

Framing How China is Taught:  
Presentation to and Perceptions of Current American College Students

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## **Introduction**

This study represents the second part of an examination of didactic methods in educating students about China. The previous study involved extracting the most frequent terms used in a combined document containing two separate articles written on China. After some adjustments were made: introducing “Japan”, Korea, and India as terms, then the most frequent terms from the combined analysis were used to create a Galileo™ survey. Each of the terms was paired with another term once and presented to the participant to evaluate how dissimilar or similar they related the two to be.

Participants was asked to rate these pairings with a magnitude scale of 0 to 100, where 0 represents the two terms being so similar that they are the same, and, 100 would represent the two terms being so different that they are opposites.

The students surveyed for the purpose of this project were eight students studying at the SUNY University of Buffalo. Due to technical difficulties, one student’s data set was omitted. While all students are from different backgrounds, they represent potential candidates whose educational backgrounds may have been influenced by the two articles analyzed to construct the survey. The defining characteristics that these students share together is that they are all attending an American college. Other than that, their educational and life backgrounds are divergent. Three of the students are from Buffalo, three from New York City, one from Pennsylvania two of them define their nationality as Asian, and, five of the students surveyed have traveled to China at least once. With the exception of one student, all of them have had experiences with Asian languages. All of the students know this writer, and one of them is related.

## **Data**

The tools used to complete this work, including the previously mentioned Catpac, are a group of powerful cerebral mapping tools known as Galileo™. This program analyzes text, removing unnecessary words, to create a list of the most frequent key terms. These terms were then examined, evaluated, adjusted and then entered into another program in order to create a survey for college students. This survey contained a set of 15 terms, and it created individual questions by pairing two terms at a time. The fifteen terms selected were:

- |                  |                   |
|------------------|-------------------|
| 1. China         | 9. Chinese People |
| 2. Japan         | 10. Powerful      |
| 3. Korea         | 11. Foreign       |
| 4. United States | 12. Jobs          |
| 5. India         | 13. Growing       |
| 6. Rich          | 14. War           |
| 7. Leader        | 15. Yourself      |
| 8. Communist     |                   |

For a further analysis of the post-survey results, the fifteen terms were then further sorted as being either objects or attributes, and then entered into a different program and computed along with the results from the surveys. This program created tables based on the participants' responses coinciding with the new division of the terms. The five objects drawn from the fifteen terms in this section were:

- |          |                  |
|----------|------------------|
| 1. China | 4. United States |
| 2. Japan |                  |
| 3. Korea | 5. India         |

The other ten terms were then resultantly defined as attributes.

The first sample presented is created by mean Galileo™ distances generated from the collected survey data. From the five countries selected, the data relative to the “United States” and “China” is displayed as it is most relevant to the topic.

The information displayed in sample one shows the mean attribute values that “China” and the “United States” are assigned by students on a scale from 0-100. The number 9 represents the total of 9 attributes that a country is evaluated by.

#### (China Mean Galileo Distances Table)

With most of the values, “China” is determined to be closer to all of them. The only two values that are almost neutral in their orientation, that is, being neither very close to “China” or very far are: “Leader”, “Communist”, and “War”.

#### (United States Mean Galileo Distances Table)

In comparison with “China”, the “United States” displays more divergent values, having a few that are much closer to 0, and, notably, two terms that are very distant: “Communist” and “Foreign”.

The information in the following Z-score tables is evaluated once again by the distance of an attribute from a concept, or country in this case. This data is defined as Standard Errors of Differences, or Z-Scores. If something is closer to concept A, then it will have a negative score, if it is closer to concept B, it will have a positive score. The program also adds an S to the table if the result is significant. Just as with sample one, data tables comparing “China” and the “United States” with other objects have been specifically chosen for display and discussion.

#### (Standard Errors of Differences (Z-Scores) China & Japan)

In the China Japan table, the data shows slight variances towards either nation not exceeding 1.0 in some cases. Significant data, also noted by the program, would be that the attribute “Leader” is placed closer to “Japan”; and, the attribute “Yourself” is placed closer to “China” than “Japan”. This writer would also note that “Foreign” is placed closer to “China”.

(Standard Errors of Differences (Z-Scores) China & Korea)

In comparing “China” with “Korea”, statistically significant results are that: “India” is viewed as closer to “China” than “Korea”; the attribute of “Powerful” is placed nearer to “China” than to Korea; and, the attribute of “Yourself” is once again placed closer to “China”. This writer would still note that the concept of “Foreign” is nevertheless still placed nearer to “China”.

(Standard Errors of Differences (Z-Scores) China & United States)

In comparing “China” and the “United States”, statistically significant results are: “Korea” being placed closer to “China” than to “United States”; “Leader” being placed closer to the “United States”; “Communist” is placed closer to “China”; “Foreign” is placed closer to “China”; “War” is placed closer to the “United States”; and, “Yourself” is placed closer to the “United States”.

