media coverage (Page *et al.*, 1987; MacKuen, 1984) further contribute to the understanding of opinion change.

UNUSUAL CHANGES

Next, we look at three groups of changes that do not follow the typical slow and steady pattern. First, we inspect the largest year-to-year changes on the GSS. Second, we examine all non-constant, non-linear trends from an analysis of 493 trends. Third, we consider three of the richest and most volatile of opinion series: trends in presidential popularity, consumer confidence, and the most important problem facing the nation. These large and/or irregular changes should be the hardest to explain and the most likely to lend support for a chaos model of opinion change. If these changes can be explained, then we have added support to the position that opinion change is real and meaningful.

LARGEST GSS CHANGES

First, we identified all one-year changes of 10 percentage points or more and all two-year changes of 15 percentage points or more on the GSSs. Table 1 shows that there are 36 such changes. Since there are about 2,600 such one- or two-year change intervals on the 1972-91 GSSs, these represent approximately the 1.4 percent biggest changes that have occurred on the GSS.

The top 36 changes can be categorized in several ways. Our analysis of the changes suggests that 14 are primarily event-driven, ten result from measurement variation, four from secular trends, four from cyclical trends, two from a

³ Clearly economic conditions related to the business cycle and economic crises may overlap. Below we cite an example where both overlap and separation occurs.

⁴ A less obvious example was the increase in approval of legal abortions that result from 1973 Roe versus Wade decision. Between 1972 and 1973 (from before to immediately after the ruling) support for six abortion questions rose by 6.0-8.4 percentage points. This rise was confined to the 85 percent of the sample who had heard of the recent decision. Controlling for the chief predictors of abortion attitudes (education, church attendance, age, and gender), knowing of the decision was significantly related to approval of legal abortions.

combination of measurement variation and events,⁵ and for two the cause of the changes are uncertain. While it is possible that some of our explanations are incorrect (and that only meaningless bounce causes the change), it is noteworthy that in almost every case previous substantive and/or methodological research has examined these changes and offered the same explanations as here. These researches are cited along with discussion of the specific changes.

A perusal of these large changes indicates that a plurality of these extraordinary changes results from dramatic events. Most of the event-driven changes are responses to foreign policy developments (11), domestic political events account for 3 changes (including both that are combined with methods effects), one is related to an economic occurrence, and one to religious scandals.

Looking at the changes related to foreign policy events, we find that the Persian Gulf War notably increased confidence in the military, liking of Israel, expectations of future wars, support for defense spending, confidence in organized religion, and liking of Egypt between February/March, 1990 and February/March, 1991 (during and in the immediate aftermath of the U.S. and allied victory) (Smith, 1992c). Only the connection between the Gulf victory and increased confidence in religion is less than patently obvious. Similarly, the Soviet invasion of Afghanistan and the Iran hostage crisis in 1979-80 increased support for military spending between 1978 and 1980. Support for spending then returned to 1978 levels in 1982 as military preparedness increased and these crises ended or faded (Smith, 1986; 1987).⁶

Finally, the three other changes prompted by foreign policy events were the increased liking of Russia between 1985 and 1986 following Gorbachev's rise to power and a successful U.S.-Soviet summit (Smith, 1986; 1987), the drop in expectation of a future war from 1975 to 1976 after the end of U.S. involvement in Vietnam and the growth of detente in general, and the rise in dislike of China in 1990 following the Tienanmen Square suppression.

On the domestic side confidence in the executive branch of the federal government fell from 1973 to 1974 as Watergate disclosures came out (Smith *et al.*, 1980); confidence in banks and financial institutions dropped from 1990 to 1991 as the savings and loans and stock market scandals compounded,⁷ and confidence in organized religion fell from 1987 to 1988 in the wake of the Bakker and Swaggart scandals (Smith, 1992d).

⁵ The discussion below will also indicate that we think that several changes involve more than one factor. In these two cases we do not feel that we can assign a primary factor and in fact believe the change results from an interaction of events and measurement variation.

⁶ Media coverage also turned against more military spending in the early 1980s (Zaller, 1992).

⁷ A series of these troubles from the mid-1980s on led the percent with 'hardly any' confidence in banks and financial institutions to rise from 11.0 in 1984 to 22.6 in 1990 and then to 34.6 in 1991. The surge in 1990/91 thus came on top of a substantial trend. It may be linked to the political and criminal scandals that came out in 1990 such as the Keating Five, the involvement of Bush's son, and the jailing of 'junk bond king' Michael Milken. It also appears that confidence in banks tends to vary with the business cycle.

TABLE 1 Largest Annual Changes on the General Social Survey^a

<i>Variables</i>	<i>Years</i>	<i>Annual rate of change in percentage points</i>	<i>Reason for change</i>
Confidence in military (CONARMY)	90-91	27.1	Gulf War
Like/dislike Israel (ISRAEL)	90-91	22.8	Gulf War
World War likely (USWARY)	90-91	19.2	Gulf War
Confidence in education (CONEDUC)	74-75	18.3	Context
Defense spending (NATARMS)	90-91	17.1	Gulf War
Confidence in Executive Branch (CONFED)	73-74	16.0	Watergate
Quality of members of military (MILQUAL)	82-83	16.0	Trend
Confidence in Executive Branch (CONFED)	77-78	15.9	Presidential cycle
Defense spending (NATARMS)	78-80	15.5	Afghanistan/Iran
Like/dislike of China (CHINA)	89-90	15.1	Tienanmen Square
Confidence in Executive Branch (CONFED)	76-77	14.9	Presidential cycle
Defense spending (NATARMS)	80-82	14.7	Afghanistan/Iran
Religious experience (GRACE)	83-84	14.5	Context
Support military draft (DRAFT)	82-83	14.3	Trend
Confidence in organized religion (CONCLERG)	90-91	14.1	Gulf War
Helpfulness of people (HELPFUL)	75-76	13.2	Context
Confidence in organized religion (CONCLERG)	87-88	12.6	Televangelists
Like/dislike Egypt (EGYPT)	90-91	12.5	Gulf War
Confidence in education (CONEDUC)	73-74	12.3	Context
Confidence in education (CONEDUC)	77-78	12.1	??
Confidence in banks (CONFINAN)	90-91	12.0	S&L crisis, etc.
Like/dislike Russia (RUSSIA)	85-86	11.8	Gorbachev
Confidence in organized religion (CONCLERG)	74-75	11.8	Context
War likely (USWAR)	75-76	11.4	Vietnam/detente
Trust in people (TRUST)	83-84	10.9	Context
People don't care for others (ANOMIA9)	73-74	10.9	Watergate/context

