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*Issues, Values, and Critical Moments: Did "Magic" Johnson Transform Public Opinion on AIDS?**

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By what process do changes occur in the way issues are perceived and evaluated by ordinary citizens? A number of scholarly accounts share this perspective: intense, value-laden communications, or "critical moments," are of key importance in supplying people with symbolic frames for issues and, thus, in defining or redefining the value bases of issue conflict. Applying this perspective to the case of Earvin ("Magic") Johnson's announcement that he had contracted the AIDS-causing virus—a critical moment in AIDS opinions fortuitously captured by interrupted time-series data—this analysis finds that heterosexual moral values define a new basis of polarization on AIDS-related policies among post-announcement respondents. Furthermore, an analysis of survey data obtained 10 months after "Magic" Johnson's disclosure reveals both persistence of the new value basis and erosion in the importance of moral evaluations of homosexuality, the "old" or established value that citizens have referenced in forming opinions about AIDS.

While it may have discouraged the search for ideological sophistication, Converse's classic work (1964) fostered an extensive literature that variously redeems the political acumen of ordinary citizens. One particularly rich vein of research suggests that individuals rely on group symbols (Brady and Sniderman 1985) or other "core values" (Feldman 1983, 1988) as shortcuts in deciding where they stand on issues. More generally, if conditions are right, ordinary citizens will use a shared emblem to transfer meaning from a familiar value to a seemingly unrelated political object or issue.[1] Public opinion on AIDS-related issues, the empirical case analyzed here, may be understood as a straightforward instance: attitudes toward homosexuals have been primary determinants of mass opinion on

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[1]Models of "symbolic racism" are the archetypes for these approaches (see Kinder and Sears 1981; McConahay and Hough 1976). Converse (1964) recognized the potency of racial attitudes in bringing consistency to issue positions. Others see the symbol of race behind a wide range of policy disputes that ostensibly have nothing to do with racial conflict (Edsall and Edsall 1991).

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any policy that mentions AIDS—from funding for AIDS treatment to banning AIDS-infected children from school—regardless of whether the issue itself has anything to do with homosexuality (Jelen and Wilcox 1992; Le Poire et al. 1990; Pollock, Lilie, and Vittes 1993b; Pryor et al. 1989; Schnell and Huddy 1990; Stipp and Kerr 1989).

How does this work? How do citizens come to use symbols as "bridges" between values and issues? According to the perspective considered below, large-scale transformations in the bases of mass opinion require a "critical moment"—an intense communication with wide exposure and unmistakable value referents. By this perspective, Earvin ("Magic") Johnson's well-known public revelation, dominated by information and images so clearly at odds with established symbolism, should have been the catalyzing event for a mass-level shift in the way individuals evaluate public policies that deal with AIDS. The purposes of this analysis are to gauge the effect of "Magic" Johnson's announcement on the structure of mass opinion on AIDS and, more generally, to show how this particular case illuminates larger questions about the dynamics of opinion formation and change.

Critical Moments in Opinion Formation

If there is ample evidence that people sometimes use symbolic shorthand to evaluate issues, the process that fosters this adhesion of issues, symbols, and values remains something of a mystery. In theory, we can identify these basic elements: competitive, opportunistic elites supply the links between issues and symbols; the media channel and reinforce these connections; ordinary citizens respond. By Carmines and Stimson's (1989) account, for example, party activists and other elites consciously joined party symbols with policy differences on civil rights—a basis of disagreement that was conveyed by the media and, following a lag, reflected at the mass level. In this way, the meanings that people attach to issues "evolve" from elite-driven origins.

Arguing from a somewhat different perspective, but using a similar metaphor, Gamson and Modigliani (1989) view issues as pursuing "careers." Like products in a competitive market, many issues fail, never recognized or understood beyond the rarefied atmosphere of elite-level debate. Some issues, however, are imbued with evocative, value-laden meaning by skillful "cultural entrepreneurs." The media, in turn, select and promote portrayals that best "resonate" with cultural themes, like individualism, egalitarianism, or moralism. Thus, even highly complex matters can be conveyed by the media in simplified, symbolic terms readily accessible to nonelites (Pollock, Lilie, and Vittes 1993a).

A central feature of these and related models is the implied existence

of an unseen pivot point—an "event" (Carmines, Renten, and Stimson 1984), "critical moment" (Carmines and Stimson 1989), an episode of "cultural resonance" (Gamson 1988; Gamson and Modigliani 1989), a "crisis of irrelevance" (Beck 1979)—that defines, or redefines, the way the public responds to an issue, a political party, or other political object. Presumably it is at this point, or during this brief period, that ordinary citizens "get it," somehow absorbing the information required to cement a link between the issue and a familiar symbol or value. Just how does this happen? Under what conditions is this moment most (and least) likely to occur?

Zaller's (1991) analysis provides some clues to this mass conversion, this "marriage of information and values" (1215). Zaller apparently agrees that the process of opinion change is elite-driven, since elites supply the "contextual information" that gives "value colorations" to messages (1216), and since individual acceptance or resistance depends on the distance between the "values of the individual and the value coloration of the message" (1217). However, messages vary in intensity or "loudness," and a relatively thin stratum of citizens regularly pays attention to what elites are saying. Only as citizen attentiveness (or message loudness) increases is there an increase in the "likelihood that individuals will be aware of the elite-supplied 'contextual information' that gives messages their colorations" (1218). Thus, Zaller shows why the level of political awareness is such an important gradient in accounting for the structure of opinion on any given issue. Indeed, one may infer that critical moments—massive changes in the public's perception of "what goes with what"—are rare events, likely to occur only when the issue-to-value link becomes sufficiently intense, and sources of mediation sufficiently numerous, that even the least attentive citizens are exposed to the message.

