

# Comparison of Consciousness on Cultural Themes

## Assessment by association method

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### 連想法による文化への意識比較

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本稿は、長崎大学教育学部に所属する「異文化理解コース」履修者のコース前後の価値観の変化を連想テストの結果を基に調査したものである。比較分析の結果、1) 履修者の異文化への意識の変化、また 2) 意識変化の内容はコースで取り扱った内容を反映している、ことが確認された。

#### 1. Introduction

In carrying out a course in any educational setting, it is inevitable that teachers want to find ways of gauging the success of their course. Of course, we can set tests in order to assess the extent to which students have absorbed the course content. Furthermore, student evaluation questionnaires can provide a subjective feeling of the success from the students' point of view, and suggest areas for improvement in the future. What is more difficult is to assess the extent to which students' way of thinking has been affected as a result of their studies. While it was not the intention of this study to prove that students have been successfully inculcated in any kind of dogma, it is nevertheless of interest to all teachers to have an idea of the extent to which their own teaching has on the minds of their students. To assess changes of students' thinking sphere as a result of a course of study is the reason for using an association method. To achieve this assessment, an association test was administered on the first day, and the last day of the course.

It is also interesting to gain some insight into the extent to which our mental associations are bound by culture. To do this the responses of students in the first test were compared (where applicable) with those of British native speakers using the Edinburgh Association Thesaurus.

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## 2. Background

The respondents to the association questionnaire were mostly third-year students in the Faculty of Education at Nagasaki University. The name of the course is 異文化理解, or Understanding Culture. This course is compulsory for all students wishing to obtain their English teacher's qualification, whether as a major or a minor subject. Thirty-six students completed the first association test, thirty-four completing the second one at the end of the semester in the first half of 2009. Nine overseas exchange students also carried out the first test, but their responses were excluded from the current study.

The course is based on Geert and Gert Jan Hofstede's *Cultures and Organizations* (Hofstede & Hofstede 2005), with a focus on, not only the initial four dimensions, and their related data, but also the sections dealing with cultural differences in education. Throughout the course there were opportunities for students to explore their own feelings on the relationship between culture and values, especially in the field of education. Having carried out questionnaires with their partners, they were able to compare their own values with those of their classmates, Japan as a whole, as well as other countries, particularly from the English-speaking world. For a fuller analysis of this topic, see Brown (2005). Apart from the questionnaires, students carried out other communicative activities, such as role plays and group discussions, supported by readings from the core text and other literature.

## 3. Methodology

On the first day of the course (April 2009), students carried out association tests to ten dictated cue words, with a 50-second response time for each word. They were allowed to write as many responses as they wished within the allocated time. The responses to cue words were then calculated and displayed statistically based on information theory in Excel. An association map (using a method developed at Nagasaki University by Itoyama, Fujiki and Kamizono) for each cue word was produced displaying the results of the class as a whole. Common responses (i.e. those by which many students responded), come near to the centre of the association map. The words at the edge of circle indicate a response by only one person. The association map creates a kind of "snapshot" of the consciousness of the group at a particular time.

A second test was carried out at the end of the course (July 2009). By comparing the maps, and associated data, we can obtain a visual image of changes in the group consciousness. For a teacher, it is interesting to note, especially, where items which have been discussed or introduced during a course, have entered the association map, or have moved closer to the centre. For a more complete description of statistical background to the association maps, see Kamizono (2005a; 2005b).

Where available, the results obtained from the Word Association Database at the University of Edinburgh (<http://www.eat.rl.ac.uk/>) are included as a way of comparing

cultural differences, and as a basis for future research. It should be noted, however, that the Edinburgh data is based on single-word responses, which somewhat limits its applicability for comparison.

## 4. Results

Though a total of ten cue words were administered on both occasions, this paper will deal with a subset of cues and associations, especially those most clearly related to the content of the course. The full data set will form part of a future study.

