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AMUSEMENT, TASTEFULNESS AND PLAYFULNESS JUDGEMENTS AS FUNCTIONS
OF NUMBER OF SOCIAL NORMATIVE INCONGRUITY DIMENSIONS

by

Sarah Yee Wah Tsang

Hon. B.A. University of Windsor, 1975

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada

1976

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ABSTRACT

This experiment is concerned with amusement, tastefulness and playfulness judgements as functions of number of value social normative incongruity dimensions. Five hypotheses were tested. The first three predict that the group whose value culture is anticonformed to in a given item will find that item 1) more amusing, 2) in poorer taste, and 3) more playful respectively than will the group whose value culture is nonanticonformed to on that item. Hypotheses 4 and 5 predict that the group whose value culture is tridimensionally anticonformed to on a particular item will find that item 4) more amusing and 5) more playful than will an equivalent group find either the one- or two-dimensional items which properly embed that three-dimensional item. Two equivalent groups of Chinese immigrants to Canada mostly from Hong Kong (22 and 23 subjects respectively) and two equivalent groups of Canadian Caucasian high school students all living in Canada (28 and 25 subjects respectively) were employed. A $2 \times 2 \times 3$ factorial design was used with repeated measures on the last two factors. In addition, two different treatments were employed as a counterbalanced control. This control enabled an embedding procedure which eliminated individual item error variance in testing the last two hypotheses. This two-treatment procedure required randomizing Chinese subjects into two equivalent groups, and Canadian subjects also. Hypotheses 2 and 3 were substantiated at the .05 level of significance. The remaining three hypotheses were not substantiated.

ACKNOWLEDGEMENTS

I would like to express my appreciation to my major professor Dr. Lawrence La Fave for his constant availability. His theory pervades these thesis pages.

Also I much appreciate the help given me by members of my thesis committee Drs. John J. La Gaipa and Subhas Ramcharan. Dr. Ramcharan's courses on ethnic groups in Canada were very helpful in stimulating my interests in this area. Similarly, I much benefitted from courses in Asian Studies by Chinese experts Professors Clive Ansley and Jerry D. Schmidt--who kindly served as consultants on this study--as did Dr. Sally Snyder, who offered various useful suggestions.

Fellow graduate students such as Roger Mannell and Hwenje L. Mutuma were helpful--especially Mrs. Ann Marie Guilmette and Mrs. Naresh Issar who helped in many ways. Further, I would like to thank the following students for their assistance in item construction: Gerald Jenner, Edward Latwinski, Gilman Leung, Chester Masse, and Janet Veitch.

Also thanks to Dean George McMahon and high school teachers and administrators, too numerous to mention, in the greater Windsor area.

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CHAPTER I

INTRODUCTION

Intellectual interest in humour goes back at least thousands of years. According to Chapman and Foot (1976, p. 1), such ancient Greeks as Plato and Aristotle conceived of humour as based on derogation of the defects of others. At that time holding a so-called "sense of humour" was apparently considered an undesirable personality trait, reflecting malevolence and ignorance.

If so, the desirability of possessing a sense of humour seems to have changed. For instance, Omwake (1937) and Allport (1961) found that only 1.4% and 6% respectively of college students confessed having a below average sense of humour.

A number of clinical psychologists and psychiatrists have taken the position (in recent symposia on humour at annual scientific conventions) that indeed a sense of humour is a desideratum in psychotherapy (e.g., Balance, 1970; Mindess, and O'Connell, 1975).

The last two decades have witnessed many humour studies. However, cross-cultural research on humour of a systematic nature has been rare. This neglect is surprising in view of the continuous interest intellectuals have had with the topic of humour over the centuries.

However, before the current century most of the attention paid to humour was speculative. Only recently has the humour area profited from the application of social science research techniques. Among completed

empirical studies of humour, many have not grounded themselves in any theoretical framework. Furthermore, many humour researches have been enervated by various methodological and technical problems which ambiguated interpretations of data. Thus integration of the data on humour research is a formidable task.

Keith-Spiegel (1972) lists eight early humour theories. They are: biological, instinct, and evolution theories; superiority theories; incongruity theories; surprise theories; ambivalence theories; release and relief theories; configurational theories; and psychoanalytic theory.

Several of these humour theories have proven especially resistant to extinction. The social psychological motivational variable of feeling superior and enhancing one's self esteem represents one category. Another involves arousal or tension reduction. Still another centers on incongruity.

Incongruity Theories of Humour

Although an incongruity assumption can be discovered in the philosophical writings of previous centuries and among early experimental psychologists, the Gestalt psychologists were most forceful in pointing out the importance of the principle that particular forms or relations between elements of a perceived pattern could create cognitive disharmony. Gestalt psychology thereby offers Incongruity Theories an useful approach; man imposes structure on an unstructured situation. Hence the nonsensical or incongruous is perceived as meaningful. Under certain circumstances, a pleasant, amusing mental experience seems to be the consequence of achieving closure.

Incongruity humour theories have not been infrequent, dating back at least as far as Aristotle (1895). Gerard (1759) views the objects of humour as uncommon mixtures of relations and the contrariety in things. Laughter for Beattie (1776) results from fusing two or more inconsistent or unsuitable circumstances. The description of laughter as "an affection arising from the sudden transformation of a strained expectation into nothing," was offered by one of the most noted of early incongruity theorists, Kant (1790).

Similarly, laughter results when "the conscious is unawares transferred from great things to small--only when there is a descending incongruity," argues Spencer (1860). By this view only those incongruities result in laughter which involve a descending incongruity from, in a sense, the sublime to the ridiculous. Not all incongruities then cause laughter.

Guthrie (1903) thinks that amusement ensues in a disharmonious situation only if simultaneously we are assured that everything is "all right."

Humour is for Bergson (1911) a consequence of "something mechanical encrusted on the living." He relates when a situation is inevitably comic. It must simultaneously belong to two altogether independent series of events and be capable of two entirely different interpretations simultaneously.

Byrne (1961) defines incongruity as "a state of contradiction, disharmony or inconsistency."

To test a number of derivations from a cognitive theory of humour, Shultz (1972) performed two experiments. Both incongruity and resolution

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in his theory are treated as structural aspects of the joke. A subject must understand these two structural aspects to appreciate fully the humour intended. Shultz views his results as showing a tendency for a subject first to identify an incongruity and then resolve it for each cartoon. He observes that an appreciation of cartoon humour is determined by detection of an incongruity in the cartoon and then a resolution of the incongruity. By insisting that all jokes contain two distinct structural dimensions, incongruity and resolution, Shultz has called attention to the structural aspects of humour, incongruity and resolution.

An analogous theory to Shultz's is that of Suls (1972)--who finds two major operations involved in the cognitive process of comprehending and appreciating verbal jokes. In the first operation, Suls maintains, a narrative schema is developed by the reader which directs him to some expectancy of the story's outcome. When the unexpected end of the joke surprises him, the reader tries to explain or resolve the incongruity involved by finding some cognitive rule (second operation). The joke is understood, leading to some unspecified level of appreciation, as a consequence of the two operations having succeeded in taking place.

Extensive research on humour judgements in children leads McGhee (1972) to conclude that "while level of cognitive mastery over stimulus elements plays a role in determining the perception of some incongruous depiction of those elements as humorous, other external cues may lead a child to see humour in a situation apart from his cognitive level." He adds that, "a child's general mood or frame of mind may also modify the influence of level of cognitive mastery on perceiving humour in incongruity."


In a similar vein with Berlyne, McGhee and Shultz focus on the structural properties of humour. Although McGhee and Shultz may not agree on the way they deal with incongruity, with respect to resolution of a perceived incongruity all would reach the same deduction.

Other relevant theorists include Rothbart (1973) and Nerhardt (1970)--emphasizing violations of expectancy as central to the humour experience. Rothbart feels that a humour judgement demands the individual's decision that the incongruity perceived be inconsequential and safe. Nerhardt and Rothbart emphasize that incongruity concerns itself with expectancy violation. Yet, counter to McGhee and Shultz, neither emphasizes the resolution process.

Any resolution of the difference between these one- and two-stage models seems to require understanding that an unexpected event can be explained in a nonthreatening way. Contained within the one-stage model is such a resolution.

The role of discrepancy--not the need for any kind of resolution--would seem salient for Nerhardt (1970). However, by pointing out that the discrepancy must not be perceived as threatening, Rothbart is clearer with respect to the second stage.

Factual findings and other theories in the areas of arousal, curiosity and explanatory behaviour are the sources for Berlyne's (1960) explanation of the pleasure known when amused. The physiological aspects of humour is his main emphasis. Violation of expectancy for him leads to an arousal increment. However, humour is caused by the comprehension of the incongruity or violation.



Persuaded by the above literature on incongruity, the present thesis wishes to generalize such views to focus upon the cultural relativity of humorous incongruity. Studies even hinting in this direction of social-normative humorous incongruity are rare.

Middleton (1959) pursues the hypothesis that humorous judgements vary with cultural background. His research is based on sub-cultural variations in humour--comparing the judged humourness of racial jokes (both anti-Negro and anti-white) by matched groups of Negroes and whites. His results indicate that, consistent with his superiority humour prediction, anti-white jokes prove more amusing to Negroes than to whites. Counter to such theory, however, Negroes generally found anti-Negro jokes as funny as whites did.

Humour is situationally relative, Goldman (1960) deduces. Arnez and Anthony (1968) find that "the humorousness is indeed a reflection of one's cultural experience." They argue that Negro humour reflects Negro experience. Because these studies above try to explain the relationship between ethnic cultures and humour, they are relevant here.

Emphasizing the social functions of humour, Zijderveld (1968) observes that "our social behavior takes place within a traditional framework of behaviour patterns (institutions) urging us to perform certain social roles." This framework, he further indicates, is manifest in joking, as institutionalized joking relationships are part of almost every social structure. Jokes belonging to one particular institution could thus represent non-jokes in another institution which reflects some other traditional framework.

Humour, the present thesis argues, is culturally relative; what amuses in one culture may fail to in another. What might amuse in Chinese or African cultures may not in American or Canadian. One man's joke might

be another man's insult. Cultural bias requires that the "joke" contain a point; failing to get the point of the joke is like failing an intelligence test item. This ethnocentrism insists that jokes are objectively amusing, that some jokes are superior to others. However, the existence of a good joke is questioned by Flugel (1954). La Fave and Mannell (1976) go even further to question the very existence of jokes.

The argument seems plausible, however, that "jokes" do not possess points or inherent incongruities which transcend cultural boundaries. Consider the Tchambuli tribe studied by Margaret Mead (1950). She found the women in Tchambuli society more aggressive than the men. It appears, then, that the type of joke whose point is based on woman dominating man would be unfunny in Tchambuli society; but that the same 'joke' would often be found amusing and a joke in pre-Women's Liberation North American society (where women were not expected to dominate men). That men, not women, ought to be the aggressors in pre-Women's Liberation North American society is the incongruous point of that type of alleged joke.

Evidence for the cultural relativity of incongruity appears indirectly offered too by Nerhardt (1970), Deckers and Kizer (1974, 1975) and Gerber and Routh (1975). Their experiments measure discrepancy of weights from an expected range established by a series of previously lifted weights. The most laughter and presumably humour were found to result from the most discrepant weights. Yet no one thinks of the weights, which were found amusing, as jokes. Nonetheless, the essential consideration is that these experiments appear to offer support for the cultural relativity of incongruity humour. Typically culturally relative is one's weight-lifting and other past experiences.