A Critical Moment in AIDS Opinions

In both its "loudness" and in the clarity of its "value coloration," basketball star Earvin ("Magic") Johnson's public announcement that he had contracted the AIDS-causing virus may have defined a critical moment in the evolution of opinions about AIDS. Generally considered in sports circles to be one of the best players of all time, "Magic" Johnson's countenance had wide recognition and appeal among a much larger audience as well. Although no empirical evidence exists on this point, it is almost certainly the case that within a few days of his announcement, an unusually large proportion of the general public—sports fans and nonenthusiasts, attentive and inattentive citizens alike—had heard about it. Thus, in breadth and intensity of exposure, in "loudness," this phenomenon was extraordinary.

More important, the symbols and values associated with Johnson's situation, particularly his proclaimed (and unchallenged) heterosexuality, were fundamentally at odds with the connection between AIDS and homosexuality. The link to homosexuals, which characterized the first medical classifications of AIDS-related illnesses,[2] quickly became a fixture of early journalistic reports (Albert 1989; Kinsella 1989; Shilts 1987). By the time of the public disclosure, in 1985, that Rock Hudson had the disease, the association with homosexuality had become firmly established in popular perception. This perception, by all empirical accounts (Jelen and Wilcox 1992; Le Poire et al. 1990; Pollock, Lilie, and Vittes 1993b; Pryor et al. 1989; Schnell and Huddy 1990; Stipp and Kerr 1989), has persisted, despite heavily nuanced changes in the way the media have framed policy conflicts involving the disease (Corea 1992; Fumento 1990; Treichler 1988). Did the "value coloration" of "Magic" Johnson's revelation redefine AIDS-related policy disputes—whether to increase spending for treatment, whether to make HIV-testing mandatory for health care providers, and so on—as battles over the moral status of premarital heterosexual activity?

Johnson's announcement, like any public communication, can be analyzed for its content, for factors intrinsic to the message being communicated (Kellerman and Lim 1989). Of course, the content of a message need not be complete or coherent, since people use "heuristics" to draw inferences from often fragmented information (Tversky and Kahneman 1974). Thus, Johnson did not explicitly say that government funding for AIDS treatment should be increased, or that the AIDS problem has gotten worse, or that the disease can be contracted through heterosexual contact. But he did say that "it can happen to anybody, even me," that he is "far from being homosexual," that he endorsed "safe sex," and that he would become a "spokesman" for the disease.[3] Assuming comprehension of these utterances, the use of the "causal heuristic," whereby people "organ[ize] . . . events by schemas of cause-effect relations" (Tversky and Kahneman 1982, 117), seems straightforward.

Yet even for people who paid minimal attention to what Johnson was saying, the effects of factors extrinsic his message—"source effects" (McGuire 1969)—may have been powerful enough to forge a link to heterosexuality. After all, Johnson's televised press conference and its

[2]In 1981 the Centers for Disease Control had provisionally adopted the acronym GRID (gay-related immunodeficiency) to describe the syndrome. The term AIDS (Acquired Immune Deficiency Syndrome) was chosen in 1982 (see Shilts 1987, chap. 16).

[3]Johnson made all of these statements during his press conference on 7 November 1991, except the explicit reference to his heterosexuality, which he made on 8 November, during an appearance on a late-night talk show.

immediate aftermath were dominated by images and symbols that were highly atypical, indeed unprecedented. There was "Magic" Johnson—black, male, sports star, seemingly robust, accompanied by his pregnant wife, apparently universally liked. Unlike previous celebrities who have drawn attention to AIDS, most notably actor Rock Hudson, virtually every aspect of Johnson-as-source bespoke heterosexuality. Thus, instead of having to imagine or "simulate" a scenario in which people with Johnson's characteristics can contract the AIDS virus, the more direct and concrete "representativeness" or "availability" heuristics would come into play (Tversky and Kahneman 1974). Ignoring or discounting the relatively low probability that someone like Johnson could get AIDS, citizens would tend to take his case as typical of a large class of cases. And the mental picture of his predicament would now be readily available in memory for future reference. Or as one activist put it, "All the posters and pamphlets were about white gay males. . . . [Johnson] knocks the myths right out of the water."[4]

In sum, "Magic" Johnson's announcement was an intense message that had new yet unambiguous value referents and that, in all probability, penetrated well beyond the level of attentive citizens. It was, quite arguably, a critical moment in the evolution of public opinions about AIDS, and it therefore should have produced a change in the *structure* of opinion, a durable shift in the type of values people use when deciding where they stand on policies dealing with the disease. This proposed change, which I label the "value shift hypothesis," is the main focus of the following analysis. According to the value shift hypothesis, the "value coloration" of Johnson's message—its clear heterosexual symbolism—evoked a previously latent set of values and defined a new and lasting dividing line between the supporters and opponents of AIDS-related policies.

