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ABSTRACT

A study tested the hypothesis that highly unrepresentative news stories about foreign nations would have a more damaging effect on the accuracy of inferences formed by United States audiences if the stories concerned developing countries than if they were about developed nations. Subjects, 76 college students, answered questions concerning a nation located in either a familiar or an unfamiliar world region (Europe or Africa), then read or did not read news stories containing highly nonrepresentative information concerning that nation. The results confirmed the hypothesis. They also showed that such stories would increase the confidence people place in their inferences only if the material and peoples' generalizations concerned unfamiliar nations. (FL)

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THE IMAGE GAP: TOWARD A THEORY
OF THE EFFECTS OF INTERNATIONAL NEWS

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ABSTRACT

This study explores the role of sensational news in influencing audience images of foreign countries. Based upon mass-communication and psychological theory, it was predicted that news articles would have more impact upon the accuracy of peoples' inferences about developing than developed countries. The research utilized an experiment and 76 student subjects to test this hypothesis. Stimuli consisted of news stories concerning samples of European and African nations. The results confirmed the hypothesis. The role of news stories in influencing peoples' judgments about the accuracy of their inferences also was examined. Stories concerning African nations increased participants' confidence in these inferences, but news articles had no significant impact on peoples' judgments concerning the accuracy of their inferences about European countries.

THE IMAGE GAP: TOWARD A THEORY
OF THE EFFECTS OF INTERNATIONAL NEWS

About 15 years ago, three researchers at the University of Minnesota published the initial formulation of the knowledge-gap hypothesis, the prediction that an infusion of mass-mediated information into a social system will increase existing gaps in public-affairs knowledge between persons of high and low socioeconomic status (Tichenor, Donohue, and Olien 1970). In other words, an effort to use the mass media in educating people about public affairs may make relatively wealthy persons wealthier, in terms of information, without having much influence on the knowledge levels of less-affluent people. The hypothesis has generated a tremendous amount of research (see Gaziano, 1983, for a review).

The international flow of news also has generated a large amount of research, stemming in part from the New International Information Order (NIIO) debate. This controversy has featured complaints by spokespersons for the developing nations that the globally dominant Western news agencies cover the Third-World nations in a sparse and overly sensational manner (Masmoudi, 1979). On balance, data do not entirely support these claims (see for example Schramm, 1981; Wilhoit and Weaver, 1983). There is some evidence, however, indicating that wire news about developing nations tends to be rather negative in comparison with news about developed countries (Gifford, 1984).

What has not received much research attention is the possible effects of world news on audiences (for an exception, see McNelly and Izcaray, 1984). We can probably safely assume that the news always will

consist largely of reports concerning unusual events. Based upon current theory in psychology and in mass communications, one might expect that even an equalization of the type of news audiences read about developing and developed countries, in terms of the negative and positive, would not lead to equally balanced images of these countries in audiences. This study will test experimentally the hypothesis that sensational news will have a greater impact on U.S. citizens' images of developing nations than on their images of developed countries.

The prediction is that world news will create a kind of knowledge gap among citizens in the West. Such a gap, however, will not relate to differences among individuals or groups in knowledge about the world. Instead, it will involve variations between and among nations in the accuracy of what people know about them.

This image or inference gap hypothesis can be stated as follows: holding others factors such as audience attention constant, equally and highly nonrepresentative news stories will have a more-powerful impact on U.S. citizens' cognitions about nations with lesser socioeconomic status than on their knowledge about countries with greater socioeconomic status, causing peoples' knowledge about developing countries to be less accurate relative to their cognitions about developed nations than before.

THEORETICAL BACKGROUND

Analogies between the formal rules for inference specified by statisticians and the ways people normally generalize are among the areas of psychology relating directly to the central theme of this study. To estimate the characteristics of a population from information obtained in

a sample, a scientist must meet two conditions, according to statisticians. The sample must be sufficiently large, and a researcher must obtain it in a random, unbiased manner. When ordinary people generalize about objects or events, however, the size of the sample or their knowledge about its freedom from bias often makes little difference (Tversky and Kahneman, 1971; Ross, Amabile, and Steinmetz, 1977; Nisbett and Ross, 1980). The NIIO complaint about the samples of information available about developing countries is analogous: the pieces are unrepresentative and too small.