That an incongruity (violation of expectancy--whether of the physical environment or social) must be nonthreatening and nonserious for a humorous mental experience is a major consideration in the model to be offered. The so-called "joke," it is argued here, lacks absolute stimulating value, but may be culturally relative. In the case of "social normative" violations of expectations, the model emphasizes, what is conformity to the norms of one culture, social or ethnic group may be a violation of social convention for still another society.

McGhee (1974) seems consistent with such reasoning. An incongruity will only be perceived when the observer has had appropriate knowledge and a set of expectations regarding that area. These expectancies may be with regard to the individual's physical environment, McGhee observes. It would be expected with physical environment, for instance, that less cross-cultural differences in expectancy would be found. However, with social environment wide variations regarding every facet of social life exist in social normative expectancies.

Problem and Hypotheses

Little cross-cultural humour research data has been obtained under carefully controlled experimental conditions, despite a fair amount of humour research. In the past, humour researchers have spread their theoretical and empirical notions and ideas drawn from their own research to a transnational perspective. The present effort hopes to offer some sense of theoretical, methodological and empirical direction for efforts to study humour transnationally. Thus the cultural relativity of humour is the main concern of this thesis.

... Could culturally relative perceived social-normative incongruity be amusing under specifiable conditions? This is the most basic question of this thesis. If amusement could thus result, seriously intended behavior nonanticonforming to the social norms of one ethnic group may prove incongruously humorous to members of another group whose relevant norms the behavior in question is highly discrepant with respect to. The latter group may thus feel superior to such "absurd" customs and be amused. Jokes in an absolute sense as humorous stimuli would nonexistent as a joke in one culture would be judged a non-joke in another.

A two-stage model (Jones, 1970; Shultz, 1972; Suls, 1972) involving incongruity and incongruity resolution has been offered by recent theories in the incongruity humour literature. The cultural relativity of incongruity remains relatively neglected as an area, despite the contributions of the two-stage models.

An important task for this thesis must be to define the main technical terms. La Fave's approach (La Fave, 1972; La Fave, Haddad and Maesen, 1976; La Fave, personal communication) is the basis for the definitions of technical terms and incongruity humour theory employed.

Social norm is mathematically defined as the intersection of the individual (i.e., psychological) norms of all the members of the society in question. Any individual's behaviour falling within that intersection is defined as conformity to that social norm. Nonconformity refers to any behavior not within that intersection.

Nevertheless, the social norms in the proposed experiment would represent the dominant culture of an entire nation. Thus, the above definition

of conformity is too impractically narrow for present purpose. Very difficult, if not impossible, it would be to locate any social norms subscribed to by all members of the society of that nation which embrace the dominant culture. More helpful for purposes here then are the terms anti-conformity and nonanticonformity.

A mathematical definition of anticonformity to a given social norm is as any behaviour in the complementary class of the union of the individual norms whose intersection makes up that social norm. Thus any behaviour in the union of all the individual norms involved would represent nonanticonformity. Behaviour is more abstractly defined than is a response; the most concrete behaviour would be a class of responses. A physical event involving movement by the subject is the present conception of a response.

Consider the following example of a one-dimensional social norm. The first college male student in a three-person group feels he ought to have from 5 to 10 dates with the opposite sex per month. The second male judges that 3 to 6 dates per month is the proper range. The third insists that at least five dates per month is the right amount. Thus the social dating norm for this particular three-man society is the range from 5 to 6 dates per month.

Any dating frequency behaviour within the range from 5 to 6 dates per month in the above example represents conformity to this social norm. Any dating frequency behaviour outside that range (i.e., less than 5 or greater than 6) indicates nonconformity. Dating frequency behaviour in the closed interval from 3 to infinity represents nonanticonformity.

Finally, dating frequency behaviour less than 3 indicates anticonformity.

An expectancy which is shared by all the members of the society under consideration is a social norm. A social normative incongruity has often been defined as a violation of expectancies. However, the social-psychological literature uses the word expectancy ambiguously. Expectancy sometimes denotes an attitude (or value) and at other times a belief. A crucial distinction exists between an attitude or value and a belief. Any belief has a truth value and is therefore either correct or mistaken. An attitude or value can never have a truth value. Thus it can neither be correct nor mistaken.

Two basic meanings of expectancy exist. Thus two types of social norms, value and belief social norms, exist. The cultural relativity of these expectancies called value social norms is the central concern of the present thesis. Under what conditions is anticonformity behaviour not only judged incongruous but also amusing? Such conditions the present thesis hopes to help explicate.

A violation of one's value social norm would typically be expected to prove threatening, rather than amusing. But what if at least three such value violations were involved in the story? Then the subject might change from a reality to fantasy mode. Thus, instead of becoming threatened by such incongruities, consistent with McGhee's reality-fantasy-assimilation theory, he might become amused.

The process whereby an individual transfers what he is perceiving as unreal to the present is called fantasy assimilation. Reality assimilation is the process involved when an individual encounters "real" discrepancies from already formed structures or concepts. The individual's encoun-

ter of stimulus situations that are already inconsistent with 'his' established knowledge is involved in a reality assimilation.

McGhee (1972) illustrates reality-fantasy assimilation. A child sees a cartoon drawing showing an elephant climbing up a small tree to sit on a nest of eggs for a mother bird. Doubtless the child views this incongruity inconsistent with previously established concepts and knowledge regarding elephants and their size, abilities, etc. The child does not change those relevant conceptual categories to include this new information about elephants. That is, reality assimilation does not occur. In this example, the presentation of the information in a drawing or diagrammatic fashion is the most important cue that a serious or realistic interpretation of the events depicted is not required. The child is able to ascertain from this kind of drawing that the story is so out of proportion that it doesn't deserve to be taken seriously. Yet the distinction wanted here seems best characterized as serious-playful, rather than reality-fantasy (Mannell and La Fave, 1976, p. 230).

Ethnic humour, joke and strange judgements as functions of multidimensional social normative incongruity were studied by Mutuma (1976). Employing picture-story items as stimulus material, he tested 88 subjects drawn from two populations, Caucasian North American and Black African. The subjects were observed to judge a picture-story amusing more frequently when it anticonformed to at least three value social norms of the culture preferred of the two cultures than when the picture-story nonanticonformed to all these value social norms of the subject. Substitution of either joke or strange judgements for amusing provided similar results.

Nerhardt (1970) and Deckers and Kizer (1974, 1975) needed only one dimension of incongruity. Why then did Mutuma need three? Apparently because those authors only violated a nonthreatening belief social norm; Mutuma's (1976) experiment, however, involved violation of ego-involving value, i.e., attitude, social norms. Violations of three value social norms of the same subject should often prove so ridiculous that the subject cannot take the communication seriously. Therefore, rather than taking the communication as a threat, he playfully finds the story an amusing joke.

What the Mutuma experiment demonstrated with respect to amusement judgements is that three dimensions of anticonformity on a given item is sufficient to generate significantly more amusement than zero dimensions of anticonformity regarding value social norms. However, the Mutuma experiment did not establish that three such dimensions of anticonformity are necessary to generate significant amusement. It may be, for instance, that two, or even one, such dimension(s) is all that is needed. One cannot determine the necessary number from Mutuma's experiment because he did not employ one- and two-dimensional anticonformity items with respect to value social norms.

An experiment by Issar (1976) did actually employ one-dimensional anticonformity items. However, her experiment employed only one-dimensional items.

Issar's experiment used amusement, hostility and surprising judgements as functions of ethnic group identifications (East Indian or Canadian), degree of social-normative incongruity, and ego-involvement. Her three hypotheses predicted that the items which anticonformed to the sub-

jects' non-ego-involving belief norms would tend to be judged amusing, and surprising. The items which anticonformed to the subjects' ego-involving attitude norms were predicted to be judged hostile. All three of Issar's hypotheses were substantiated.

It appears then from Issar's experiment that when the norms anticonformed to are relatively non-ego-involving (as her belief norms were chosen to be) then only one dimension of anticonformity may be necessary to generate a significant amount of amusement.

Her results seem consistent with those of Nerhardt (1970), Deckers and Kizer (1974, 1975) and Gerber and Routh (1975), since those experiments generated significant amusement with discrepant weights analogous to unidimensional, non-ego-involving belief social norms.

However, the fact that her unidimensional, ego-involving attitude social norms generated less amusement is consistent with the present thesis that anticonformity to attitude social norms may require more than one dimension to enable the serious-to-playful transformation which generates amusement.

In the present experiment the three independent variables are population (ethnic group), permutation (a qualitative distinction between anticonformity and nonanticonformity to a society's norms), and degree of anticonformity (a quantitative distinction involving either one, two, or three dimensions of anticonformity). The three dependent measures are amusement, tastefulness, and playfulness.

The five hypotheses each predicts an interaction effect. The first three hypotheses predict two-way interactions and the last two hypotheses predict three-way interactions, as follows:

Hypothesis 1.

The subject will more often judge an item amusing when it anticonforms to at least one value social norm of the culture preferred of the two cultures than when the item anticonforms to no value social norm of the subject.

Hypothesis 2.

The subject will more often judge an item in poor taste when it anticonforms to at least one value social norm of the culture preferred of the two cultures than when the item anticonforms to no value social norm of the subject.

Hypothesis 3.

The subject will more often judge an item playful when it anticonforms to at least one value social norm of the culture preferred of the two cultures than when the item anticonforms to no value social norm of the subject.

Hypothesis 4.

The subject will more often judge an item amusing when it anticonforms to three value social norms of the culture preferred of the two cultures than when the item anticonforms to one or two value social norms of the culture preferred by the subject.

Hypothesis 5.

The subject will more often judge an item playful when it anticonforms to three value social norms of the culture preferred of the two cultures than when the item anticonforms to one or two value social norms of the culture preferred by the subject.

Hypothesis 1 bears a resemblance to Hypothesis 4. However, they are

not combined into one hypothesis because the distinction made in Hypothesis 1 is qualitative, whereas the distinction in Hypothesis 4 is quantitative.

Similarly, Hypothesis 3 resembles Hypothesis 5; but they are not combined into one because the former makes a qualitative distinction whereas the distinction in Hypothesis 5 is quantitative.

CHAPTER 11

METHOD

Subjects

A total of 98 subjects were employed in the present experiment. They were drawn from two populations. The Chinese population consisted of 45 subjects who had emigrated from the Hong Kong area and preferred Hong Kong Chinese culture. The other population of 53 subjects consisted of Canadian Caucasians believed to be ignorant of Hong Kong Chinese culture and who preferred Canadian Caucasian culture.

The Chinese subjects consisted of high school and university students living in the greater Windsor area, ranging in age from 17 to 27 years. They consisted of 13 females and 32 males. All of them had immigrated to Canada within the range from 3 months to 3 years ago. All but 2 had emigrated from Hong Kong. These remaining 2 had emigrated from the neighboring island Macau (which is culturally similar to Hong Kong).

The Canadian subjects were all high school students from the greater Windsor area, ranging in age from 16½ to 19 years. They consisted of 41 females and 12 males; although 2 of them were American citizens, these 2 also preferred Canadian culture (and had lived 8, and 10 years in Canada respectively).

To count as a subject, the prospective subject must record the predicted response on the questionnaire--viz., that the subject prefers Chinese culture if Chinese and has emigrated from the Hong Kong area to Canada, and prefers Canadian (or American) culture if a Caucasian North

American.