(Standard Errors of Differences (Z-Scores) China & India)

Statistically significant results emerging from the standard errors of distance between “China” and “India” are: “Japan” is placed closer to “China” than “India”; “Korea” is placed closer to “China” than “India”; “Powerful” as an attribute is determined to be nearer to “China” than India; “War” as an attribute is determined to be closer to “China” than “India”; and, “Yourself” as an attribute is determined to be closer to “China” than “India”.

The information in the coordinate grids is generated by use of two separate programs in the Galileo™ suite. The first program, Microgal, takes the data and generates coordinate data; this data is then used by a second program called Thought Vision 32 (TV32) to create 3-D coordinate grids that can be navigated by the user. The following two samples will be two different perspectives on the same coordinate grid generated by TV32.

Both coordinate grids provide perspectives broader than that of the Z-score tables, which condense the data down to pairings of objects and attributes. With this method, the five objects (countries) are placed across the grid along with the ten attributes. A term’s distance on the y-axis is highlighted by a cube. To locate the origin of the term on the surface of the grid, one follows the cube down the line and connects to it, until it reaches to surface of the grid, where it is planted with an “x”.

Coordinate grid one provides a view of one side of the z axis of the grid. On this side of the grid there are only the two attributes: “United States” and “Korea”. Attributes include: Far, “Communist”, “Powerful”, “Leader”, and “Yourself”. This image of the data shows that the “United States” forms a center point on the grid between “Leader”, “Powerful”, and “Yourself”. Worth noting also is that only “Korea” as an object is on the same side of the z axis as the “United States”. Interesting to note also is that “Communist” is on the current side of the z axis, and, it is not on the same side as “China”.

(Coordinate Grid One)

Changing perspective to the other side of the z axis, the objects: “India”, “China”, and “Japan” appear. The attributes on this side include: “Chinese People”, “Foreign”, “Rich”, “Jobs”, and “Growing”. Each object has one or more attributes near to it: near to “China” is “Chinese People” and “Foreign”; near to “India” is “Jobs”; near to “Japan” is “Rich”; and, nearest to “India”, yet almost equidistantly far from each object is “Growing”.

(Coordinate Grid Two)

## **Discussion**

One outside factor not accounted for by the four demographic questions at the end of the survey is the fact that all of the participants know this writer, and thus they do not form a random sample of students.

Other factors worth noting that affect this survey is the fact that each student has a potentially divergent high school experience, and therefore will approach the college experience with a different perspective and understanding of the world.

Notable results from the Galileo Mean Distances of the object “China” is the nearness of “China” to all nine attributes: “China” does not have a single attribute that is placed at a distance of 50 or higher. This result is interesting, and would suggest that the students’ perceptions conform to the information drawn from the two articles, given that they have placed all of the culled attributes closer than farther to “China”. Given that these students were not asked if they had read either of the two articles, we cannot conclude that there is necessarily a relation.

Examining the Z-Scores, there is more divergence in the results when “China” is set against other countries. Juxtaposed against “Japan”, nine of the results favor “China”, and six of them favor “Japan”, showing that student’s perceptions of “Japan” begin to challenge the initial placement of attributes from sample 1. Nevertheless, none of the attributes are significantly closer to “Japan” with the exception of “Leader”. This divergence is interesting, as one would consider that in the current political climate, China seems to be constantly in the headlines. As to what aspect of “Japan” or totality thereof that causes surveyors to equate “Japan” with Leader, this writer will decline to comment or speculate as it is neither discussed in the articles nor the focus of this survey.

In comparing the results of “China” and Korea, the z-scores show that “China” is favored with ten of the fifteen terms being placed closer to it. Significant differences in scores appear with the object “India”, and the attributes of “Powerful” and “Yourself”. As to why “India” is placed closer to “China” than Korea, this writer has no grounds to make conjecture except geographic. While it is significant, that the surveyors view “China” as a more powerful concept between itself and Korea, it is even more interesting that the survey takers placed themselves closer to “China” than Korea, especially when the spacial placement of “Foreign” as an attribute is closer to “China”. The results almost seem contradictory, and one would speculate that there are potential attributes of “China” that survey takers identify more with than those of Korea, despite “Foreign” still being placed closer to “China”.

When compared with the “United States”, once again ten of the objects and attributes are placed closer to “China” than to the “United States”. What is distinct in this survey, is that for the first time the z-scores of “China” are significant with regards to “Communist” and “Foreign”. Thus, this writer would note that America seems to have a polarizing effect on these attributes of “China”, forming a counterpoint. Additionally, there are three terms: “Leader”, “War”, and “Yourself” that show significant Z-scores favoring the “United States”.

The z-scores table comparing “China” and “India” displays the biggest shift towards “China”: twelve of the fifteen objects and attributes are placed closer to “China” than to “India”. “Growing” is curiously neutral between the two nations, suggesting that the concept is placed equidistant from the two, yet the table indicates “China” is slightly favored: -0.00. Significant in this case is that not only has “Powerful” been placed closer to “China”, but, both “War” and “Yourself” has also been placed closer. Only in this comparison of “China” and “India” has “War” been placed closer to “China” with significant z-scores.

