

# SOME EXPERIMENTS ON USING A PROJECTIVE TECHNIQUE TO MEASURE STEREOTYPES AND COMPARE THEM CROSS-CULTURALLY

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Walter Lippmann (1921) coined the term, "stereotyping" to label the mental images one harbors of other types of people -- nationalities, ethnic groups, occupations, etc. Of course, this propensity to abstract certain features from exemplars of a group and then apply the abbreviated portrait to the group as a whole existed long before Lippmann provided a label for it. Very likely it is a universal trait of human beings, who must necessarily through perceptual, interpretive and linguistic processes distill an infinitely complex and detailed reality down to a manageable collection of more or less accurate, abstracted images.

During, and in the aftermath of, World War II stereotyping received attention from American sociologists, psychologists and anthropologists, as the nation was forced to confront both a bewildering medley of disparate peoples as allies and enemies, and also the evils of racism and racist stereotyping. Anthropologist Alexander Leighton noted: "A central question in the matter of national attitude and belief is the way the members of any given nation perceive the members of another. Generally, the members of one nation -- and the United States is no exception -- harbor stereotyped images of other nations, starkly simple and exceedingly inaccurate. . . . The nature of the various types of images . . . their comparison with reality, and the identification of causal factors are attackable problems. Until some headway is made, international relations must always be in danger of decisions based on fantasy" (1949, pp 102-103).

One early study (Buchanan and Cantril, 1954) used a list of 14 positive and negative adjectives (e.g., "hardworking", "cruel", "self-controlled") to measure stereotypes held by members of eight nations of people in other countries, plus their own self-stereotypes. They found (1) in all eight countries a tendency to ascribe certain characteristics to certain people; (2) some uniformities in national stereotypes held by peoples in all eight countries toward certain countries; (3) invariably flattering stereotypes of one's own countrymen; and (4) that the relative preponderance of positive terms chosen is a good index of one nation's friendliness toward another.

Interest in stereotyping seems to have waned

since those pioneering days. An examination of Communication Research over the past ten years turned up not a single article directly addressing the topic of "stereotyping", and Journal of Communication yielded only one. In that article, Seiter (1986) suggested that perhaps the topic has fallen into disrepute because, owing to its negative connotations, "stereotyping" has become a "dirty word." She notes, however, that "social psychologists explain stereotypes in terms of cognitive skills, as one form of mental category among many that allow us to organize information. The term does not necessarily connote falseness or a perversion of social reality, as it often does in mass communications research" (p. 15). Recent articles on stereotyping in the public opinion research literature, for example Thibodeau (1989) and Brosius, Mundorf and Staab (1991), would appear to support her assessment. However, Forgas and O'Driscoll (1984) tested perceptions of 20 countries using subjects from Australia and Papua New Guinea and found that "subjects from widely differing cultures have stable and consistent representations about other nations, which may be readily identified using multi-dimensional scaling methods" (p. 219). These examples, at least, suggest that psychologists tend to approach stereotyping as a legitimate cognitive process, while public opinion researchers persist in rooting out injustice and bringing it to light.

This paper approaches stereotyping as a mental means of creating a manageable social reality, whether positive, negative or neutral. In this context, accuracy is the main issue, not fairness. The paper reports the findings of four experiments on stereotypes based on a cross-cultural research instrument. The instrument has been applied across a variety of nations and cultures, both as self-assessment and particularly as a projective means of measuring stereotypes (Funkhouser, 1991, and in press). Given the roles of images and stereotypes in marketing and political campaigning (e.g., Boorstin, 1961), as well in international and race relations, it seems that the possibilities for research on this topic have by no means been exhausted.