#### 4. 1 Japan

Respondents were invited to write down all of the words that came to mind from the cue word <Japan>. The map below (Fig. 1), shows their responses, with the most frequent

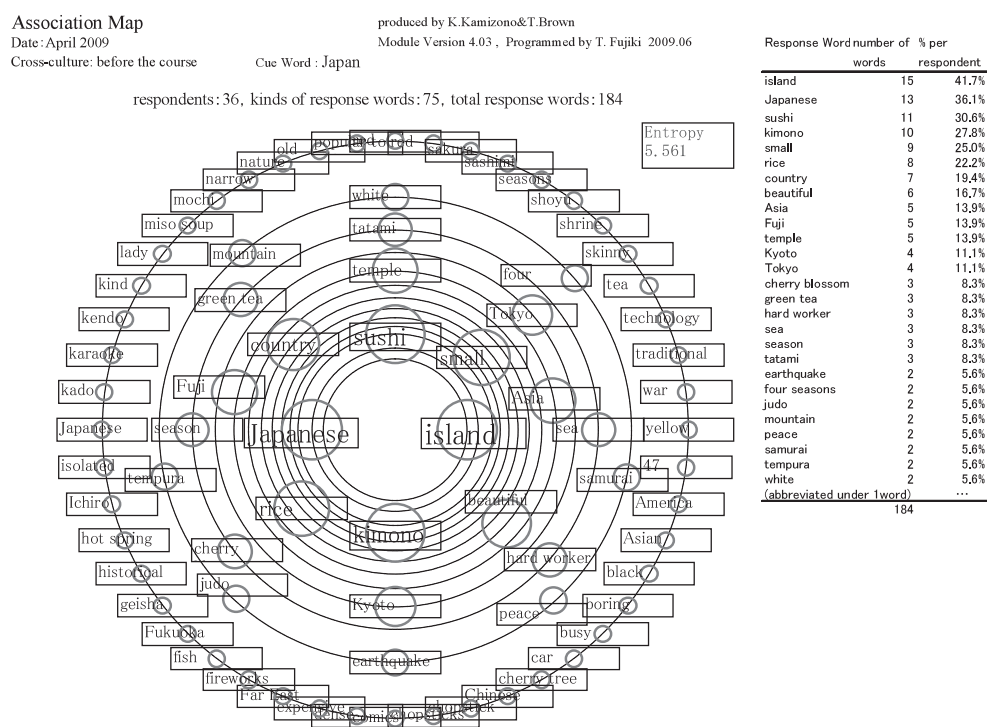


Figure 1

When compared with responses four months later (see Fig. 2), we find that students' central concept of <Japan> has changed. Words about <Japan> have increased by 56%: the number of the kinds of response word has increased from 75 to 117, despite the slightly lower number of respondents. Furthermore, the total number of response words has increased by 20.7%. This increase in number of kinds of words and total number of response words led to the much higher entropy value in the second test.



#### 4.1 Culture

Respondents were asked to write all of the words that came to mind from the cue word <culture>. The map below (Fig. 3) shows how they responded, with the most frequent answers at the centre.

Their responses are somewhat different to the most common responses from the Edinburgh database. In the Edinburgh data, “art” was by far the most common response, accounting for about 18% of 95 answers. In our study “art” was given by only three respondents, none of them as the first response. Similarly, “society” accounted for 8.4% of responses in the Edinburgh study, but was unrepresented in the data from our students. The closest common response was “music”, which was given by 8.4% of respondents in the Edinburgh data. In this study (April 2009), it was given by 13.9% of respondents, accounting for 2.7% of the total responses.