Of 116 prospective subjects, 18 failed to qualify as subjects because they failed to check on the questionnaire a clear preference for the culture they had been predicted as preferring. Of these 18, 14 actually checked as preferring a culture counter to that predicted. Of these 14, 6 would have been Chinese subjects in Treatment 1 and 1 a Chinese subject in Treatment 2. Also, 2 would have been Canadian subjects in Treatment 1 and the remaining 5 Canadian subjects in Treatment 2. The remaining 4 of the 18 rejects failed to check any culture at all. Of these 4, 1 would have been a Chinese subject in Treatment 2, 1 a Canadian subject in Treatment 1, and 2 would have been Canadian subjects in Treatment 2.

Stimulus Materials

The stimulus materials consist of: two types of booklets (Treatment 1 and Treatment 2) each containing three sets of 12 items; a questionnaire; and four instruction sheets, three of which contain rating scales. (See Appendix A.)

Procedure

A 2 X 2 X 3 mixed factorial design was used with repeated measures on the last two factors. Thus, subjects were selected from two basic populations (Hong Kong Chinese and Caucasian Canadians, both groups living in Canada). Each of these two groups or populations were randomly dichotomized into two roughly equal samples. One sample from each of the two basic populations received Treatment 1 and the other random sample from each of the two populations received Treatment 2. This two-valued

treatment variable, however, is not an independent variable but a counter-balanced control, as will be discussed below.

The two-valued, repeated measures independent variable dichotomizes the 12 items in either treatment into two permutations of 6 items each. One permutation (P_1) for either treatment consists of 6 items each of which anticonforms in from one to three dimensions to Chinese cultural value norms, while anticonforming in zero dimensions to Canadian cultural value norms. The other permutation (P_2) for either treatment consists of 6 items such that it is the mirror-image of P_1 . That is, each item in P_2 anticonforms in from one to three dimensions to Canadian cultural value norms, while anticonforming in zero dimensions to Chinese cultural value norms. The three-valued, repeated-measures independent variable trichotomizes the 6 items in a given permutation for a given treatment into two items each. One category finds its two items each anticonforming in one dimension to whichever culture its permutation anticonforms to. Another category finds each of its two items anticonforming in two such dimensions, and the remaining category discovers its two items each anticonforming in three such dimensions. (See Appendix A.)

Treatment 1 involves precisely the same value cultural norms as does Treatment 2. The reason two treatments are necessary as a counter-balancing control is to eliminate individual item error variance due to extraneous differences between items.

For instance, suppose (consistent with Hypothesis 4) a three-dimensional anticonformity item was more amusing to subjects for whom that item was in their anticonformity permutation than a one- or two-dimensional anti-conformity item from the same permutation. How could one know that

the three-dimensional anticonformity item was the most amusing because Hypothesis 4 were correct, rather than because the author had unconsciously stacked the cards in favor of Hypothesis 4 by making it a funnier story for extraneous reasons? Such "card stacking" could be avoided by having the three-dimensional anticonformity items constructed entirely from the conjunction of the one- and two-dimensional anticonformity items of the same permutation.

However, if all three such items were in the same treatment, the subject would likely notice that the three-dimensional items embed one- and two-dimensional items, perhaps invalidating the experiment. Hence the need for two treatments as a counterbalancing control. Thus, for instance, any three-dimensional anticonformity item in P_1 , Treatment 2, embeds the conjunction of a one- and a two-dimensional anticonformity item from P_1 , Treatment 1. Similarly, any three-dimensional anticonformity item in P_1 , Treatment 1 embeds the conjunction of a one- and a two-dimensional anticonformity item from P_1 , Treatment 2. The same interlocking across treatments would apply for all items within P_2 .

Each subject was assigned to one of two treatments. In either treatment the subject judged each of 12 items on three dependent measures--degree of amusement, tastefulness, and playfulness. (All items were constructed by a committee of six--consisting of representatives of both Chinese and Canadian cultures.)

Each of the two treatment materials (i.e., two types of booklets) is contained in a large envelope. On the outside of this large envelope the beginning instructions sheet is pasted. (See Appendix A.) Each of the

two large treatment envelopes contains four smaller envelopes. The first of these smaller envelopes, labelled 1, contains an amusement instruction-scoring sheet and a set of 12 items. This set of 12 items is randomly numbered and presented in a different random order for each subject.

The second smaller envelope, labelled 2, within a given large envelope consists of a tastefulness instruction-scoring sheet and the identical set of 12 items, but presented in a different random order.

The third smaller envelope, labelled 3, within a given large envelope consists of a playfulness instruction-scoring sheet and again the identical set of 12 items, albeit again presented in a different random order.

The fourth smaller envelope, labelled 4, within a given larger envelope consists merely of a brief questionnaire. (All materials described above are contained in the Appendix A.)

Thus the instructions to the subjects are exactly those given, in the order mentioned above, on the four instruction sheets and questionnaire.

Subjects were tested anonymously--five or more at a time so they would know their results are anonymous. (This anonymity created no problem in tabulating data since the experimenter only needed to know which of the populations each subject was from and all five or more subjects within a given testing were from the same population.)

Each subject was tested by an experimenter who was a member of the subject's own ethnic group and had been socialized into that subject's culture. Such a procedure seems preferable to that of systematically varying experimenters across the subject populations because this latter technique would more probably damage rapport and invalidate results when

the experimenter were of a different ethnic group from the subject.

Since the set of items was in a different random order not only across subjects but also for the three sets of items within subjects, the item-number rows on each answer sheet are in a different order. To facilitate ease of following instructions, these item numbers for each set of items were filled in beforehand by the author.

While the subjects read the instructions on the top of the large envelope, the experimenters also demonstrated to the subjects what they were supposed to do within the four smaller envelopes in the large one.

The experimenter made certain that the subjects did not refer back to the already filled in answer sheets, so that their judgements of the other measures to be employed would not be affected by already made judgements on the items.

The four instruction-answer sheets were placed in the four envelopes so that the subject would not see or know of the following instruction-answer sheet as "he" started from instruction-answer sheet number 1. The reason for this control was to prevent the subject's answers on each preceding instruction-answer sheet from being influenced by a knowledge of what "he" would be required to rate in the following scales. Also, a large envelope was provided to keep the material from the four answer sheets from being mixed with some answer sheets from other subjects.

Of the three dependent measures employed (i.e., amusement, tastefulness, and playfulness) the subjects were asked to rate each item on a five-point scale which ranged from VERY AMUSING to NOT AT ALL AMUSING, GOOD TASTE to POOR TASTE, and PLAYFUL to SERIOUS. (See Appendix A.)

Pretest

A pretest was employed, following a similar experimental design to that of Mutuma (1976), except Chinese subjects were substituted for Black Africans. The two treatments were manipulated not by use of different cartoons but by differentiating instructions, and only two of Mutuma's three dependent measures were employed.

However, Hypotheses 1 and 2, so clearly substantiated by Mutuma, failed to be substantiated here. This failure was apparently due to the subjects' finding the instructions confusing, which (along with the answer sheet) have been modified in the present experiment.

Two dependent measures were also introduced after the pretest. These are a taste measurement (to replace joke measurement in the pretest) and a playful measurement. These measures were added so that, if the subjects did not find the item amusing, they would still have indicated how incongruous they thought it was by judging it with respect to tastefulness and playfulness.

CHAPTER III

RESULTS

Each of the three scales on which the subjects rated the items contain five boxes. (See Appendices A and B.) The right-most box is always given a value of 1, the box to its immediate left a value of 2, and so on such that the left-most box always has a value of 5.

For purposes of statistical analysis, the five-point scales on which subjects rated the items were each collapsed into two categories. On the first dependent measure these two categories are Amusing (which includes 5 and 4); and the remaining category is Not At All Amusing (which includes 1, 2, and 3).

Essentially the same collapsing procedure was applied to the other two dependent variables--tastefulness and playfulness. However, on the second dependent variable one category includes Poor Taste, 1, and 2; while the other category on that scale consists of Good Taste, 5, 4, and 3. The last dependent variable was collapsed into Playful, 5, and 4 for one category; and Serious, 1, 2, and 3 for the other category.

The set of 12 items in Treatment 1 has its results for each item presented in Table 1 for the amusing dependent variable. The results for the set of 12 items in Treatment 2 for the amusing variable are given in Table 2. Similarly, the results for the 12 items in Treatment 1 and the 12 in Treatment 2 for the tastefulness dependent measure are provided in Tables 3 and 4 respectively.

TABLE 1

Amusement Judgements by Chinese and Canadian Caucasian
Groups on Treatment 1 Across Permutations and Dimensions

Permutation 1 ^a (P ₁)	<u>Chinese (Ch)</u>			<u>Canadian Caucasian (CC)</u>			<u>Ch + CC</u>
	AM ^b	¬AM ^c	AM + ¬AM	AM	¬AM	AM + ¬AM	AM + ¬AM
Dimension 1							
Item #2	6	16	22	3	25	28	50
Item #10	5	17	22	2	26	28	50
Dimension 2							
Item #6	7	15	22	3	25	28	50
Item #12	4	18	22	2	26	28	50
Dimension 3							
Item #3	6	16	22	4	24	28	50
Item #5	<u>5</u>	<u>17</u>	<u>22</u>	<u>2</u>	<u>26</u>	<u>28</u>	<u>50</u>
	33	99	132	16	152	168	300
Permutation 2 ^d (P ₂)							
Dimension 1							
Item #4	6	16	22	2	26	28	50
Item #9	5	17	22	2	26	28	50
Dimension 2							
Item #8	9	13	22	6	22	28	50
Item #11	7	15	22	3	25	28	50
Dimension 3							
Item #1	4	18	22	8	20	28	50
Item #7	<u>10</u>	<u>12</u>	<u>22</u>	<u>5</u>	<u>23</u>	<u>28</u>	<u>50</u>
	41	91	132	26	142	168	300
P ₁ + P ₂	74	190	264	42	294	336	600

^aPermutation 1 = Items anticonforming to Chinese culture but nonanticonforming to Canadian Caucasian culture

^bAM = Amusing Judgements (i.e., 5 or 4)

^c¬AM = Non-Amusing Judgements (i.e., 1, 2 or 3)

^dPermutation 2 = Items anticonforming to Canadian Caucasian culture but nonanticonforming to Chinese culture

TABLE 2

Amusement Judgements by Chinese and Canadian Caucasian
Groups on Treatment 2 Across Permutations and Dimensions

Permutation 1 ^a (P ₁)	Chinese (Ch)			Canadian Caucasian (CC)			Ch + CC
	AM ^b	¬AM ^c	AM + ¬AM	AM	¬AM	AM + ¬AM	AM + ¬AM
Dimension 1							
Item #206	7	16	23	2	23	25	48
Item #207	8	15	23	7	18	25	48
Dimension 2							
Item #203	8	15	23	7	18	25	48
Item #205	4	19	23	4	21	25	48
Dimension 3							
Item #204	10	13	23	1	24	25	48
Item #209	<u>4</u>	<u>19</u>	<u>23</u>	<u>7</u>	<u>18</u>	<u>25</u>	<u>48</u>
	41	97	138	28	122	150	288
Permutation 2 ^d (P ₂)							
Dimension 1							
Item #208	8	15	23	12	13	25	48
Item #212	5	18	23	6	19	25	48
Dimension 2							
Item #201	5	18	23	5	20	25	48
Item #210	5	18	23	8	17	25	48
Dimension 3							
Item #202	5	18	23	13	12	25	48
Item #211	<u>4</u>	<u>19</u>	<u>23</u>	<u>4</u>	<u>21</u>	<u>25</u>	<u>48</u>
	32	106	138	48	102	150	288
P ₁ + P ₂	73	203	276	76	224	300	576