The instrument comprises 62 agree-disagree items (6-point scale, ranging from "strongly agree" to "strongly disagree", no neutral point) that tap common, concrete behaviors and attitudes. It was originally

developed for investigating cross-culturally the natures of good and evil, and power and control -- which apparently are universal dimensions of morals and motivating forces, respectively (Funkhouser, 1991). Items were chosen that pertain to many cultures and settings over recorded history, and their concreteness avoided one problem that cross-cultural instruments often experience; i.e., that single descriptive words such as "hardworking" or "responsible" are open to a wide range of interpretations. Also, while these items sharply differentiate "good" from "evil", they do not telegraph positive versus negative responses as obviously as many adjective check lists do.

Ten indices based on 39 of the 62 items were formed, as shown in Figure 1. These indices span a range from "badness" (items to which an agree response is commonly associated with "wicked and evil people" -- for example, "You'll never get anywhere unless you break the rules") to "goodness" (items to which agree responses indicate "good and virtuous" people -- for example, "Helping other people makes life more worthwhile"), with a middle section of indices associated with "drive", or "strong personalities" (Noelle-Neumann, 1985) -- for example, "I like to take the lead when a group does things together".

These indices provide a basis for creating and comparing profiles of groups, images and stereotypes (Funkhouser and Brosius, 1988). The instrument was originally developed in English, but has been used in German, Japanese and Spanish translation.

#### EXPERIMENT ONE: Stereotypes of political leadership

Questionnaires were randomly distributed among American undergraduate business students several months after the 1988 election. Stereotypes of two political leaders were measured: Presidents George Bush and Ronald Reagan. For comparison, stereotypes of Mickey Mouse and "the typical state office worker" also were measured. In addition to the 62 items comprising the instrument, an item measured the degree to which the respondent liked or disliked the person he rated. Respondents were instructed to complete the questionnaire projectively, based on their estimate of how the assigned person would fill it out. A comparable sample's stereotype of a "strong and successful leader, the kind mentioned in the history books", and a self-assessment profile from a sample of state office workers were already in hand.

Table 1 shows the profiles of these samples (with index scores mathematically transformed into scores ranging from +1.0 = "agree" to -1.0 = "disagree"). Profiles were compared by computing

average absolute differences between index means, so that 1.000 indicates a perfect match. This sample judged George Bush to be very close to the profile of the kind of person they "liked", and moderately distant from the profile of the "strong and successful leader." The same was true of Ronald Reagan and Mickey Mouse, and would probably be true of Bill Clinton. While this sample is far from representative of the U.S. population, nevertheless it suggests what may be The Iron Law of American politics -- make the voters like you, or DIE! Mickey Mouse's profile underscores the point: how many human beings are as popular, and have attracted as much revenue, as Mickey Mouse?

The profile of the state employees is instructive for its illustration of the inaccuracy of stereotypes -- on average 1.411 scale points distant from the self-assessment profile of a sample of actual state office workers.

#### EXPERIMENT TWO: Accuracy of stereotypes of people in foreign countries

Samples of Singapore undergraduate business students filled out the questionnaire projectively, based on how they thought a "typical student" from Singapore, the U.S., Japan, Nigeria or Argentina would fill it out. The study's hypotheses were that their stereotypes of Singapore students would be most accurate; stereotypes of American and Japanese students would be somewhat accurate owing to the relatively heavy media coverage these countries receive in Singapore; and stereotypes of Nigerian and Argentine students would be the least accurate, because these countries are rarely mentioned in the Singapore media.

Accuracy was measured by comparing the stereotype profiles with actual self-assessment data from samples of students from the respective nations -- how they really did fill the questionnaire out. These comparisons are shown in Table 2. The stereotype Singapore students have of Singapore students closely matches the actual profile, indicating accurate knowledge of the group they were rating and reliability of the method.

However, media coverage notwithstanding, the other four stereotypes are about equally inaccurate, compared to self-assessment data, suggesting scant improvement during the 50 years since Leighton's comment. The United States, which receives in Singapore more mass media exposure by far, via press, television, radio (American pop music) and cinema, than any other distant foreign country, enjoyed the least accurate stereotype of all.