^aBased on all changes on the GSS involving one or two year intervals between observations.

TABLE 1 (continued)

<i>Variables</i>	<i>Years</i>	<i>Annual rate of change in percentage points</i>	<i>Reason for change</i>
Who can be trusted (ANOMIA8)	73-74	10.8	Watergate/context
Spending on welfare (NATFARE)	75-76	10.8	Business cycle
Approve suicide if incurable (SUICIDE)	89-90	10.5	Trend
Confidence in business (CONBUS)	76-77	10.1	Context
Make divorce harder/easier (DIVLAW)	77-78	10.0	??
Integrate social clubs (RACCHNG)	85-86	10.0	Trend
Confidence in medicine (CONMEDIC)	74-75	10.0	Context
Warm/cold towards Jews (JEWTEMP)	86-88	8.7	Instructions
Helpfulness of people (HELPFUL)	76-78	8.2	Context
Importance of job security (JOBSEC)	80-82	8.1	Business cycle

Second, measurement variation accounts for 10 of these large changes. The GSS strives for consistency in measurement and has been generally successful in exactly replicating wording, sampling, and most other features (Smith, 1990b; Davis and Smith, 1992). However, it has not always been possible to standardize context. While context effects are relatively rare (Smith, 1991), they can notably change distributions when they do occur. Altering the internal order of institutions on the confidence question and/or the placement of the confidence battery created five large context effects in 1973-77 surveys (Smith, 1981). Other context effects occurred when an item on religious ecstasy was asked in connection with items on paranormal experiences (Smith, 1984c) and on three measures of misanthropy (Smith, 1983; 1991). In addition, an alteration in probing instructions also changed how warmly people rated Jews (and to a lesser extent how they rated four other groups).

Third, it appears that in two cases changes resulted from a combination of events and measurement variation. Two Srole anomia items (believing that 'people don't really care about what happens to the next fellow' and that 'a person doesn't really know whom he can count on') fell from 1973 to 1974. Six other anomia items showed little consistent change (percentage changes of -4.5, -4.1, -0.3, +0.5, +3.0, and +5.6). A seventh item ('most public officials are not really interested in the problems of the average man') increased by 6.2

percentage points. The three items showing the largest changes appeared together in both 1973 and 1974 (the other six appearing in two other groups of three in both years). In 1974 this cluster appeared immediately after the confidence scale. Both the appearance of the confidence scale with the executive branch item and the fact that three anomia item group was led-off by the political alienation item probably created a link in people's minds to the Watergate scandal in 1974. Thus, context in combination with the Watergate scandal probably increased popular agreement with these three anomia items in 1974.

Fourth, there are four changes that are part of secular trends. Two of these are related to military events. Belief in the quality of the American military increased from 52.6 percent in 1982 to 68.6 percent in 1983 and 71.7 percent in 1984. In tandem, support for a voluntary armed forces versus a draft increased from 55.7 percent in 1982 to 70.0 percent in 1983 and 76.3 percent in 1984. (Likewise, confidence in the military was also rising from 28.8 percent in 1980 to 37.1 percent in 1984.) In brief, we have every reason to believe that these changes were real. In two other cases the surges are probably minor deviations from ongoing trends. Approval of suicide in case of an incurable disease rose from 39.2 percent in 1977 to 58.7 percent in 1991. The surge from 49.0 percent in 1989 to 59.5 percent in 1990 represents only a minor and probably sampling deviation from the long-term trend. If we fit the 14 year trend on 1989 and 1990, we get estimates of 54.2 and 56.4 percent. This suggests that the 1989 and 1990 observations were probably just over- and underestimates of the secular trend. Similarly, support for desegregating social clubs climbed from 41.9 percent in 1977 to 69.0 percent in 1991. The 1985/86 leap from 55.7 to 65.7 percent also probably represents a slight over- and underestimate of the long-term trend which estimates the 1985 and 1986 points at 57.4 and 59.3 percent.

Fifth, four items shifted according to cyclical patterns. Presidential popularity is high at the beginning of a term. This has been described as an inaugural or honeymoon effect (Edwards, 1990; Mueller, 1973). This explains the surge of confidence in the executive branch of the federal government from 1976 to 1977. Popularity then tends to decline with foreign policy occurrences, economic conditions, and media coverage explaining the changes. The failures of the Carter presidency which led to his defeat for re-election explains the drop in confidence from 1977 to 1978.