^aPermutation 1 = Items anticonforming to Chinese culture but nonanticonforming to Canadian Caucasian culture

^bAM = Amusing Judgements (i.e., 5 or 4)

^c¬AM = Non-Amusing Judgements (i.e., 1, 2 or 3)

^dPermutation 2 = Items anticonforming to Canadian Caucasian culture but nonanticonforming to Chinese culture

TABLE 3

Taste Judgements by Chinese and Canadian Caucasian
Groups on Treatment 1 Across Permutations and Dimensions

Permutation 1 ^a (P ₁)	Chinese (Ch)			Canadian Caucasian (CC)			Ch + CC
	PT ^b	¬PT ^c	PT + ¬PT	PT	¬PT	PT + ¬PT	PT + ¬PT
Dimension 1							
Item #2	13	9	22	13	15	28	50
Item #10	10	12	22	9	19	28	50
Dimension 2							
Item #6	7	15	22	10	18	28	50
Item #12	10	12	22	9	19	28	50
Dimension 3							
Item #3	11	11	22	8	20	28	50
Item #5	<u>5</u>	<u>17</u>	<u>22</u>	<u>7</u>	<u>21</u>	<u>28</u>	<u>50</u>
	56	76	132	56	112	168	300
Permutation 2 ^d (P ₂)							
Dimension 1							
Item #4	8	14	22	11	17	28	50
Item #9	7	15	22	14	14	28	50
Dimension 2							
Item #8	6	16	22	17	11	28	50
Item #11	6	16	22	19	9	28	50
Dimension 3							
Item #1	10	12	22	22	6	28	50
Item #7	<u>9</u>	<u>13</u>	<u>22</u>	<u>20</u>	<u>8</u>	<u>28</u>	<u>50</u>
	46	86	132	103	65	168	300
P ₁ + P ₂	102	162	264	159	177	336	600

^aPermutation 1 = Items anticonforming to Chinese culture but nonanticonforming to Canadian Caucasian culture

^bPT = Poor Taste Judgements (i.e., 1 or 2)

^c¬PT = Non-Poor Taste Judgements (i.e., 5, 4 or 3)

^dPermutation 2 = Items anticonforming to Canadian Caucasian culture but nonanticonforming to Chinese culture

TABLE 4

Taste Judgements by Chinese and Canadian Caucasian
Groups on Treatment 2 Across Permutations and Dimensions

Permutation 1 ^a (P ₁)	<u>Chinese (Ch)</u>			<u>Canadian Caucasian (CC)</u>			<u>Ch + CC</u>
	PT ^b	¬PT ^c	PT + ¬PT	PT	¬PT	PT + ¬PT	PT + ¬PT
Dimension 1							
Item #206	9	14	23	6	19	25	48
Item #207	7	16	23	6	19	25	48
Dimension 2							
Item #203	10	13	23	6	19	25	48
Item #205	9	14	23	6	19	25	48
Dimension 3							
Item #204	7	16	23	4	21	25	48
Item #209	<u>6</u>	<u>17</u>	<u>23</u>	<u>3</u>	<u>22</u>	<u>25</u>	<u>48</u>
	48	90	138	31	119	150	288
Permutation 2 ^d (P ₂)							
Dimension 1							
Item #208	7	16	23	20½	4½	25	48
Item #212	7	16	23	19	6	25	48
Dimension 2							
Item #201	9	14	23	21	4	25	48
Item #210	7	16	23	17	8	25	48
Dimension 3							
Item #202	7	16	23	12	13	25	48
Item #211	<u>11</u>	<u>12</u>	<u>23</u>	<u>21</u>	<u>4</u>	<u>25</u>	<u>48</u>
	48	90	138	110½	39½	150	288
P ₁ + P ₂	96	180	276	141½	158½	300	576

^aPermutation 1 = Items anticonforming to Chinese culture but nonanticonforming to Canadian Caucasian culture

^bPT = Poor Taste Judgements (i.e., 1 or 2)

^c¬PT = Non-Poor Taste Judgements (i.e., 5, 4 or 3)

^dPermutation 2 = Items anticonforming to Canadian Caucasian culture but nonanticonforming to Chinese culture

In an analogous manner, Tables 5 and 6 furnish the results on the playful-serious dependent measure for Treatments 1 and 2 respectively.

The raw score results for each subject are presented in Appendix B.

Tables 7, 8, and 9 reveal the results and predictions for both treatments on Hypotheses 1, 2, and 3 respectively. Two tests of each of these three hypotheses are necessary (one for Treatment 1 and one for Treatment 2) because the items in Treatment 1 cannot be assumed to be independent of the items in Treatment 2. Such an independence assumption is unwarranted for all the one- and two-dimensional items in Treatment 1 are properly embedded within three-dimensional items in Treatment 2. Conversely, all the one- and two-dimensional items in Treatment 2 are properly embedded within three-dimensional items in Treatment 1. Predictions are by items rather than by subjects. The number 1 is assigned to a particular item in a given treatment if that item was predicted correctly on the hypothesis in question. The number 0 in the cell indicates the item was predicted incorrectly.

The statistical inference procedure employed could not legitimately be analysis of variance on any of the five hypotheses because only ordinal scalability could be assumed. Nor could homoscedasticity be assumed for any of the first three hypotheses. Homogeneity of variance could not be assumed for Hypotheses 1, 2, and 3 because the subjects were drawn from different populations. (However, homoscedasticity could probably be reasonably assumed on Hypotheses 4 and 5, to be discussed later, because on each of the eight predictions on either of these two hypotheses only two equivalent groups representing random samples from the same population

TABLE 5

Playful Judgements by Chinese and Canadian Caucasian
Groups on Treatment 1 Across Permutations and Dimensions.

Permutation 1 ^a (P ₁)	Chinese (Ch)			Canadian Caucasian (CC)			Ch + CC
	PL ^b	¬PL ^c	PL + ¬PL	PL	¬PL	PL + ¬PL	PL + ¬PL
Dimension 1							
Item #2	7	15	22	3	25	28	50
Item #10	3	19	22	2	26	28	50
Dimension 2							
Item #6	12	10	22	15	13	28	50
Item #12	5	17	22	3	25	28	50
Dimension 3							
Item #3	2	20	22	4	24	28	50
Item #5	<u>8</u>	<u>14</u>	<u>22</u>	<u>1</u>	<u>27</u>	<u>28</u>	<u>50</u>
	37	95	132	28	140	168	300
Permutation 2 ^d (P ₂)							
Dimension 1							
Item #4	3	19	22	5	23	28	50
Item #9	9	13	22	16	12	28	50
Dimension 2							
Item #8	6	16	22	18	10	28	50
Item #11	5	17	22	11	17	28	50
Dimension 3							
Item #1	2	20	22	13	15	28	50
Item #7	<u>5</u>	<u>17</u>	<u>22</u>	<u>15</u>	<u>13</u>	<u>28</u>	<u>50</u>
	30	102	132	78	90	168	300
P ₁ + P ₂	67	197	264	106	230	336	600

^aPermutation 1 = Items anticonforming to Chinese culture but nonanticonforming to Canadian Caucasian culture

^bPL = Playful Judgements (i.e., 5 or 4)

^c¬PL = Non-Playful Judgements (i.e., 1, 2 or 3)

^dPermutation 2 = Items anticonforming to Canadian Caucasian culture but nonanticonforming to Chinese culture

TABLE 6

Playful Judgements by Chinese and Canadian Caucasian
Groups on Treatment 2 Across Permutations and Dimensions

Permutation 1 ^a (P ₁)	Chinese (Ch)			Canadian Caucasian (CC)			Ch + CC
	PL ^b	¬PL ^c	PL + ¬PL	PL	¬PL	PL + ¬PL	PL + ¬PL
Dimension 1							
Item #206	6	17	23	5	20	25	48
Item #207	6	16	22	5	20	25	47
Dimension 2							
Item #203	11	12	23	2	23	25	48
Item #205	6	17	23	2	23	25	48
Dimension 3							
Item #204	14	9	23	7	18	25	48
Item #209	<u>11</u>	<u>12</u>	<u>23</u>	<u>1</u>	<u>24</u>	<u>25</u>	<u>48</u>
	54	83	137	22	128	150	287
Permutation 2 ^d (P ₂)							
Dimension 1							
Item #208	4½	18½	23	19½	5½	25	48
Item #212	10	13	23	14	11	25	48
Dimension 2							
Item #201	1	22	23	15	10	25	48
Item #210	12	11	23	14	10	24	47
Dimension 3							
Item #202	7	16	23	21	4	25	48
Item #211	<u>4</u>	<u>19</u>	<u>23</u>	<u>15</u>	<u>10</u>	<u>25</u>	<u>48</u>
	38½	99½	138	98½	50½	149	287
P ₁ + P ₂	92½	182½	275	120½	178½	299	574

^aPermutation = Items anticonforming to Chinese culture but nonanticonforming to Canadian Caucasian culture

^bPL = Playful Judgements (i.e., 5 or 4)

^c¬PL = Non-Playful Judgements (i.e., 1, 2 or 3)

^dPermutation 2 = Items anticonforming to Canadian Caucasian culture but nonanticonforming to Chinese culture

TABLE 7

Results of Predictions by Items for Each Treatment on Hypothesis 1

<u>Treatment 1</u>		<u>Treatment 2</u>	
Item No.	Result	Item No.	Result
2	1	206	1
10	1	207	1
6	1	203	1
12	0	205	1
3	0	204	1
5	1	209	0
4	0	208	1
9	0	212	1
8	0	201	0
11	0	210	1
1	1	202	1
7	<u>0</u>	211	<u>0</u>
Right:Wrong	5:7		9:3

TABLE 8

Results of Predictions by Items for Each Treatment on Hypothesis 2

<u>Treatment 1</u>		<u>Treatment 2</u>	
Item No.	Result	Item No.	Result
2	1	206	1
10	1	207	1
6	1	203	1
12	1	205	1
3	1	204	1
5	1	209	1
4	0	208	1
9	1	212	1
8	1	201	1
11	1	210	1
1	1	202	1
7	<u>1</u>	211	<u>1</u>
Right:Wrong	11:1		12:0

TABLE 9
Results of Predictions by Items for Each Treatment on Hypothesis 3

<u>Treatment 1</u>		<u>Treatment 2</u>	
Item No.	Result	Item No.	Result
2	1	206	1
10	1	207	1
6	1	203	1
12	1	205	1
3	1	204	1
5	1	209	1
4	0	208	1
9	1	212	1
8	1	201	1
11	1	210	0
1	1	202	1
7	<u>1</u>	211	<u>1</u>
Right:Wrong	11:1		11:1

were compared.)

Nonparametric statistics were used in testing all five hypotheses. The prediction for each of the first three hypotheses was by items rather than by subjects. Therefore, Chi Square was employed to determine whether more items were predicted correctly on a given test of a given hypothesis than by chance. (However, it was sometimes possible to use an exact probability test instead, based on a binomial theorem expansion.) On either test of any of the first three hypotheses the probability of each item being predicted correctly was $\frac{1}{2}$. A formula (discussed later) was used to determine whether a given item was predicted correctly on a given test of any of these first three hypotheses.

Only one test of Hypothesis 4 was employed and only one of Hypothesis 5. These last two hypotheses could only be each tested once as results from both Treatments 1 and 2 were needed in order to test either of these hypotheses. Eight predictions were made on either of these two hypotheses. Each such prediction was on three of the 24 items from Treatments 1 and 2 combined. The three items compared in any of the eight predictions were always those one- and two-dimensional items from one treatment and the three-dimensional item in which they were embedded from the other treatment. The three-dimensional item was always predicted to have the higher proportion. The probability of each of these eight predictions being correct for a given hypothesis is $\frac{1}{3}$.

