Differential Construal and the False Consensus Effect
[Attitudes and Social Cognition]

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Abstract

People's own beliefs, values, and habits tend to bias their perceptions of how widely they are shared. The present research examined whether this “false consensus effect” is partly due to people's failure to recognize that their choices are not solely a function of the “objective” response alternatives, but of their subjective construal of those alternatives. Study 1 provided initial support for the importance of differential construal in people's consensus estimates by showing that larger false consensus effects tend to be obtained on items that permit the most latitude for subjective construal. Study 2 replicated this effect experimentally by asking Ss either a general or specific version of the same question. Larger false consensus effects were obtained on the general version that offered more latitude for construal. Studies 3 & 4 provided further support by showing that (a) Ss who made different choices tended to interpret the response alternatives in ways that reflected the choices they made and (b) subjects who were led to construe the alternatives in the same way tended to make the same choices.

“I do, and anybody who says he doesn't is lying.” This statement, some version of which we have all heard from time to time, represents a clear case of social projection. Because the speaker believes or does something, he or she is unwilling to admit that anyone would believe or act otherwise.

The idea that people project onto others their own beliefs, attitudes, and predispositions has a long history. It has been examined by Freud (1956) in his discussion of the defense mechanism of projection, by Ichheiser (1970) in his work on social perception, by Holmes (1968) in his analysis of “attributive projection,” and most recently by the flurry of empirical studies on the “false consensus effect” (Ross, Greene, & House, 1977; see also Gilovich, Jennings, & Jennings, 1983; Marks & Miller, 1982, 1987; Mullen et al., 1985; Sherman, Presson, & Chassin, 1984; Sherman, Presson, Chassin, Corty, & Olshavsky, 1983). The false consensus effect refers to a tendency for people's own habits, values, and behavioral responses to bias their estimates of the commonness of the habits, values, and actions of the general population. Francophiles think that more people are fans of French culture and cuisine than do Francophobes; drinkers think that more people like to imbibe than do teetotalers.

It is important to stress at the outset the relative nature of the false consensus effect. People do not always think that their own thoughts or actions are shared by a majority of other people. Rather, the false consensus effect refers to a tendency for people's estimates of the prevalence of a given response to be positively correlated with their own response. Religious fundamentalists do not necessarily believe that most people have a similar orientation, although their estimates of the percentage of religious fundamentalists in the general population can be counted on to exceed similar estimates made by their more secular peers.
Numerous cognitive and motivational mechanisms have been proposed to account for the false consensus effect, and a number of them have received empirical support. The strength of the false consensus effect has been shown to be affected by a person's attributional focus (Gilovich et al., 1983; Zuckerman, Mann, & Bernieri, 1982), by the desire to see oneself in the mainstream (Marks & Miller, 1982; Sherman et al., 1984), and by various “informational” factors such as selective exposure and availability (Mullen et al., 1985; Sherman et al., 1983). There is also some evidence that the false consensus effect might even be partly a consequence of a normatively appropriate strategy of generalizing from one indisputable datum—one's own response (Dawes, 1989).

Curiously, there has been no research on one of most intriguing explanations of the false consensus effect offered by the original authors, an explanation that centers on the resolution of ambiguities inherent in most choice problems (see also Ross, 1987). When deciding whether they prefer French or Italian films, for example, people must first determine exactly what the terms French and Italian films mean. The precise way that they construe these two categories will not only decide their own preference, but will exert a parallel influence on their estimates of the preferences of others. If they think of The Bicycle Thief and La Strada when they think of Italian films, for instance, they may be more likely to choose Italian films and to estimate that a larger percentage of their peers would choose likewise than if they construe Italian films to mean spaghetti Westerns.

Note that this interpretation of the false consensus effect rests on two assumptions: (a) Different people construe the same choices quite differently, and (b) people generally fail to recognize this fact and thus fail to make adequate allowance for it when making consensus estimates. It seems that the process of interpretation is so reflexive and immediate that it is often overlooked. This, combined with the widespread assumption that there is but one objective reality, is what may lead us to overlook the possibility that others may be responding to a very different situation. Expressed differently, people certainly recognize that others have different values, goals, and dispositions, and these differences are “factored into” everyday assessments of the commonness of specific beliefs, attitudes, and actions. What people often fail to recognize, however, is that a great deal of divergence of opinion is not due to differences in the “judgment of the object,” but to differences in the “object of judgment” (Asch, 1948, p. 256; see also Dunning, Madey, & Perie, 1990; Dunning, Meyerowitz, & Holzberg, 1989; Ross, 1987). By failing to adjust sufficiently for such an important source of divergence, people arrive at inflated estimates of the degree of social support for their beliefs and actions.

**Study 1**

How can one determine whether differential construal does, in fact, contribute to the false consensus effect? Preliminary evidence was obtained by combining a closer look at some of the results originally reported by Ross et al. (1977) with more recent data that were collected explicitly to test the present thesis. In Table 3 (pp. 287–288) of their article, Ross et al. presented the results of a study designed to assess the perservativeness of the false consensus effect. Specifically, subjects were asked to make consensus estimates and to indicate their own choice for each of 35 different issues involving personal traits, preferences, activities, and so forth (e.g., “Are you shy?” “Do you think about dying?” and “Do you think that there will be a discovery of extraterrestrial life by the year 2000?”). Results consistent with the false consensus hypothesis were obtained on 33 of the 35 items, although the effect varied in magnitude from item to item.

This variability permits a test of the importance of subjective construal in the false consensus effect: Is the false consensus effect stronger on those items that involve more latitude for
alternative interpretation? According to the logic of the present interpretation, there should be relatively little false consensus when there is little opportunity for alternative construal because an important source of (unrecognized) disagreement is eliminated. To address this issue, eight members of the Psychology Department at Cornell University were asked to rate on a 7-point scale the “latitude for construal” of 32 of the 35 items (2 items were out of date and 1 was not described sufficiently in the original report). The judges' ratings were highly reliable (Spearman–Brown index = .97) and revealed considerable variability across items, from those affording almost no room for alternative constructions (“Are you a first-born or later-born child?” $M = 1.25$) to those permitting a great deal (“Are you competitive?” $M = 5.63$). The mean ratings of the latitude for construal were then correlated with the size of the false consensus effect for all 32 items. The size of the false consensus effect was indexed in two ways: (a) by the $t$ values reported as the test of the false consensus hypothesis, and (b) by the simple difference between the mean estimate of the percentage of people who would choose a given option (e.g., Italian films) given by people who chose that option themselves (e.g., those who preferred Italian films) and the same mean estimate given by those who chose the opposite option (e.g., those who preferred French films).