Other options follow the ups and downs of the business cycle. These include evaluations of recent changes in financial conditions, expectation of losing a job, estimates of being able to get another job, the importance of job security, financial satisfaction, support for welfare spending, confidence in business, and to a lesser extent confidence in banks, government help for the poor, and agreement that the lot of the average man is getting worse. To illustrate, over the

TABLE 2 Fluctuations in the U.S. economy 1970-1991

<i>Troughs</i>	<i>Peaks</i>
11/1970	11/1973
3/1975	1/1980
7/1980	7/1981
11/1982	7/1990
3/1991	—

TABLE 3 Percentage indicating worsening financial position

<i>Year</i>	<i>Percentage</i>	<i>State of Economy</i>
1973	16.3	
1975	28.3	Recession
1978	18.7	
1982	29.5	Recession
1989	17.8	
1991	22.2	Recession

last 20 years the U.S. economy went through the swings in performance shown in Table 2. The percentage reporting that they were worse-off financially than before matched this cycle as shown in Table 3. In line with this pattern the end of the 1975 recession explains the decrease in support for more welfare spending from 24.7 percent in 1975 to 13.9 percent in 1976. Similarly, the rise in the importance of job security from 34.7 percent in 1980 to 50.8 percent in 1982 results from the 1982 recession.

Finally, that leaves two of 36 trends that we do not feel we have solid explanations for. Opinion on whether it should be easier or more difficult to obtain a divorce showed a gain of 10 percentage points for the unread, but precoded, 'stay the same' option between 1976 and 1977. This shift is probably related to the fact that increasing support for easier divorce was reversing in the mid-1970s as divorce laws were liberalized and divorce rates climbed in the 1970s and then levelled-off in the early 1980s. The other unexplained change was the fall in confidence in education from 41.0 percent in 1977 to 28.9 percent in 1978.⁸

⁸ Across about 2,600 intervals one change of 10+ percentage points could easily be due merely to sampling error.

Examining these 36 case studies of large opinion shifts provides insight into the nature of opinion change and suggests several lessons about opinion change. The chief lesson we learn from perusing these large changes is that even almost all of the largest changes have ready explanations.

Second, we note that half of the largest changes that are not explained by measurement variations are in the national security area (i.e. foreign affairs and the military). National security items are especially susceptible to large changes because (1) foreign and military conditions can change rapidly and massively and such changes act as exogenous shocks to public opinion; and (2) the public must rely on media and elite presentation of information to base their opinions on, as they do not personally experience the events at issue in the way they experience domestic matters such as crime or inflation. Thus we would expect opinions dealing with national security matters to be more changeable than other items (Page and Shapiro, 1992).

Third, 13 of the 36 changes involve the confidence battery that evaluates 13 institutions (the Executive Branch, the Supreme Court, the Congress, the military, major companies, organized unions, banks and financial institutions, the scientific community, medicine, education, TV, the press, and organized religion). While the reasons for the confidence items showing changes are quite variable (six due to events, four to context, two to cycles, and one uncertain), there are some common elements of the confidence items that make them prone to large swings. First, the confidence items are in effect contemporary performance measures and the ratings of institutions are naturally sensitive to the recent successes and failures of the institutions (as shown by the link of the ratings of major companies and banks to the business cycle, of the military to victories, of the executive branch and organized religion to scandals, etc.). The confidence items, like presidential popularity, are likely to be event-driven and therefore susceptible to notable short-term swings. In addition, evaluating confidence partly involves making a relative judgment. People apparently consider the other institutions they have been asked to evaluate and partially provide a relative comparison across institutions. This in part explains the context effects that we have observed.

Finally, up to twelve of the 36 largest changes result wholly or in part from measurement variation. This lesson will be discussed below.

NON-CONSTANT, NON-LINEAR TRENDS

Non-constant, non-linear trends significantly vary from a constant fit and no significant part of the variation is uni-directional and linear (Taylor, 1980). Non-constant, non-linear trends include such patterns as fairly simple trends and counter-trends (i.e. reversals or V-shaped trends) and more complex trends

involving multiple peaks and valleys. Such non-constant, non-linear trends are the type of fluctuations posited by the chaos model of opinion change.

A preliminary analysis of 493 trends that has been compiled as part of an ongoing study of liberal/conservative change since the 1930s found that only 52 or 10.5 percent of the time series had non-constant, non-linear trends.⁹ Of these trends three deal with behaviors and will be excluded from consideration.

That leaves 41 showing no individual changes that qualify as large, as defined in the GSS series examined above, and only eight with large changes. Of the 41 'minor' non-linear, non-constant trends many show statistically significant, but trivial, variation. For example, in nine surveys from 1944 to 1986 the percentage believing in God ranged from a low of 94.2 percent to a high of 99 percent. Similarly, in 14 surveys from 1968 to 1991 the percentage approving of a policeman hitting a protest marcher fell between 1.1 and 3.9 percent. For many others alterations in wording and/or in the organization asking the question explains the observed variation. In less than 10 of the 41 time series are there consistent measurement and non-trivial trends. In each of these time series there are plausible events (e.g. World War II and the Korean War) to explain 'blips' and/or trends and counter-trends (i.e. reversals) that agree with known events and/or are confirmed by related series. For example, on several time series evaluations of the United Nations peaked during the Korean and Persian Gulf Wars and two series show that approval of the metric system increased from the late sixties to the mid-seventies and then fell-off to the early 1980s.

The eight non-linear, non-constant times series that have at least one annual change of 10 percentage points or more are also generally comprehensible. First, there are three series that seem to follow well-documented historical changes. Support for defense spending has varied greatly from 1971 to 1991 due to world events as discussed above. Similarly, between 1950 and 1991 approval of the job the UN is doing showed peaks in 1953-54 during and in the immediate aftermath of the Korean War and again in 1991 at the time of the Gulf War. Similar patterns are shown by four other UN time series. Also, an item that asks whether religion is gaining/losing influence in America showed that people thought that influence was waning from 1957 to 1970, waxing to 1976, in roughly a steady state from 1976 to 1986, and then dropped in 1988-90. This pattern is consistent with general perceptions of a liberal, secular 'sixties', a seventies and eighties marked by the rise of the Moral Majority and the religious right, and the previously mentioned religious scandals in 1987-88 (Smith, 1992a;d).