Data and Model Specification

Two survey data sets are analyzed here, both of which are random-digit dial statewide telephone polls conducted by the Institute for Public Opinion Research (IPOR) at Florida International University. The first data set is an interrupted time series—the interruption, in this case, being fortuitously provided by "Magic" Johnson's public announcement of 7 November 1991. IPOR began polling respondents for its annual policy survey on 3 November 1991 and had completed 278 interviews by 7 November. Daily interviews continued (except on 11 November, a holiday)

[4]AIDS activist the Rev. Mr. Carl Bean, quoted in *Newsweek,* 18 November 1991, 60.

through 24 November, when the sample was complete (total $N = 1{,}220$). The survey included several questions gauging the respondent's opinions about AIDS, the legal and moral status of homosexuality, and the morality of premarital sex. The second survey ($N = 1{,}217$), conducted 10 months later (between 20 September and 17 October 1992), contains belief and value questions that are very similar to those in the earlier poll, and it includes an item that allows us to differentiate respondents who associate "Magic" Johnson with AIDS from those who do not.[5]

Together these two surveys provide a singular glimpse at the immediate and longer-term effects of Johnson's revelation. More important, they permit a rare opportunity to study the sort of exotic change postulated by the value shift hypothesis. Just what should this change "look like"? The following basic form depicts a general model of value shift:

$$P = f[B_0 + B_1(C) + (B_{01} + B_{11}C)NV + (B_{02} + B_{12}C)EV + B_{03}Z + u].$$

In this formulation, P is the mass public's position on some policy, and C represents the occurrence of an intense, value-laden communication—a critical moment. The term C would be equal to zero before the critical moment, and one afterward. The parameter B_1 allows the constant (B_0) to move, thus accommodating change in the mean level of support for P following the critical moment. The term NV is the value coloration of the message, which, according to the value shift hypothesis, connects the policy position (P) with a previously unreferenced, "new value." The term EV, which stands for "established value," represents the current basis for evaluating P-type policies before the critical moment occurs. Finally, Z represents a vector of other beliefs that may affect positions on P, and u is a randomly distributed error term.

This specification, which conforms to the application of regression-based techniques to interrupted time-series data (Lewis-Beck 1986), provides a clear framework for gauging the structural opinion change that is the centerpiece of the value shift hypothesis. Before the interruption, when $C = 0$, public support for P should be found to be a function of some base level (B_0) and the public's position on the "old" value (EV). The new value (NV) remains latent. That is, B_{01} should not differ significantly from zero, and the absolute value of B_{02} should be significantly

[5]The FIU/Florida Poll is a random-digit dialing telephone survey of Florida residents, age 18 and older. The telephone number sample, which was obtained from Survey Sampling, Inc., is a probability element sample of Florida's telephone households, stratified by the state's 67 counties. See Heise, Gladwin, and McLaughen (1992) for a complete description of questionnaire construction and survey methodology.

greater than zero. Of key importance to the value shift hypothesis is the magnitude of B_{11}, which estimates the effect of the new basis for policy opinions following the interruption, when C switches to one. If the theory is correct—if exposure to the value coloration of the communication did indeed create a shared referent between the value and the policy—then B_{11} should be large and statistically significant.

In considering the empirical status of B_{12}, the effect of the critical moment on the relationship between the established value and policy position, one can frame both "strong" and "weak" versions of the value shift hypothesis. The stronger variant would predict that, among individuals exposed to the critical moment, the new value would completely *replace* the old as a yardstick for figuring out P. Thus, B_{12} would be of the opposite sign from B_{02} and large enough to offset the effect of EV on P. In its weaker form, the value shift hypothesis says that the new value would *complement* the established value, simply adding another way for individuals to form opinions on P-type policies. In this case, B_{12} would not differ noticeably from zero and thus would have no effect on the relationship between EV and P. In both its "strong" and "weak" versions, value shift predicts a big coefficient (B_{11}) on the new value that is symbolized by the critical moment. And, of course, to be genuine, a value shift must be durable: we should find that people continue to associate the new value (NV) with the policy (P) long after the critical moment has occurred.

Parameter estimates were obtained for the above model using each of the survey data sets described earlier. The November 1991 data and September–October 1992 data were examined separately: the first for evidence of the immediate effect of "Magic" Johnson's announcement, the second for evidence of persistence and change in the models' elements. The measures for the dependent variable (P) that were available from each data set are very similar but (alas!) are not identical, and so direct comparison of the parameters between surveys is not possible. However, other enlightening comparisons can be made. Each analysis is considered in turn.

Data Analysis: 1991 Interrupted Time Series

The November 1991 survey contained one question tapping the respondent's opinion about AIDS-related policy—a three-category ordinal-level variable that asked whether "spending for AIDS hospital treatment and research should be cut, left as is, or increased." Responses to this question served as the dependent variable, with higher scores denoting greater support for spending. The measure of homosexual values (labeled

HOMSEX in the analysis), the established basis for evaluating AIDS policies, was created by summing responses to two questions: one asking whether "sexual relations between two adults of the same sex is always wrong, almost always wrong, wrong only sometimes, or not wrong at all"; and another four-category question eliciting the respondent's level of agreement with "proposed laws that would give homosexuals equal treatment in matters such as jobs and housing."[6] The survey asked one question about the moral status of premarital sex: "If a man and woman have sex relations before marriage, do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?" Responses to this question form the measure of heterosexual values (*HETSEX*), the new value basis symbolized by "Magic" Johnson.[7]