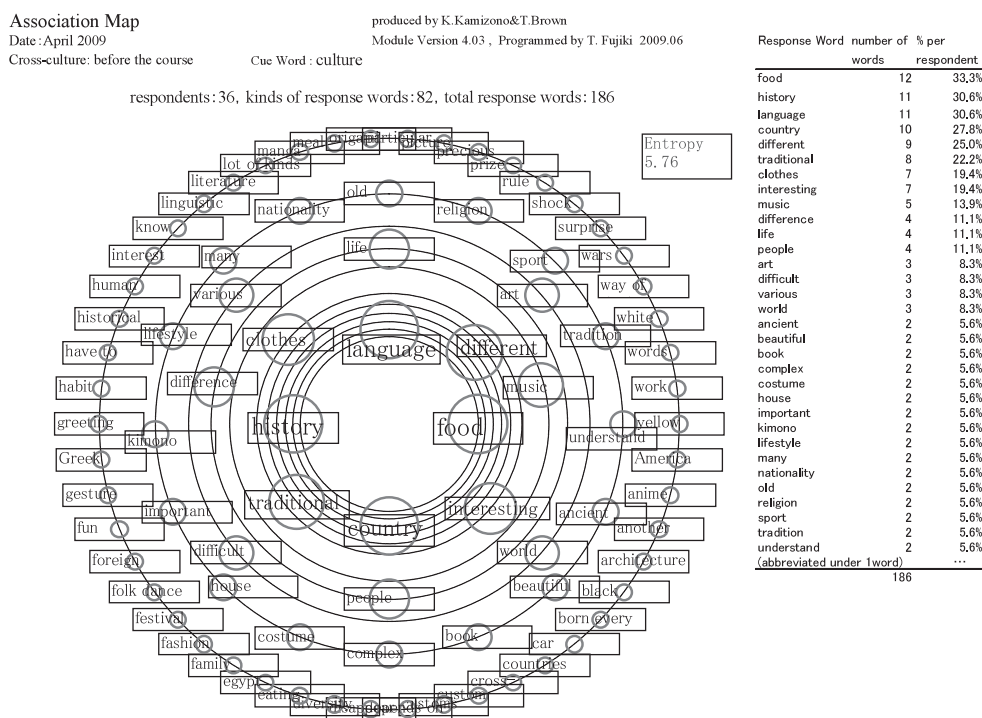


Figure 3

The most striking change in consciousness we observe when comparing the April (Fig. 3) results with those of July (Fig. 4) is that words related to difference have moved much closer to the centre. In the April test, “difference” and “different” accounted for 13 responses (36.1 % of respondents). In July, derivatives of “different” accounted for 22 responses (64.7% of respondents), with “difference” being the most common response. This indicates that the most frequent impression of students was “difference” of culture at

the end of the Understanding Culture course. A newly-appeared word as a response to <culture> after the course, “foreigner” (5 words) could be also interpreted as indicating the same tendency, awareness of difference. There seems a marked tendency for students to be more sensitive towards cultures other than their own.

Generally we also see a change from concrete terms, such as “food”, “history”, “language” and “clothes”, to more abstract ones, such as “difference” (increased 12 words), “custom” (increased 5 words), “difficult”, “people” and “way of thinking” (increased 3 words respectively). There is a clear migration in the consciousness of the students from what Hofstede and Hofstede (2005:7) describe as the “symbols” of culture, towards what he terms “values” and “rituals”. Indeed, one of the purposes of this course was to have students see culture in terms of values and behaviours, rather than simply in terms of its products. More importantly, the preponderance of variations on “different” near the centre of the map may be seen as part of an acceptance, on the part of students, of the concept of cultural relativism. In their section on cultural relativism, Hofstede and Hofstede (2005: 6) refer to Lévi-Strauss’ warning that “one culture has no absolute criteria for judging the activities of another culture as ‘low or noble’”, and go on to urge their readers to suspend judgement when observing other cultures.

