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ABSTRACT

A study examined how the relative familiarity of a social group described in a message may affect the impact of ostensibly fiction and nonfiction messages on subsequent beliefs about social groups. The 24 paid subjects each received one of four sets of prose excerpts. Each set consisted of four excerpts that were labelled as fiction or nonfiction and were manipulated to refer to either a familiar or unfamiliar social group. Interactions between group familiarity and fiction/non-fiction status on beliefs about group member attributes and on confidence in belief estimates were found. It is concluded that fictional messages about unfamiliar groups of people may well have equal or greater impact on readers' beliefs than do nonfictional messages. The results of the study also highlight the contexts in which cultivation and dependency theory are more applicable. (One table and two figures are included, and 41 references are attached.) (MG)

PROCESSING SOCIAL INFORMATION IN MESSAGES: SOCIAL GROUP FAMILIARITY, FICTION/NON-FICTION LABELS, AND SUBSEQUENT BELIEFS

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Abstract

This experiment examines how the relative familiarity of a social group described in a message may affect the impact of ostensibly fiction and non-fiction messages on subsequent beliefs about social groups. Probable differences in the cognitive processing of information about familiar versus unfamiliar social groups are suggested. As a result of these differences, non-fiction messages are expected to influence beliefs about group attributes more than do fiction messages only when the social group described is relatively familiar. The experiment is a 2x2 within-subjects design, with 16 stimuli arranged in a 4x4 Greco-latin square. Twenty-four subjects received one of four sets of prose excerpts. Each excerpt was labelled as fiction or non-fiction, and was manipulated to refer to either a familiar or unfamiliar social group. Interactions between group familiarity and fiction/non-fiction status on beliefs about group member attributes and on confidence in belief estimates are found. Some unexpected aspects of the interactions are discussed, as are possible implications for cultivation and dependency theories. It is concluded that fictional messages about unfamiliar peoples may well have equal or greater impact on readers' beliefs than do non-fiction messages.

PROCESSING SOCIAL INFORMATION IN MESSAGES: SOCIAL GROUP FAMILIARITY, FICTION/NON-FICTION LABELS, AND SUBSEQUENT BELIEFS

Media effects research (Gerbner, Gross, Morgan, & Signorielli, 1986; see Greenberg, 1982), as well as personal experience, suggests that an individual's beliefs about the larger social world are shaped largely through mediated experience, via television, film, newspapers, magazines, novels, and textbooks. Mediated representations of groups of people--who they are, how they live, their values and aspirations--are of necessity problematic. A message can present only a limited set of individuals, circumstances, and interpretations. The reliability of mediated representations, moreover, varies considerably.

To some extent, it is possible for a reader or viewer without special expertise or direct experience to evaluate the reliability of mediated information. Most media consumers are cognizant of the difference between the CBS Evening News and Beverly Hillbillies, or between a textbook and a Harlequin romance. However, the ability to discriminate among sources of information may well be constrained by human information-processing limitations.

This study is concerned with how the relative unfamiliarity of a social group described in a message will constrain processing of that message. In particular, this study addresses how the familiarity of the social group in a message may determine the relative impact of fiction versus non-fiction messages on beliefs about social groups.

Beliefs about social groups. Social groups here refers to groupings of people by ethnicity, region, religion, or nationality, however those groups may be characterized. Beliefs about members of social groups are often described as stereotypes. Stereotype was originally used by Lippmann (1922) to describe simplified and often simplistic systems of beliefs about the social world. A central point of his, however, was that simplified mental representations of the complex social world are inevitable and are necessary to intellectual functioning. This point is often lost when the term stereotype is used, but is well-reflected by current psychological theory.

Beliefs about social groups are conceptualized here as being arranged in categories or schemas (Crocker, Fiske, & Taylor, 1984; Fiske & Taylor, 1984). These categories are made up of beliefs about specific attributes of group members or beliefs about their more general traits (Andersen & Klatzky, 1987; Carlston, 1980; Carlston & Skowronski, 1986; Wyer & Martin, 1986). These beliefs may be exemplified by specific instances in memory (Weber & Crocker, 1983), and are organized in memory by social group referents (Wyer & Martin, 1986; Wyer & Srull, 1986).

The actual content of beliefs about group members may be conceptualized as estimates of how characteristic given attributes, behaviors, or traits are of a given group (Kahneman & Miller, 1986; Nisbett & Kunda, 1985). These estimates have a second dimension, namely, the confidence with which they are made (see Srull, 1984). Beliefs about social

groups, then, incorporate two component variables: estimates of the characteristicness of attributes and confidence in belief estimates.

Fiction versus non-fiction messages. Most mediated messages are labelled, either explicitly or through the context in which they are presented, as to genre: news, entertainment, fiction, non-fiction. How does the genre into which a message falls affect how it is processed?

Potter (1988) suggests that the status of a message as fiction or non-fiction has negligible impact. He argues that the realism of the portrayals is far more likely than message genre to determine the believability of a message. Research into source credibility, however, shows that message recipients on the whole tend to be more accepting of credible sources (e.g., Hovland, Janis, & Kelley, 1953). This should be especially true in the case of message influence on beliefs about social groups. Persuasion research indicates that source cues such as credibility are especially influential when the message recipient is not motivated to process information in a detailed, thoughtful way (Chaiken, 1980; Petty & Cacioppo, 1986). The portrayals of people as group members are usually incidental to the actions taking place in a message. A reader, in most cases, is likely to assimilate such information as a secondary consequence of reading a given text, suggesting that source cues may be particularly influential.