Second, there are four time series that seem to vary because of house, sample, and/or wording effects. These include items on the regulation of pornography (1974-86), racial discrimination as a reason for black-white differences in

⁹ This updates through 1991 and adds to the 455 trends covered in Smith, 1990a.

standard of living (1977-91), the role of the federal government in promoting racial integration (1964-90), and the legalization of homosexuality (1977-91). In the last case we now realize that 3 of the 13 time points have to be dropped because of variant wordings.¹⁰

Finally, there are two series that are not readily explicable. While most of the initial variation in support for the legalization of homosexuality results from wording differences (see note 10), there still is an unexplained fluctuation in approval of legalization from 35 percent in 1988 to 47 percent in 1989 and back to 36 percent in 1991. This is especially striking since evaluations of the morality of homosexuality are extremely stable during this same period (Smith, 1992a). Also, uncertain is the shift in support for government medical coverage which rises and falls as follows: 1973, 50 percent; 1974, 43 percent; 2/1975, 40 percent; 10/1975, 50 percent; 1976, 52 percent; 1977, 45 percent; 1978, 50 percent; 1979, 40 percent; and 1983, 49 percent. While the range of variation is not great, the pattern of changes is difficult to explain. In brief, inspection of non-linear and non-constant time series shows few large fluctuations and even fewer inexplicable ones.

VOLATILE TIME SERIES

Among the longest, richest, and most changeable of opinion times series are those on presidential popularity, consumer confidence, and the most important problem. Early variants of the presidential popularity series were first asked by Gallup in 1935 and a standard wording has been employed hundreds of times since 1945 (Edwards, 1990). The five-item Index of Consumer Sentiments was asked quarterly by the Survey Research Center from 1952 to 1978 and monthly from then down to the present (Curtin, 1982). The most important problem facing the U.S. series was started by Gallup in 1936 and a standard wording (as well as occasional variants) have been asked several times a year since 1947 (Smith, 1980a; 1985a;b).

Each item has been widely copied by other organizations. The Gallup presidential popularity item has been appropriated by CBS/*New York Times* and similar series have been fielded by Harris, NBC/*Wall Street Journal*, the Roper Organization, and others. The Conference Board developed a similar indicator of consumer sentiments and have asked it regularly since 1969. Likewise, both

¹⁰ There are three wordings. The standard wording asks, 'Do you think homosexual relations between consenting adults should or should not be legal?' The first variant is 'Do . . . adults in their own homes should be legal or illegal?' The second variant is 'Do . . . adults in the privacy of their own homes should be legal or illegal?' Support is about 6 percentage points higher than the standard version when the first variant version is used and 12-19.5 percentage points higher when the second variant is employed. The difference probably comes from the addition of the phrase 'in their own homes' for the first variant and the even stronger 'in the privacy of their own homes' in the second variant.

exact replications of and close approximations to the most important problem item have been used by all major public opinion pollsters.

Each of these series can show extremely large, short-term changes in opinion. Presidential popularity occasionally swings 12-16 percentage points between adjacent points only a week or two apart and undergoes much larger changes over longer periods (e.g. from 67 percent in 1/1973 to 25 percent in 2-3/1974). Likewise, mentions of the most important problem facing the nation can change 20+ percentage points within a month and 35-45 percentage points in six months. Consumer confidence is intrinsically more stable since it is a scale and in part refers to personal economic situations, but its index value often moves 20+ scale points within a year or so.

There is a large literature utilizing the presidential popularity measure and notable, if smaller, bodies of research using the consumer confidence and most important problems series. In each case much of the over time trends has been explained. Consumer confidence varies along with the business cycle and the correspondence is so strong between them that a three-item sub-scale, the Index of Consumer Expectations, has been incorporated in the government's official measure of leading economic indicators.¹¹ Presidential popularity is affected by the presidential election cycle, the business cycle, and various events. The impact of events such as foreign policy rallying points and domestic scandals can be calculated both by entering the discrete episodes into a model or by using media content to cover events (Shapiro and Conforto, 1980; Kernell, 1978; Ostrom and Simon, 1985). The most important problem also closely follows both the business cycle and world and domestic events, but it seems to be unrelated to the presidential cycle. Overall, the most important problem series closely tracks historical changes and objective conditions (Smith, 1980a; MacKuen, 1984). Even though each of these series involves numerous, large swings in opinion, these opinion changes are meaningful and comprehensible reactions to cyclical and episodic changes in the world.

MEASUREMENT VARIATION

At various points in our discussion of opinion changes, we have credited large and irregular shifts as due to measurement variation. Variations in wording and order in particular as well as changes in surveying mode, item and sample non-response, and house can seriously distort and invalidate over time comparisons.

¹¹ A single item asked by Allensbach from 1949 to the present about 'Is it with hopes or fears that you enter the coming year?' has likewise been a good predictor of economic conditions in Germany.

For that reason strict replication is essential in order to reliably monitor social and opinion change.