#### Association Map

Date : July 2009

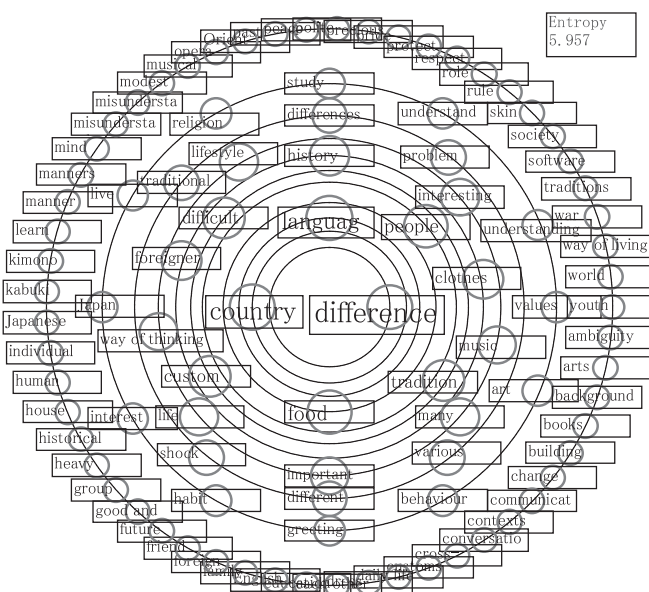
Cross-culture: after the course

produced by K.Kamizono&T.Brown

Module Version 4.03 , Programmed by T. Fujiki 2009.06

Cue Word : culture

respondents:34, kinds of response words:93, total response words:216



Response Word	number of words	% per respondent
difference	16	47.1%
country	13	38.2%
language	11	32.4%
food	9	26.5%
people	7	20.6%
custom	6	17.6%
difficult	6	17.6%
tradition	6	17.6%
clothes	5	14.7%
foreigner	5	14.7%
history	5	14.7%
important	4	11.8%
interesting	4	11.8%
life	4	11.8%
lifestyle	4	11.8%
many	4	11.8%
music	4	11.8%
way of thinking	4	11.8%
differences	3	8.8%
different	3	8.8%
problem	3	8.8%
world	3	8.8%
shock	3	8.8%
traditional	3	8.8%
various	3	8.8%
behaviour	2	5.9%
greeting	2	5.9%
habit	2	5.9%
interest	2	5.9%
Japan	2	5.9%
live	2	5.9%
religion	2	5.9%
study	2	5.9%
understand	2	5.9%
understanding	2	5.9%
values	2	5.9%
(abbreviated under 1 word)	...	...
total score	216	

Figure 4

It is also of some interest to look at the word “culture” not only as a cue word, but also as a response. In several of the maps there was a tendency for the word “culture” to move towards the centre, when comparing the July results with the previous data from April. This is seen most clearly in the responses to the cue <moral>. In the April data, 5 students (13.9%), included the response “culture” to the cue <moral>. In July this had doubled to 10 students (29.4%). There is some evidence that participants on the course, through their study, and their own discussions, had come to feel that there is a link between morality and culture, and that at least to some extent, what might seem right – even morally so – in one culture, may not be seen in the same way in another culture. This reflects some of what has been written in the literature on the relationship between morality and culture. For example, Turiel (2002: 1 - 2), summarising the views of Piaget, Freud, the Behaviourists and Durkheim, concludes that “moral development primarily involves accommodations to, and internalizations of, the norms, standards and practices of society.” Similarly, Wagner (1981: 41) describes morality as “a cultural construct”. This change in consciousness on the part of the Nagasaki students also perhaps shows a greater acceptance on their part towards cultural relativism together with the consciousness of difference. Only one respondent in the Edinburgh data gave “culture” as a response to <moral>.

#### 4. 1 School

Respondents were invited to write down all of the words that came to mind from the cue word <school>. The map below (Fig. 5) displays their responses, with the most frequent coming to the centre of the circle