This experiment points to two conclusions: (1) this instrument and profiling technique can be reliably

used to measure and compare stereotypes or images across cultures; and (2) greater mass media coverage does not necessarily produce more accurate stereotypes of peoples in other lands.

### EXPERIMENT THREE: Stereotypes as portrayed in mass media

This experiment tested the utility of the instrument as a tool for content-analysis, specifically as a means of gauging audience reactions to media characters. Could it measure, for example, how evil a villain is J.R. Ewing, compared to The Joker? How does Batman as good guy differ from Sam Spade as good guy? What accounts for Madonna's appeal to certain audiences? This application has obvious implications for matching media portrayals to audience tastes.

A mass-communication class in Singapore was divided into four groups. One group was assigned individually to watch an American film (either at the cinema or on TV) and then fill out the questionnaire as they thought the "good guy" would do it (Kevin Costner in "Robin Hood" was a popular choice). Another group did the same for the "bad guy" (assuming he would tell the truth). The third and fourth groups were assigned to watch Chinese (Hong Kong) movies and rate the "good guys" and the "bad guys", respectively.

American and Chinese "bad guys" were similar on every index -- strong on "badness" and weak on "goodness" (and a bit more evil than the Singapore student stereotype of a "wicked and evil person"). The respective "good guys" differed on two points: American "good guys" were seen as more anti-authority (index 2) than their Chinese counterparts; and they were much more successful (7) (e.g., got the reward and the pretty girl: compare to the ending of the Hong Kong gong-fu classic, "Fists of Fury", where superstar Bruce Lee is unjustly arrested and shot by the police).

One interesting finding emerged incidentally to the main point of the study. As a warm-up, students were given the questionnaire with instructions to fill it out as they thought the "very best, most inspiring lecturer they could imagine" would do it. Profiles were on hand of Singaporean stereotypes of "good and virtuous people" and "strong and successful leaders, the kind mentioned in the history books". However, comparing the average absolute differences between "inspiring lecturer" and other profiles, it appears that what the Singapore students really want up there at the blackboard is neither Confucius nor Sun Yat Sen, but the "good guy" from a Chinese movie -- except that they envision him as more successful than the typical

movie hero. The desired traits can be summarized as: good but not "goody-goody", not pushy, and as altruistic as a priest.

### EXPERIMENT FOUR: Traits that lead to "likeability"

The questionnaires used by American students in Experiment One, and by the Singapore students in Experiment Three, included an item on which respondents rated the extent they liked the person for whom they projectively filled out the instrument. As the two samples were rating quite different classes of stereotypes -- the American sample did Presidents, Mickey Mouse and state office workers; and the Singaporeans did students, mostly in other countries -- we cannot compare the two cultures' criteria of liking and disliking absolutely. However, the results suggest traits that are relatively important for liking in the two settings.

For the American sample, the indices most strongly ( $p < .003$  by Anova) differentiating "liking" from "disliking" were altruism (index 10), success (7), social harmony (9), achievement (8) and leadership (6).

Five indices were related virtually equally ( $p < .005$ ) to liking, according to the Singapore sample: control against other people (1); personal dominance (3); altruism (10); success (7); and control against convention and rules, i.e., anti-authority (2). The relationships between likeability and indices 1, 3 and 2 were negative.

From these data it seems that different patterns of traits or behaviors are related to one's being liked or disliked by the US and Singapore samples of students. For both samples, an altruistic and harmonious inclination would seem to be mandatory for anyone who desired to be liked. However, the Singapore sample would be less tolerant of pushiness, nor would they give many points for achievement-orientation or leadership. Self-confidence would neither help nor hurt with either sample.

### SUMMARY

Since these four experiments are based on small student samples, no claims are advanced that they yielded cosmic truths, or even substantive findings generalizable to their respective national populations. Rather, the results reported here suggest guidelines for gathering more accurate, reliable and useful data on stereotypes and images, particularly in cross-cultural studies.