Source credibility is commonly manipulated by attributing a message to a more or less authoritative individual. The fiction or non-fiction source of a message should be to some

extent analogous: Messages believed to be non-fiction should be somewhat more credible with respect to their portrayals of people than fiction. In non-fiction, persons portrayed are presumably actual, flesh-and-blood human beings. In fiction, they are presumably at least to some extent the product of an author's or producer's imagination. Flesh-and-blood human beings, even as represented in a message, should be more authoritative exemplars of social group members than characters invented by an author.

Certainly, distinctions between fiction and non-fiction are often blurred in actual media content. Prior knowledge about the expertise or likely biases of the author or producer may result in fiction being perceived as more credible or non-fiction being less so. Realistic fiction may seem more believable than stylized or didactic non-fiction. Genres such as docudrama obscure distinctions between fiction and non-fiction.

Research in which such confounding factors are controlled, however, does indicate that mediated portrayals believed to be real have a greater impact on their audience than the same portrayals when believed to be fictional (Atkin, 1983; Berkowitz & Alioto, 1973; Leshbach, 1972). Presumably, then, message recipients in some fashion seek to take into account the lesser informational value of portrayals known to be fictional, reducing the impact of such messages on subsequent beliefs. A less intuitive proposition will also be advanced: that differences in the impact of fiction versus non-fiction messages on subsequent beliefs will depend upon

whether the groups described are relatively familiar or unfamiliar.

Relative familiarity of the social group in a message. A message describing members of a social group may influence social beliefs in several ways. The information contained in the message may provide additional specifics with which to confirm or elaborate a set of existing beliefs. The message may provide contradictory information that may undermine existing beliefs. Or, the message may provide new information in the absence of existing knowledge about a relatively unfamiliar group (Crocker, Taylor, & Fiske, 1984; Weber & Crocker, 1983).

The effects of confirmatory versus disconfirmatory information on beliefs about people have frequently been compared (see Wyer & Srull, 1986). Differences in the processing of unfamiliar versus more familiar social information, however, have rarely been explored (Crocker, Fiske, & Taylor, 1984).

The range of possible familiarity with a social group is quite wide. One may have intimate personal knowledge of the group, or some direct personal acquaintanceship. Absent personal experience, one may still have some amount of indirectly-acquired knowledge and beliefs; or, one can be unfamiliar with the group. This study is concerned with the latter two levels.

This study focusses on indirect, mediated experience--or its lack--for two reasons. One reason is conceptual simplicity. Personal and mediated experience probably differ along multiple dimensions. Personal experience is linked to enacted

behavior, yields relatively clear and confident attitudes, and is more readily accessible from memory than is mediated experience (Fazio & Zanna, 1978, 1981; Fazio, Chen, McDonel, & Sherman, 1982). Message recipients are more likely to focus on message content when the topic concerns personal experience, and more likely to focus on source characteristics when the topic concerns mediated experience (Adoni, Mane, & Cohen, 1984; Wu & Shaffer, 1987). It is a more manageable proposition to theorize about cognitive processing of a message when the simpler question is posed--the effects of the relative presence or absence of pre-existing beliefs about the social group in a message.

A second reason is substantive. Only a small part of the social world is encompassed in an individual's direct experience. Questions concerning the domain of mediated experience are fundamental to understanding media effects on social beliefs. Theories of media effects on social beliefs often address the cumulative effects of mediated experience on people's beliefs about the world. For example, an assumption of cultivation theory (Gerbner, Gross, Morgan, & Signorielli, 1986) is that media content tends to reflect beliefs widely held in society. The principal effect of information provided by the media is to reinforce those beliefs people hold which are congruent with both socially-accepted norms and with media content. A message about a familiar topic, then, should be more reinforcing simply because there are more previously-existing beliefs to reinforce than if the message is about an unfamiliar topic.

In contrast, dependency theory (Ball-Rokeach & DeFleur, 1976; especially as interpreted by Adoni, Cohen, & Mane, 1984 and Elliott & Rosenberg, 1987) implies that messages about familiar topics should have less effect than messages about unfamiliar topics. The basic reasoning is that when people are unfamiliar with a topic, they have little alternative but to rely on the mediated information provided.

A look at the cognitive processing of social information in messages may serve to clarify the ambiguity surrounding the effects of the relative familiarity of message content. What specific processing differences may be expected due to the wealth or paucity of pre-existing beliefs about a social group in a message?

Belief content about a familiar referent may be expected to be relatively organized and coherent (see Crocker, Fiske, & Taylor, 1984; Fiske & Taylor, 1984; Wyer & Srull, 1986). Social information in a stimulus is routinely compared with existing beliefs in order to assess the congruity of, and to comprehend, that new information (Srull, Lichtenstein, & Rothbart, 1985). However, if the social group referent in a message is unfamiliar, the processing task is more complex. A category must be improvised from more general related categories in order for that new social information to be processed. For example, if Polish mountain people are the referent, one may access existing beliefs about Poles, mountain people, Eastern Europeans, and foreigners (see Aslin & Rothschild, 1987 and Srull, Lichtenstein, & Rothbart, 1985 for similar arguments).