As predicted, there was a significant positive correlation between latitude for construal and the size of the false consensus effect regardless of which false consensus index was used: with the $t$ values, $r = .40$, $p < .05$; and with the simple difference in mean estimates, $r = .38$, $p < .05$. Larger false consensus effects are more likely to be obtained when the choices can readily be interpreted in alternative ways.

**Study 2**

The same prediction that was tested and confirmed through the correlational analysis reported in Study 1 can also be tested experimentally. If two versions of the same choice problem are given to subjects, one a more specified version of the other, there should be less of a false consensus effect on the more specified version that offers little latitude for alternative construal. People who are asked whether they prefer the color tan or aqua, for example, should exhibit more of a consensus bias than those who are asked their preference between specific swatches of the two colors. In the latter case, everyone's estimates are based on the same object of judgment and an important source of potential (unrecognized) divergence is eliminated. The false consensus effect should diminish accordingly.

To test this hypothesis, one group of 100 Cornell undergraduates was asked to make choices and provide consensus estimates for three broadly defined choice problems—whether they preferred aqua or tan, whether they would rather have an American or European snack, and whether they would rather have a “last meal” of American or Italian food. A second group of 100 Cornell undergraduates was presented with more specified versions of the same three problems. These subjects were asked to express a preference between one of two color swatches (one aqua, one tan), between apple pie and chocolate mousse, and between a meal of fried chicken and veal parmigiana.

**Results**

Subjects' consensus estimates for each of the three questions were analyzed by a 2 (Question Type: general or specific) × 2 (Subject's Choice: aqua/tan, American/European, or American/Italian) analysis of variance (ANOVA). The critical test was the interaction: Was the difference in consensus estimates made by subjects who made divergent choices larger for the
general version of the question than the specific version? This interaction was significant for
two of the three questions: aqua/tan, $F(1, 196) = 7.26, p < .01$; American/European snack, $F(1, 194) = 10.08, p < .01$; and American/Italian meal, $F < 1.3$

The mean consensus estimates are presented in Table 1. There it can be seen that subjects who
were asked the broadly specified versions exhibited significant false consensus effects on all
three questions: for aqua/tan, $t(196) = 3.89, p < .001$; for American/European snack, $t(194) = 4.61, p < .001$; and for American/Italian meal, $t(193) = 3.30, p < .005$. In marked contrast, there
was no evidence of a false consensus effect for two of the more specific questions—aqua/tan and
American/European snack, both $t s < 1$. There was a significant false consensus effect for the
third question, American/Italian meal, $t(193) = 2.10, p < .05$, but here too the results were in the
predicted direction: The false consensus effect was (nonsignificantly) larger in the general
version than the specific version.

<table>
<thead>
<tr>
<th>Question type</th>
<th>General</th>
<th>Specific</th>
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<tbody>
<tr>
<td><strong>Difference</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>18.3***</td>
<td>-0.5</td>
</tr>
<tr>
<td>Snack</td>
<td>18.2***</td>
<td>1.7</td>
</tr>
<tr>
<td>Meal</td>
<td>11.0**</td>
<td>7.3*</td>
</tr>
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</table>

Table 1 Mean Estimated Percentage of Cornell Students Who Would Choose Option 1 as a Function of Question Type and Subject's Choice

Past research, it should be pointed out, has shown that the magnitude of the false consensus
effect is affected by the percentage of subjects who actually choose each option. Larger false
consensus effects tend to be obtained when the distribution of choices is closer to 50–50 (Mullen &
Hu, 1988). Note that this finding works against the results obtained for the question about
American/European snacks. The choice breakdown in the specific version of that question was
closer to 50–50, but the false consensus effect was nevertheless much larger in the general
version. As for the question about American/Italian food, the choice breakdown was equally
skewed in both versions, but with the majority preference reversed (only 39% preferred
American over Italian food, but 64% preferred fried chicken to veal parmigiana). It is not clear
whether this difference in the distribution of choices had any effect on the consensus estimates
obtained in the two versions. The remaining question, aqua versus tan, produced very similar
distributions across the two versions, and thus it constitutes the best test of the present thesis.

All told, these data strongly reinforce the correlational results obtained in Study 1. Both
studies indicate that the false consensus effect is more likely to be obtained when there is greater
latitude to interpret the choices in alternative ways.
Study 3

With these two sources of initial support for the present thesis in hand, a more ambitious test seemed warranted. In particular, it became important to determine whether people who make different choices do indeed construe the “objective” features of the choices quite differently. To examine this question, two replications of a transmission experiment were performed (cf. Gilovich, 1987). In each replication, one group of “first-generation” subjects was asked to indicate a preference for, say, 1960s or 1980s music, and to estimate the percentage of their peers who would make each choice. They were also asked to specify what they had in mind as 1960s and 1980s music when they made their choices. Their construals of the two categories were then transcribed and given to a yoked group of “second-generation” subjects in the form of a more fleshed-out choice dilemma. Second-generation subjects, in other words, did not choose between 1960s and 1980s music, but between a first-generation subject's particular construal of 1960s and 1980s music—between, say, Jimi Hendrix, Eric Clapton, and Traffic on the one hand, and The Cars, Men at Work, and Michael Jackson on the other.

This procedure permits several tests of the present thesis. First, the popular appeal of the specific musicians listed by the first-generation subjects can be quantified, and the examples listed by those who prefer 1960s music can be compared with the examples listed by those who prefer 1980s music. With these data one can ask whether subjects who prefer 1960s music do so in part because they call to mind more appealing 1960s musicians and less appealing 1980s musicians than do subjects who prefer 1980s music. A second test of the present analysis can be obtained by comparing the preferences made by matched pairs of first- and second-generation subjects. If the preferences expressed by first-generation subjects stem partly from the precise way they construe the categories of 1960s and 1980s music, then these differences in construal should be reflected in the choices made by the second-generation subjects to whom they were yoked. Second-generation subjects who had the choice framed by someone who preferred 1960s music should tend to choose 1960s music themselves; those who had the choice framed by someone who preferred 1980s music should tend to choose 1980s music.