First, care should be taken to base the measurement instrument on (1) concrete, ordinary attitudes and behaviors that are (2) common to all

populations involved, both respondents and stereotypes. The instrument used here is based on specific, virtually universal attitudes and behaviors which pertain to most respondents and most stereotypes. Other instruments with these properties could be developed.

Second, the accuracy of stereotypes can, and should, be verified. This may be done via self-assessment, as in the studies reported here. Possibly it could be done also via "content analysis," that is, having trained observers independently rate the population being studied. In any event, measurements of stereotypes whose accuracies are unknown are of limited utility, at least if accurate images are the ultimate goal (many communicators, we must admit, seek favorable, rather than accurate, images).

Third, stereotypes and images may deserve more attention than they have lately received from communication researchers. These four experiments indicate a number of useful applications for such research, for example:

- profiles of political (or other) figures, compared to one another, or to "ideal" candidates
- comparison of one population's stereotypes with those of another population
- measurement and comparison of audience images of media characters or portrayals, either cross-sectionally or over time
- comparisons of images or stereotypes with self-assessment, for example in the context of management/employee relations (e.g., do the employees see management the same way management sees itself? And if not, what can be done to foster better mutual understanding?)

It hardly seems necessary to point out that most of the world's judgments and decisions are made on the basis of stereotypes and images, rather than on solid foundations of objective reality. Advertisers, public relations practitioners, media directors and politicians make no bones about it, and devote their considerable talents to manipulating image, spin and popular fantasy. This being the case, it seems desirable that we researchers should understand stereotypes and images, and how they are formed and influenced, better (and perhaps less judgmentally) than we currently do. A first step is a reliable and widely applicable means of measuring and analysing them. Absolute measurements of attitudes, stereotypes and images may remain perpetually elusive, but comparative and relative measures are adequate to serve most purposes.

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Figure 1

ITEMS COMPRISING SUBSCALE INDICES  
(Note: "NN" denotes Noelle-Neumann "Strong Personality" item)

(BADNESS)

1. Control Against Other People

- 11. I like to buy things or do things that I know will impress people.
- 14. It is important not to let others know about your weak points.
- 18. It is fun to tease people, trick them or put them down.
- 23. To me much of the fun of having a lot of money is impressing other people with it.
- 41. It is fun to shock or upset other people.

2. Control Against Convention and Rules

- 5. People who always follow the rules are dull and no fun to be around.
- 12. You'll never get anywhere unless you break the rules.
- 24. It is fun to see if you can get away with things.
- 40. I do things on impulse, just to see what will happen.
- 51. It doesn't bother me to bend the rules if it means getting what I want.

(DRIVE)

3. Personal Dominance

- 9. I am usually able to make other people do what I want them to do.
- 21. I enjoy beating other people at sports and games.
- 26. When someone gets the better of me, I make sure to even the score.
- 29. Good leadership means ordering subordinates to do things.
- 31. I enjoy jobs or situations that let me tell other people what to do.

4. Willfulness

- 1. I tend to get my way in one-on-one situations. (NN)
- 3. I dislike having other people tell me what to do.
- 15. In this life you have to take what you want.

5. Self-Confidence

- 50. I am often a step ahead of others. (NN)
- 52. I am rarely unsure about how I should behave. (NN)
- 58. I usually count on being successful with everything I do. (NN)

6. Leadership

- 25. People look to me for leadership. (NN)
- 43. People come to me for advice. (NN)
- 53. I like to take the lead when a group does things together. (NN)

7. Success

- 2. I am making good progress toward my important life objectives. (NN)
- 20. Generally speaking, I find a lot of joy in life.
- 38. I don't experience very many bad days.
- 62. I rarely have cause to complain about my life.

8. Achievement

- 33. I enjoy being in jobs or situations that test my abilities, even if there is a chance I might fail.  
(39. Often I have time on my hands and just feel bored.)(reflected)
- 42. I am curious about how things work. (NN)
- 46. It is a joy to see a true expert at work.