Some see such methods effects as evidence of the capriciousness of opinion and as reasons to distrust opinion research in general and opinion change in particular. But instead understanding measurement variation gives us a better and more grounded understanding of the underlying phenomenon itself. If two point estimates or two time series disagree, the proper response is not to damn opinion as labile nor to curse surveys as unreliable, but to seek out the source of the differences. There is almost always a readily apparent explanation for the discrepancies. By isolating these sources of variation one gains a better understanding both of what factors can influence the particular substantive opinion under investigation and of what elements of surveying tend to create differences in general. For example, one can learn much about public opinion by observing how changes in context (Smith, 1991) or wording (Smith, 1981) change distributions and relationships.

When it comes to measurement variation and the study of opinion change, there are two lessons to be learned and followed: first, 'The way to measure change is not to change the measure.' And if this primary rule is *not* abided by, then second, 'It is a mistake not to learn from a mistake.'

SUMMARY

When we examine opinion changes we find neither chaos nor a chimera, but rather order and a map of reality. In fact, most opinion change can be plausibly explained. Cohort-education turnover, structural shifts, election and business cycle, event-driven, and media coverage models can explain most opinion change. In recent years, several wide-ranging studies of opinion change have examined hundreds of trends over three to five decades (Mayer, 1992; Page and Shapiro, 1992; Smith, 1990a; Stimson, 1991). They have uniformly found both that individual opinion time series are reliable measures of social change and that in the aggregate opinion trends often show a great deal of consistency and cohesion so that one can clearly identify meta-trends and define certain historical periods.

If measurement variation is minimized, these substantive engines will explain why opinion has moved and (to a limited extent) where it is going. But changes in measurement procedures can significantly alter the phenomenon being measured and seriously distort a time series. While such complications are undesirable from the point of assessing true change, such methodological artefacts do not invalidate opinion research. Instead they provide an opportunity to learn more about both the particular opinion under investigation and to advance the art and science of survey research in general.

REFERENCES

- Almond, Gabriel A. (1950): *The American People and Foreign Policy*, New York, Praeger.
- Bennett, W. Lance (1992): 'Constructing Publics and Their Opinions', Paper presented to the American Association for Public Opinion Research, Chicago.
- Cochran, Thomas C. (1972): *Social Change in America: The Twentieth Century*, London, Allen and Unwin.
- Converse, Philip E. (1970): 'Attitudes and Non-Attitudes: Continuation of a Dialogue'. In Edward R. Tufte (ed.) *The Quantitative Analysis of Social Problems*, Reading, MA, Addison Wesley.
- Curtin, Richard T. (1982): 'Indicators of Consumer Behavior: The University of Michigan's Surveys of Consumers', *Public Opinion Quarterly*, 46, 340-52.
- Cutler, Stephen J. (1985): 'Ageing and Attitudes about Sexual Morality', *Ageing and Society*, 5, 161-73.
- Davis, James A. (1975): 'Communism, Conformity, Cohorts, and Categories: American Tolerance in 1954 and 1972-73', *American Journal of Sociology*, 81, 491-513.
- Davis, James A. (1980): 'Conservative Weather in a Liberalizing Climate: Change in Selected NORC General Social Survey Items, 1972-1978', *Social Forces*, 58, 1129-56.
- Davis James A. (1981): 'The Parental Families of Americans in Birth Cohorts 1890-1955: A Categorical, Linear Equation Model Estimated from the NORC General Social Survey', *Social Indicators Research*, 9, 395-453.
- Davis, James A. (1992): 'Changeable Weather in a Cooling Climate Atop the Liberal Plateau: Conversion and Replacement in 42 Items, 1972-1989', *Public Opinion Quarterly*, 56, 261-306.
- Davis, James A. and Smith, Tom W. (1992): *NORC's General Social Survey: A User's Guide*, Newbury Park, CA, Sage.
- Duncan, Beverly (1985): 'Legalization of Marijuana and Year of Birth: Public Opinion 1969 to 1980'. In Leon Brill and Charles Winick (eds.) *The Yearbook of Substance Use and Abuse*, Vol. III, New York, Human Science Press.
- Edwards, George C., III (1990): *Presidential Approval: A Sourcebook*, Baltimore, Johns Hopkins University Press.
- Firebaugh, Glenn and Davis, Kenneth E. (1988): 'Trends in Antiblack Prejudice, 1972-1984: Region and Cohort Effects', *American Journal of Sociology*, 94, 251-72.
- Kernell, Samuel (1978): 'Explaining Presidential Popularity', *American Political Science Review*, 72, 506-22.
- Kiccolt, K. Jill and Acock, Alan C. (1988): 'The Long-Term Effects of Family Structure on Gender-Role Attitudes', *Journal of Marriage and the Family*, 50, 709-17.
- MacKuen, Michael B. (1984): 'Reality, the Press and Citizens' Political Agendas'. In Charles F. Turner and Elizabeth Martin (eds.) *Surveying Subjective Phenomena*, New York, Russell Sage Foundation.
- MacKuen, Michael B. and Turner, Charles F. (1984): 'The Popularity of Presidents, 1963-1980'. In Charles F. Turner and Elizabeth Martin (eds.) *Surveying Subjective Phenomena*, New York, Russell Sage Foundation.