Psychologists also have documented the impact of sensational or extreme information on peoples' judgments. In 1973, Tversky and Kahneman published initial work regarding the availability heuristic, the tendency of people to use the memorial availability of instances of a class in making frequency or probability judgments about the class. Subsequent work has shown the availability heuristic to be quite robust; extreme information is highly memorable and exerts powerful effects even when people have received data reflecting more-typical occurrences (Rothbart, Fulero, Jensen, Howard, and Birrell, 1978). Clearly, the news media could bias judgment by making sensational events, which are relatively likely to receive news coverage, more available in memory than typical events, which almost by definition do not constitute news.

Certain factors, however, seem to moderate peoples' tendencies to make wide inferences from sparse and unrepresentative data. In generalizing about groups of people, for example, whether one belongs to the group appears important. Research has shown that people view out-groups as more uniform than in-groups, regardless of true uniformities (Jones, Wood, and Quattrone, 1981; Park and Rothbart, 1982).

Psychologists do not clearly understand the causes of the out-group homogeneity phenomenon, but it may result both from peoples' greater familiarity with groups to which they belong and from an ego-based mechanism. In addition, Quattrone and Jones (1980) provide data indicating that people generalize from the characteristics of an individual to a group more readily if they do not belong to the group, evidently because of differences in perceived homogeneity.

Research has treated the in-group/out-group distinction as an absolute dichotomy. Its impact on inference, however, may lie along a continuum, depending upon humans' identification with a group and their perceptions about the social or cultural distance of the group from them. Such an assumption allows use of these research findings to predict that U.S. citizens would view people of other developed nations as a relative in-group, in comparison with persons living in developing countries. Americans may, therefore, be less willing to generalize about people in developed societies than about residents of developing areas.

The same pattern may hold for all characteristics of countries, not just those involving its people. The media-dependency hypothesis (Ball-Rokeach and DeFleur, 1976) predicts that mass-media influence on peoples' conception of social reality will decrease for phenomena with which people have personal experience. Cohen, Adoni, and Drori (1983) found support for this idea in a study of Israeli adolescents' perceptions of social conflicts appearing on television news. The study found greater perceived differences between television and social reality for a form of conflict that the adolescents had personally experienced--school integration--than for a less-familiar topic, political terrorism.

U.S. citizens, however, normally have little direct experience with

foreign nations, regardless of the developmental status of the countries. Nonetheless, other factors should make Americans relatively non-media dependent in forming their impressions of developed countries. Education may contribute to relatively large amounts of knowledge about developed nations, in comparison with knowledge of Third-World societies. In addition, U.S. residents might use what they know about their own country to form reasonably accurate impressions of some of the characteristics of other developed societies--impressions that might counteract the influence of sensational news accounts.

One previous study experimentally tested the ideas developed in this paper. Although survey work has documented a lack of knowledge about specific foreign nations among U.S. citizens (e.g., Robinson, 1967), Perry (1984) predicted that peoples' general impressions, or prototypes, about developed and developing countries might cause them to generalize more readily about developing than about developed countries. A group of college students was asked to estimate the life expectancy of a child born recently in a hypothetical country. Half the subjects were told the country was typical of Africa, and the others were informed that it was typical of Europe. First, half of each group of participants read a news story describing a small group of residents of the country who lived to a very old age. Subjects not reading a story were more accurate in estimating European than African life expectancies. The stories, which mentioned age figures that were equally extreme relative to actual life expectancies in Europe and in Africa, led to approximately equal inaccuracy, however. Surprisingly, the stories caused greater damage to longevity estimates regarding residents of the European country than to life-expectancy estimates concerning citizens of the African nation--i.e.,

the stories closed the image gap.

In retrospect, the use of prototypical nations may not have represented a sufficiently powerful manipulation of familiarity. Perhaps if actual countries were used in the analyses, results conforming to expectation might emerge. This study makes use of inferences concerning a sample of actual African and European nations in testing a possibly more-powerful and ecologically valid manipulation.