Unfamiliar categories should have relatively few specific

details, because information in more general categories tends t be more abstract (Cantor & Mischel, 1977; see Fiske & Taylor, 1984). Information in unfamiliar categories may also be inconsistent, since the general categories from which a new category is created are not necessarily closely related. As a result, the reader will probably have to depend on the instances in the message itself to help structure the new category and to provide specific instances within that category. These special demands occasioned by processing messages about unfamiliar groups should have an impact on the processing of fiction versus non-fiction messages.

Predicted interactions between familiarity of social groups in a message and message genre. A principal difference between the processing of information about familiar versus unfamiliar social groups, then, is that unfamiliar social information poses a greater cognitive load on the reader. If this is the case, less cognitive capacity should be available for differentiating between fiction and non-fiction when the message is about an unfamiliar social group. As a result, differences between fiction and non-fiction messages on subsequent beliefs are less likely when the social group described is unfamiliar.

Another distinguishing characteristic of processing unfamiliar information is that the reader needs to use the information in a message about an unfamiliar group as a basis for constructing a category or schema with which to process the message. It would be a difficult balancing act to discount the value of a message's information while using that

information as a basis for organizing one's thinking about the message. This leads to the same conclusion: that, when the social group described is unfamiliar, fiction will have no less impact on beliefs than does non-fiction.

It is hypothesized, therefore, that non-fiction messages will have a greater impact than fiction on subsequent beliefs only when the social group described in the message is familiar. Differences between fiction and non-fiction should be negligible when the social group described is unfamiliar. The result should be an interaction between familiarity of social group and message genre.

Methods

Design. The experiment is a 2x2 within-subjects design, with the stimuli arranged in a 4x4 Greco-Latin square (Calfee, 1985; Winer, 1971). The Greco-Latin square consists of four original messages each manipulated to fit all four experimental conditions (familiarity crossed with fiction/non-fiction status), for a total of 16 messages. The messages were presented in four sequences of four messages each, with the order of treatments and original messages counterbalanced. One-quarter of the subjects received each sequence of stimuli (see Table 1). Familiarity and fiction/non-fiction status, then, were manipulated both within-subject and within-message.

Stimulus selection. Two excerpts were located in novels and two in non-fiction magazines using standard library references as guides. One each of the fiction and non-fiction excerpts was selected to be about a familiar and unfamiliar social group. Excerpts were lengthy--about 600 to 700 words each--and were presented in a typeset, double-column format

similiar to that found in a typical magazine.

Table 1 about here

Experimental manipulations. Familiarity of various alternative social group referents was first pretested with a group of 43 undergraduate communication majors. Each of the four original messages was then edited into two versions by changing locations, proper names, and other identifying features, to refer to a familiar or an unfamiliar social group (groups used are shown in Table 1). After editing, the messages were reviewed by eight judges in order to eliminate incorsistencies or incongruities that might have emerged as a consequence of editing.

Fiction/non-fiction status was manipulated by labelling messages as being fiction or non-fiction. Each message appeared in a version in which it was described in an introductory paragraph, and labelled at the top, as being an excerpt from a novel; a second version described the excerpt as an excerpt from a non-fiction magazine. Excerpts originally written in the third person were edited into first person accounts to maximize the credibility of the manipulation.

Subjects and procedure. Twenty-four paid subjects were recruited through adult education classes and among the spouses of graduate students in university housing. All but one subject were female, with a median age of 36 and median education of 17 years. The single male subject did not provide any outlying values in his responses and was therefore

retained in the analysis. Instruments consisted of a 30-page sealed booklet with a cover page, excerpts, demographic questions, and dependent measures, and were completed by subjects in their homes. Subjects were instructed to complete the booklet without interruption, and to discuss its contents with no one until after debriefing. Follow-up interviews indicated that compliance with these instructions was excellent.

Dependent measures. The use of familiar versus unfamiliar message topics as an independent variable raises several issues regarding operationalization of beliefs as a dependent variable. Changes in beliefs about a familiar group are conceptually different from changes in beliefs about an unfamiliar group. In the first instance, message impact will probably involve increased salience of beliefs, increased confidence in beliefs, and elaboration of belief structure (Crocker, Taylor, & Fiske, 1984; Weber & Crocker, 1983). In the second instance, message impact will probably involve how a new category is organized and what instances it will contain. The question of whether messages have greater impact on beliefs about unfamiliar or familiar groups, then, is too limited: a more appropriate set of questions would concern the nature of the differences in impact on beliefs, and the consequences of these differences.

In the context of this experiment, however, the question of amount of impact is meaningful. The primary question posed concerns how the relative impact of fiction and non-fiction is contingent upon whether or not the message is about a familiar or unfamiliar group. The criteria for such impact should not

concern differences in impact on beliefs about familiar versus unfamiliar groups, which tends to confound the independent and dependent variables, but should concern differences in impact on beliefs about groups in a more general sense.

Therefore, to ensure meaningful comparison of message effects, dependent measures refer to the superordinate category under which both the familiar and unfamiliar group are subsumed. For example, belief items refer to mountain people generically, not to Polish or Appalachian mountain people as described in the excerpts. Impact on beliefs about mountain people becomes a common criterion against which stimuli in each condition may be assessed.