Both analyses mentioned thus far examine the extent to which an individual's choice is governed by the precise way he or she has interpreted the alternatives at hand. To investigate whether people's consensus estimates are similarly influenced by subjective construal, the ratings of the specific musicians listed by the first-generation subjects can be compared with the consensus estimates of both generations. Do first-generation subjects who call to mind particularly appealing 1960s musicians tend to give particularly high estimates of the number of other people who prefer 1960s music? Do second-generation subjects who inherit a list of appealing 1960s musicians tend to give rather high estimates of the percentage of their peers would choose the 1960s musicians?

A final, rather stringent test of the present thesis is provided by comparing the consensus estimates made by the first-generation subjects with the choices of their second-generation counterparts. Do the estimates made by first-generation subjects who, say, chose 1960s music closely match the actual choices made by the relevant subgroup of second-generation subjects to whom they were yoked? In a sense, this comparison addresses whether subjects' consensus estimates, when looked at a certain way, may be less exaggerated than they first appear. People's consensus estimates may be inflated because they unknowingly provide “conditional” estimates when they should be providing “unconditional” estimates. The statement that 70% of all people prefer 1960s music may be offered unconditionally, but it may more accurately represent a more conditional statement like, “If everyone were to construe 60s and 80s music the way I have, then
70% would prefer 1960s music.” By overlooking the fact that others may have construed the alternatives quite differently than themselves, people may inadvertently provide relatively “correct” answers to the wrong question.

Method
Subjects.

The subjects were 320 student volunteers from Cornell University.

Procedure.

There were two replications of the basic experiment, one in which subjects were asked whether they preferred 1960s or 1980s music and one in which they were asked whether they preferred older or recent films. All subjects were approached at various locations on the Cornell campus and asked several questions in counterbalanced order. Half of the subjects in each replication were first asked to indicate their own preference and to estimate the percentage of all Cornell students who would prefer each alternative. These subjects were then asked to state what they had in mind when they made their choice between the two alternatives. Specifically, subjects were asked (for the older/recent film version): “What sort of films of each type came to mind when you were trying to decide the kind of films you preferred? What sort of films did you think of when you thought about older films? What sort of films did you think of when you thought about recent films? We do not want to know what kind of films you like personally; we are interested in the kind of films you thought of when you were making your choice.”

To control for the possibility that subjects might list specific examples that are slanted to justify their choices, the remaining subjects were first asked to provide examples of what came to mind for each category, and then were asked to indicate their own preference and their estimates of the preferences of their peers. In particular, these subjects were asked: “Think of the two categories of older and recent films. What comes to mind when you think of these two categories of films? What sort of films do you think of when you think about older films? What sort of films do you think of when you think about recent films? We do not want to know what kind of films you like personally; we are interested in the kind of films that come to mind when you think about older and recent films.”

The second-generation subjects were also recruited at various locations around campus. Each second-generation subject was yoked to a first-generation subject and was asked whether he or she preferred the kind of music (or films) exemplified by his or her partner's list of 1960s or 1980s musicians (or older or recent films). The terms 60s, 80s, older, and recent were never presented to second-generation subjects; they chose between lists of instances of these categories without any mention of the categories themselves. Second-generation subjects were also asked to estimate the percentage of all Cornell students who would choose each of the two lists.

Results

The order in which the first-generation subjects answered the various questions did not yield any significant differences on the key dependent measures. As a result, this variable was dropped from all further analyses.

False consensus effects.
The personal preferences and consensus estimates of both first- and second-generation subjects are presented in Figure 1. As can be seen in the left-hand column of that figure, significant false consensus effects were exhibited by first-generation subjects in both replications. First-generation subjects who preferred 1980s music estimated that 67.3% of their peers would have a similar preference, whereas those who preferred 1960s music thought that only 55.7% of their peers would choose 1980s music, $t(77) = 2.89, p < .01$.

First-generation subjects who preferred recent films estimated that 68.3% of their peers would choose similarly, whereas those who preferred older films estimated that only 58.1% of their peers would choose recent films, $t(78) = 2.89, p < .01$.

<table>
<thead>
<tr>
<th>First Generation</th>
<th>Second Generation</th>
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<tbody>
<tr>
<td>Chose 1980's (n = 43; 54%)</td>
<td>Chose 1980's (n = 31; 70%)</td>
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<tr>
<td>Estimated % 80's = 67.3</td>
<td>Estimated % 80's = 62.9</td>
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<tr>
<td>Estimated % 60's = 32.7</td>
<td>Estimated % 60's = 37.1</td>
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<tr>
<td>Chose 1960's (n = 36; 46%)</td>
<td>Chose 1960's (n = 13; 30%)</td>
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<tr>
<td>Estimated % 80's = 55.7</td>
<td>Estimated % 80's = 50.4</td>
</tr>
<tr>
<td>Estimated % 60's = 44.3</td>
<td>Estimated % 60's = 49.6</td>
</tr>
<tr>
<td>Chose 1980's (n = 36; 46%)</td>
<td>Chose 1980's (n = 24; 67%)</td>
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<tr>
<td>Estimated % 80's = 55.7</td>
<td>Estimated % 80's = 47.7</td>
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<tr>
<td>Estimated % 60's = 44.3</td>
<td>Estimated % 60's = 52.3</td>
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<tr>
<th>Older vs. Recent Films</th>
<th>Older vs. Recent Films</th>
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<tbody>
<tr>
<td>Chose Recent (n = 38; 48%)</td>
<td>Chose Recent (n = 26; 68%)</td>
</tr>
<tr>
<td>Estimated % Recent films = 68.3</td>
<td>Estimated % recent = 68.1</td>
</tr>
<tr>
<td>Estimated % Older films = 31.7</td>
<td>Estimated % older = 31.9</td>
</tr>
<tr>
<td>Chose Older (n = 42; 52%)</td>
<td>Chose Older (n = 14; 33%)</td>
</tr>
<tr>
<td>Estimated % Recent films = 58.1</td>
<td>Estimated % recent = 62.1</td>
</tr>
<tr>
<td>Estimated % Older films = 41.9</td>
<td>Estimated % older = 37.9</td>
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<tr>
<td>Chose Recent (n = 28; 67%)</td>
<td>Chose Older (n = 28; 67%)</td>
</tr>
<tr>
<td>Estimated % Recent films = 53.8</td>
<td>Estimated % recent = 53.8</td>
</tr>
<tr>
<td>Estimated % Older films = 46.2</td>
<td>Estimated % older = 46.2</td>
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An examination of the right-hand column of Figure 1 reveals a similar pattern in the consensus estimates of the second-generation subjects. Differences in consensus estimates consistent with the false consensus hypothesis and of roughly the same magnitude as those observed among first-generation subjects were obtained in all relevant comparisons. This latter result is surprising. Given the results of the first two studies, one might have expected second-generation subjects, who faced a more specified choice dilemma, to exhibit less of a false consensus effect than their first-generation counterparts. A discussion of the significance and possible reasons for this anomalous result is presented after Study 4 in the general discussion.