The present study will explore inferences about human life expectancy. In terms of the NIIO debate, life expectancy may not seem the most important characteristic of nations to study. It reflects, however, economic development--one of the three major dimensions that people use in comparing similarities of countries (Wish, Deutsch, and Biener, 1970). The other two domains--political alignment and size--seem less applicable to the information-order controversy. Development also constitutes one of the three most important dimensions extracted in factor-analytic reductions of more than 200 objective indicators of countries (Rummel, 1972).

The design of the Perry (1984) study and the present one both correspond to a theoretical framework for mass-communications research suggested by Adoni and Mane (1984). This framework represents an attempt to integrate the critical and empirical traditions of research concerning media and the construction of social reality. Adoni and Mane argue that one cannot understand this process without examining three types of reality--symbolic, subjective, and objective. Researchers also should explore a close-remote dimension of social reality, they argue. The present study will concern the impact of symbolic reality (media content) on how accurate subjective reality (human inference) is, with reference to

objective reality. The developed/developing nations dimension corresponds to Adoni and Mane's close/remote dimension.

The present study will explore one other aspect of social judgment. Human cognition involves more than simple inference. As Waern and Askwall (1981: 17) put it, "Comprehension is a double-decker bus with 'sheer' comprehension processes on the first floor and comprehension checking on the second." People not only process messages and form inferences, but they also are likely to evaluate their degree of understanding of the message and the quality of their inferences.

Unfortunately, these evaluations often have little to do with inferential accuracy. Research has documented what Kahneman and Tversky (1973) termed the illusion of validity--the tendency for people to express great confidence in very fallible judgments. Waern and Askwall (1981) have shown that inferential confidence often is unrelated to inferential accuracy. Oskamp (1965) found that psychologists expressed greater confidence in clinical predictions when they utilized more information, although their predictions did not necessarily improve. Taken together, these findings suggested to Perry (1984) that sensational news stories might increase peoples' confidence in their inferences, as well as reduce the accuracy of their judgments. The stories had virtually no overall impact on confidence. Descriptively, the European story lowered confidence in inferences, and the African story increased confidence. The interaction between these factors did not attain significance, however.

Psychological theory offers an explanation for such a pattern, and perhaps it will achieve significance with judgments about actual countries. Kahneman and Tversky (1973) have noted that people tend to

exhibit greater confidence when their inferences are based upon consistent pieces of information. Assuming that people possess greater general knowledge about developed countries than developing nations, one can expect that extreme information will seem less consistent with prior knowledge if it concerns developed countries.

CONCEPTUALIZATIONS AND HYPOTHESES

CONCEPTS

The following concepts appear in hypotheses tested in this paper.

Inferential Accuracy refers to a person's ability to infer, with exactness and precision, how much or what type of attributes a nation or its people possess or embody.

Inferential Evaluation is a person's evaluation of the quality of a generalization--i.e., the amount of confidence and satisfaction the person expresses about the accuracy of the inference and how much additional information that person indicates a need for.

Familiarity of a Nation is defined as the amount of knowledge that people have about a nation.

Highly Nonrepresentative Information refers to information focused exclusively on a portion (but not on the whole) of an entity (such as population, land surface, etc.) within the geographic boundaries of a

nation. The portion must differ in the characteristic of concern (such as length of expected life, topography) from the overall total, mean, or mode associated with the entity. Such information also must be different enough from the overall figure or measure of central tendency for the nation so that if utilized as the sole basis for generalization, it would damage the accuracy of peoples' inferences.

HYPOTHESES

The previous discussion suggests the following predictions.

- H1: Highly nonrepresentative information will reduce the accuracy of inferences people form about countries.
- H2: Information that is highly nonrepresentative will yield smaller reductions in the accuracy of inferences people make about nations located in a more-familiar region than in the accuracy of inferences people form concerning countries in a less-familiar area.
- H3: Highly nonrepresentative information will make subjects' evaluations of their inferences concerning nations in a less-familiar region more positive.
- H4: Highly nonrepresentative information will make peoples' evaluations of their inferences involving nations in a relatively familiar region less positive.