Beliefs about characteristics of group attributes were measured using eight items for each of the four stimuli presented. Each set of items incorporated five statements concerning specific artifacts, settings, roles, relationships, and goals (Schank & Abelson, 1977) reflecting the contents of the excerpt describing each social group in question (e.g., "Mountain people tend to live in extended families--that is, with cousins, uncles or aunts, and grandparents"). Three more items were statements concerning traits descriptive of portrayals in the excerpts (e.g., "Mountain people are a bit superstitious"). These items had an 11-point response scale ranging from Not at all characteristic to Very characteristic (see Weber & Crocker, 1983).

The eight belief items were averaged into a single index of beliefs about characteristicness of group attributes. The index had a Cronbach's alpha of .63, indicating adequate internal consistency (Cronbach, 1951).

Two confidence assessments were made, one about the specific belief statement responses and one about the trait statement responses (e.g., "How confident are you about the above [five or three] estimates?").[1] These were also 11-point response scales, ranging from Not at all confident to Very confident. These measures were averaged into a single index, with a Cronbach's alpha of .72.

Manipulation checks. The principal manipulation check for familiarity with the social group in the message, "Prior to reading the passage about [name of social group], did you have impressions, images, or information about them?" (response scale: 1-Never heard of them to 11-had a lot of impressions, information) was asked immediately prior to the dependent measures. A second check concerning prior media exposure, "Have you ever read, seen films or TV shows, or studied about [name of group]?" (1-Not anything at all to 11-Quite a lot), was asked at the same point. The check for fiction/non-fiction was part of several cover questions concerning the excerpt and characters in the excerpt, and followed each excerpt. The item read "As best you can recall, was [name of principal character in excerpt] in fact non-fictional (a real individual) or was he a fictional character (a character invented by the author)?" (response scale: 1-Invented character to 11-Real individual). Subjects were instructed not to look back at excerpt headings or introductions in order to answer this item.

Data analysis. The analysis of main effects and interactions of familiarity and factuality on social beliefs

was carried out as an analysis of variance, using the interaction between the treatment factor and the individual subject factor, which is nested within the sequence factor, as the error term (R.C. Calfee, School of Education, Stanford University, personal communication, May 1987; Winer, 1971).[2]

Results

Distributions of dependent variables. Distributions tended to be slightly leptokurtic and skewed to the right, but not enough to pose a hazard to analyses of variance (Glass, Peckham, & Sanders, 1972). Variances between treatment groups were also approximately equal.

Manipulation checks. Manipulation checks for familiarity with the social group in the message and for prior media exposure to the group were both significant (familiar mean=7.2, unfamiliar mean=2.3, $F(1,20)=201.12$, $p<.001$; familiar mean=5.9, unfamiliar mean=1.8, $F(1,20)=100.07$, $p<.001$ respectively). The manipulation check for recognizing portrayals as being fictional or non-fictional was significant (non-fiction mean=9.4, fiction mean=2.6, $F(1,20)=72.15$, $p=.001$).

Interactions. A significant crossed interaction is found for the characteristicness of group attributes index ($F(1,20)=6.76$, $p=.017$, see Figure 1). Excerpts with non-fiction labels have a greater effect than do excerpts with fiction labels in the familiar condition, but the difference between means does not quite reach statistical significance at the .05 level ($F(1,20)=3.59$, $p=.073$, see Figure 1). The fiction mean is, surprisingly, higher than the non-fiction mean in the unfamiliar condition, but that difference is also

not quite significant at the .05 level ($F(1,20)=3.45$, $p=.078$, see Figure 1).[3]

Figures 1 and 2 about here

Another significant interaction is found for the confidence index ($F(1,20)=7.05$, $p=.015$, see Figure 2). Excerpts with non-fiction labels have, as predicted, greater impact on the confidence index than do excerpts with fiction labels in the familiar condition ($F(1,20)=14.49$, $p=.001$, see Figure 2). The difference between fiction and non-fiction is, as predicted, negligible in the unfamiliar condition ($F(1,20)=.26$, n.s.).

Main effects. The only main effect that reached significance at the .05 level was that for fiction/non-fiction on the confidence index (non-fiction mean=7.26, fiction mean=6.03, $F(1,20)=5.07$, $p=.036$).

Discussion

Interactions between familiarity of social groups in a message and fiction/non-fiction status were found for both the belief content and confidence in beliefs measures. To what extent did the interactions reflect specific predictions?

Non-fiction messages were expected to have a greater effect on beliefs than equivalent fiction messages when those messages were about familiar social groups, but not when they were about unfamiliar groups. This is precisely what was found--with respect to the readers' confidence in their beliefs. In fact, the difference between fiction and non-fiction in the familiar condition was great enough to produce

a significant main effect despite the lack of difference in the unfamiliar condition.

The results on the characteristicness of attributes measure were less consistent with the predictions. As expected, messages labelled as non-fiction had a greater impact than those labelled as fiction when the social group in the message was familiar, though the difference di[illegible] quite reach statistical significance at the .05 level. Unexpectedly, messages labelled as fiction had a greater impact than those labelled as non-fiction when the social group in the message was unfamiliar--though, again, the difference was not quite significant at the .05 level.