**Construal differences.**

Were the subjects who chose 1960s music thinking about fundamentally different definitions of what constitutes 1960s and 1980s music than those who chose 1980s music? Did those who expressed a preference for older films have in mind a very different image of what older and recent films are than those who expressed a preference for recent films? To answer these questions, a group of 10 judges (9 Cornell undergraduates and the author) rated the appeal of all the examples listed by our subjects on a 6-point scale (0 = low appeal, 5 = high appeal). Among the musicians, for example, The Beatles and The Talking Heads received a very high rating and The Bee Gees and Motley Crue a very low rating. Among the films, *Casablanca* and *The Killing Fields* received a high rating and *Rambo* and *The Texas Chainsaw Massacre* received a low rating. The judges were instructed to rate only the films and music they had seen or heard personally. The average rating of all participating judges was computed and served as the appeal index for each film and musician. The reliability of these ratings was high for both 1960s/1980s music (Spearman–Brown index = .97) and older/recent films (.94).

The appeal indices for all 1980s musicians listed by a given subject were summed and subtracted from the summed appeal indices of all 1960s musicians listed by that subject. This yielded, for each subject, a measure of the extent to which his or her construal of the two categories was slanted toward a preference for 1960s music. The same procedure was used for older/recent films to create a measure of the extent to which a given subject's construal was slanted toward a preference for older films.5

As predicted, the construals of subjects who made different choices diverged in a direction consistent with the choices they made. Subjects who expressed a preference for 1960s music provided examples of more appealing 1960s musicians and less appealing 1980s musicians \( (M = 5.5) \) than subjects who expressed a preference for 1980s music \( (M = 2.2) \), \( t(78) = 2.90, p < .01 \). Similarly, subjects who chose older films listed instances of more appealing older films and less appealing recent films \( (M = 3.4) \) than subjects who chose recent films \( (M = 0.2) \), \( t(78) = 2.78, p < .01 \). It seems that subjects who expressed different choices did indeed have very different images of what constituted the two categories.

**Consensus estimates and construal.**

The two analyses presented thus far would lead one to expect an overall correlation between subjects' construals and their consensus estimates because both variables are significantly related to subjects' choice. More important, however, does such a relationship exist when choice is held constant? Table 2 presents the within-cell correlations between the construals of the first-generation subjects and the consensus estimates of both first- and second-generation subjects.
The correlations are presented separately for each generation (first and second), choice dilemma (older/recent films and 1960s/1980s music), and choice made by the first-generation subject. These data indicate that subjects' consensus estimates do indeed tend to be related to the precise way the choice is construed, and that this relationship is more pronounced for the second-generation subjects. All four correlations for the second-generation subjects were positive, with an average correlation of .23. Collapsing across the four correlations yields a significant positive association between construal ratings and subjects' consensus estimates, Stouffer's $z = 2.78, p < .01$. Among the first-generation subjects, three of the four correlations were positive, with an average correlation of .12. Collapsing across all four yields a marginally significant association between construal and consensus estimates, Stouffer's $z = 1.69, p < .10$.

<table>
<thead>
<tr>
<th>Table 2 Correlations Between Ratings of the Construals of First-Generation Subjects and the Consensus Estimates of First- and Second-Generation Subjects</th>
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<tbody>
<tr>
<td><strong>Choice dilemma</strong></td>
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<td><strong>Subject sample</strong></td>
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<tr>
<td>Second generation</td>
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<tr>
<td>First generation</td>
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</tbody>
</table>

* $p < .10$. ** $p < .05$.  

Table 2 Correlations Between Ratings of the Construals of First-Generation Subjects and the Consensus Estimates of First- and Second-Generation Subjects

It appears, then, that the way in which the relevant choice alternatives are construed not only influences the choices that are made, but a person's estimates of the commonness of various choices as well. The finding that this result was less strong among first-generation subjects is hardly surprising: First-generation subjects almost certainly did not articulate everything that went through their heads about 1960s/1980s music or older/recent films when they were asked to specify what they had in mind when they thought about these categories. Thus, their consensus estimates were subject to the influence of additional, unmeasured thoughts about the categories of 1960s/1980s music or older/recent films. Second-generation subjects, on the other hand, had the two categories defined for them by their first-generation counterparts, and so their consensus estimates were almost certain to reflect more closely the specific examples of films or musicians that were listed. Also, the consensus estimates of the first-generation subjects were no doubt more influenced by abstract theories about what people think of different eras of music or films than were the consensus estimates of the second-generation subjects (for whom the choice was not explicitly about different eras). This too would make the consensus estimates of the first generation less tightly connected to the ratings of construal.