To determine whether any test of any of the five hypotheses was significant, the .05 level of significance was chosen.

The formula used to predict each item on each of the two tests of

each of the first three hypotheses is:

$$(A - \bar{A}) > (\neg A - \neg \bar{A})$$

In the above formula, A indicates the percentage of judgments in the higher of the two categories for that one of the two groups whose norms were anticonformed to on either the Hypothesis 1 or 3 dependent measure. On the Hypothesis 2 dependent measure substitute "lower" for "higher" above.

For instance, Item 2 anticonforms to the Chinese norm. On Treatment 1 of Hypothesis 1, Table 1 indicates that 6 of 22 Chinese subjects judge Item 2 in the higher of the two collapsed amusement categories (i.e., as either 5 or 4). Hence the value (i.e., 6/22) is substituted for A in the above formula for Item 2, Treatment 1, Hypothesis 1:

In the above formula \bar{A} represents the average percentage of judgments across all 12 items in a given treatment that were in the higher of the two categories (i.e., 4 or 5) for that one of the two groups whose norm was anticonformed to on either the amusement or playful-serious dependent measure. (Substitute 1 or 2 for 4 or 5 above when testing Hypothesis 2 with the tastefulness results.) Thus, for any of the 6 items in Permutation 1, Treatment 1, \bar{A} indicates the average or mean anticonformity percentage for the Chinese group. Table 1 reveals that, of 264 judgements by Chinese in Treatment 1, 74 (i.e., 28.0%) were amusing. Hence 28.0% is substituted for \bar{A} in the above formula in predicting Item 2 on Treatment 1 for Hypothesis 1.

On Item 2 only 3 of 28 (10.7%) Canadian Caucasians indicate they are amused. Therefore, substitute 10.7% for $\neg A$ in the above formula. As 42 of 336 judgements by Canadian Caucasians on Treatment 1 items are

amusing, substitute 12.5% for $\neg A$ in the formula.

Thus the prediction for Item 2, Treatment 1, Hypothesis 1 is:

$$(27.3\% - 28.0\%) > (10.7\% - 12.5\%)$$

Since $(-0.7\%) > (-1.8\%)$, so that prediction is correct. Therefore, the number 1 is inserted in the appropriate cell in Table 7.

Table 7 reveals that only 5 of the 12 items were predicted correctly (and 7 incorrectly) on the first test (Treatment 1) of Hypothesis 1. Therefore, Hypothesis 1 is not substantiated for Treatment 1 as the number of successful predictions is actually below chance--but obviously insignificantly so.

Table 7 also indicates that 9 of 12 items were predicted correctly (and 3 incorrectly) on the second test (Treatment 2) of Hypothesis 1. Since 1 degree of freedom is lost due to use of means, the number of items for purposes of analysis must be treated as $12 - 1 = 11$. Correcting for continuity provides a χ^2 of 1.84. Thus, on a one-tailed hypothesis, $df = 1$, $.10 > p > .05$.

Since the trend is insignificantly in the wrong direction on the first test and insignificantly in the predicted direction on the second, so Hypothesis 1 is clearly not substantiated.

Similarly, Table 2 in conjunction with the above formula generates Table 8--which provides the results of predictions to do both tests of Hypothesis 2. For Treatment 1, Table 8 indicates 11 correct predictions and 1 wrong. Using Chi Square in the same manner as discussed in the second test of Hypothesis 1 above provides $\chi^2 = 6.06$. Thus $p < .01$. Table 8 indicates that all 12 predictions for Treatment 2 are correct.

On an exact probability test, $n = 11$ ($12 - 1$), one-tailed, $p = 1/2048$.

Thus $p < .0005$.

Since both tests of Hypothesis 2 are readily substantiated, Hypothesis 2 is readily substantiated.

Similarly, Table 3 in conjunction with the above formula generates Table 9--which provides the results of predictions to do both tests of Hypothesis 3. For Treatment 1, Table 9 shows 11 correct predictions and 1 wrong. For Treatment 2, Table 9 also indicates 11 right and 1 incorrect.

Thus, as in the first test of Hypothesis 2, $p < .01$ (for both Treatments 1 and 2). Clearly then Hypothesis 3 is substantiated.

It appears desirable to test each of the three hypotheses above by nonparametric statistics--to avoid unwarranted assumptions. However, each of these three hypotheses predict two-way interactions (i.e., group X permutation) and, ordinarily, nonparametric statistics is only used with one independent variable.

In the above formula the two groups are not compared directly with each other but only indirectly in the sense that they are both first compared with their own means. So, the counterbalanced experimental design enables this formula to eliminate the constant error (i.e., the difference between group means). Also, the above formula does not make two predictions (i.e., $A > \bar{A}$, and $\neg A < \neg \bar{A}$). It only makes one prediction per item because doing so enables any constant error due to differences between permutations extraneous to the hypothesis to be cancelled out. Furthermore, and most central here, permutation is held constant

within the prediction for each item and only varied across item predictions. In this manner the permutation variable is held constant for purposes of statistical analysis. It thereby becomes possible to test each of these three hypotheses using a nonparametric statistic based on a single independent variable.

Hypotheses 4 and 5 predict three-way interactions (group X permutation X number of dimensions). However, the same nonparametric statistics can be used as in the first three hypotheses above. The permutation variable is again eliminated for statistical inferential purposes as in the last reason given in the above paragraph. But the group variable is also eliminated for statistical purposes since (as Tables 10 and 11 indicate) group is also held constant within each of the three-items predictions but varied across such predictions in testing each hypothesis.

Table 10 provides the 8 predictions for testing Hypothesis 4. For instance, the first prediction goes across the first row to compare items 10 and 6 with 204 for Chinese subjects (as the Chinese group is the one whose culture is anti-conformed to on all three items). Item 204 is predicted to be the most amusing since it is the three-dimensional item in which each of the other two from the other treatment are properly embedded. Item 204 is found amusing by a proportion of the Chinese subjects, .435 (43.5%) in Treatment 2. Since this is a higher proportion than given for either Item 10 or 6 for the equivalent group of Chinese subjects from Treatment 1, so this first prediction is correct. (It would seem plausible to also predict from the theory that Item 6, being

TABLE 10
Proportion of Amusement Judgements and Results of Predictions
by Dimensions on Hypothesis 4

Permutation 1 (Chinese Subjects)

Number of Dimensions						
One		Two		Three		Results
Item #	Amusing	Item #	Amusing	Item #	Amusing	
10	5/22 = .227	6	7/22 = .318	204	10/23 = .435	1
2	6/22 = .273	12	4/22 = .182	209	4/23 = .174	0
207	8/23 = .348	203	8/23 = .348	3	6/22 = .273	0
206	7/23 = .304	205	4/23 = .173	5	5/22 = .227	<u>0</u>
Right:Wrong						1:3

Permutation 2 (Canadian Caucasian Subjects)

Number of Dimensions						
One		Two		Three		Results
Item #	Amusing	Item #	Amusing	Item #	Amusing	
9	2/28 = .071	8	6/28 = .214	202	13/25 = .520	1
4	2/28 = .071	11	3/28 = .107	211	4/25 = .160	1
208	12/25 = .480	201	5/25 = .200	1	8/28 = .286	0
212	6/25 = .240	210	8/25 = .320	7	5/28 = .179	<u>0</u>
Right:Wrong						2:2
Total Right:Wrong						3:5

TABLE 11
Proportion of Playful Judgements and Results of Predictions
by Dimensions on Hypothesis 5

Permutation 1 (Chinese Subjects)

Number of Dimensions						
One		Two		Three		Results
Item #	Playful	Item #	Playful	Item #	Playful	
10	3/22 = .136	6	12/22 = .545	204	14/23 = .609	1
2	7/22 = .318	12	5/22 = .227	209	11/23 = .478	1
207	6/22 = .273	203	11/23 = .478	3	2/22 = .091	0
206	6/23 = .261	205	6/23 = .261	5	8/22 = .364	<u>1</u>
Right:Wrong						3:1

Permutation 2 (Canadian Caucasian Subjects)

Number of Dimensions						
One		Two		Three		Results
Item #	Playful	Item #	Playful	Item #	Playful	
9	16/28 = .571	8	18/28 = .643	202	21/25 = .840	1
4	5/28 = .179	11	11/28 = .393	211	15/25 = .600	1
208	19½/25 = .780	201	15/25 = .600	1	13/28 = .464	0
212	14/25 = .560	210	14/24 = .583	7	15/28 = .536	<u>0</u>
Right:Wrong						2:2
Total Right:Wrong						5:3

two-dimensional, should be more amusing to the Chinese subjects in Treatment 1 than Item 10, being one-dimensional, is to these same subjects. However, that prediction is not made because Items 6 and 10 are totally different in content. Consequently, there is no way the present experiment can subtract out error variance due to differences in these two items for reasons extraneous to the hypothesis.)

Table 10 reveals that 3 predictions are correct and 5 incorrect. Since the probability that each row will be correctly predicted is $1/3$, the expected frequency is $8/3$ correct predictions. Obviously 3 correct predictions (i.e., $9/3$) is not significantly larger on a one-tailed test at $p = .05$ than $8/3$. Thus Hypothesis 4 clearly fails to be substantiated.

Table 11 gives the 8 predictions needed to test Hypothesis 5. It reveals that 5 predictions are correct and 3 incorrect. Again the expected number of correct predictions by chance is $1/3$ or $8/3$. However, an exact probability test ($p = 1/3$, $q = 2/3$, $n = 8$) indicates that this correct trend is not significant at .05 on a one-tailed test. That is, $p = .088$. Hence Hypothesis 5 also fails to be substantiated.

It is clear then that two of the five hypotheses of this experiment are substantiated at the .05 level.

However, when one has a number of hypotheses, and some are substantiated and some are not, the question presents itself as to whether the number of hypotheses substantiated is itself significant. The problem for the present experiment is whether substantiation of two of five hypotheses at .05 is itself significant at .05. This question can be answered by an exact probability test in which a highly skewed binomial

expansion occurs where $p = .05$, $q = .95$, and $n = 5$.

Such an expansion indicates first that the chances of exactly one out of five hypotheses being substantiated at .05 is approximately .20. Clearly then substantiation of only one of five hypotheses would not be a significant result. However, this binomial expansion indicates the chances of substantiating at least two of five hypotheses each at .05 is $p = .023$.

It can therefore be concluded that the number of hypotheses substantiated in the present experiment is significant. In this sense then the present experiment can be said to have obtained significant results.

CHAPTER IV

DISCUSSION

Despite the fact that a significant number of hypotheses was substantiated, the results are somewhat perplexing and do not seem to offer a very simple explanation. In some respects the substantiation of Hypotheses 2 and 3 (considering that the other three hypotheses were not substantiated) is more puzzling than if none of the hypotheses had won support.

If none of the hypotheses had won support, it might seem reasonable to maintain that the items are invalid--that they do not measure what they purport to measure. However, the fact that anticonformity items were found in poorer taste and more playful than nonanticonformity items suggests that the items really succeed in tapping differences between Chinese and Canadian cultures.

It seems strange then that Hypothesis 1 was clearly not supported (exhibiting only a mild trend in the predicted direction). Tables 1 and 2 suggest that the problem may be with the Chinese, rather than the Canadian, subjects; the Canadian subjects (unlike the Chinese) quite consistently find the permutation of items anticonforming to its culture more amusing than the other permutation.