There are two other differences in the findings for the characteristicness of attributes and confidence estimates. One was that confidence estimates tended to be lower for both fiction and non-fiction when messages were about unfamiliar groups. This may simply be due to the respondents' recognition of how little they actually knew about the unfamiliar groups. The second difference is that confidence estimates were lower than characteristicness of attribute estimates when messages were labelled as fiction and were about familiar groups. This apparent difference may reflect the nature of how fiction is discounted in the familiar condition: While fictional information may influence beliefs concerning attributes, those beliefs are held more tentatively than those derived from reading non-fiction excerpts. It would be interesting to learn whether the beliefs influenced by fiction decay more rapidly over time, since they are held with less confidence, or if the beliefs survive and the

tentativeness disappears as memory of the source fades.

On the whole, then, the preferred status of non-fiction information is slight, and tends to disappear entirely when the message is about an unfamiliar social group. In fact, there is a consistent, though not statistically validated, tendency for fiction messages to have the greater effect on beliefs about unfamiliar groups. This tendency deserves further discussion.

Fictional messages were hypothesized to prompt some kind of discounting or closer scrutiny of the social information in a message. Fictional messages may prompt a second, opposed, response as well: a tendency to process the message while suspending disbelief, or critical judgement, concerning the characters and events in fiction (Graesser, 1981). Graesser points out that readers, being aware that the characters and events are drawn from a fictional world, are less likely to scrutinize such portrayals carefully.

In a message about a more familiar group, however, comparison of information in the message with information in memory verges on a cognitive inevitability (see Crocker, Fiske, & Taylor, 1984; Wyer & Srull, 1986). As a consequence, readers of fiction about a familiar group are probably less generous suspending disbelief than when reading about an unfamiliar group. When the message is about an unfamiliar group, however, there is less obstacle to the suspension of disbelief about fictional messages. Unfamiliar, fictional information is not only harder to scrutinize, but tends to be forgiven scrutiny. Therefore, fiction may tend to influence beliefs

somewhat more than non-fiction when the subject of the message is an unfamiliar group.

Such a proposition, of course, is a very tentative one, suggested but not convincingly supported by the data. However, there is some additional data that provides incidental evidence.

Suspension of disbelief implies a willingness to abstain from critical scrutiny of the message. This abstention would represent reduced cognitive activity on the part of the reader. On the familiarity manipulation check, subjects reported less familiarity with social groups when the groups were described in messages labelled as fiction than when the same groups were described in messages labelled as non-fiction (fiction mean=4.1, non-fiction mean=5.4, $F(1,20)=11.38$, $p=.003$). The lesser familiarity with the same group when mentioned in fictional messages suggests that less cognitive search-and-retrieval activity is prompted by fiction than by non-fiction.

Implications for theories of media effects. Certainly, this study suggests that the effects of the relative familiarity of message content on subsequent beliefs is more complex that suggested by dependency or cultivation theory. The results of this study also, when treated more speculatively, highlight the contexts in which each theory is most applicable.

When the messages in this experiment were labelled non-fiction, messages about familiar groups tended to be more influential, as implied by cultivation theory. When messages were labelled fiction, messages about unfamiliar groups showed

a slight tendency to be more influential, as implied by dependency theory. These findings by no means should be taken to mean that cultivation is more likely to hold with respect to non-fiction than to fiction, or that dependency theory is more likely to hold with respect to fiction, both wholly counterintuitive notions. The difficulty of generalizing from a fixed-effects experimental model, and the artificiality of the fiction/non-fiction manipulation, should preclude such conclusions. Rather, the fiction/non-fiction effects should be interpreted in terms of the mechanisms associated with the experimental manipulation.

It was argued earlier that messages believed to be fiction would be more likely on the whole than non-fiction messages to elicit critical scrutiny. Research that has supported dependency theory predictions with respect to familiarity (Adoni, Mane, & Cohen, 1984) used personally relevant topics that would also tend to elicit careful scrutiny of messages. In general, then, dependency may be most predictive when messages are attended to with some care, because of personal relevance of the content or other cues that might elicit careful scrutiny.

Similarly, cultivation theory may be most predictive in the absence of a cue to scrutinize messages carefully. In this experiment, the fiction label may have served as such a cue. In actual practice, more important cues that would undercut cultivation predictions might be personal relevance of or experience with the topic of a message (e.g. Doob & McDonald, 1979). In the absence of such relevance or

involvement--as when an individual is casually viewing a typical television melodrama--a cultivation effect may be most likely occur.

Limitations. Limitations to generality of this experiment are a function of subject and stimulus sampling. Subjects in this experiment were mostly female and of relatively high educational level (slightly over 16 years). Lower educational levels might affect results: Subjects having less education and experience with reading might be less sensitive to differences between fiction and non-fiction. There is little evidence in the literature to suggest differential effects of familiarity or factuality due to gender; however, it would be useful to extend these findings to a sample with more males. Sample size, while small, is not a major concern: Use of a within-subject design makes 24 subjects equivalent in power to 96 subjects in a conventional 2x2 factorial experiment. The stimuli used were naturalistic and reasonably typical of social information contained in novels and journalistic non-fiction. However, they were sampled purposively, and generalization beyond the stimuli used must be made cautiously.