- Mason, Karen Oppenheim and Yu-Hsia Lu (1988): 'Attitudes Toward U.S. Women's Familial Roles, 1977-1985', *Gender & Society*, 2, 39-57.
- Mayer, William G. (1992): *The Changing American Mind: How and Why American Public Opinion Changed Between 1960 and 1988*, Ann Arbor, University of Michigan Press.
- Mueller, John E. (1973): *War, Presidents, and Public Opinion*. New York, John Wiley & Sons.
- Ogburn, William Fielding (1922 [1966]): *Social Change*, New York, Dell.
- Ostrom, Charles W., Jr. and Simon, Dennis M. (1985): 'Promise and Performance: A Dynamic Model of Presidential Popularity', *American Political Science Review*, 79, 334-58.
- Page, Benjamin I. and Shapiro, Robert Y. (1992): *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*, Chicago, University of Chicago Press.
- Page, Benjamin I., Shapiro, Robert Y. and Dempsey, Glenn R. (1987): 'What Moves Public Opinion?' *American Political Science Review*, 81, 23-43.
- Rogers, Everett M. (1982): *Diffusion of Innovation*, New York, The Free Press.
- Shapiro, Robert Y. and Conforto, Bruce M. (1980): 'Presidential Performance, the Economy, and the Public's Evaluation of Economic Conditions', *Journal of Politics*, 42, 49-67, 76-81.
- Smith, Tom W. (1976): 'Ms. President? A Study in the Political Role of Women, 1936-1974'. In James A. Davis (ed.) *Studies of Social Change Since 1948*, NORC Report 127B, Chicago, NORC.
- Smith, Tom W. (1980a): 'America's Most Important Problem: A Trend Analysis, 1946-1976', *Public Opinion Quarterly*, 44, 164-80.
- Smith, Tom W. (1980b): *A Compendium of Trends on General Social Survey Questions*, NORC Report 129, Chicago, NORC.
- Smith, Tom W. (1981): 'Can We have Confidence in Confidence? Revisited'. In Denis F. Johnston (ed.) *The Measurement of Subjective Phenomena*, Washington, DC: GPO.
- Smith, Tom W. (1983): 'An Experimental Comparison of Clustered and Scattered Scale Items', *Social Psychology Quarterly*, 46, 163-68.
- Smith, Tom W. (1984a): 'Cycles of Reform? A Summary of Trends Since World War II', Paper presented to the American Sociological Association, San Antonio.
- Smith, Tom W. (1984b): 'Nonattitudes: A Review and Evaluation'. In Charles F. Turner and Elizabeth Martin (eds.) *Surveying Subjective Phenomena*, New York, Russell Sage.
- Smith, Tom W. (1984c): 'A Preliminary Analysis of Methodological Experiments on the 1984 GSS', GSS Methodological Report No. 30, Chicago, NORC.
- Smith, Tom W. (1985a): 'The Polls: America's Most Important Problems: Part 1', *Public Opinion Quarterly*, 49, 264-74.
- Smith, Tom W. (1985b): 'The Polls: America's Most Important Problems: Part 2', *Public Opinion Quarterly*, 49, 403-10.
- Smith, Tom W. (1986): 'Where Are We Now? Public Attitudes and Knowledge about the Soviet Union', Paper presented to the Conference on Effective Citizen Education about the Soviet Union, Wingspread, Wisconsin.

- Smith, Tom W. (1987): 'Red in the Morning: Recent Trends in American Attitudes Towards the Soviet Union and Communism', *The NORC Reporter*, 1, 4-5.
- Smith, Tom W. (1990a): 'Liberal and Conservative Trends in the United States Since World War II', *Public Opinion Quarterly*, 54, 479-507.
- Smith, Tom W. (1990b): 'Timely Artifacts: A Review of Measurement Variation in the 1972-1989 GSS', *1990 Proceedings of the Section on Survey Research Methods*, Washington, DC, American Statistical Association.
- Smith, Tom W. (1991): 'Context Effects in the General Social Survey'. In Paul B. Biemer, *et al.*, (eds.) *Measurement Errors in Surveys*, New York, John Wiley & Sons.
- Smith, Tom W. (1992a): 'Are Conservative Churches Growing?' *Review of Religious Research*, 33, 305-29.
- Smith, Tom W. (1992b): 'Attitudes Towards Sexual Permissiveness: Trends and Correlates', GSS Social Change Report No. 35, Chicago, NORC.
- Smith, Tom W. (1992c): 'Gulf War Effects', *GSSNews*, 5, 4-6.
- Smith, Tom W. (1992d): 'Religious Beliefs, Behaviors, and the Televangelist Scandals of 1987-1988', *Public Opinion Quarterly*, 56, 360-80.
- Smith, Tom W., Taylor, Garth D. and Mathiowetz, Nancy A. (1980): 'Public Opinion and Public Regard for the Federal Government'. In Carol Weiss and Allen Barton (eds.) *Making Bureaucracies Work*, Beverly Hills, Sage.
- Stimson, James A. (1991): *Public Opinion in America: Moods, Cycles, and Swings*, Boulder, CO: Westview Press.
- Taylor, D. Garth (1980): 'Procedures for Evaluating Trends in Public Opinion', *Public Opinion Quarterly*, 44, 86-100.
- Turner, Charles F. and Martin, Elizabeth (eds.) (1985): *Surveying Subjective Phenomena*, New York, Russell Sage.
- Zaller, John R. (1992): *Nature and Origins of Mass Opinion*, Cambridge, Cambridge University Press.

BIOGRAPHICAL NOTE

Tom W. Smith is Director of the General Social Survey at the National Opinion Research Center, University of Chicago. He specializes in the study of social change and survey methodology.

FORUM

IF THERE IS REAL OPINION CHANGE, HOW MUCH REAL OPINION EXISTS? COMMENT ON 'IS THERE REAL OPINION CHANGE?'

'Is There Real Opinion Change?' (Smith, 1994) shows that changes in aggregate public opinion are generally slow and steady, and whether slow or rapid, are largely explicable by rational factors. This is taken as disproving the contention, attributed to Converse and others, that 'opinions are . . . largely composed of non-attitudes, labile moods, and/or measurement artefacts.' There are two problems with this conclusion.