Hong Kong Chinese (which includes most of the Chinese subjects in this experiment), being raised in a British Colony, are possibly already

quite willing to accept Canadian culture before they migrate to Canada. Furthermore, selective migration perhaps also renders the Hong Kong Chinese who migrate to Canada even more willing to adopt a Canadian outlook before they arrive in Canada than would a random sample of Hong Kong Chinese living in Hong Kong.

Yet this interpretation still leaves perplexing the fact that the only Hong Kong Chinese counted as subjects checked on the questionnaire that they preferred Chinese culture to Canadian. There does not seem any neat way to justify the data. However, the basic reason Hypothesis 1 failed of substantiation probably rests with the selection of Chinese subjects. The author hopes to do a follow-up experiment testing Chinese in the rural New Territories section of Hong Kong.

However, the Chinese subjects cannot be simply held accountable for failure to substantiate Hypotheses 4 and 5, as the Canadian subjects also failed to exhibit a significant trend to support these hypotheses. Here too, as in the above discussion of the failure of Hypothesis 1, it does not seem wise at this point to give up on the theory, which seems plausible enough and consistent with other evidence. Therefore, the question again needs be raised regarding a technical defect in the present experiment. Was either the selection of subjects or the selection of items defective?

It is difficult to 'blame' one population of subjects for the failure of Hypotheses 4 and 5 as neither group supported it. But good reason appears to exist to be suspicious of the items.

There seems truth in the epigram "Brevity is the soul of wit."

If so, Hypothesis 4 (and perhaps 5) badly had "the cards stacked" against it (them). The three-dimensional anticonformity items were of course (as Appendix A clearly indicates) substantially longer and/or often more complex in sentence structure than the one- and two-dimensional items. The extra mental effort that the three-dimensional items required of the subjects may have reduced both the amusement and playful aspects of the items.

Therefore, in the proposed follow-up experiment an attempt would be made to render the three-dimensional items little if any longer than the one- and two-dimensional (while trying to avoid significantly more complex sentence structure in the three-dimensional items). This feat could conceivably be accomplished by use of Noam Chomsky's distinction between deep and surface semantics. Consider the following three dimensions: 1) That object is large. 2) That object is red. 3) That object is a triangle. The deep semantics of the conjunction of propositions 1), 2), and 3) above could be preserved while transforming the surface semantics by generating sentence 4): It is a large, red, triangle.

A further suggestion for the proposed follow-up experiment seems warranted here. The present thesis did not think the sex variable in need of control. Considering the impact of Women's Liberation in recent years on the judgement of sexism in literature, humourous and otherwise, possibly the sex variable should have been controlled.

The difference in sex proportions between the two populations used in this study is quite striking. Only 13 of 45 Chinese subjects (i.e., 29%) were females; however, 41 of 53 Canadian subjects (i.e., 77%) were

females.

Chinese culture is of course much more patriarchal than is Canadian culture. Consequently, some items nonanticonforming to Chinese culture may seem representative of male chauvinism to those who internalize the goals of Women's Liberation. It seems reasonable to suppose that the female subjects are more likely to resent such patriarchal items than the male subjects are. If so, one would expect from vicarious superiority humour theory (La Fave, 1972) that females would find such items less funny than would males. However, since these patriarchal items would be in Permutation 2, by perceived incongruity humour theory one would expect to find such items more likely amusing to Canadians than to Chinese. Also, 48% (77% - 29%) more of the Canadian subjects are female than of the Chinese. Therefore, failure to control the sex variable could cause vicarious superiority humour theory to work at cross purposes with perceived incongruity humour theory on Hypothesis 1 in the present case.

An examination of the two items from Permutation 2 which seem most 'male chauvinistic' (Item 7, Treatment 1 and Item 210, Treatment 2) suggests that failure to control the sex variable did 'stack the cards' against substantiation of Hypothesis 1 to some extent by affecting subjects' amusement judgements of these items.

For instance, vicarious superiority humour theory suggests that females should find Items 7 and 210 less funny than would males. Item 7 was judged amusing by 3 of 21 (14%) of Canadian females and 2 of 7 (28%) of Canadian males. For Chinese females 2 of 5 (40%) find Item 7 amusing

and 8 of 17 (47%) of Chinese males do. Therefore, failure to control for sex possibly seems to spuriously have caused Item 7 to be predicted wrongly (Table 6) by 12%. However, partialling out to control for sex proportion difference would apparently have enabled Item 7 to be predicted less poorly.

The situation is different for Item 210, since that item was already predicted correctly. However, the percentage by which that item was predicted correctly would apparently not have been hurt by partialling out for sex.

A suggestion for future research, then, is that sex proportion be held constant across populations.

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APPENDIX A
STIMULUS MATERIALS

2

L

INSTRUCTIONS AND RESPONSE-SHEETS

INSTRUCTIONS TO JUDGES

We are doing research to determine the properties of stories. We need your help as judges to achieve this objective. However, we do not need to know your name.

Please do not open this large envelope until you have completed reading the instructions on this page.

The large envelope contains four smaller envelopes. These four are numbered 1, 2, 3, and 4.

After you have finished reading the instructions on this page, you will open the large envelope and remove only the envelope numbered 1.

You will remove the instruction-answer sheet and the set of stories from envelope 1. You will read and follow those instructions and when you have completed rating the stories, please return both the set of stories and the instruction-answer sheet to envelope 1. Then return envelope 1 to the large envelope, while removing the envelope numbered 2.

Remove the material from envelope 2, follow the instructions, then return that material to envelope 2. Next return envelope 2 to this large envelope while removing envelope 3.

Remove the contents of envelope 3. Follow the same procedure for the two remaining envelopes--3 and 4 respectively.

Do you have any questions?

INSTRUCTIONS TO JUDGES

For the last time you are asked to rate the same set of twelve stories. Remember the number of each story is already written for you in the ITEM NUMBER column. Fill in the boxes on your right as to whether each story is playful or serious or somewhere in between.

ITEM NUMBER

PLAYFUL

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SERIOUS

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ITEMS

Items Anticonforming to Chinese Value Norms (P_1)
on Treatment 1

Dimension 1

2

The 18-year-old single girl packed her things, left home, and assured her parents nothing was wrong between her and the family.

10

The bride, accompanied by her father and bridesmaid, met the groom in church.

Dimension 2

6

After the wedding ceremony the best man drove the newlyweds around the city, honking the horn in the tissue-paper-decorated car.

12

The young unmarried man moved out of his family's house because he wanted to live by himself. His relationship with his family remained as good as before he had left home.

Dimension 3

3

The couple agreed to live common law for a trial period of at least one year. They also decided to share the rent and the housework. During that year they attended child-care classes in case they later decided to have a family.

When the girl told her family of her plans to marry, her grandfather (who was visiting from the old age home) congratulated her. Her sister offered to have a bridal shower for her and her parents promised to pay for a big wedding.

Items Anticonforming to Canadian Caucasian
Value Norms (P_2) on Treatment 1

Dimension 1

4

On New Year's Day the mother would not allow anyone to sweep up the mess until the next day.

9

The wife cooked a delicious dinner including shark-fin soup.

Dimension 2

8

The husband and wife were giving a birthday party for his father. She prepared a nine-course dinner, and a special dish for his father only-- snake gall bladder with wine.

11

On New Year's Day a man and his wife gave the children Lucky money in red envelopes. During the course of the evening, one of the children deliberately spilled food on the floor. His mother only mildly scolded the child.


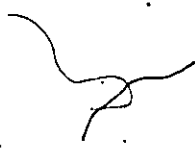
Dimension 3

1

Upon the father's death, his wife insisted that three years be added to his actual age when it was put in the newspaper. The family then put on white clothing until after the burial. Each guest was given a white envelope containing a handkerchief and some candy.

7

The bridegroom paid the bride's sisters \$99 so the bride could leave her home on the wedding day. After the wedding the bride knelt before her new father and mother-in-law and nodded her head. During the dinner reception the bride changed gowns several times.



Items Anticonforming to Chinese Value Norms (P_1)
on Treatment 2

Dimension 1

206

When the girl told her family of her plans to marry, her grandfather (who was visiting from the old-age home) congratulated her.

207

The man and woman attended child-care classes in case they later decided to have a family.

Dimension 2

203

The couple agreed to live common law for a trial period of at least one year. They also decided to share the rent and the housework.

205

The sister of the bride-to-be offered to have a bridal shower, and her parents promised to pay for a big wedding.

Dimension 3

204

The bride, accompanied by her father and bridesmaid, met the groom in church. After the wedding ceremony the best man drove the newlyweds around the city honking the horn in the tissue-paper-decorated car.

209

The 18-year-old single girl packed her things, left home and assured her parents nothing was wrong between her and the family--only that she would like to live by herself from now on. Her relationship with the family remained as good as before she had left.

Items Anticonforming to Canadian Caucasian
Value Norms (P_2) on Treatment 2

Dimension 1

208

Each guest at the funeral was given a white envelope containing a handkerchief and some candy.

212

During the dinner reception the bride changed gowns several times.

Dimension 2

201

Upon the father's death his wife insisted that three years be added to his actual age when it was put in the newspaper. The family then put on white clothing until after the burial.

210

The bridegroom paid the bride's sisters \$99 so the bride could leave her home on the wedding day. After the wedding the bride knelt before her new father- and mother-in-law and nodded her head.

Dimension 3

202

The husband and wife were giving a birthday party for his father. She prepared a nine-course dinner (including such delicious food as shark-fin soup) and a special dish for his father only--snake gall bladder with wine.

On New Year's Day a man and his wife gave the children Lucky money in red envelopes. During the course of the evening, one of the children deliberately spilled food on the floor. His mother only mildly scolded the child and would not allow anyone to sweep up the mess until the next day.

QUESTIONNAIRE

Please complete the following items:

Sex: ☒ male ☐ female

Age: 1

Citizenship

How long have you lived in Canada?

Years	Months
1940	1
1941	2
1942	3
1943	4
1944	5
1945	6
1946	7
1947	8
1948	9
1949	10
1950	11
1951	12
1952	13
1953	14
1954	15
1955	16
1956	17
1957	18
1958	19
1959	20
1960	21
1961	22
1962	23
1963	24
1964	25
1965	26
1966	27
1967	28
1968	29
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1971	32
1972	33
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1997	58
1998	59
1999	60
2000	61
2001	62
2002	63
2003	64
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2005	66
2006	67
2007	68
2008	69
2009	70
2010	71
2011	72
2012	73
2013	74
2014	75
2015	76
2016	77
2017	78
2018	79
2019	80
2020	81
2021	82
2022	83
2023	84
2024	85
2025	86
2026	87
2027	88
2028	89
2029	90
2030	91
2031	92
2032	93
2033	94
2034	95
2035	96
2036	97
2037	98
2038	99
2039	100

Education:

High School Grade presently in:

Preliminary (or Grade 13):

University or College Year presently in:

Other _____ Specify _____

which culture do you prefer?