Beyond these measures of the value bases of policy attitudes, the survey contained questions that allow an unusually complete specification of AIDS opinions. AIDS-specific cognitions, which are known to shape policy position, are gauged by three questions: two eliciting beliefs about its general seriousness and urgency, and one tapping more direct, instrumental concerns about contagion.[8] More generally, since spending

[6]Responses to these two items were strongly related. Gamma = .66 between the gay rights question (recoded so that higher scores denote pro-gay rights attitudes) and the question about the morality of homosexual relations (chi-square = 268.8). Each individual's responses to the two homosexuality questions were summed (coding each item one through four, with higher scores denoting values more favorable to homosexuality), which created an additive scale that ranges from two (very unfavorable) to eight (very favorable).

[7]Very few cases fell into the "almost always wrong" category, and so these responses were combined with the "always wrong" responses. In arriving at the best specification of the relationship between *HETSEX* and the dependent variable, further analysis revealed that "wrong only sometimes" and "not wrong at all" respondents held very similar AIDS opinions. Therefore, these two responses also were combined, thus creating a two-category ordinal-level measure for *HETSEX*.

[8]Three independent variables were created from survey questions tapping beliefs about AIDS. Respondents were asked to name the "most urgent" health problem facing the country. A dummy variable, *URGENT*, was assigned the value one for respondents choosing AIDS, zero otherwise. Respondents also were asked if they thought the AIDS problem had "gotten worse," "stayed the same," or "gotten better" during the past year. Preliminary analysis revealed that responses to this question bore a nonmonotonic relationship with the dependent variable: respondents choosing "stayed the same" were much less likely to favor AIDS spending than were their more pessimistic or more optimistic counterparts. This is captured by a dummy, *NOCHANGE*, scored one for respondents who think the AIDS problem has stayed the same, zero otherwise. Finally, a four-category question that asked, "How worried are you [not at all, not too, somewhat, very] that you or someone you are close to might get AIDS?" was used to create *WORRIED*, with higher scores denoting greater personal concern about contagion.

opinions might plausibly be affected by ideological predispositions, as well as demographic variables, measures for self-described ideology and familiar background attributes were created from questions on the November 1991 survey.[9] Finally, a dummy variable (*NOV8*) distinguishes respondents who were interviewed between 3–7 November from those interviewed between 8–24 November.

Using the general model of value shift as a guide, the "spending for AIDS treatment and research" variable may be specified as a function of heterosexual values, homosexual values, AIDS beliefs, and demographic measures:

$$\begin{aligned} P = {} & B_0 + B_1 NOV8 + B_{01} HETSEX + B_{11}(NOV8 \times HETSEX) \\ & + B_{02} HOMSEX + B_{12}(NOV8 \times HOMSEX) + B_{03} URGENT \\ & + B_{04} NOCHANGE + B_{05} WORRIED + B_{06} CONSERV \\ & + B_{07} BLACK + B_{08} FEMALE + B_{09} AGE \\ & + B_{010} EDUCATION + B_{011} INCOME. \end{aligned}$$

Of special theoretical interest are the coefficients for the new value (*HETSEX*) and the established value (*HOMSEX*) and the interaction terms, *NOV8* × *HETSEX* and *NOV8* × *HOMSEX*, which permit the appropriate tests for structural opinion change. As a methodological matter, however, the interaction terms are transformations of the base variables, which introduces multicollinearity among the predictors (Jaccard, Turrisi, and Wan 1990, 30–31). This problem was ameliorated here by "centering" the independent variables before creating the interaction terms (Boyd and Iversen 1979; Aiken and West 1991; Bryk and Raudenbush 1992). Of course, in rescaling the variables we also must recast our interpretation of the model's coefficients. Specifically, after the subsample marker (*NOV8*) has been centered, the base coefficients for *HETSEX* and *HOMSEX* (B_{01} and B_{02}) will yield samplewide estimates for the effect of each of these independent variables; and the coefficients for the accompanying interaction terms (B_{11} and B_{12}) will estimate the magnitude of adjustment to each samplewide effect for the pre-

[9]Dummy variables measure conservatism (self-described "conservatives" are scored one on *CONSERV*), race (African Americans scored one on *BLACK*), and sex (women scored one on *FEMALE*). Age is actual age in years. Education measures highest educational level completed, ranging from one (grade school) to six (completed graduate degree). Income measures pretax income by six categories, from one (under $5,000) to six (over $50,000).

announcement and postannouncement subsamples.[10] Probit estimates for the model's parameters appear in Table 1.[11]

The patterns of Table 1 are intriguingly consistent with the value shift hypothesis. To be sure, respondents across the entire interview cycle betrayed a characteristic feature of AIDS-related opinion. Differences in attitudes toward spending for treatment and research can be traced to basic differences in value judgments about homosexuality ($B_{02} = .10$, $t = 4.41$, $p < .05$); and the coefficient for the interaction term suggests insignificant departures from this overall effect for preannouncement and postannouncement respondents ($B_{12} = -.05$, $t = -.99$, n.s.). The samplewide estimate for the impact of heterosexual values, as well, is statistically indistinguishable from zero ($B_{01} = .11$, $t = 1.12$, n.s.). It is clear from the interaction term, however, that the statistical purchase of this predictor differs significantly between subsamples ($B_{11} = .49$, $t = 2.21$, $p < .05$). For the preannouncement group, the modest base effect of *HETSEX* is nullified, even reversed, by the interaction effect ($.11 \times HETSEX + .49 \times -.77 \times HETSEX = -.27 \times HETSEX$). In the wake of the critical moment, by contrast, respondents professing stricter standards of heterosexual behavior suddenly became less likely—and their laissez-faire counterparts more likely—to endorse funding for AIDS treatment and research ($.11 \times HETSEX + .49 \times .23 \times HETSEX =$