First, it is wrong to assert that the many authors cited, from Converse on, saw 'opinions consisting of mostly unreliable chaff', so that 'from these perspectives opinion change is potentially reduced to little more than random noise.' Converse and the others mentioned argued on the contrary that there was a group—ranging from as few as 20 percent on the role of government in providing utilities and housing to as many as 60 percent on the 'busing' question—which had genuine, stable opinions. Of course on almost all of the opinion items studied in the Michigan panel surveys, Converse's 'Black-and-White model' (assuming three kinds of people, liberal opinion-holders, conservative opinion-holders, and non-opinion-holders answering at random) estimated the genuine opinion holders as a minority of all respondents, so that overall survey figures on 'public opinion' represent a rather diluted mixture of real opinion and random response. But this does not mean that there is nothing there.

Taylor (1983) argued that one should count those who show genuine opinion *change* as real opinion-holders. Her latent structure analysis of the three-wave panels surveyed by University of Michigan Survey Research Center in 1956–60 and 1972–76 allowed for two more latent classes—real changers in either a conservative or a liberal direction. However these real changers were only from 2 to 8 percent of the respondents, still leaving real opinion-holders a minority on almost all items.

Brody (1986) criticized Taylor's models for classifying people who answered 'no opinion' on any of the three waves as 'non-attitude' holders. Brody's 'Black-Gray-White' model of these data avoided forcing those who answered a question 'no opinion' on any wave into the category of non-attitude holders, and allowed for three more latent classes: consistent 'no-opinion' people (who are non-opinion-holders but admit it), 'soft liberals' who vacillated between liberal answers and no opinion, and 'soft conservatives' who vacillated between conservative answers and no opinion. On this basis the 'attitude-holders' were estimated at from as low as 40 percent on foreign policy items to a high of 80 percent for the busing item.

Second, the fact that attitude changes tend to be slow and steady, and that rapid attitude change is generally explicable on the basis of unusual events (or the fact that the

objects of the 'same question' were different at different times), does not contradict the claim of Converse and others that large percentages of the public, often a majority, are 'non-attitude' holders answering at random. To argue from aggregate stability to the stability of individual respondents confuses levels. The *aggregate* response of randomly responding non-opinion holders will be stable within normal statistical limits determined by sample size; the real opinion-holders will be divided between those who are individually stable over time, and those who are real opinion changers. The net change in the last group is superimposed on the aggregate stability of the other two groups, producing the observed phenomena. It is also possible that people *become* real opinion holders when public events impinge their lives and become salient to them. These processes require at least three panel waves to identify.

In the absence of panel-based estimates of the size of the stratum holding real attitudes, the size of the change *relative to the number who hold meaningful opinions* is unknown. *Net* change beyond random limits can occur only in the stratum of the population which holds—or comes to hold—meaningful opinions on a given issue. But the amount of rationally explainable change only sets minimum estimates of the proportion holding real opinions.

It is of course possible that the 'nonopinion-holders' do not actually answer at random, but in response to ephemeral widely publicized incidents or propaganda blitzes, and that their individual instability reflects variations over time in such short-run stimuli, thus producing aggregate change which is still relatively 'meaningless'. However the data reported by Smith in the present article suggest that this does not happen on most issues, and that the observed changes are taking place among the 'real opinion holders'. But the size of that group remains unknown.

Smith argues that even the more volatile time-series on presidential popularity, consumer confidence, and 'most important problem' are 'meaningful and comprehensible reactions to cyclical and episodic changes in the world'. Certainly such volatile opinions can have consequences for voting or consumer purchases and are in this sense 'real' even though they may be based on widespread misinformation, media fads, or irrational social processes (as in 'crazes' and 'panics') rather than 'real' events or conditions. The 'quality' of opinions is a different issue from their short-run test-retest reliability and their effects on behavior. But an unknown proportion of those answering such questions may still be doing so at random and their answers would not predict any other behavior.

For trend studies on which the original data files are available, one might stratify the public on some indicator of political knowledge or sophistication, and see whether opinion changes occurred more, or earlier, among the knowledgeable stratum. Black (1982) showed that 'opinion leaders' in public samples interviewed quarterly picked up changes in opinion from 3 to 14 quarters earlier than non-leaders. On the other hand Neuman (1986) tried without success to find a relationship between 'political sophistication' and attitude stability or structure: on some issues the less sophisticated and less educated had more stability and higher opinion intercorrelations than the more sophisticated and more educated. The only factor reliably related to attitude 'constraint' appears to be occupying a really high elite status—as a congressional candidate, CEO of

a big corporation, union leader, or other top positions (Converse, 1964; Barton and Parsons 1977.)

REFERENCES

- Barton, Allen H. and Parsons, R. Wayne (1977): 'Measuring Belief System Structure', *Public Opinion Quarterly*, 41, 159-80.
- Black, Joan S. (1982): 'Opinion Leaders: Is Anyone Following?' *Public Opinion Quarterly*, 46, 169-76.
- Brody, Charles J. (1986): 'Things are rarely Black and White: Admitting Gray into the Converse Model of Attitude Stability', *American Journal of Sociology*, 92, 657-77.
- Converse, Phillip E. (1964): 'The Nature of Belief Systems in Mass Publics', In Apter, D. E., *Ideology and Discontent*, New York, Free Press, pp. 206-61.
- Neuman, W. Russell (1986): *The Paradox of Mass Politics*. Cambridge, Mass.: Harvard University Press, ch. 3, 'The link between sophistication and opinion'.
- Smith, Tom W. (1994): 'Is There Real Opinion Change?' *International Journal of Public Opinion Research* (this issue).
- Taylor, Marylee C. (1983): 'The black-and-white model of attitude stability: a latent class examination of opinion and nonopinion in the American public', *American Journal of Sociology*, 83, 373-401.