In particular, it should be noted that any two examples of fiction and non-fiction may differ on many dimensions--narrative versus expository style (Graesser, Hauft-Smith, Cohen, & Pyles, 1980), realism of description (Potter, 1986; 1988), emotion and vividness (Nisbett & Ross, 1980). Each of these variables might influence message impact on beliefs. However, the relationship between fiction/non-fiction status and these variables is inconsistent. For

example, a piece of fiction may be more detailed and vivid than a non-fiction article about the same subject, or may be highly stylized and unrealistic. Similiarly, non-fiction can be didactic or narrative. The one consistent difference between fiction and non-fiction is the putative relationship of the message to the physical world.

The results of this study, then, suggest a general observation concerning the effects of messages on beliefs about social groups. Messages labelled as non-fiction had a greater effect on beliefs than did fictional messages in the familiar condition. However, messages labelled as fiction had equal or greater impact on beliefs about unfamiliar social groups, even among a group of well-educated subjects. Americans as a polity, and policymakers in particular, often make decisions of considerable import to many distant and largely unfamiliar peoples of the world. One may be legitimately concerned as to the origin and nature of beliefs about those peoples, beliefs that may well inform consequential decisions.

References

Adoni, H., Cohen, A.A., & Mane S. (1984). Social reality and television news: Perceptual dimensions of social conflicts in selected life areas. Journal of Broadcasting 28 33-49.

Andersen, S.M. & Klatzky, R.L. (1987). Traits and social stereotypes: Levels of categorization in person perception. Journal of Personality and Social Psychology 53 235-246.

Aslin, T.M. & Rothschild, M.L. (1987). An introduction to a cognitive-behavioral perspective on consumer behavior. In M. Wallendorf & P. Anderson (Eds.), Advances in consumer research (Volume 15). Provo, UT: Assoc. for Consumer Research.

Atkin, C. (1983). Effects of realistic TV violence vs. fictional violence on aggression. Journalism Quarterly 60 615-621.

Ball-Rokeach, S. & DeFleur, M. (1976). A dependency model of mass media effects. Communication Research 3, 3-21.

Berkowitz, L. & Alioto, J.T. (1973). The meaning of an observed event as a determinant of its aggressive consequences. Journal of Personality and Social Psychology 28, 206-217.

Calfee, R.C. (1985). Experimental methods in psychology. NY: Holt, Rinehart, & Winston.

Cantor, N.& Mischel, W. (1977). Prototypes in person perception. In L. Berkowitz (Ed.), Advances in

experimental social psychology. NY: Academic Press.

Carlston, D.E. (1980). Events, inferences, and impressions. In R. Hastie, T.M. Ostrom, E.B. Ebbesen, R.S. Wyer, D.L. Hamilton, D.E. Carlston (Eds.), Person memory. Hillsdale, N.J.: Erlbaum.

Carlston, D.E. & Skowronski, J.J. (1986). Trait memory and behavior memory: The effects of alternative pathways on impression judgment response times. Journal of Personality and Social Psychology 50 5-13.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. Journal of Personality and Social Psychology 39 742-766.

Crocker, J., Fiske, S.T., & Taylor, S.E. (1984). Schematic bases of belief change. In R. Eisner (Ed.), Attitudinal judgment. NY: Springer-Verlag.

Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. Psychometrika 16 297-334.

Doob, A. & McDonald, G.E. (1979). Television viewing and the fear of victimization: Is the relationship causal? Journal of Personality and Social Psychology 37 170-179.

Elliott, W.R. & Rosenberg, W.L. (1987). Media exposure and beliefs about science and technology. Communication Research 14 164-188.

Fazio, R.H., Chen, J., McDonel, E.C., & Sherman, S.J. (1982). Attitude accessibility, attitude-behavior consistency, and the strength of the object-evaluation association. Journal of Experimental Social

Psychology 18, 339-357.

Fazio, R.H. & Zanna, M.P. (1978). On the predictive validity of attitudes: The roles of direct experience and confidence. Journal of Personality 46, 228-243.

Fazio, R.H. & Zanna, M.P. (1981). Direct experience and attitude-behavior consistency. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 14). NY: Academic Press.

Feshbach, S. (1972). Reality and fantasy in filmed violence. In J.P. Murray, E.A. Rubinstein, & G.A. Comstock (Eds.), Television and social behavior (vol. 2) (DHHS Publication no. HSM 72-9057J). Washington, D.C.: U.S. Government Printing Office.

Fiske, S.T., & Taylor, S.E. (1984). Social cognition. Reading, Mass.: Addison-Wesley.

Gerbner, G., Gross, L., Morgan, M., & Signorielli, N.. (1986). Living with television: the dynamics of the cultivation process. In B. Jennings & D. Zillman (Eds.), Perspectives on media effects. Hillsdale, NJ: Erlbaum.

Glass, G.V. & Hopkins, K.D. (1984). Statistical methods in education and psychology (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Glass, G.V., Peckham, P.D., & Sanders, J.R. (1972). Consequences of failure to meet assumptions underlying the fixed effects analysis of variance and covariance. Review of Educational Research 42 237-288.

Graesser, A.C. (1981). Prose comprehension beyond the word. NY: Springer-Verlag.

Graesser, A.C., Hauft-Smith, K., Cohen, A.D., Pyles, L.D. (1980). Advanced outlines, familiarity, and text genre on retention of prose. Journal of Experimental Education 48, 209-220.