[10]Under familiar 0–1 coding for *NOV8*, the base coefficient of *HETSEX* (B_{01}), for example, estimates the effect for preannouncement respondents ($B_{01} \times HETSEX + B_{11} \times 0 \times HETSEX$). Accordingly, the coefficient for the interaction term *NOV8* × *HETSEX* (B_{11}) estimates the *magnitude of adjustment to this preannouncement effect* for the postannouncement subsample ($B_{01} \times HETSEX + B_{11} \times 1 \times HETSEX$). As in the centering of continuous variables, dummies may be rescaled by subtracting the sample mean—that is, the proportion of respondents in the entire sample scoring one on the dummy—from each respondent's score. Thus, since .77 of the November 1991 sample scored one on *NOV8*, this dummy rescales to −.77 (i.e., 0–.77) for respondents interviewed before 8 November, and .23 (i.e., 1–.77) for those interviewed on or after 8 November. However, the base coefficient of *HETSEX* (B_{01}) will now estimate the samplewide effect of the predictor; and the coefficient for the interaction term (B_{11}) will estimate the *magnitude of adjustment to this samplewide effect* for the preannouncement subsample ($B_{01} \times HETSEX + B_{11} \times -.77 \times HETSEX$) and the postannouncement subsample ($B_{01} \times HETSEX + B_{11} \times .23 \times HETSEX$). General treatments of centering may be found in Boyd and Iversen (1979, 65–70) and Aiken and West (1991, 28–36). For an excellent discussion of dummy centering, see Bryk and Raudenbush (1992, 25–28).

[11]Probit is an appropriate procedure for polytomous ordinal dependent variables (Daganzo 1979; McKelvey and Zavoina 1975). This analysis uses the computer software developed by Dubin and Rivers (1990). The measure of pseudo-R^2 reported here is the calculation proposed by Aldrich and Nelson (1984, 57–58). See Hagle and Mitchell (1992) for a discussion of the relative advantages of this goodness-of-fit measure.

Table 1. Probit Analysis of Opinions toward Spending for AIDS Treatment and Research, before and after "Magic" Johnson's Announcement

Independent Variable	Coefficient	*t*-ratio
Constant	1.76*	25.11
NOV8	.13	1.32
HETSEX	.11	1.12
NOV8 × *HETSEX*	.49*	2.21
HOMSEX	.10*	4.41
NOV8 × *HOMSEX*	−.05	−.99
URGENT	.25*	2.96
NO CHANGE	−.40*	−3.80
WORRIED	.17*	4.20
Conservative	−.20*	−2.21
Black	.73*	3.56
Female	.02	.24
Age	−.01	−1.15
Education	−.05	−1.42
Income	−.06*	−1.72
Threshold	1.22*	17.84
−2(LLF)	1,171*	
Pseudo-R^2	.53	
Number of cases	1,025	

Note: Dependent variable is treatment/research.

*$p < .05$.

.22 × *HETSEX*). Thus, even after the significant effects of AIDS-specific beliefs have been accounted for (*URGENT*, *NOCHANGE*, and *WORRIED* are strongly related to policy preference), and the impact of other key variables controlled (African Americans are significantly more in favor of AIDS spending; self-described conservatives and higher-income respondents are significantly more opposed), the data reveal public opinion divided along a new line of polarization.

Table 2, which presents mean probabilities on the dependent variable for different values of *HETSEX*, provides a better idea of the nature and

Table 2. Average Predicted Probabilities on the Treatment/Research Variable, by Moral Evaluations of Premarital Sex

Spending Should Be[a]	Subsample: 3–7 November, Premarital Sex[b]: Wrong	3–7 November, Premarital Sex[b]: Not Wrong	8–24 November, Premarital Sex[b]: Wrong	8–24 November, Premarital Sex[b]: Not Wrong
Cut	.07	.08	.09	.04
Left as is	.28	.29	.31	.21
Increased	.65	.63	.60	.75
Number of cases	72	155	250	548

[a]Full text of question: "Do you think that spending for AIDS hospital treatment and research should be cut, left as is, or increased?"