Allen H. Barton

BIOGRAPHICAL NOTE

Allen H. Barton was director of the Bureau of Applied Social Research from 1962 to 1977 and a professor of sociology at Columbia University, New York. He is now Adjunct Professor of Sociology, University of Florida.

REPLY TO BARTON'S COMMENT

Allen Barton provides a service by cogently discussing how individual-level change relates to aggregate-level change. I deal with the latter and I think that we both agree with Page and Shapiro (1992) that 'even if individual opinions or survey responses are ill-formed, shallow, and fluctuating, collective opinion can be real, highly stable . . . and it can be measured with considerable accuracy by standard survey techniques.'

However, Barton seems to believe that my introductory comments about 'several veins of social science research' that 'question the reliability of opinion measures' were directed only at the non-attitude research. Elements of non-attitude theory, along with separate discussions of mood and measurement artefact have been used by various critics to challenge public opinion research. As Asher Arian (forthcoming) has noted, these theories have been used to argue against giving serious consideration to public opinion and to depict public opinion as something that 'gyrates capriciously'.

As for the implications that non-attitude theory alone has for aggregate change that first depends on which version one utilizes (Smith, 1984). Converse's black-and-white model posited that all individual change was the product of non-attitudes and essentially

random, while all true attitude holders showed no individual-level change. This extreme version argues that any change would come only from population turnover. Other models that introduce shades of gray, instrument error, and other factors lead to other expectations. Taylor (1983) for example does allow true change among the attitude holders. However, most non-attitude models that assert that many (or even most) attitude expressors are really non-attitude holders do imply that opinion change will be erratic and/or hard to relate to real change.

First, the variability of estimates is greatly increased. Total random error would be a function not only of sampling variation, but also of the random expression of opinions by the non-attitude holders. Assuming (as many models do) that the expressed opinions of the non-attitude holders are random and uncorrelated over time means that there would on average be no expected change. However, this random non-attitude factor added on top of sampling error would make measured attitudes less stable over time.

Second, if true change came only from the holders of real attitudes (as Barton indicates various non-attitude models assume) and the true attitude holders were only a sub-set and often only a minority of all respondents, then true change would be hard to detect since it could easily be overwhelmed by the random noise from the often numerically superior group of non-attitude holders.

Third, if non-attitude theory includes volatile, transitory responses to processes that Barton variously characterizes as 'ephemeral', 'propaganda blitzes', 'media fads', and 'crazes', then there would be net change from time one to time two. While some have included this phenomenon as part of non-attitudes, I prefer (a) to consider this rather as related to labile moods and (b) am disinclined to characterize many such processes as 'meaningless'.

In sum, the literatures on non-attitudes, mood, and measurement artefacts have been used to challenge the general reliability and utility of public opinion research and each of these perspectives does have implications about aggregate-level opinion change.

REFERENCES

- Arian, Asher (forthcoming): *Security Threatened: Surveying Israeli Opinion on Peace and War*.
Page, Benjamin I. and Shapiro, Robert Y. (1992): *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*, Chicago: University of Chicago Press.
Smith, Tom W. (1984): 'Nonattitudes: A Review and Evaluation'. In Charles F. Turner and Elizabeth Martin (eds.) *Surveying Subjective Phenomena*. New York: Russell Sage.
Taylor, Marylee C. (1983): 'The Black-and-White Model of Attitude Stability: A Latent Class Examination of Opinion and Nonopinion in the American Public', *American Journal of Sociology*, 89, 373-401.

Tom W. Smith

BOOK REVIEW

Out of Order: How the Decline of the Political Parties and the Growing Power of the News Media Undermine the American Way of Electing Presidents. Thomas E. Patterson, New York, Knopf, 1993. 301 pp. ISBN 0-679-41929-2; US-\$23.00.

This book is about how the news coverage of U.S. presidential election campaigns has developed over the past thirty years and the consequences of this for the presidential selection process, and particularly for candidates and voters. It is based on a systematic and impressive content analysis of trends in print and television news coverage spanning more than thirty years and includes every presidential election campaign from 1960 to 1992. The book is well documented and exceptionally well written, and is important reading for reporters, politicians and pollsters, as well as scholars and students of politics and the media.

Anyone concerned about the media and the democratic process should be alarmed at some of the long term trends documented in this book. These include:

More negative news about candidates. Candidates received largely favorable news coverage in the 1960s, but the ratio has changed over the years so that by 1992, their coverage was mostly negative.

More news about the electoral 'game' and correspondingly less news about policy and substantive issues. In the 1960s, election stories were often framed in the context of what Patterson calls a 'policy schema', in other words, concerned about leadership problems and issues. But the emphasis on policy has steadily declined and the framing of stories in the context of candidate strategy and electoral success—what Patterson calls a 'game schema'—now predominates.

More interpretive news. The vast majority of election stories were 'descriptive' in the 1960s, that is, they focused on 'what' happened and often quoted the candidate at length. Today, however, the vast majority are 'interpretive' in nature, they focus on 'why' rather than 'what', often referring to the candidate's motives and expectations. The length of quotes from politicians in the printed press and 'soundbites' in television news has also continued to decline.

Fewer partisans and more journalists shaping the tone of coverage. The words of partisan sources, often the candidates themselves, were used to set the tone of most election news stories in the 1960s. Today the 'tone is usually set by the journalist who prepares the story' (p. 114).

More emphasis on campaign controversies, less on policy problems. In the 1960s, policy problems were more in evidence in the news but the long term trend is declining. By 1992, however, even though policy problems were important, campaign controversies loomed large in the coverage.