METHOD

DESIGN

The research employed a two-factor, fully crossed, after-only experimental design. Each factor utilized two levels: subjects answered questions concerning a nation located in a relatively familiar or unfamiliar world region, and they either read or did not read highly nonrepresentative information concerning the nation. Data were analyzed utilizing the method of planned comparisons and one-tailed test statistics, consistent with the hypotheses. Each hypothesis received a .05 alpha level. The study tested the first hypothesis by examining the main effect of highly nonrepresentative information on accuracy. It tested the second prediction by examining the impact of the interaction of nonrepresentative information and type of region on inferential accuracy. The final two hypotheses involved simple effects: the researcher examined differences in accuracy evaluations between persons receiving nonrepresentative information and those not receiving it, within each of the two levels of familiarity.

OPERATIONAL DEFINITIONS

Inferential Accuracy

The researcher initially drew a simple random sample of 20 African and 20 European nations¹ from all the countries in each region with areas containing more than one million hectares; this qualification excluded a few extremely small countries such as Monaco. In addition, the research

excluded South Africa from the African-nation population of countries because it generally is regarded as a developed country. Each participant estimated the life expectancy of a child born recently in one of the 40 countries, assigned at random. The researcher computed an accuracy score by taking the absolute difference, in years, between each subject's estimate and the actual life expectancy.²

Accuracy Evaluation

Subjects were asked to indicate, on 0-to-100 scales, how confident they felt concerning their estimate, to what extent they needed more information, and how satisfied they were, given the limited information and the nature of the study. A 100 indicated the greatest possible confidence, need for more information, and satisfaction. A 0 represented no confidence, need for additional facts, or satisfaction.

Familiarity

Participants answering questions about European nations made up the familiar-nation cells, and subjects interrogated about African countries constituted the unfamiliar-nation categories.

Highly Nonrepresentative Information

Subjects receiving this information read a typeset news story describing a group of people with unusually lengthy life spans living in a region, the Tofala plateau, in one of the 40 countries. The piece was a rewritten and shortened version of a story appearing in the Unesco Courier

that described people who live in a remote region of Ecuador. The news story was reset 40 times with the name and regional location (e.g., northeast Europe or southwest Africa) of each of these countries inserted; the actual life expectancy figures mentioned in it were altered in each case so that the figures mentioned were approximately equally extreme, relative to actual longevity figures for each country.³ The subjects reading a story were told that it actually had appeared in a magazine devoted to international development, but did not know that the actual story originated from a country other than the one they read about. Students who did not read a story received information about their country's regional location along with the life-expectancy question; this information was not repeated with questions for students who read a story.

PROCEDURE

The study utilized as subjects 79 undergraduate students enrolled in mass-communication classes at a public university during the summer of 1984. Intact classes were used. The experimenter assigned subjects to treatment conditions by handing out experimental booklets, which contained the different manipulations, in a randomized order. Participants were told that their answers were anonymous. The booklets informed subjects that the study involved the impressions people have of other countries. After the students completed the study, they received a debriefing about the deception used with the news story, a description of the purpose of the study, and an opportunity to ask any questions they had about it. The researcher pooled responses to questions regarding the samples of European and African nations in creating the experimental cells.

RESULTS

MISSING DATA, DATA CODING, AND SUBJECT DELETIONS

Missing data caused little problem in the study. One participant failed to answer the satisfaction question, and one provided an illegible response to this item. In addition, one person did not answer the confidence question. The researcher inserted mean responses in lieu of these missing data. In answering the life-expectancy question, six persons indicated a range--e.g. 90 to 100--instead of a specific number of years. The midpoint of the range--e.g., 95--was substituted. One person provided a life-expectancy answer of "about 70," which was coded as a 70. Two subjects provided answers of "100+" to the life-expectancy question. The researcher coded these as "100." Both subjects had read news stories about African countries, so the method of coding would work against the researcher's hypotheses if the subjects actually meant some unspecified figure in excess of 100 years. As stated above, the study predicted the news story would harm inference, an effect expected to be greater for African than European countries.

The original study design required 80 subjects. Had this number been attained, the design would have included two subjects who answered questions about each of the 40 nations initially selected: one who had read a story and one who had not. Only 79 participants were available at the end, meaning only one subject answered items concerning one of the 40 countries. Therefore, the researcher deleted data from the participant who answered questions concerning the country for which data were missing. Data collected from subjects answering questions about one

randomly selected nation from the other geographic region were also deleted.⁴ This created an orthogonal design with 76 subjects, or 19 per cell.