[b]Abbreviated labels are used for heterosexual values: "Wrong" denotes "Always/Almost always wrong"; "Not wrong" denotes "Wrong only sometimes/Not wrong at all."

magnitude of this shift in the bases of AIDS policy opinions.[12] Comparing probabilities across the columns for the 3–7 November subsample, one sees no meaningful pattern. Those expressing traditional views of heterosexual conduct were about as likely as nontraditionalists to favor a cut in spending (around a 7% or 8% probability), to endorse no policy change (a little less than 30% for both groups), or to favor a spending increase (more than a 60% probability for both). In accounting for the distribution of probabilities among the 8–24 November subsample, however, heterosexual values are a much more useful predictive tool. Following Johnson's announcement, moralistic respondents remained anchored fairly close to the probabilities of their preannouncement counterparts, even showing a slight "downward" shift in the distribution of likelihoods—a decrease in support for more spending (from .65 to .60), an increase in support for the status quo and for a funding cut. More precipitous, of course, is the new popularity of AIDS treatment and research among those more approving of premarital sex. Compared to preannouncement probabilities, the chance that members of this group would favor a spending cut dropped by half (from .08 to .04), while the likelihood that they would favor an increase jumped by .12 (from .63 to .75).

[12]The probabilities reported in Table 2 were obtained at the samplewide expected values for all other variables in Table 1.

In sum, people seem to have been surprisingly responsive when a recurrent issue became associated with a "loud" communication bearing novel information and atypical symbols. At least that is what this side-by-side comparison of two consecutive "snapshots" of opinion has shown. But did these changes last? Did citizens internalize the connection between AIDS and heterosexuality represented by "Magic" Johnson, the emblem shared by the issue and the value?

Data Analysis: 1992 Follow-up

The September–October 1992 survey repeated many of the questions from November 1991, allowing replication of the independent variables used above. Although the "spending for AIDS treatment and research" question was not repeated, a similar question is available. Respondents were asked whether they agree or disagree that the "state should increase spending for public information campaigns to educate the public about AIDS and how to prevent it." This question serves as the dependent variable, with the "agree" response scored higher.[13]

The value shift that appeared in the November 1991 data should be found to persist only among citizens for whom "Magic" Johnson is a prominent AIDS symbol. Responses to the following open-ended recall question, which appeared on the 1992 questionnaire, measure the salience of the critical moment: "Every once in a while, a well-known person or celebrity draws attention to the problem of AIDS by saying that he or she has been infected with the AIDS virus. Can you recall the names of any celebrities who have been infected with the AIDS virus?" Up to two names were coded by the interviewer, although, unfortunately, the questionnaire protocol did not preserve the order of mention.[14] Even so, responses to this question provide a useful if blunt way to distinguish citizens who associate "Magic" Johnson with AIDS, a group constituting

[13]Preliminary analysis of the relationship between responses to this "spending for public information campaigns" variable and the premarital sex question (*HETSEX*) revealed few differences in the policy opinions of respondents saying premarital sex is "always wrong" and those saying it is "almost always wrong." These two categories were combined. Respondents in the two other categories, "wrong only sometimes" and "not wrong at all," differed from each other on the dependent variable, and so these were retained as separate values of *HETSEX*. Higher scores on this three-category ordinal variable denote less moralistic heterosexual values.

[14]"Magic" Johnson and Rock Hudson were, not surprisingly, the two most frequently named people. Johnson was mentioned, either singly or in addition to a person other than Hudson, by 626 respondents (51.4% of the sample); Hudson was named, either singly or in addition to a person other than Johnson, by 186 respondents (15.3%). A rather sizable group (191 respondents, 15.8%) named both Johnson and Hudson. Only 60 respondents (4.9%) mentioned other names, while 154 (12.6%) volunteered no names.

just over half of the sample (51.4%), from those who do not. In the following analysis, a dummy variable (labeled *MAGIC*) captures this distinction.[15]

Table 3 presents the estimates from a probit model that most closely replicates the earlier analysis.[16] As before, the coefficients for heterosexual values (*HETSEX*) and homosexual values (*HOMSEX*) reveal the samplewide effects of these predictors. Similarly, the coefficients for the interaction terms (*MAGIC* × *HETSEX* and *MAGIC* × *HOMSEX*) tell us how much to adjust the base effects for the two subsamples: respondents for whom the critical moment remains salient, and respondents who, by our dummy measure, recall a different symbolization of AIDS.

These results are remarkably similar in form to those obtained from the interrupted time series. In particular, the tell-tale fieldmark of value shift—a big effect of the "new value" for citizens who recall its symbol—is clearly present in the 1992 data. Again, for those who do not link "Magic" Johnson with AIDS, value disagreements about premarital sex do not translate into different opinions about AIDS spending. The base effect of *HETSEX*, for this group, is neutralized by the interaction term (.13 × *HETSEX* + .25 × −.51 × *HETSEX* = 0 × *HETSEX*). By contrast, for the half of the sample who recalled "Magic" Johnson, moral evaluations of premarital sex remained, nearly a year after the critical moment, a gradient of polarization on AIDS spending opinions (.13 × *HETSEX* + .25 × .49 × *HETSEX* = .25 × *HETSEX*).

Figure 1, which plots probabilities on the "agree" category of the "spending for public information campaigns" variable for different values of *HETSEX*, lends graphic detail to this durable change in the value bases of AIDS opinions. Clearly, people sharing the "Magic" Johnson symbolization are deeply divided on this new dimension: a .21 difference in the likelihood of policy support separates highly moralistic respondents (*HETSEX* = 1) from their libertarian counterparts (*HETSEX* = 3).