**Second-generation choices.**

Do second-generation subjects who are led to adopt different interpretations of a given choice dilemma express systematically different preferences? The pattern of choices shown in the right-hand column of Figure 1 indicates that they do indeed. In the first replication, 70% of the second-
generation subjects who saw the alternatives through the eyes of someone with a preference for 1980s music chose 1980s music themselves. In contrast, of those who had the choice framed by a subject with a preference for 1960s music, only 33% indicated that they preferred 1980s music, \( \chi^2(1) = 10.96, p < .001 \). In the second replication, 68% of the second-generation subjects who were yoked to first-generation subjects with a preference for recent films chose recent films themselves. In contrast, only 33% of those yoked to subjects with a preference for older films indicated that they preferred recent films, \( \chi^2(1) = 9.82, p < .01 \).

It is clear, then, that the preferences expressed by the second-generation subjects were closely connected to the ways in which their first-generation counterparts had fleshed out the details involved in these rather abstract choices.

**The “conditional” accuracy of consensus estimates.**

Do the consensus estimates of the first-generation subjects who made a particular choice match the actual choices of the second-generation subjects to whom they were yoked? The data presented in Figure 1 indicate that, to an interesting degree, they do. In the first replication, first-generation subjects who preferred 1980s music estimated that 67.3% of their peers would have the same preference. This estimate closely matches the 70% of their yoked second-generation counterparts who chose 1980s music. Those first-generation subjects who chose 1960s music estimated that 44.3% would make the same choice. This figure actually underestimates the 67% of the relevant second-generation subjects who chose 1960s music.

A similar pattern emerged in the second replication. First-generation subjects who preferred recent films estimated that 68.3% of their peers would have the same preference—an estimate that is virtually identical to the 68% of their yoked counterparts who chose recent films. Those first-generation subjects who preferred older films estimated that 41.9% would make the same choice—an estimate that underestimates the 67% of the relevant sample who chose older films.

In summary, when the consensus estimates of the first-generation subjects are compared with choices made by those who are free to interpret the alternatives their own way (i.e., the first-generation subjects as a whole), a pattern commonly found in the false consensus literature appears (Mullen & Hu, 1988; Sanders & Mullen, 1983): The subjects who made one choice (1980s/recent films) substantially overestimated the percentage who would choose similarly (estimated 67%, actual 54%; estimated 68%, actual 48%), whereas those who made the other choice (1960s/older films) either estimated quite accurately or slightly underestimated the percentage who would choose similarly (estimated 44%, actual 46%; estimated 42%, actual 52%). However, when compared with the choices made by those whose construals were constrained to match their own (i.e., their yoked second generation counterparts), what looked initially like overestimates now appear to be rather accurate, and what looked initially like accurate estimates now appear to underestimate substantially the actual choices made by the relevant conditional subgroup. Combined with the results reported earlier, these data suggest that part of the reason for any overestimation in people's estimates of consensus is the failure to make adequate allowance for the possibility that other people may construe the objective features of the two alternatives quite differently than themselves.

**Discussion**

The results of this experiment support the idea that the resolution of ambiguity plays an important role in people's perceptions of consensus. Subjects who made different choices were
shown to have interpreted the two alternatives quite differently and in ways that reflected the choices they made. Subjects who preferred older films thought of more appealing older films and less appealing recent films than did subjects who preferred recent films. Subjects with a preference for 1960s music thought of more appealing 1960s music and less appealing 1980s music than subjects with a preference for 1980s music. And, to the extent that subjects may have thought that most people would have preferences similar to their own, they were right—right, that is, if most people were to construe the two alternatives the same way they did. Second-generation subjects who were induced to construe the alternatives like someone with a preference for recent films mostly chose recent films themselves. Those who were led to construe the alternatives like someone with a preference for older films mostly chose older films themselves. A similar pattern was obtained for the choice between 1960s and 1980s music. Subjects' consensus estimates were also linked to how the alternatives were interpreted. With choice held constant, the construal ratings of the first-generation subjects were significantly related to the consensus estimates of the second generation and marginally related to those of the first generation. A final strand of support for the present thesis was provided by comparing the consensus estimates of the first-generation subjects with the choices of their yoked second-generation counterparts. Looked at “conditionally” in this way, these estimates were found to either underestimate or estimate with considerable accuracy the choices made by subjects who were led to interpret the two alternatives in a particular way.

Together, these findings bolster this article's twin contentions that (a) different people see the “objective” features of the same choice quite differently, and (b) people do not fully appreciate this fact and thus do not make adequate allowance for it in estimating consensus.

It is important to point out that there was one aspect of the results—yet to be discussed—that did not fall so neatly into this overall pattern of support for the present thesis. This involved the correlation between the choices made by matched pairs of first- and second-generation subjects. Recall that second-generation subjects tended to make the same choice as that made by the first-generation subject who framed the alternatives for them. This result can be expressed in correlation form: The phi coefficient for the relationship between the choices of yoked pairs of first- and second-generation subjects was .35 for older/recent films and .37 for 1960s/1980s music, both ps < .01. The reason one would expect such a correlation, of course, is that first-generation subjects construed the alternatives in a way that predisposed a particular choice, and their second-generation counterparts inherited that particular slant. This suggests that if the correlation between the choices of first- and second-generation subjects were recomputed with the construals of the first-generation subjects held constant through a partial correlation analysis, the relationship should disappear. When this analysis was conducted, however, the original correlations were only minimally diminished—a troubling finding for the present thesis.

There are at least two factors that could account for the failure of this predicted result. First, the judges' ratings of the popular appeal of the specific films or musicians listed by the first-generation subjects may not have measured differences in construal as accurately as one might have hoped. Thus, when these ratings were partialled out, the original correlation remained largely intact. This is no doubt true to some extent because no measure can capture perfectly the appeal of a set of films or musicians to a given individual. It is not clear, in fact, whether the rating measure used in this study can be improved significantly.

The second factor offers more hope for revision. The choice made by any individual subject is the product of a host of idiosyncratic influences and thus is not terribly predictable. The choice of an individual second-generation subject, then, may not always faithfully reflect the extent to which an inherited construal predisposes a particular choice. A given first-generation subject
might construe the categories of older and recent films in a way that heavily predisposes a preference for older films and yet a given second-generation subject may nevertheless prefer the list of recent films. If a more stable choice measure were used, such as the modal choice made by a group of second-generation subjects who were all yoked to the same first-generation subject (and thus were all led to construe the alternatives in the same way), one might expect it to be more tightly connected to the ratings of construal. This idea was tested in the next experiment.