## Association Map

Date: April 2009

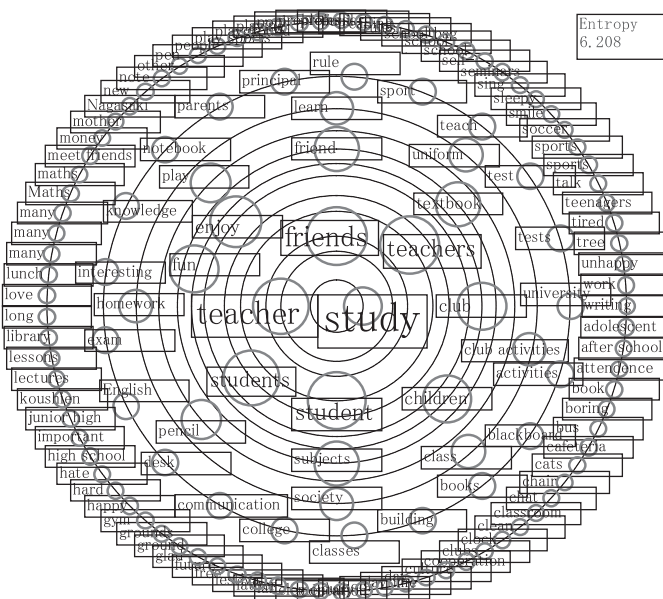
Cross-culture: before the course

Cue Word: school

produced by K.Kamizono&amp;T.Brown

Module Version 4.03, Programmed by T. Fujiki 2009.06

respondents:36, kinds of response words:127, total response words:283



	words	respondent
study	26	72.2%
teacher	18	50.0%
friends	15	41.7%
student	11	30.6%
teachers	11	30.6%
students	9	25.0%
enjoy	7	19.4%
children	6	16.7%
club	6	16.7%
fun	6	16.7%
friend	5	13.9%
subjects	5	13.9%
textbook	5	13.9%
pencil	4	11.1%
play	4	11.1%
class	3	8.3%
club activities	3	8.3%
homework	3	8.3%
learn	3	8.3%
society	3	8.3%
uniform	3	8.3%
activities	2	5.6%
blackboard	2	5.6%
books	2	5.6%
building	2	5.6%
classes	2	5.6%
college	2	5.6%
communication	2	5.6%
desk	2	5.6%
English	2	5.6%
exam	2	5.6%
interesting	2	5.6%
knowledge	2	5.6%
notebook	2	5.6%
parents	2	5.6%
principal	2	5.6%
rule	2	5.6%
sport	2	5.6%
teach	2	5.6%
test	2	5.6%
tests	2	5.6%
university	2	5.6%
(abbreviated under 1 word)	...	...
	283	

Figure 5

Generally speaking there are no big surprises here. The distribution of responses is largely what we might expect. Kamizono found a universality of the image of <school>, which is constructed of teacher, study and students (friends), comparing associations in Germany, Malaysia and Japan (Kamizono 2003). Also, unlike most categories, this cue word elicited responses not unlike those from the Edinburgh database. In the Edinburgh data “teacher” accounted for 6.5% of responses. In this study, it accounted for 8.9% of total response words. Responses in Edinburgh of “boy” or “girl” made up 14% of the total, while in the Nagasaki University class, “student”, “students” and “children” accounted for 12.8%. Obviously there is an element of collocation in the native speaker responses, which was largely unseen in the Nagasaki data. Indeed, according to Aitchison (2003: 86) collocation is the second most common word association response among native speakers (see also McCarthy (1990: 12 – 15); Schmitt (2000: 76 – 81)). Unfortunately, such comparisons are beyond the scope of this paper, and will be investigated further in a future study.

When we compare the map for the post-course data (see Fig. 6), what immediately stands out is the fact that “rules” has come close to the centre. Indeed 16 out of 34 students (47.1%) gave “rules” as one of the responses, compared with only three (8.3%), who responded with “rules” or “rule” in the April data. When exploring the concept of Japan as a highly uncertainty avoiding culture (Hofstede 1980: 187, Hofstede & Hofstede 2005: 168; 178 – 181), there was a great deal of discussion on the preponderance of rules,