Australian

Canadians

Chinese

European

United States

Other Specify

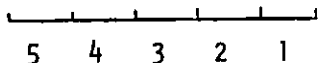
APPENDIX B ✓

RAW DATA: SUBJECTS' AMUSEMENT,
TASTE AND PLAYFUL JUDGEMENTS

Amusement Judgements by Chinese Subjects in Treatment 1

Anticonformity to Chinese
Value Norms (P_1)Anticonformity to Canadian
Caucasian Value Norms (P_2)

Item #	Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3		
S. #	2	10	6	12	3	5	4	9	8	11	1	7	4	9	8	11	1	7
1	1	1	2	1	3	3	4	5	4	2	1	4						
2	3	1	4	1	1	3	1	5	5	2	2	5						
3	3	2	4	2	4	2	2	1	1	1	2	2						
4	2	2	3	2	2	2	3	3	3	2	2	3						
5	2	2	3	1	3	3	1	1	4	4	2	4						
6	2	5	1	2	1	3	5	1	5	5	1	5						
7	3	1	2	3	1	1	1	1	2	1	2	1						
8	2	3	2	5	4	5	5	3	4	5	3	4						
9	5	5	1	1	1	1	1	1	1	1	5	1						
10	1	1	5	5	3	2	5	3	4	5	1	5						
11	4	1	2	3	4	2	2	1	3	2	3	3						
12	1	4	5	5	4	4	4	5	2	5	1	1						
13	1	2	3	3	2	3	4	2	2	2	2	3						
14	5	3	3	2	4	3	3	5	4	3	3	4						
15	3	1	2	2	2	1	3	1	2	2	3	2						
16	1	3	5	1	3	1	1	1	1	3	1	1						
17	3	2	2	4	3	4	3	2	2	3	2	4						
18	4	1	2	3	2	2	2	2	2	2	2	2						
19	3	5	4	3	3	2	3	3	4	4	4	4						
20	4	4	3	2	3	4	2	4	3	3	4	4						
21	4	2	2	2	2	5	1	2	4	5	4	2						
22	3	2	4	3	4	3	1	1	1	1	3	1						
4 or 5	6	5	7	4	6	5	6	5	9	7	4	10						
4 or 5 for P_1						33												41
4 or 5 for P_2																		

Amusement Scale: Very Amusing  Not At All Amusing

5 4 3 2 1

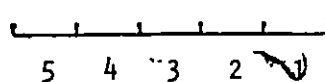
Amusement Judgements by Canadian Caucasian Subjects in Treatment 1

Anticonformity to Chines
Value Norms (P_1)Anticonformity to Canadian
Caucasian Value Norms (P_2)

Item # S #	Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3		
	2	10	6	12	3	5	4	9	8	11	1	7	
1	2	1	5	1	1	1	1	3	3	1	2	1	
2	4	4	2	2	4	2	2	1	2	2	4	2	
3	3	1	1	1	1	1	1	3	1	1	4	2	
4	4	1	1	1	3	3	1	1	1	1	1	1	
5	1	1	1	3	1	3	1	1	1	1	1	5	
6	2	3	1	3	3	3	3	3	3	3	3	2	
7	2	1	3	1	1	1	3	2	4	4	4	3	
8	2	4	4	4	4	5	2	5	5	3	2	3	
9	1	1	1	1	3	1	1	1	1	1	3	4	
10	1	2	2	2	4	4	2	1	1	1	2	1	
11	2	1	1	1	1	1	2	3	3	2	3	3	
12	3	1	1	2	3	2	4	1	2	1	2	1	
13	1	1	1	1	1	1	1	1	1	1	1	1	
14	1	1	1	1	1	1	1	1	1	1	1	1	
15	2	1	1	1	1	1	2	2	3	1	1	1	
16	1	1	2	1	1	1	1	3	4	1	4	1	
17	1	1	1	1	1	1	1	2	1	1	1	1	
18	2	1	4	1	3	2	1	2	4	2	3	4	
19	4	1	3	4	2	2	1	5	5	4	5	5	
20	2	1	3	3	3	1	3	2	2	2	3	4	
21	1	1	2	1	1	1	1	2	2	2	2	2	
22	2	1	2	1	2	1	1	1	2	2	1	1	
23	1	1	1	1	1	2	1	2	2	1	2	1	
24	3	1	3	1	3	2	3	3	3	2	4	1	
25	1	1	3	1	4	1	3	3	3	3	4	3	
26	2	3	3	2	3	3	4	3	4	4	4	3	
27	1	1	1	2	1	1	1	1	1	1	1	1	
28	1	1	2	1	1	1	1	1	1	2	2	1	
4 or 5	3	2	3	2	4	2	2	2	6	3	8	5	
4 or 5 for P ₁	16						4 or 5 for P ₂						26

Amusement Scale:

Very Amusing



Not At All Amusing

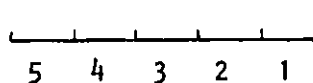
Amusement Judgements by Chinese Subjects in Treatment 2

Anticonformity to Chinese
Value Norms (P_1)Anticonformity to Canadian
Caucasian Value Norms (P_2)

Item # S #	Anticonformity to Chinese Value Norms (P_1)			Anticonformity to Canadian Caucasian Value Norms (P_2)		
	Dimension 1	Dimension 2	Dimension 3	Dimension 1	Dimension 2	Dimension 3
	206	207	203 205	204 209	208 212	201 210
	202	211				
1	2	1	1 2	2 1	2 2	1 1
2	2	2	5 3	5 4	3 4	3 4
3	4	3	5 3	1 5	3 1	3 1
4	5	4	5 4	2 5	3 1	3 3
5	5	5	5 5	5 1	1 5	1 1
6	3	1	3 1	5 1	5 3	5 1
7	1	2	1 2	1 1	1 2	1 1
8	3	4	5 2	1 2	1 2	4 3
9	5	3	1 1	3 1	1 1	1 1
10	5	4	4 3	3 2	5 3	4 2
11	1	2	4 2	4 2	1 2	1 1
12	1	2	1 1	4 1	4 1	1 1
13	2	4	3 4	5 3	5 4	2 4
14	1	1	2 3	5 3	2 2	1 2
15	1	4	5 3	5 3	4 2	4 5
16	1	4	1 1	1 2	1 1	1 1
17	2	3	1 1	2 1	2 1	2 2
18	1	3	3 1	2 2	5 1	2 1
19	2	2	3 3	2 3	2 2	2 2
20	2	3	3 3	4 2	4 3	3 4
21	5	2	1 4	1 3	4 3	3 1
22	2	4	1 1	3 3	1 5	1 4
23	4	1	1 2	5 4	3 5	5 3
4 or 5	7	8	8 4	10 4	8 5	5 5
4 or 5 for P_1				41	4 or 5 for P_2	32

Amusement Scale:


Very Amusing



Not At All Amusing

Amusement Judgements by Canadian Caucasian Subjects in Treatment 2.

Item # S #	Anticonformity to Chinese Value Norms (P_1)						Anticonformity to Canadian Caucasian Value Norms (P_2)					
	Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3	
	206	207	203	205	204	209	208	212	201	210	202	211
1	2	2	4	4	3	4	1	1	1	2	1	1
2	3	3	4	3	2	5	1	2	1	1	2	2
3	1	3	4	2	3	4	4	4	5	2	5	3
4	1	4	1	1	2	1	4	1	1	4	2	1
5	1	1	1	3	3	1	2	3	5	5	4	2
6	1	1	1	1	1	1	3	1	1	1	1	1
7	3	1	2	3	2	3	4	3	3	2	1	1
8	3	3	4	1	4	5	1	2	1	2	2	1
9	3	3	2	4	2	3	2	4	2	5	4	3
10	1	4	2	1	2	2	5	4	1	1	5	3
11	3	3	3	3	3	2	5	1	4	5	5	5
12	3	1	5	1	1	2	1	5	1	4	2	1
13	1	1	1	1	1	1	2	3	1	1	3	2
14	2	2	1	1	3	1	4	3	1	2	4	2
15	2	3	4	3	3	5	2	3	5	5	4	3
16	1	3	3	2	2	1	4	2	1	3	4	1
17	1	4	4	2	3	3	1	1	1	1	3	2
18	1	1	1	1	3	1	2	1	1	3	3	1
19	1	4	1	1	2	2	3	2	1	1	4	1
20	2	2	2	4	2	2	4	2	2	2	4	4
21	1	5	1	1	3	1	5	3	2	4	4	4
22	5	5	1	1	1	5	4	4	1	4	4	4
23	1	2	1	1	1	1	3	1	1	2	2	2
24	1	1	1	1	3	2	4	3	2	1	4	3
25	4	4	2	5	3	5	5	5	5	1	2	3
4 or 5	2	7	7	4	1	7	12	6	5	8	13	4
4 or 5 for P_1						28			4 or 5 for P_2			48

Amusement Scale: Very Amusing  Not At All Amusing


5 4 3 2 1

Taste Judgements by Chinese Subjects in Treatment 1

Anticonformity to Chinese
Value Norms (P_1)Anticonformity to Canadian
Caucasian Value Norms (P_2)

Item #	Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3	
S #	2	10	6	12	3	5	4	9	8	11	1	7
1	2	2	3	2	2	4	3	5	5	5	1	4
2	1	4	5	5	1	4	3	5	5	3	4	5
3	2	2	4	4	4	3	1	3	5	1	2	1
4	4	4	4	5	5	4	4	4	4	4	3	3
5	2	2	3	2	3	4	2	2	5	3	3	3
6	5	2	2	3	2	3	5	3	3	5	3	5
7	2	1	2	1	2	1	1	3	3	1	1	2
8	2	4	2	4	5	5	5	2	3	5	2	5
9	3	1	3 1		3	3	3	5	5	1	3	3
10	1	2	5	4	2	3	5	2	5	5	1	5
11	4	2	2	3	3	4	2	3	4	4	2	3
12	2	5	5	5	3	5	5	5	1	5	2	1
13	2	4	3	2	4	3	3	1	2	3	3	2
14	1	3	3	3	4	4	3	2	3	4	2	3
15	2	3	2	1	2	2	1	2	1	2	3	2
16	5	5	5	1	3	1	3	5	3	3	3	3
17	4	2	4	2	4	3	4	3	2	2	3	2
18	3	2	2	2	2	2	2	2	2	2	2	2
19	3	3	4	3	2	3	2	3	4	3	3	3
20	2	4	4	3	2	4	3	4	4	4	2	2
21	1	4	2	1	1	3	2	4	1	5	4	2
22	5	5	5	5	2	5	5	5	5	5	5	5

1 or 2 13 10 7 10 11 5 8 7 6 6 10 9
 1 or 2 for P_1 56 1 or 2 for P_2 46.