MANIPULATION CHECK

A two-sample t test was used to test whether the participants possessed greater familiarity with European than with African nations. Participants reading no story estimated African life expectancies less accurately than European longevities ($t=2.44$, $d.f.=36$, one-tailed $p<.05$). Table 2 contains the means compared.

RELIABILITY

No internal consistency assessment was possible for the single-item accuracy dependent variable. The researcher standardized and summed the evaluation items (after the need-more-information measure, which was on an opposite scale from the other two, was subtracted from 100), yielding an acceptable standardized Cronbach's alpha of .70.

THE PREDICTIONS

Discussion of the results of individual hypothesis tests appears below. Table 1 contains the results of statistical tests of hypotheses utilizing the accuracy dependent variable, and Table 2 contains these cell means. Results of the hypothesis test involving the evaluation criterion variable appear in Table 3, and Table 4 contains the cell means utilized.

TABLES 1 THROUGH 4 ABOUT HERE

Hypothesis 1

Results presented in Table 1 confirmed this hypothesis; a significant t statistic emerged in the direction of prediction. Overall, the news stories damaged inferential accuracy, and whether subjects read a story explained a moderate amount (about 15 percent) of the variation in their accuracy.

Hypothesis 2

A significant interaction in the direction of prediction confirmed this hypothesis. The news story did greater damage to inferential accuracies of subjects estimating African life expectancies than to people estimating European longevities. The interaction explained about 7 percent of the variation in accuracy.

Hypothesis 3

News stories about African countries made subjects' evaluations of their inferences more positive, according to results contained in Table 3. The simple-effect contrast testing this idea explained about 16 percent of the variation in evaluations among all subjects.

Hypothesis 4

Table 3 contains a nonsignificant t statistic in the direction of

prediction. Therefore, the results failed to confirm the prediction that stories about European nations would make participants' evaluations of their inferences concerning European longevities less positive.

The averages of estimated life expectancies are presented in Table 5. Additional insight is possible by comparing these figures with information about the actual stories, contained in footnote 3. The average estimates about African nations are much closer to the figures mentioned in the African stories than are the estimates about European countries and figures mentioned in European stories.

TABLE 5 ABOUT HERE

DISCUSSION

The present study tested experimentally the idea that highly unrepresentative news stories about foreign nations will have a more damaging effect on the accuracy of inferences formed by U.S. residents if the stories concern actual developing countries than if they are about a sample of developed societies. Results confirmed the hypothesis. The data also suggest that the stories will increase the confidence people place in their inferences only if the news material and peoples' generalizations concern unfamiliar societies. The results clearly support the idea of the image gap and contradict an earlier study by Perry (1984). The previous study indicated that people tend to make similar judgments,

based upon highly sensational news articles, about prototypical developing and developed countries.

How does one resolve these apparently conflicting findings? An examination of responses by the 19 subjects who read a sensational article concerning a European country can provide insight. In many instances, the story influenced their inferences very greatly--i.e., six subjects' life expectancy estimates for children in a European nation were equal to or in excess of 100 years, and three provided answers of from 90 to 99 years. In other cases, the stories seemed to have little or no impact--i.e., four participants indicated actual longevity figures of from 80 to 89, and six subjects provided estimates in the seventies or less. In contrast, among European-nation subjects who did not read a story, the two who indicated the lengthiest life-span estimates provided figures in the eighties. A majority believed life expectancy to lie between 50 and 70 years. It appears, then, that for some developed countries and/or with some types of people, the news stories will have a powerful impact. In some cases, then, it makes little difference whether people are reading about an actual or prototypical nation, and in other cases it makes a great deal of difference.

Participants estimated life expectancies in the following European nations as equal to or in excess of 100 years: Czechoslovakia, East Germany, Finland, Iceland, Switzerland, and Yugoslavia. This list seems intuitively to include several nations, such as Iceland and various Communist countries, that most people in the United States may know relatively little about.