Greenberg, B.S. (1982). Television and role socialization: an overview. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), Television and behavior. Rockville, MD: National Inst. of Mental Health.

Hovland, C.I., Janis, I.L., & Kelley, H.H. (1953). Communication and persuasion. New Haven, CT: Yale University.

Kahneman, D. & Miller, D.T. (1986). Norm theory: Comparing reality to its alternatives. Psychological Review 93 (2) 136-153.

Nisbett, R.E. & Kunda, Z. (1985). Perception of social distributions. Journal of Personality and Social Psychology 48 297-311.

Nisbett, R.E. & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. Englewood Cliffs, NJ: Prentice-Hall.

Petty, R.E. & Cacioppo, J.T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 19). NY: Academic Press.

Potter, W.J. (1986). Perceived reality and the cultivation hypothesis. Journal of Broadcasting and Electronic Media 30 (2), 159-174.

Potter, W.J. (1988) Perceived reality in television effects research. Journal of Broadcasting and

Electronic Media 32 (1), 23-41.

Schank, R.C. & Abelson, R.P. (1977). Scripts, plans, goals, and understanding: An inquiry into human knowledge structures. Hillsdale, NJ: Erlbaum.

Srull, T.K. (1984). Methodological techniques for the study of person memory and social cognition. In R.S. Wyer & T.K. Srull (Eds.), Handbook of social cognition (Volume 2). Hillsdale, NJ: Erlbaum.

Srull, T.K., Lichtenstein, M., & Rothbart, M. (1985). Associative storage and retrieval processes in person memory. Journal of Experimental Psychology: Learning, Memory, & Cognition 11 (2) 316-345.

Weber, C. & Crocker, J. (1983). Cognitive processes in the revision of stereotypic beliefs. Journal of Personality and Social Psychology 45 961-977.

Winer, B.J. (1971). Statistical principles in experimental design (2nd ed.). NY: McGraw-Hill.

Wu, C. & Shaffer, D.R. (1987). Susceptibility to persuasive appeals as a function of source credibility and prior experience with the attitude object. Journal of Personality and Social Psychology 52, 677-688.

Wyer, R.S. & Martin, L.L. (1986). Person memory: The role of traits, group stereotypes, and specific behaviors in the cognitive representation of persons. Journal of Personality and Social Psychology 50 661-675.

Wyer, R.S. & Srull, T.K. (1986). Human cognition in its social context. Psychological Review 93 (3) 322-359.

Notes

1. Two rather than eight confidence assessments were made for each of the four sets of eight items in order to decrease subject fatigue. (The instrument averaged over an hour to complete.)

2. A limitation of the Greco-Latin square is that interactions between sequence, individuals within sequence, serial position, and original material are not obtainable (Calfee, 1985; Winer, 1971). This does not pose a serious problem in this study: Sequence, serial position, individual differences, and original material are incorporated to provide increased control, not to estimate effect sizes or test hypotheses concerning these factors.

3. Analyses of differences between group means were carried out using analyses of variance of half the sample (either familiar condition only or unfamiliar condition only). One-way analyses of variance of two group means are equivalent to t-tests (Glass & Hopkins, 1984), though not identical. The analyses of variance partitioned variance due to control factors, and used the interaction term as the denominator in the F-ratio, giving rise to fewer degrees of freedom than in the paired comparison t-test.

Table 1. Arrangement of Social Group Referents and Fiction/ Non-fiction Attributions in Presentation of Stimuli: A Greco-Latin Square Design.

Sequence	Serial position of stimuli			
	1	2	3	4
A	Eritrean guerrillas (unfamiliar/ fiction)	Appalachian mountain people (familiar/ non-fiction)	English gentlemen farmers (familiar/ fiction)	Mauritian rural townspeople (unfamiliar/ non-fiction)
B	Mississippi rural townspeople (familiar/ non-fiction)	Dutch gentlemen farmers in Java (unfamiliar/ fiction)	Polish mountain people (unfamiliar/ (non-fiction)	Contra guerrillas (familiar/ fiction)
C	Appalachian mountain people (familiar/ fiction)	Eritrean guerrillas (unfamiliar/ non-fiction)	Mauritian rural townspeople (unfamiliar/ fiction)	English gentlemen farmers (familiar/ non-fiction)
D	Dutch gentlemen farmers in Java (unfamiliar/ non-fiction)	Mississippi rural townspeople (familiar/ fiction)	Contra guerrillas (familiar/ non-fiction)	Polish mountain people (unfamiliar/ fiction)

Note. Familiarity of social group referent (e.g., Polish versus Appalachian mountain people) and fiction/non-fiction status are the experimental treatments. Serial position, sequence, subjects within sequence, and original stimulus materials (i.e., excerpts about mountain people, guerrillas, gentlemen farmers, and rural townspeople) are control factors.

Figure Caption

Figure 1. Mean evaluation of the characteristicness of group attributes as a function of familiarity of group in message and fiction/non-fiction status.

