## [Grant-in-Aid for Scientific Research(S)] Humanities and Social Sciences (Social sciences)



## Title of Project : Asia Pacific Values Survey--- Cultural Manifold Analysis (CULMAN) on peoples' sense of trust ---.

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Research Area : sociology, international relations, social psychology

Keyword: : social survey, social organization, national character, ethnicity

[Purpose and Background of the Research] The Institute of Statistical Mathematics has been conducting a longitudinal nationwide survey on the Japanese national character since 1953The survey, called "Nihonjin no Kokuminsei Chosa" (Japanese National Character Survey), stimulated many countries to carry out the same sort of time series surveys such  $\mathbf{as}$ the World Value Survey, Eurobarometer, General Social Survey of USA, ALLBUS of Germany, CREDOC of France, etc. Since 1971, our survey has been extended to a cross-national comparative study for more advanced understanding of Japanese national character. The focus of our cross-national surveys is the investigation of the statistical comparison of peoples' social values and their ways of thinking and feeling: cultural identities and people's attitudes toward economy, freedom speech. interpersonal relationships. ofleadership, politics, public acceptance of science and technology, religion, social security, etc. These aspects clarify certain similarities or dissimilarities that are represented by psychological distances between countries in certain statistical analyses of responses.

## [Research Methods]

The cross-national survey involves particular methodological problems to compare response data collected under different conditions. Thus, an important problem of our study is to investigate those conditions under which meaningful cross-national comparability of social survey data is guaranteed. As our approach towards this problem over decades, we have been developing the methodologies called CLA (Cultural Linkage Analysis) and CULMAN (Cultural Manifold Analysis). The main components of CLA are 1) a spatial link for cross-national comparison, 2) a temporal link inherent in longitudinal analysis, and 3) an item-structure link inherent in the commonalties and differences in item response patterns within and across different cultures. CULMAN is a development introducing hierarchical structures into the three types of cultural linkages.

[Expected Research Achievements and Scientific Significance] In CULMAN we utilize the back-translation technique and statistical pattern analyses such as Hayashi's Quantification Method or Yoshino's Super-culture Model. Although a simple cross-national tabulation of people's responses with respect to a single item may not be reliable because people's responses may occasionally be sensitive to slight differences in the wording of certain questions, certain pattern analyses or scaling on a set of items can be reliable.

On the other hand, we have found some response tendencies particular to certain countries. For example, the Japanese tend to avoid polar answer categories and to choose intermediate categories, whereas the French generally tend to give negative responses to any question.

We believe that our methodologies will be useful to analyze not only people's sense of trust but public opinion polls or social survey data in general.

## (Publications Relevant to the Project)

Yoshino, R.(ed.) (2007). East Asia Values Survey -- Science of Data. Tokyo: Bensei-syuppan.

- Yoshino, R., Nikaido, K., & Fujita, T.(2009). Cultural manifold analysis (CULMAN) of national character. Behaviormetrika, 36, 2, 89-114.
- Yoshino, R. (2009) Reconstruction of trust on a cultural manifold: sense of trust in longitudinal and cross-national surveys of nationalcharacter. Behaviormetrika, 36, 2, 115-147.
- Fujita, T., & Yoshino, R. (2009). Social values on international relationships in the Asia-Pacific region. Behaviormetrika, 36, 2, 149-166.
- **Term of Project** FY2010-2014
- [Budget Allocation] 114,100 Thousand Yen
- [ Homepage Address and Other Contact Information]

http://www.ism.ism.ac.jp/~yoshino/ http://www.ism.ac.jp/souran/kenkyusya/ yoshino\_ryozo.html