**Study 4**

This experiment used the same general procedure as that used in Study 3 except that each first-generation subject was yoked to 10 second-generation subjects. The same results were anticipated, with the exception that the more stable measure of second-generation choices should be more tightly connected to the construal ratings in the partial correlation analysis.

**Method**

Three hundred thirty undergraduates, approached at various locations on the Cornell campus, volunteered to serve as subjects in this experiment. Only one of the choice dilemmas from the previous study was used—whether subjects preferred 1960s or 1980s music. Thirty first-generation subjects were asked to state a preference for one of these two eras of music and to estimate the preferences of Cornell students as a whole. Then, after being given the same instructions as in Study 3, these subjects provided specific examples of what they had in mind as 1960s and 1980s musicians. The two lists provided by each subject were transcribed and given to a group of 10 second-generation subjects. These subjects indicated a preference for “Category A” or “Category B,” and provided estimates of the percentage of Cornell students who would prefer each category.

**Results**

**The false consensus effect.**

The personal preferences and consensus estimates of both first- and second-generation subjects are presented in Figure 2. The left side of the figure reveals the usual false consensus effect in the estimates of the first-generation subjects. Those subjects who preferred 1980s music estimated that 69.6% of their peers would have a similar preference, whereas those who preferred 1960s music thought that only 52.1% would prefer 1980s music, \( t(28) = 2.58, p < .02 \).
The right side of Figure 2 reveals the standard false consensus effect on the part of second-generation subjects as well. Unlike the previous study, however, the false consensus effect was slightly smaller in the second generation. The difference in the percentage estimates made by the two choice groups was 17.5% (i.e., 69.6 - 52.1) in the first generation, and only 13.5% (57.7 - 44.2) and 10.9% (54.2 - 43.3) in the two subgroups of second-generation subjects. These data are thus more in keeping with the results of Studies 1 and 2 in that the size of the false consensus effect is seemingly reduced when there is less latitude for alternative construal. It is important not to make too much of this finding, however, because the difference in the magnitude of the false consensus effects exhibited by first- and second-generation subjects is neither large nor statistically significant, and the difference between these data and those reported in Study 3 lies almost entirely in the estimates of the first-generation subjects.

Construal differences.

The specific musicians listed by first-generation subjects were scored for appeal according to the same procedures used in Study 3. An analysis of these data revealed that subjects who chose 1960s music provided examples of more appealing 1960s musicians and less appealing 1980s musicians ($M = 4.9$) than subjects who chose 1980s music ($M = 1.4$), $t(28) = 2.62, p < .02$. Once again, it is clear that subjects who expressed different preferences had very different images of what constituted the two categories.
Consensus estimates and construal.

An analysis of the correlation between the construal ratings and subjects' consensus estimates (with first-generation choice held constant) produced results that were stronger than those of Study 3 among the second-generation subjects, but yielded no effect among the first-generation subjects. This latter result was unexpected and remains unexplained. The enhanced effect among second-generation subjects, in contrast, was entirely predictable and no doubt stemmed mainly from the greater stability created by having 10 second-generation subjects yoked to each subject in the first generation. The correlation between the average consensus estimates of each group of 10 second-generation subjects and the ratings of the examples listed by the first-generation subject to whom they were yoked was .68 for first-generation subjects who chose 1980s music and .43 for those who chose 1960s music. Thus, the consensus estimates of the second-generation subjects were quite closely connected to the precise way they were led to construe the two alternatives.

Second-generation choices.

Did the second-generation subjects who were led to adopt different interpretations of what constitutes 1960s and 1980s music express systematically different preferences? The pattern of choices shown on the right side of Figure 2 indicates that they did indeed. Because of a lack of independence in the responses of each set of 10 second-generation subjects who were yoked to the same first-generation subject, the choice data that are presented are not those of individual subjects, but the majority choices made by the 10 subjects in each group. Of the 15 groups of second-generation subjects who saw the alternatives through the eyes of someone with a preference for 1980s music, there was a clear majority preference in 14 (in one set there was a 50–50 split in opinion). In 57% of these groups, the majority preferred 1980s music themselves. In contrast, of those groups who had the choice framed by someone with a preference for 1960s music, 12 revealed a clear majority preference (3 were split evenly), and in only 1 (8%) was there a majority preference for 1980s music. This difference in the pattern of choices made by second-generation subjects was statistically significant, Fisher's exact $p = .012$.

The most important question to be addressed in this experiment, however, was whether the pattern of choices made by the second-generation subjects was mediated by the particular construals they inherited from their first-generation counterparts. With 10 subjects yoked to each person in the first generation (and thus a more stable measure of the impact of a particular construal), would there be a tighter connection between the choices of the second generation and the construals of the first? This question was addressed through the same partial correlation analysis described in Study 3. The simple correlation between the preferences expressed by each first-generation subject and the percentage of his or her yoked second-generation counterparts with the same preference was .33, $p < .10$. Similarly, the simple correlation between the preferences of the first generation and the modal preference of each group of 10 second-generation subjects was .45, $p < .02$. When these correlations were recomputed with the construals of the first generation partialled out, they were reduced substantially. The first dropped to .08 ($p > .35$) and the second to .25 ($p > .10$). Clearly, it is the precise way that the first-generation subjects construed the two categories of 1960s and 1980s music that was responsible for the substantial correlation between the choices of the yoked pairs of first- and second-generation subjects.

The “conditional” accuracy of consensus estimates.
Having 10 second-generation subjects yoked to each first-generation subject also provides a more informative test of the “conditional” accuracy of people's consensus estimates. Rather than comparing the average consensus estimates of the first generation with the choices made by the second generation, one can now examine whether the estimates made by individual first-generation subjects tend to match the percentage of their yoked second-generation counterparts who made a particular choice. Did subjects who gave particularly high estimates induce a higher percentage of their yoked second-generation counterparts to make the same choice as they made? An examination of the correlation between first-generation consensus estimates and second-generation choices within yoked groups of first- and second-generation subjects provided no evidence for this hypothesis. Thus, even when subjects' construals are taken into account through the transmission procedure used in this experiment, there is still substantial room for inaccuracy in the consensus estimates of first-generation subjects.