In comparison, 13 of the 19 African-nation subjects who read a news story provided longevity estimates of at least 90 years. Only one

indicated a life-expectancy figure of fewer than 80 years. Among African-nation participants who did not read a story, 13 estimated life-expectancies of fewer than 40 years, and only two indicated figures of 50 or greater.

One can now suggest that in some instances, equally sensational news stories will increase an image gap between Americans' knowledge about developing and developed societies. In other cases, when stories concern countries--both developed and developing--that people are unfamiliar with, the news items possibly will close any gap that existed previously. Perhaps future work can specify the precise nature of these contingencies, which could exist either because of differences in general knowledge of most people about individual European countries or because of individual differences in people. One might, for example, utilize an experimental design with several subjects reading the same story about each country, and treat the different countries as an experimental factor nested within the developed/developing nation dichotomy. A researcher also could explore individual differences in people by measuring, prior to the introduction of any experimental stimulus, personality and cognitive characteristics of subjects that may influence their overall tendency to generalize. Such measures might relate to concepts such as cognitive complexity or general international-affairs knowledge, for example.

Additional research also should use news stories and questionnaires relating to important characteristics of countries other than the life expectancies of their residents. In some cases, researchers may find that subjects' initial knowledge about certain characteristics of nations is nonexistent or so inaccurate that even extremely sensational news stories may not harm the accuracy of their inferences. Such a floor effect of

initial knowledge seems analogous to the ceiling effects sometimes found in knowledge-gap studies (Ettema and Kline, 1977). Ceiling effects can occur when the media transmit information that is completely redundant with what people already know.

Additional work also could focus on one possible objection to the methods utilized here: the assumption of a confounding of the familiarity-of-nation factor with the credibility of the stories. In other words, stories relating to the European nations mentioned longer life-expectancy figures than did the stories concerning African countries. Participants may have been more influenced by stories concerning Africa because the longevities mentioned there may have seemed more reasonable. The image gap hypothesis, however, is consistent with a prediction that nonrepresentative news will seem more credible if it refers to developing, rather than developed, societies.

The image-gap hypothesis might also be examined, although with much difficulty, using survey methods. One might find, for example, that controlling for other factors such as education, exposure to highly nonrepresentative news about foreign nations harms inference about developing more than developed nations. The nature of the hypothesis, however, is such that a survey methodology may not be entirely appropriate. The hypothesis does not predict, for example, that exposure to world news in general or to news about a specific nation should be associated with cognitive inaccuracy about that nation. It applies only to exposure to highly nonrepresentative news. At this point, we do not know how much world news actually is highly nonrepresentative, an idea that is conceptualized with reference to the accuracy of what people already know. Determining this obviously would involve a laborious

procedure. One also would need to control for the fact that news about developing societies and developed countries almost certainly would not be equally nonrepresentative. In addition, the hypothesis requires that attention to media content remain relatively constant across the different stories, and in the real world U.S. residents, for example, may attend to stories concerning developed countries far more carefully than to news items about developing areas.

The results relating to peoples' evaluations of their inferences also merit discussion. The research possibly did not confirm the prediction that news stories would significantly decrease confidence and satisfaction about European generalizations simply because the news stories had only a relatively small impact on the generalizations themselves. Although European-nation subjects who read a news story exhibited less inferential accuracy than did European-nation subjects who read no story (see Table 2) this simple-effect difference did not attain significance ($t=1.12$, $d.f.=72$, $p>.05$, one-tailed). The news stories made peoples' evaluations of their inferences about Africans more positive, as predicted. A simple-effect comparison showed that African-nation subjects who read a news story were significantly less accurate inferentially than those not receiving one ($t=5.74$, $d.f.=72$, $p<.05$, one-tailed). Perhaps sensational information has an impact on subjects' evaluations of their inferences only when it has a powerful effect overall on the accuracy of inferences.

If subsequent work involving judgments of Westerners continues to yield results consistent with the line of theorizing developed here, additional work could focus on cross-national differences in generalization. One prediction might be that residents of developing

countries would be more apt to generalize from news stories about developed countries than from news regarding developing nations, for example.