[15]The recall question permits a reasonably clear distinction between citizens who make reference to the "new" symbolization of AIDS represented by "Magic" Johnson and citizens who refer to the "established" symbol, Rock Hudson. However, as noted above, some respondents mentioned both Johnson and Hudson. This of course created uncertainty about which symbol these respondents preferred, since there was no way to tell which of the two names was mentioned first. The course chosen here was to classify this group with respondents mentioning Rock Hudson and/or other names. On the positive side, this strategy makes the dummy measure of Johnson's salience (*MAGIC*) mildly conservative, since at least some of the Johnson-Hudson namers almost certainly place greater weight on Johnson as a symbol of AIDS.

[16]As in the earlier analysis, the independent variables were centered. The rescaled values for the subsample dummy (*MAGIC*) are −.51 for respondents not mentioning Johnson and .49 for respondents mentioning Johnson.

Table 3. Probit Analysis of Opinions toward Spending for AIDS Public Information Campaigns, Comparing Respondents Who Do and Who Do Not Recall "Magic" Johnson's Announcement

Independent Variable	Coefficient	*t*-ratio
Constant	.97*	19.40
MAGIC	.00	.01
HETSEX	.13*	1.89
MAGIC × *HETSEX*	.25*	2.06
HOMSEX	.13*	3.20
MAGIC × *HOMSEX*	−.10	−1.32
URGENT	.21*	2.01
NO CHANGE	−.20*	−1.62
WORRIED	.08*	1.73
Conservative	−.33*	−3.15
Black	.31	1.56
Female	−.07	−.66
Age	−.01*	−2.02
Education	−.13*	−2.89
Income	.01	.14
−2(LLF)	526*	
Pseudo-R^2	.34	
Number of cases	1,012	

Note: Dependent variable is public information campaigns.

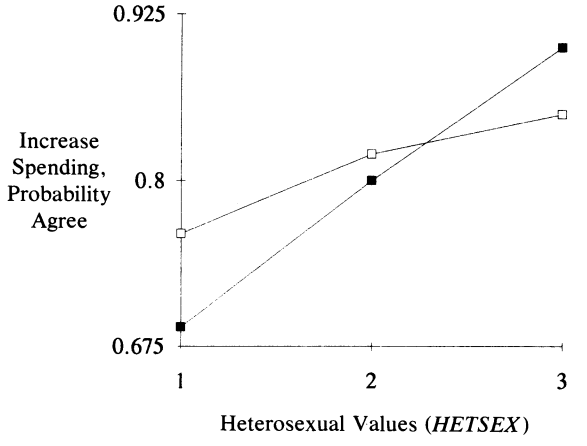
*$p < .05$.

Clearly, too, those not converted by the critical moment bear weak testimony to its impact.

What about the role of that resilient group referent, attitudes toward homosexuals? Not surprisingly, the *HOMSEX* coefficient in Table 3 is sizable and stable ($t = 3.20$, $p < .05$), suggesting persistence in the importance of this value basis across the 1992 sample. The negative coefficient on the interaction effect (*MAGIC* × *HOMSEX*) is intriguing, however. Of course, statistically this effect is quite modest. Yet in substantive terms, this effect at least hints at the "strong" value shift profile—a weakening in the impact of homosexual values among the "Magic" Johnson respondents as heterosexual values gain in importance.

A concluding analysis demonstrates, furthermore, that this pattern

Figure 1. Average Predicted Probabilities on the Public Information Campaigns Variable, by Moral Evaluations of Premarital Sex, Comparing Respondents Who Do and Who Do Not Recall "Magic" Johnson's Announcement



Note: Plotted probabilities are for different values of *HETSEX*, "Always/Almost always wrong" (coded 1), "Wrong only sometimes" (2), "Not wrong at all" (3). For respondents recalling "Magic," Figure 1 plots probabilities of .69 (N = 153), .80 (N = 124), and .90 (N = 254). Corresponding probabilities for respondents not recalling "Magic" are .76 (N = 143), .82 (N = 108), and .85 (N = 230). Probabilities were calculated at samplewide expected values for all other independent variables in Table 3.

of "strong" value shift—emergence of the new value, attenuation of the established value—also describes the structure of citizen opinion on other policies that mention AIDS, policies that otherwise are quite different from the spending issues already examined. The 1992 survey included two agree/disagree questions dealing with "regulatory" approaches to AIDS: whether "people with AIDS should be required to wear or carry identification that indicates that they have the virus" and whether "mandatory testing for the AIDS virus for doctors, nurses, and other health care workers" should be required. Responses to these two questions were strongly related, and they were combined to form a single variable.[17]

[17]Gamma = .76 between the "identification" and "testing" questions (chi-square = 151.8). Scoring proregulatory responses 0 and antiregulatory responses 1, these two questions were summed, initially creating an ordinal variable ranging from 0 to 2. However, very few respondents scored 2 (81, or 6.7% of the sample), so the final variable was collapsed to two categories.

Table 4. Probit Analysis of Opinions toward AIDS Identification and Testing, Comparing Respondents Who Do and Who Do Not Recall "Magic" Johnson's Announcement

Independent Variable	Coefficient	*t*-ratio
Constant	−.70*	−14.79
MAGIC	.22*	2.34
HETSEX	.09	1.40
MAGIC × *HETSEX*	.21*	1.70
HOMSEX	.17*	4.13
MAGIC × *HOMSEX*	−.14*	−1.78
URGENT	−.01	−.14
NO CHANGE	−.06	−.48
WORRIED	−.03	−.60
Conservative	−.13	−1.25
Black	.48*	3.05
Female	−.24*	−2.53
Age	.01*	1.80
Education	.29*	6.62
Income	−.01	−.24
−2(LLF)	346*	
Pseudo-R^2	.26	
Number of cases	977	

Note: Dependent variable is identification and testing.