Taste Scale: Good Taste  Poor Taste
 5 4 3 2 1

Taste Judgements by Canadian Caucasian Subjects in Treatment 1

Anticonformity to Chinese
Value Norms (P₁)

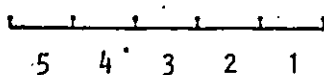
Anticonformity to Canadian
Caucasian Value Norms (P₂)

[illegible]

1 or 2	13	9	10	9	8	7	11	14	17	19	22	20
1 or 2 for P_1						56	1 or 2 for P_2					103

Taste Scale:

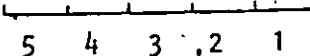
Good Taste



Poor Taste

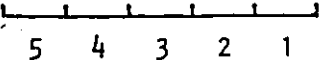
Taste Judgements by Chinese Subjects in Treatment 2

Anticonformity-to Chinese Value Norms (P ₁)							Anticonformity to Canadian Caucasian Value Norms (P ₂)							
		Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3		
Item #	S #	206	207	203	205	204	209	208	212	201	210	202	211	
1		4	3	4	3	4	5	3	4	4	4	4	4	
2		5	3	2	4	5	4	3	4	3	3	4	3	
3		5	3	1	1	5	1	3	3	3	5	1	1	
4		1	5	1	1	1	3	5	3	4	2	5	1	
5		5	1	1	5	1	5	1	5	5	5	1	1	
6		5	5	3	1	3	5	2	3	5	4	5	1	
7		2	3	2	2	2	3	3	3	2	2	4	4	
8		4	1	5	3	4	4	3	1	1	2	5	1	
9		5	3	3	5	5	1	5	5	5	5	5	5	
10		4	5	4	3	5	3	5	3	1	3	4	1	
11		2	5	4	3	2	5	3	3	2	5	2	5	
12		1	3	4	4	3	3	1	4	3	2	5	5	
13		4	2	4	4	5	5	2	4	3	4	5	3	
14		3	3	3	4	5	4	2	4	3	3	3	4	
15		2	3	4	5	5	5	4	2	4	3	4	2	
16		1	4	1	1	1	1	1	1	1	1	1	1	
17		2	2	3	3	3	2	3	3	3	3	2	3	
18		1	1	3	2	3	2	5	1	5	5	5	3	
19		1	2	2	1	1	2	1	1	1	1	1	1	
20		4	3	2	3	4	4	3	2	2	4	4	2	
21		5	4	1	2	1	5	4	3	2	5	2	1	
22		4	4	3	4	4	3	5	2	2	3	5	3	
23		5	1	1	1	5	3	3	5	4	1	3	3	
1 or 2		9	7	10	9	7	6	7	7	9	7	7	11	
1 or 2 for P ₁		48						4 or 5 for P ₂						48

Taste Scale: Good Taste  Poor Taste

Taste Judgements by Canadian Caucasian Subjects in Treatment 2

Item # S #	Anticonformity to Chinese Value Norms (P_1)						Anticonformity to Canadian Caucasian Value Norms (P_2)					
	Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3	
	206	207	203	205	204	209	208	212	201	210	202	211
1	4	4	5	5	4	4	1	1	1	3	1	3
2	3	4	4	3	3	4	1	2	2	2	2	2
3	2	2	3	2	3	5	4	3	5	2	4	2
4	3	5	5	4	4	5	1	2	1	1	1	1
5	3	3	1	3	3	3	3	2	1	5	3	3
6	2	3	4	4	3	3	1,4	3	2	3	2	2
7	4	3	3	2	2	3	2	3	4	2	3	1
8	5	4	4	1	4	5	1	1	1	1	3	1
9	4	5	5	3	4	5	2	1	2	2	2	2
10	5	5	4	5	4	3	1	2	1	1	5	1
11	5	3	5	4	5	5	1	1	2	3	3	2
12	1	1	4	2	1	4	1	5	1	1	3	4
13	4	4	2	3	3	2	1	1	1	1	3	2
14	4	3	2	3	5	4	1	2	1	2	5	1
15	5	3	4	5	4	4	2	3	3	5	2	3
16	4	5	5	5	4	5	1	2	1	3	3	2
17	4	4	5	4	3	3	1	2	1	2	3	1
18	5	5	5	5	3	5	1	1	3	3	1	1
19	1	1	1	1	1	2	2	1	1	1	2	1
20	2	2	2	2	2	2	2	2	2	2	2	2
21	5	1	5	4	3	5	1	2	1	1	1	2
22	1	2	4	5	5	5	4	5	1	1	2	2
23	5	5	2	5	5	5	1	2	1	1	4	1
24	5	5	3	5	3	3	1	1	1	1	1	1
25	5	3	4	5	4	5	5	1	2	5	5	2
1 or 2	6	6	6	6	4	3	20½	19	21	17	12	21
1 or 2 for P_1						31		1 or 2 for P_2				110½

Taste Scale: Good Taste  Poor Taste

Playful Judgements by Canadian Caucasian Subjects in Treatment 1

Anticonformity to Chinese
Value Norms (P_1)Anticonformity to Canadian
Caucasian Value Norms (P_2)

Item # S #	Anticonformity to Chinese Value Norms (P_1)						Anticonformity to Canadian Caucasian Value Norms (P_2)					
	Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3	
	2	10	6	12	3	5	4	9	8	11	1	7
1	3	1	5	2	1	1	3	5	5	4	5	4
2	4	5	3	2	5	3	4	3	4	2	5	3
3	1	1	4	1	2	1	3	5	5	4	3	5
4	4	1	5	3	1	1	5	5	5	1	5	5
5	1	3	5	5	5	3	3	3	3	3	1	1
6	3	3	2	3	3	3	2	3	3	3	3	2
7	3	3	5	3	1	1	5	5	5	1	2	2
8	2	2	2	1	2	1	1	5	4	3	1	1
9	1	3	1	1	3	1	3	3	5	5	5	5
10	1	3	5	3	5	1	3	3	3	3	2	2
11	1	2	3	2	1	2	3	2	4	3	3	3
12	5	1	3	5	1	1	2	3	2	4	5	5
13	1	1	5	1	1	1	1	5	1	5	5	5
14	3	5	3	3	1	3	5	5	5	4	3	5
15	2	2	3	2	3	2	2	4	4	3	3	4
16	1	1	2	1	2	1	1	5	5	3	5	4
17	1	1	5	1	1	1	1	3	5	1	1	1
18	1	2	5	2	4	4	2	4	3	3	5	5
19	2	1	3	3	1	5	3	5	5	5	4	5
20	1	1	5	3	2	3	3	5	4	3	5	4
21	1	3	4	5	1	1	1	4	3	3	5	5
22	2	2	3	2	3	1	1	3	3	3	3	4
23	1	1	3	1	1	2	1	2	2	1	2	1
24	1	2	1	1	3	2	2	5	5	3	5	4
25	1	1	4	1	2	1	3	4	4	5	4	3
26	2	2	5	2	2	1	1	2	2	5	2	2
27	2	3	4	2	1	1	3	2	4	4	1	3
28	1	1	5	2	1	3	5	5	5	5	3	3
4 or 5	3	2	15	3	4	1	5	16	18	11	13	15
4 or 5 for P_1						28		4 or 5 for P_2				78

Playful Scale:

Playful

5 4 3 2 1

Serious

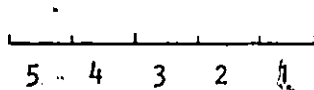
Playful Judgements by Chinese Subjects in Treatment 2

Anticonformity to Chinese
Value Norms (P_1)Anticonformity to Canadian
Caucasian Value Norms (P_2)

Item # S #	Dimension 1			Dimension 2			Dimension 3			Dimension 1			Dimension 2			Dimension 3		
	206	207	203	205	204	209	208	212	201	210	202	211	206	207	203	205	204	209
1	5	3	1	1	3	1	5	4	1	2	3	1	5	3	1	1	3	1
2	3	3	2	3	5	2	2	1	3	4	2	1	3	3	2	3	5	2
3	1	3	5	3	5	5	3	5	3	3	1	3	5	3	5	3	5	5
4	1	1	5	3	5	4	1	4	1	1	1	2	5	3	5	3	4	4
5	5	1	5	1	1	1	1	5	1	5	5	5	5	1	5	1	1	1
6	1	1	5	3	5	1	5	3	3	5	3	5	5	1	5	1	1	1
7	2	3	1	2	4	3	1	3	1	4	1	1	5	3	1	2	3	3
8	2	1	4	2	5	1	1	2	1	5	4	3	5	1	5	1	1	1
9	1	5	5	1	1	5	1	1	1	1	1	1	5	1	5	1	1	1
10	3	1	3	3	2	1	1	2	2	4	2	2	5	1	5	1	1	1
11	1	-	3	4	5	5	1,4	3	1	5	1	4	5	1	5	1	1	1
12	1	1	5	3	4	5	2	3	1	5	1	4	5	1	5	1	1	1
13	2	4	4	4	5	4	1	4	2	4	2	2	5	1	5	1	1	1
14	4	4	3	3	5	4	2	4	1	4	4	3	5	1	5	1	1	1
15	2	3	5	4	5	4	2	4	1	3	1	3	5	1	5	1	1	1
16	5	4	4	4	2	4	3	3	5	4	4	3	5	1	5	1	1	1
17	1	1	2	2	2	2	2	1	2	2	2	1	5	1	5	1	1	1
18	4	4	3	5	4	4	5	1	3	5	5	2	5	1	5	1	1	1
19	3	2	4	4	2	2	2	3	2	3	2	3	5	1	5	1	1	1
20	1	3	3	2	2	2	1	3	2	3	2	2	5	1	5	1	1	1
21	4	4	2	3	1	5	5	4	1	1	5	2	5	1	5	1	1	1
22	2	1	1	1	5	1	1	5	1	1	1	1	5	1	5	1	1	1
23	3	1	1	1	5	3	3	5	3	3	5	1	5	1	5	1	1	1
4 or 5	6	6	11	6	14	11	4½	10	1	12	7	4	4 or 5 for P_1	54	4 or 5 for P_2	38½		

Playful Scale:

Playful



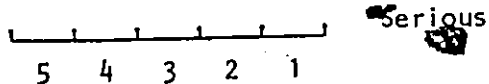
Serious

Playful Judgements by Canadian Caucasian Subjects in Treatment 2

Item # S #	Anticonformity to Chinese Value Norms (P ₁)						Anticonformity to Canadian Caucasian Value Norms (P ₂)					
	Dimension 1		Dimension 2		Dimension 3		Dimension 1		Dimension 2		Dimension 3	
	206	207	203	205	204	209	208	212	201	210	202	211
1	1	2	3	3	2	2	1,5	4	5	2	4	4
2	1	1	1	1	3	1	5	3	4	3	3	3
3	3	2	1	3	2	1	5	4	5	3	5	4
4	3	1	3	2	3	1	3	1	1	3	1	3
5	1	2	1	2	5	1	4	3	5	5	5	1
6	2	2	2	2	2	2	4	2	4	3	4	4
7	3	3	4	3	3	3	4	3	4	3	4	4
8	1	1	1	1	1	1	4	5	4	3	4	3
9	1	1	1	3	5	1	5	5	3	3	4	2
10	1	1	1	1	2	1	5	5	3	5	4	5
11	4	4	2	1	3	1	4	3	3	4	3	1
12	4	1	4	4	3	2	1	5	1	4	5	3
13	1	1	1	1	1	1	5	5	5	-	5	5
14	2	4	2	3	3	2	4	5	5	4	5	5
15	2	2	1	3	1	2	2	4	1	1	3	4
16	1	2	1	1	1	1	5	4	5	5	5	5
17	2	1	1	1	3	2	4	4	5	3	5	2
18	1	1	1	1	2	1	5	3	3	5	5	5
19	5	4	3	3	5	3	5	5	5	5	5	5
20	5	1	1	3	4	5	5	3	4	4	5	5
21	1	1	1	1	4	1	5	3	1	5	5	4
22	5	4	3	1	2	1	3	5	2	4	4	2
23	2	1	1	1	4	1	5	3	5	5	5	5
24	1	5	1	1	4	1	5	2	4	3	5	2
25	3	5	1	4	3	1	2	5	2	5	5	4
4 or 5	5	5	2	2	7	1	19½	14	15	14½	21	15½
4 or 5 for P ₁						22	4 or 5 for P ₂					98½

playful Scale:

Playful



VITA AUCTORIS

- 1948 Born September 6 in Un Long, N.T., Hong Kong, first child of Jackson S. O. and Donna S. Y. Tsang.
- 1968 Eton College, Kowloon, Hong Kong, Diploma
- 1972 St. Clair College, Windsor, Ontario, General Business Certificate
- 1975 University of Windsor, Windsor, Ontario, General B.A. (Sociology)
- 1975 University of Windsor, Windsor, Ontario, Honors B.A. (Psychology)