Discussion

This experiment replicated and extended the bulk of the results reported in Study 3 and thus provided further support for the claim that differential construal plays an important role in people's perceptions of consensus. Subjects who expressed different preferences were shown to have interpreted the alternatives quite differently, and in ways that reflected the choices they made. Subjects with a preference for 1960s music thought of more appealing 1960s musicians and less appealing 1980s musicians than did subjects with a preference for 1980s music. These differences in construal were also reflected in the choices expressed by second-generation subjects whose interpretations were constrained by their yoked first-generation counterparts. Those subjects yoked to someone with a preference for 1960s music tended to prefer 1960s music themselves; those yoked to someone who preferred 1980s music tended to prefer 1980s music. The most important finding of this experiment, however, was the close connection between the pattern of preferences of the second generation and the construals of the first. With the construals of the first generation held constant through a partial correlation analysis, the significant correlation between the choices of yoked first- and second-generation subjects disappeared.

General Discussion

As Asch (1948; 1952) and others pointed out long ago, people often construe the same situation in different ways (cf. Kelly, 1955; Lewin, 1935, 1936; Murray, 1938). Thus, divergent behavior in what appears to be the same circumstances may sometimes be best thought of as responses to very different situations. The results presented above provide clear support for the importance of differential construal in the false consensus effect. When trying to make a choice, a person must first interpret what the alternatives mean. The interpretation will influence not only the person's own choice, but—unless he or she is keenly aware that other people might construe the same alternatives quite differently—his or her estimates of the number of other people who would choose similarly. As the present results make clear, a full awareness of the possibility of such alternative construal is apparently lacking, and this lack of awareness plays a key role in the false consensus effect.

For obvious reasons, any argument that touts the importance of differential construal should devote more than the usual attention to the definition of important terms. In this case, the term construal itself is open to alternative interpretation and thus warrants a final explicit discussion. As it is used here, construal refers to the subset of specific instances or the sample of particular features that come to mind when a person considers a particular object, category, or alternative.
Differences in construal thus correspond to differences from person to person in the “objective” information under consideration (cf. Dunning et al., 1990; Ross, 1987). Of course, people also differ in their subjective interpretation and evaluation of the same objective information (Darley & Gross, 1983; Gilovich, 1981, 1983; Lord, Ross, & Lepper, 1979; Vallone, Ross, & Lepper, 1985), but such differences are not the focus of this investigation. To borrow from Asch (1948) once again, what is at issue here are differences in the very “object of judgment” under consideration, and not differences in the “judgment of the object.”

Initial support for the importance of differential construal in the false consensus effect was obtained through a further analysis of data originally presented by Ross et al. (1977). This analysis indicated that stronger false consensus effects were obtained when the two response alternatives offered a wide latitude for alternative interpretation. The same result was also obtained experimentally: When subjects' responses to general and specific versions of the same questions were examined, larger false consensus effects were obtained on the general versions that offered more latitude for alternative construal. Still further support was obtained in three replications of the “transmission” experiment reported above. The results of these experiments indicate that people arrive at different choices in part because they construe the objective features of the various alternatives in a way that predisposes the particular choice they made. Moreover, to the extent that people may appear to exaggerate the percentage of people who would choose similarly, they are “conditionally” vindicated: People who are led to construe the alternatives in the same way generally do make the same choice.

However, there were a couple of findings in Studies 3 and 4 that did not conform as well as might have been expected to the overall pattern of results. First, among first-generation subjects who made the same choice (i.e., holding choice constant), differences in construal ratings were not consistently correlated with the consensus estimates of the first generation. As discussed previously, this failure may be attributable to the inherent imperfection of any measure of construal. Because the construal ratings reflect general appeal, they may not always correspond to the idiosyncratic tastes of a particular individual, and so the ratings of the instances listed by a given subject may not always fit his or her consensus estimates. Furthermore, the construal ratings can only be based on what a subject explicitly articulates. Some subjects no doubt failed to specify everything they had in mind when they thought of 1960s and 1980s music or older and recent films. Thus, their consensus estimates are bound to be influenced by unstated factors that were not picked up by the ratings of construal. This should weaken the correlation between the construal ratings and consensus estimates among first-generation subjects, but not among second-generation subjects, for whom the two alternatives were defined by the specific instances listed. This is precisely the pattern that was observed.

The second anomalous finding involved the magnitude of the consensus estimates made by second-generation subjects in Studies 3 and 4. Recall that in Study 3 the false consensus effect was just as strong among second-generation subjects as it was for the first generation, and that in Study 4 it was only slightly smaller. Given the results of Studies 1 and 2, one would have expected consistent evidence of a more modest false consensus effect among second-generation subjects who faced a more specified version of the 1960s/1980s or older/recent choice problem. Although a complete explanation of this result can only be obtained through further research, it may be partly attributable to the latitude for construal that was still available to second-generation subjects in these experiments. A list containing the musical groups The Beatles and The Rolling Stones is more precisely specified than the label “1960s” music, but there is still considerable room for differential construal. Does “The Beatles” refer to the early, “British invasion” Beatles or the later, “white album” Beatles? Does it call to mind only the Lennon–McCartney songs, or does it also bring back memories of those written by George Harrison and...
Ringo Starr? And to what does one's “preference” refer? Does it mean music to listen to? Dance to? Play at a party? Ambiguities such as these provide a wide latitude for alternative construal, and thus may serve to boost the consensus estimates of the second generation.

In addition to the specific factors mentioned above, both of these anomalous findings also reflect the important fact that differential construal is only one of several determinants of the false consensus effect. The studies presented here attest to the importance of differential construal in people's perceptions of the commonness of their own opinions and preferences, but, as mentioned at the outset, a number of other cognitive and motivational mechanisms have also been shown to play a role (Gilovich et al., 1983; Marks & Miller, 1982; Mullen et al., 1985; Sherman et al., 1984; Sherman et al., 1983). Subjective construal is not the only determinant of the false consensus effect, but one of several. To the extent that these other mechanisms are operating, of course, the link between subjective construal and estimates of consensus would be weakened. It remains for further research to determine the relative importance of these different mechanisms, or, perhaps more productively, to elucidate more precisely the conditions under which each is particularly influential.