*$p < .05$.

Table 4 presents the results from a probit analysis of this new "identification and testing" variable.

It bears noting that the general form of opinion on the regulatory variable appears to be different from the "treatment and research" or "public information" variables analyzed earlier. Several of the background controls work differently (education and age, negatively related to public information funding, here show positive effects, suggesting greater opposition to regulatory approaches to AIDS), or, indeed, do not work at all (beliefs about urgency and contagion, previously reliable workhorses for picking up variance in the spending variables, post weak coefficients in Table 4). However, despite these noteworthy changes in the empirical terrain, the value shift process leaves its familiar imprint on the data. As before, it is only for respondents who volunteer "Magic"

Johnson's name as an icon of AIDS awareness that moral judgments about proper heterosexual conduct translate into disagreements about how society should treat people with AIDS (for *MAGIC* × *HETSEX*, $t = 1.70$, $p < .05$). And once again, it is among this group that the polarizing effect of homosexual values, though clearly still substantial, shows signs of waning (for *MAGIC* × *HOMSEX*, $t = -1.78$, $p < .05$). Thus, we may see here the makings of a "strong" value shift—a change in which the new value, at least for the *cognoscenti* of the critical moment, supplants the old.

Conclusions and Implications

Findings presented here may shed light on the process whereby individuals adopt new symbols as shortcuts in making future choices. We know that, in making sense of the world around them, people are notoriously insensitive to statistical probabilities, especially in judging unlikely events (Kahneman and Tversky 1984; Quattrone and Tversky 1988). Evidence from experimental settings suggests, furthermore, that these judgments can be radically altered by the introduction of information, even information that is of questionable relevance to the probabilistic assessment being made (Kahneman and Tversky 1973). Following what Frijda (1988) calls the "law of apparent reality," the possibility that heterosexual intercourse could transmit HIV would be perceived as much more likely after intense exposure to a salient, memorable, symbolic case. And given that over half of the 1992 sample volunteered "Magic" Johnson's name as an emblem of AIDS, the impact of the critical moment on "apparent reality" had considerable scale.

This analysis also has sought to illuminate larger questions about the social context of these opinion dynamics. The symbolic contents of citizen opinions are, by the perspective tested here, social constructions—end products in a process of elite-supplied "value colorations" and media-supplied "loudness" (Zaller 1991). Elites may drive this process, but constructions that endure at the mass level are relatively rare and, once established, are slow to decay. Citizens will become comfortable with the connection between an issue and a value—a connection forged by the extraordinary symbolism of a critical moment—and so they will be reluctant to accept new constructions, even as competing elites proffer different value colorations and new symbols. This is why the typical pattern of issue evolution suggests "punctuated equilibrium" or "dynamic growth" (Carmines and Stimson 1989, 12–13, 143–45).

One can picture how this process might have worked as AIDS evolved from public health issue to social problem. During the early 1980s, as the medical story unfolded, mainstream print and broadcast media remained reluctant to make explicit reference to the range of

behaviors associated with HIV transmission; they relied instead on simplified depictions of the type of *people* most at risk (Kinsella 1989, chap. 4). Thus, by 1982, AIDS "was so thoroughly identified as a gay disease" that it "was viewed as much a gay phenomenon as a medical phenomenon" (Shilts 1987, 213). Rock Hudson's 1985 acknowledgment that he was being treated for the disease was, perhaps, the first critical moment in the evolution of AIDS opinions—an event heavily freighted with images of Hudson's emaciated condition and infused with textual references to his "secret life" and to the gay subculture in general (Brandt 1988, 154–55; Treichler 1988, 205–07). Of course, entrepreneurial elites—gay activists, feminists, cultural conservatives, medical experts, policymakers, and leaders of various AIDS organizations—continued to battle each other for "ownership" of the problem (Spector and Kitsuse 1987), for proprietorship over its symbols. Yet even after the media began in 1986 and 1987 to favor heterosexual portrayals,[18] the mass of ordinary citizens, by every known scholarly account (including evidence presented here), remained anchored to the established value. The altered direction of elite debate certainly reshaped the "contextual information" about AIDS, and it may even have changed (or reflected) opinion among attentive citizens. But it took dramatic symbolism to communicate this construction of the problem to the public at large, to disrupt the way AIDS was discussed and argued in families, among peers and coworkers, and in other social settings. As we have seen, that was the role—and may define the legacy—of "Magic" Johnson.

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[18]According to Kinsella (1989, 79), the first major articles on heterosexuality and AIDS began to appear in the *New York Times* in 1986. Surgeon General C. Everett Koop's highly publicized report on AIDS education, which emphasized the general sexual nature of the disease, was released in October 1986. There was an upsurge of coverage in 1987, much of it alarmist, culminating in *Newsweek*'s infamous cover (in March 1988), "Crisis: Heterosexual Behavior in the Age of AIDS." The book that was the topic of that cover story (Masters, Johnson, and Kolodny 1988) was widely discredited by other expert opinion, and media coverage of the heterosexual aspects of AIDS declined afterward (see Fumento 1990, chap. 18).

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