NOTES

1. The European sample included the following countries: Austria, Belgium, Czechoslovakia, Denmark, England, Finland, France, Germany (East), Germany (West), Greece, Hungary, Iceland, Ireland, Italy, Poland, Portugal, Romania, Sweden, Switzerland, and Yugoslavia. The following nations constituted the African sample: Angola, Burundi, Chad, Egypt, Ethiopia, Ghana, Guinea, Ivory Coast, Liberia, Libya, Malawi, Mauritania, Mozambique, Niger, Senegal, Sierra Leone, Somalia, Sudan, Swaziland, and Zimbabwe. The sample included England, rather than the United Kingdom, because of the unavailability of life-expectancy data for the entire United Kingdom.

2. The researcher derived the life-expectancy figures by averaging separate figures about each country for men and women in the U.N. Demographic Yearbook (United Nations, 1982).

3. The beginning of the story used about Austria appears below. It was typeset for the sake of ecological validity and appeared under the 36-point headline, "Longevity remains a high mystery."

The medieval alchemists who quested for the philosopher's stone which would prolong life as well as transform base metals into gold might have been fascinated to meet the inhabitants of the Tofala plateau in the central European nation of Austria.

In this beautiful area, a life-span of 120 years is considered unexceptional. A census taken there a year or two ago revealed that more

than one percent of the people were at least 123, about three hundred times the normal percentage found in many countries. The oldest resident was 143; one of his daughters was a sprightly 118. One woman, 115, still has 12 brothers over age 110.

The remainder of the story featured discussion of how little about longevity phenomena scientists understand.

The stories used for the other European nations were identical, except that the name of the country and information about its location in Europe were changed. Residents of all European nations used had similar life expectancies, within a range from 68 to 77. For African nations, which have more-varied actual life expectancy data, the longevity figures mentioned were all 20 or 30 years less than those mentioned above, depending upon the true figure. If the normal life expectancy of a person in an African nation was 47 years or below, the story contained age figures uniformly 30 years less than the figures contained in the European stories. If the actual figures were from 48 to 57 years, the story mentioned ages 20 years less than those appearing above. Use of this method prevented the use of certain artificial-sounding phrases in the stories that might have cued participants about the deceit used—e.g., "a life span of 124 years (instead of the nicely rounded 120) is considered unexceptional." With this system, the average difference between actual figures and those mentioned in the stories was virtually identical for African and European nations.

4. Ethiopia and Romania were the countries deleted from the original sample.

REFERENCES

- ADONI, H., and S. MANE (1984) "Media and the social construction of reality: toward an integration of theory and research." *Communication Research* 11: 323-340.
- BALL-ROKEACH, S. and M. DeFLEUR (1976) "A dependency model of mass media effects." *Communication Research* 3: 3-21.
- COHEN, A. A., H. ADONI, and G. DRORI (1983) "Adolescents' perceptions of social conflicts in television news and social reality." *Human Communication Research* 10: 203-225.
- ETTEMA, J. S., and F. G. KLINE (1977) "Deficits, differences, and ceilings: contingent conditions for understanding the knowledge gap." *Communication Research* 4: 179-202.
- GAZIANO, C. (1983) "The knowledge gap: an analytical review of media effects." *Communication Research* 10: 447-486.
- GIFFORD, C. A. (1984) "Developed and developing nation news in U. S. wire service files to Asia." *Journalism Q.* 61: 14-19.
- JONES, E. E., G. C. WOOD, and G. A. QUATTRONE (1981) "Perceived variability of personal characteristics in in-groups and out-groups: the role of knowledge and evaluation." *Personality and Social Psychology Bulletin* 7: 523-528.

KAHNEMAN, D., and A. TVERSKY (1973) "On the psychology of prediction." Psych. Rev. 80: 237-251.

MASMOUDI, M. (1979) "The new world information order." J. of Communication 29, 2: 172-185.

McNELLY, J. T., and F. IZCARAY (1984) "International news exposure and national images in a Third World setting." Paper presented to the annual convention of the International Association for Mass Communication Research.

NISBETT, R. E., and L. ROSS (1980) Human Inference: Strategies and Shortcomings of Social Judgment. Englewood Cliffs, N.J.: Prentice-Hall.

OSKAMP, S. (1965) "Overconfidence in case-study judgments." J. of Consulting Psychology 29: 261-265.