(GOODNESS)

9. Social Harmony

- 7. From a practical standpoint, honesty is the best policy.
- 32. For the most part, you can trust others to do what's right.
- 44. I enjoy listening to what other people have to say.
- 48. I enjoy working with other people to achieve some common objective.

10. Altruism

- 6. I like to help other people in my life to reach their goals.
- 35. Helping other people makes life more worthwhile.
- 60. Seeing others do well makes me feel good.

Table 1

## STEREOTYPE PROFILES OF AMERICAN FIGURES

<u>INDEX</u>	<u>George Bush</u>	<u>Ronald Reagan</u>	<u>Mickey Mouse</u>	<u>State Employee</u>	<u>(Actual) St. Empl.</u>	<u>"Leader"</u>	<u>"Like"</u>
	(n = 21)	(n=17)	(n = 26)	(n = 16)	(n = 11)	(n = 17)	(n = 58)
<b>(BADNESS)</b>							
1. Control Against Other People	-.33	-.14	-.52	-.04	-.58	-.06	-.38
2. Control Against Convention and Rules	-.37	-.25	-.25	.06	-.35	.11	-.31
<b>(DRIVE)</b>							
3. Personal Dominance	.19	.14	-.15	.21	-.45	.45	.01
4. Willfulness	.40	.35	.33	.27	.06	.67	.28
5. Self-Confidence	.33	.35	.36	.23	.12	.79	.35
6. Leadership	.71	.65	.62	.02	.18	.94	.64
7. Success	.68	.57	.61	-.05	.48	.44	.63
8. Achievement	.74	.63	.80	.09	.57	.82	.72
<b>(GOODNESS)</b>							
9. Social Harmony	.54	.40	.78	.15	.66	.33	.65
10. Altruism	.76	.63	.87	.29	.85	.33	.84
Average absolute distance from:							
"Like"	1.06	1.11	1.07	1.39	1.18	1.34	--
"Leader"	1.29	1.26	1.37	1.36	1.51	--	1.34

Table 2

## COMPARISON OF NATIONAL STEREOTYPES WITH ACTUAL RESPONSES

<u>INDEX</u>	<u>Singapore</u>		<u>U.S.A.</u>		<u>Japan</u>		<u>Nigeria</u>		<u>Argentina</u>	
	<u>Stereo</u>	<u>Actual</u>	<u>Stereo</u>	<u>Actual</u>	<u>Stereo</u>	<u>Actual</u>	<u>Stereo</u>	<u>Actual</u>	<u>Stereo</u>	<u>Actual</u>
	(n=19)	(n=67)	(n=21)	(n=42)	(n=20)	(n=35)	(n=21)	(n=21)	(n=20)	(n=61)
<b>(BADNESS)</b>										
1. Control Against Other People	-.22	-.22	.29	-.37	.00	-.30	-.02	-.04	.07	-.20
2. Control Against Convention and Rules	-.11	-.16	.31	-.33	-.32	-.05	-.07	-.18	.23	-.19
<b>(DRIVE)</b>										
3. Personal Dominance	-.06	-.09	.35	-.13	.18	-.23	.11	.19	.31	-.15
4. Willfulness	.30	.31	.76	.33	.10	.22	.48	.21	.52	.31
5. Self-Confidence	.00	.07	.65	.53	.38	-.12	.30	.30	.22	-.02
6. Leadership	.03	.19	.70	.56	.25	.01	.11	.33	.27	.07
7. Success	.42	.40	.62	.58	.40	.16	-.11	.52	.21	.39
8. Achievement	.58	.56	.64	.85	.68	.50	.46	.56	.49	.72
<b>(GOODNESS)</b>										
9. Social Harmony	.43	.48	.31	.60	.53	.39	.27	.57	.33	.48
10. Altruism	.40	.59	.45	.73	.30	.55	.43	.76	.45	.73
Average absolute difference between Stereotype and Actual										
	1.06		1.33		1.27		1.23		1.26	