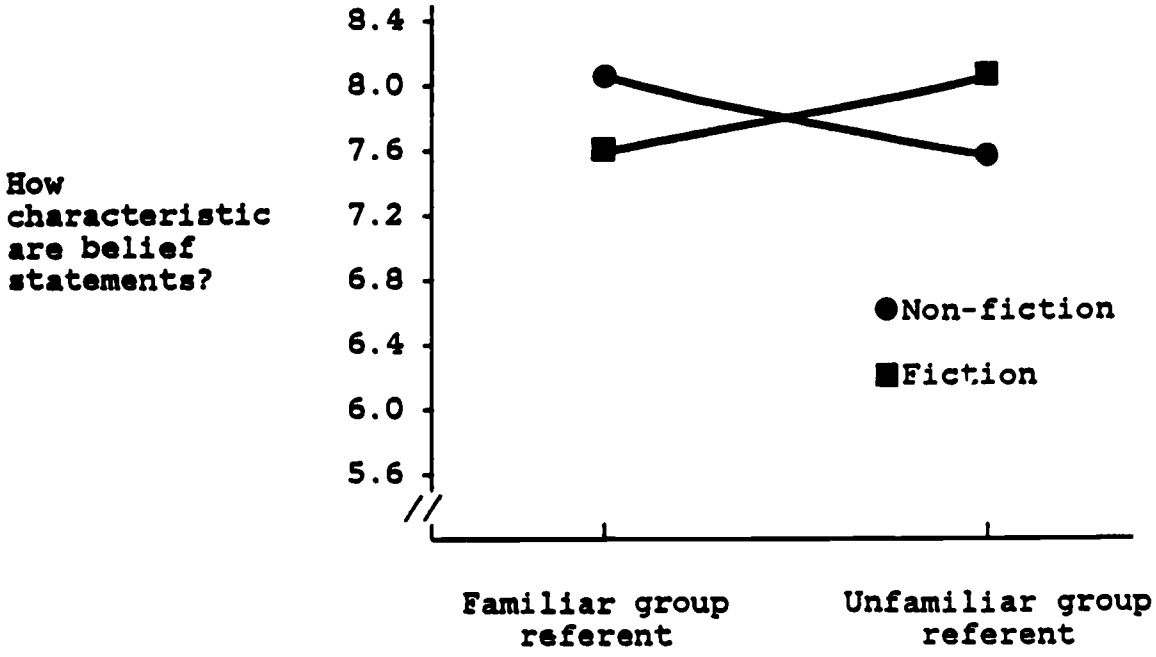
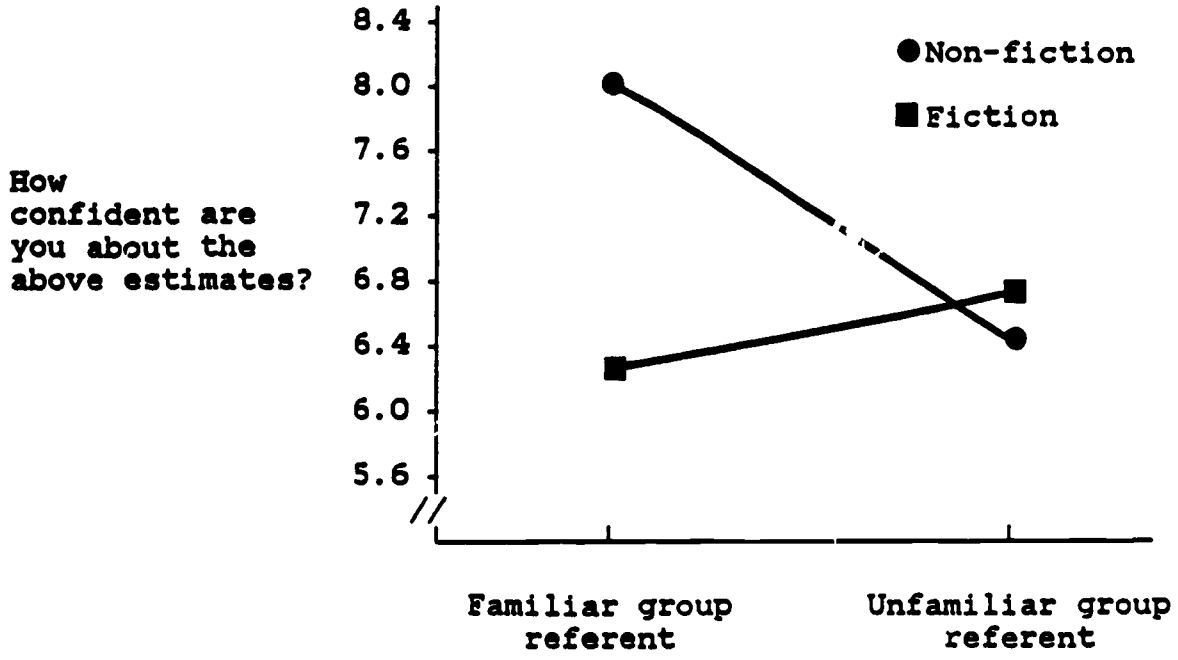

How characteristic are belief statements?
8.4
8.0
7.6
7.2
6.8
6.4
6.0
5.6
Non-fiction
Fiction
Familiar group referent
Unfamiliar group referent

Figure Caption

Figure 2. Mean confidence in estimates of characteristicness of group attributes as a function of familiarity with group described in the message and fiction/non-fiction status.


How confident are you about the above estimates?
8.4
8.0
7.6
7.2
6.8
6.4
6.0
5.6
Non-fiction
Fiction
Familiar group referent
Unfamiliar group referent