These two anomalous results aside, an understanding of the role of differential construal in the false consensus effect can shed some light on a common finding reported in the social projection literature. In particular, it has often been found that it is primarily the people in the minority (i.e., those who choose the less popular alternative) who are responsible for the false consensus effect. People in the minority tend to overestimate the actual percentage of people who would make choices similar to their own, whereas those in the majority tend to estimate accurately, or even underestimate, the percentage who would choose similarly (Mullen & Hu, 1988; Sanders & Mullen, 1983). This tendency is no doubt the product of several processes, among the most important of which may be anchoring (and insufficient adjustment) about the 50–50 midpoint of the 0 to 100% scale. Nevertheless, it is hard to resist the speculation that construal processes play an important role here as well. Those in the minority are likely to have construed the alternatives differently than most people; that may be part of the reason they are in the minority. Not recognizing that most people would interpret the same choice quite differently, they proceed to overestimate how many of their peers would make choices similar to their own. Those in the majority, on the other hand, are likely to have construed the alternatives the way most people would; that may be part of the reason they are the majority. Because their construals are closer to the mainstream, their consensus estimates should generally be more accurate. An explicit test of this analysis would be an interesting subject for future research.

The fact that people are often unaware of their subjective interpretations is also relevant to an important corollary of the false consensus effect—the tendency for people to consider behavior that is different from their own to be particularly revealing of underlying personal dispositions. Those who oppose the legalization of cocaine and other “street” drugs are apt to draw strong dispositional inferences about those who favor legalization, but not about those who oppose it. This tendency is perhaps best understood when viewed from the perspective of the present analysis. If a person construes a choice problem in a way that favors one of the alternatives, knowledge that someone else also chose that alternative reveals little about him or her—such a choice was simply called for by the situation at hand. Opposite choices, in contrast, appear to be made in the face of compelling differences in the “objective” quality of the two options and thus seem to call for something else, like a particular kind of person, to explain them (cf. Gilovich et al., 1983; Ross et al., 1977).

At first glance, it may seem as though the present analysis of the false consensus effect might be limited to those situations in which the choice is unusually abstract, secondhand, or presented
in the context of a questionnaire experiment. Even if so, however, it is important to recognize that this does not constitute much of a limitation because so many choices are precisely that kind—choices between secondhand descriptions of two response options or between inexact lexical “stand-ins” for the two alternatives (e.g., “Should we do something ‘adventurous’ on this vacation or not?” or “Do you want to go to a ‘jazz’ club or some place ‘new wave’?”). Even more relevant to this objection, however, is that the possibility for differential interpretation exists even when the choice is presented firsthand. Consider the experiment conducted by Ross et al. (1977) in which subjects were asked if they would be willing to walk around campus wearing a sandwich-board sign carrying the message “Eat at Joe's” or “Repent.” The choice subjects confronted was certainly a “real” one they encountered firsthand, and yet the possibilities for differential construal are considerable. Some subjects may have conjured up images of taunts and derisive laughter from their peers, whereas others may have imagined knowing smiles and opportunities to “break the ice” with people they have admired from afar. The studies reported here suggest that such divergent interpretations influence subjects' choices and consensus estimates and thus are partly responsible for the correlation between choice and perceptions of consensus that is the false consensus effect.

Coda

It is commonly believed that people's preferences for films, music, and other items are a reflection of their personal values and dispositions. This is no doubt true to a large extent, but the present results suggest that the influence of values and dispositions may be less significant or less direct than is generally imagined. An important component of an individual's personal preference is really not so “personal” in the usual sense, but reflects the way he or she happens to construe the various alternatives. An important task for future research is to determine the extent to which such construals reflect a person's dispositions and the extent to which they are genuinely transient, haphazard, and unpredictable.

References


1All but two of the raters were blind to the research hypothesis. The two more informed raters, moreover, were blind to the size of the false consensus effect for each of the 32 items. [Context Link]

2When the $t$ value reported by Ross, Greene, and House (1977) was listed as “< 1,” it was assigned a value of 1.0. [Context Link]

3The degrees of freedom are not the same in each question because a few subjects declined to state a preference for certain items. This was most common for the question about fried chicken versus veal parmigiana, which a number of vegetarians, understandably, refused to answer. [Context Link]

4The record of one subject's consensus estimates was illegible at the time of the analysis, so this comparison was based on 79 subjects. [Context Link]

5The reader may wonder why the appeal ratings for each category of music and films were summed rather than averaged. The two measures are, of course, highly correlated ($r_s = .54$ for music and .50 for films), but because subjects did not always list an equal number of older and recent films or 1960s and 1980s music, they are not identical. Both measures have drawbacks. For sums, a short list of appealing instances (e.g., The Beatles and The Rolling Stones) can receive a lower rating than a longer list of mediocre instances (e.g., The Smiths, Van Halen, Depeche Mode, R.E.M., and Prince), a result that seems to jar one's sense of what is appropriate. For means, however, there are two potential problems. First, a long list of appealing musicians does receive a higher rating than a shorter list of mediocre instances, but not as high as it should. The higher rating reflects only the higher average rating of the first list, and not the fact that there are also more of them—a factor that should influence a subject's choice and consensus estimates. Second, lists of equal average appeal will receive the same rating even when one list contains more instances and therefore probably should be rated higher (here it is important to note that no subject listed exclusively unappealing musicians in both categories). Because there were more potential problems associated with means than with sums, the latter were used in the measure of construal. As a further check, however, two steps were taken: (a) All of the primary analyses reported here were conducted with means as well as sums, and the conclusions did not change; and (b) to incorporate both measures simultaneously, the average of the means and sums were used as the construal index and the results were consistently stronger than those reported here. [Context Link]

6On the right side of Figure 2, then, the consensus data were derived from the estimates of individual subjects, whereas the choice data represent the modal preferences of groups of 10 second-generation subjects yoked to a common first-generation subject. [Context Link]

7A reluctance on the part of some subjects to stray far from the midpoint of 50% would lead to an underestimation of a strong majority and an overestimation of a weak minority. [Context Link]

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