### Association Map

Date : July 2009

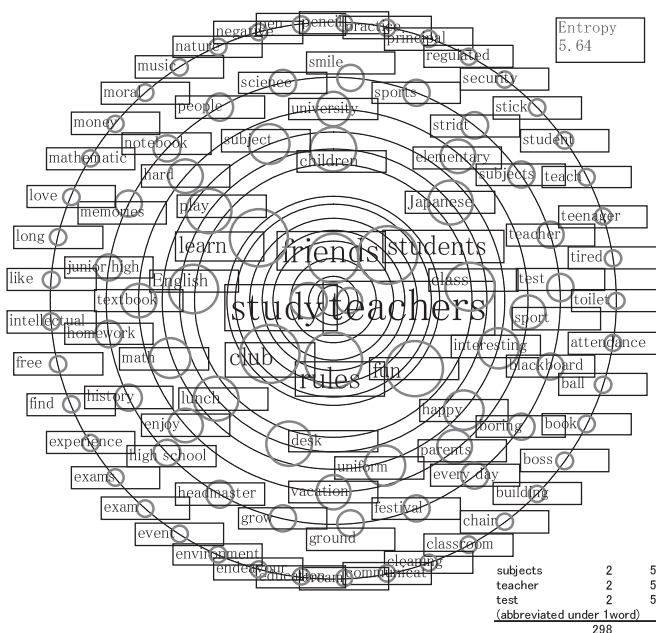
Cross-culture: after the course

produced by K.Kamizono&T.Brown

Module Version 4.03 , Programmed by T. Fujiki 2009.06

Cue Word : school

respondents:34, kinds of response words:90, total response words:298



Response Word	number of words	% per respondent
teachers	28	82.4%
study	25	73.5%
friends	20	58.8%
rules	16	47.1%
students	14	41.2%
club	12	35.3%
learn	10	29.4%
fun	9	26.5%
class	6	17.6%
English	6	17.6%
children	5	14.7%
at	5	14.7%
Japanese	5	14.7%
lunch	5	14.7%
play	5	14.7%
happy	4	11.8%
interesting	4	11.8%
math	4	11.8%
subject	4	11.8%
uniform	4	11.8%
elementary	3	8.8%
enjoy	3	8.8%
hard	3	8.8%
parents	3	8.8%
sport	3	8.8%
textbook	3	8.8%
university	3	8.8%
vacation	3	8.8%
blackboard	2	5.9%
boring	2	5.9%
every day	2	5.9%
festival	2	5.9%
ground	2	5.9%
grow	2	5.9%
headmaster	2	5.9%
high school	2	5.9%
history	2	5.9%
homework	2	5.9%
junior high	2	5.9%
memories	2	5.9%
notebook	2	5.9%
people	2	5.9%
science	2	5.9%
smile	2	5.9%
sports	2	5.9%
strict	2	5.9%

Figure 6

The association test can be a valuable tool in the arsenal of teachers wishing to evaluate and improve their courses. It shows, both in figures and visually through comparing association maps, changes in the consciousness of a group of students over a period of time, such as a course of study.

- Certain key elements of the course had entered their consciousness, which had previously not been present. These relate to Japanese culture in terms of being collectivist, masculine, and uncertainty averse.
- The movement of “difference” to the centre of the <culture> map, as well as the

movement of “culture” towards the centre of the <moral> map, indicate a tendency of respondents to be more sensitive to cultural diversity and cultural relativism.

- Students were generally more objective in their responses in the second survey.

In terms of further study, the following points bear making:

- This is basically a pilot study. However, it will be worth continuing over time, in order to gather a larger body of data.
- Though it is interesting to compare results with the Edinburgh database, it will be more useful to carry out a more “like with like” comparison, for example an identical association test with 100 Japanese students and 100 native English speakers.
- A forthcoming study will also compare this data with that of Japanese students doing an identical association test in their native language. This might help in understanding the way choice of language affects consciousness.
- A similar type of test can also be used to evaluate vocabulary acquisition by learners of English. Though this kind of technique is not new, the use of association maps, especially combined with breakdown by lexical relationship can be a powerful tool in exploring the acquisition of lexis.

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