PARK B., and M. ROTHBART (1982) "Perception of out-group homogeneity and levels of social categorization: memory for the subordinate attributes of in-group and out-group members." J. of Personality and Social Psychology 42: 1051-1068.

PERRY, D. K. (1984) "The mass media and the cognitive images people hold of other nations." Unpublished Ph.D. dissertation, the University of Wisconsin-Madison.

QUATTRONE, G. A., and E. E. JONES (1980) "The perception of variability

within in-groups and out-groups: implications for the law of small numbers." *J. of Personality and Social Psychology* 38: 141-152.

ROBINSON, J. P. (1967) *Public Information About World Affairs*. Ann Arbor: Survey Research Center.

ROSS, L. D., T. M. AMABILE, and J. L. STEINMETZ (1977) "Social roles, social control, and biases in social-perception processes." *J. of Personality and Social Psychology* 35: 485-494.

ROTHBART, M., S. FULERO, C. JENSEN, J. HOWARD, and P. BIRRELL (1978) "From individual to group impressions: availability heuristics in stereotype formation." *J. of Experimental Social Psychology* 14: 237-255.

RUMMEL, R. J. (1972) *The Dimensions of Nations*. Beverly Hills: Sage Publications.

SCHRAMM, W. (1981) "International news wires and Third World news in Asia," in J. Richstad and M. H. Anderson (eds.) *Crisis in International News: Policies and Prospects*. New York: Columbia University Press.

TICHENOR, P. J., G. A. DONOHUE, and C. N. OLIEN (1970) "Mass media flow and differential growth in knowledge." *Public Opinion Q.* 34: 159-170.

TVERSKY, A., and D. KAHNEMAN (1971) "Belief in the law of small numbers." *Psych. Bulletin* 76: 105-110.

--- (1973) "Availability: a heuristic for judging frequency and probability." *Cognitive Psychology* 5: 207-232.

United Nations (1982) *Demographic Yearbook 1980*. New York.

WAERN, Y., and S. ASKWALL (1981) "On some sources of metacomprehension." *Scandinavian J. of Psychology* 22: 17-25.

WILHOIT, G. C., and D. WEAVER. (1983) "Foreign news coverage in two U.S. wire services: an update." *J. of Communication* 33: 132-148.

WISH, M., M. DEUTSCH, and L. BIENER (1970) "Differences in conceptual structures of nations: an exploratory study." *J. of Personality and Social Psychology* 16: 361-373.

TABLE 1

Summary of Results for Accuracy Measures

<u>Hypothesis</u>	<u>t</u>	<u>d.f.</u>	<u>n²</u>
1	4.85 ^a	72	.154
2	3.26 ^a	72	.069

^a Indicates that the results attained significance in the predicted direction, utilizing a one-tailed test and a .05 level.

TABLE 2

Mean Deviations from Actual Life Expectancies

	No Nonrepresentative Information (No Story)	Nonrepresentative Information (Story)
Less-familiar nations (Africa)	23.16	47.00
More-familiar nations (Europe)	12.68	17.37

NOTE: The larger the mean deviation, the less inferential accuracy displayed by participants within an experimental cell.

TABLE 3

Summary of Results for Evaluation Measures

<u>Hypothesis</u>	<u>t</u>	<u>d.f.</u>	<u>η^2</u>
3	3.76 ^a	72	.162
4	.96	72	n.a.

^a Indicates that the result attained significance in the direction of prediction, using a one-tailed statistic and a .05 alpha level.

NOTE: Eta squared figures are reported only for significant results.

TABLE 4

Mean Scores on Inference-Evaluation Index

	No Nonrepresentative Information (No Story)	Nonrepresentative Information (Story)
Less-familiar nations (Africa)	-1.39	1.30
More-familiar nations (Europe)	.39	- .31

NOTE: The lower the average score within a cell, the less confidence and satisfaction and the more need for information participants expressed.

TABLE 5

Mean Estimates of Human Life Expectancy, in years

	No Nonrepresentative Information (No Story)	Nonrepresentative Information (Story)
Less-familiar nations (Africa)	25.00	89.79
More-familiar nations (Europe)	61.63	87.47