From all the tables and the sample eight grid, it is interesting to note that the concept of “Foreign” is consistently placed closer to “China”; yet, with the exception of the China-US tables (Sample 5), “Yourself” is also consistently placed closer to “China” than any other country concept. What is otherwise interesting is that “China” is rated in at least two tables as having significant z-scores for “Powerful”, yet only one table has significant z-scores for “War”. Moreover, it is interesting that in the China-United States table, the attribute of “Powerful” is only slightly closer to the US, with non-significant Z-scores that do not exceed 1.0.

The TV32 images reveal a slightly different view of the objects and attributes than the z score tables. Given that the perspective of the images is not juxtaposing one object against another, it leaves a more free open view of each concept – given that there is no breakdown of five objects and ten attributes in the coordinate grid. The grid shows that each previously designated object (nation) has at least one attribute close to it. Focusing on “China”, the attribute “Foreign”, after “Chinese People”, is the closest attribute.

While sample one of mean Galileo™ distances shows that all of the attributes are less than fifty units away from “China”, the z scores tables and TV32 images show that certain attributes are closer to certain objects – assuming we are bearing in mind that these fifteen original concepts are now divided into five objects and ten attributes. What is unique in these results is that the attribute “Foreign” is consistently placed close to “China”. Interesting also, is the fact that “Communist” is placed on the opposite side of the z axis from “China” in the TV32 images. This distance bears out in the z scores tables, where “Communist” is only significantly closer to “China” when China’s data is compared to that of the United States.

## **Conclusion**

This survey represents a model and a first attempt into gauging perceptions of college students in the American education system. Future surveys could use a larger pool of students and colleges/universities, along with a randomized group of students. Possible considerations for

future research would also be to consider the different parts of China, such as Hong Kong and Taiwan; breaking down China into three objects of Hong Kong, Mainland, and Taiwan could produce interesting and more specific results. If Korea is to be further utilized as a concept, it is also worth considering dividing it into the concepts of North and South for the same reason just discussed.

## Resources

- “What I Wish My College Students Already Knew about PRC History”, *Social Education*, vol. 74, no. 1 (January/February 2010): 12-16.
- Neighbor, T. (2003). Top 10 Things To Know About China In The Twenty-First Century. *Education About Asia*, 8(3).
- Beyer, Daniel “Framing How China is Taught: Analyzing Didactic Writing on China”. (2015).

## Index

### MEAN GALILEO DISTANCES

Object: CHINA

Attribute	Distance	N
RICH	34.22	9
LEADER	45.44	9
COMMUNIST	49.00	9
CHINESE PEOPLE	14.56	9
POWERFUL	19.89	9
FOREIGN	24.78	9
JOBs	34.67	9
GROWING	28.22	9
WAR	44.56	9
YOURSELF	34.78	9

### MEAN GALILEO DISTANCES

## Object: UNITED STATES

Attribute	Distance	N
RICH	36.44	9
LEADER	14.00	9
COMMUNIST	76.00	9
CHINESE PEOPLE	49.22	9
POWERFUL	15.44	9
FOREIGN	60.67	9
JOBS	42.67	9
GROWING	44.89	9
WAR	13.89	9
YOURSELF	11.78	9

## STANDARD ERRORS OF DIFFERENCES (Z-SCORES)

Objects: CHINA

JAPAN

Attribute	Z-Score
CHINA	-3.30 S
JAPAN	3.30 S
KOREA	-0.88
UNITED STATES	0.23
INDIA	-0.92
RICH	0.89
LEADER	1.32 S
COMMUNIST	-0.76
CHINESE PEOPLE	-2.83 S
POWERFUL	-0.56
FOREIGN	-1.24
JOBS	0.37
GROWING	0.22
WAR	-0.94

YOURSELF -2.38 S

STANDARD ERRORS OF DIFFERENCES (Z-SCORES)

Objects: CHINA

KOREA

Attribute	Z-Score
=====	=====
CHINA	-3.80 S
JAPAN	-0.85
KOREA	3.80 S
UNITED STATES	0.02
INDIA	-1.29 S
RICH	0.59
LEADER	0.97
COMMUNIST	-0.08
CHINESE PEOPLE	-3.12 S
POWERFUL	-1.75 S
FOREIGN	-1.23
JOBS	-0.31
GROWING	-0.29
WAR	0.47
YOURSELF	-2.21 S

STANDARD ERRORS OF DIFFERENCES (Z-SCORES)

Objects: CHINA

UNITED STATES

Attribute	Z-Score
=====	=====
CHINA	-4.88 S
JAPAN	-1.22
KOREA	-1.41 S
UNITED STATES	4.88 S

INDIA	-0.86
RICH	-0.15
LEADER	2.19 S
COMMUNIST	-1.32 S
CHINESE PEOPLE	-2.12 S
POWERFUL	0.40
FOREIGN	-2.04 S
JOBS	-0.55
GROWING	-1.17
WAR	2.93 S
YOURSELF	1.60 S

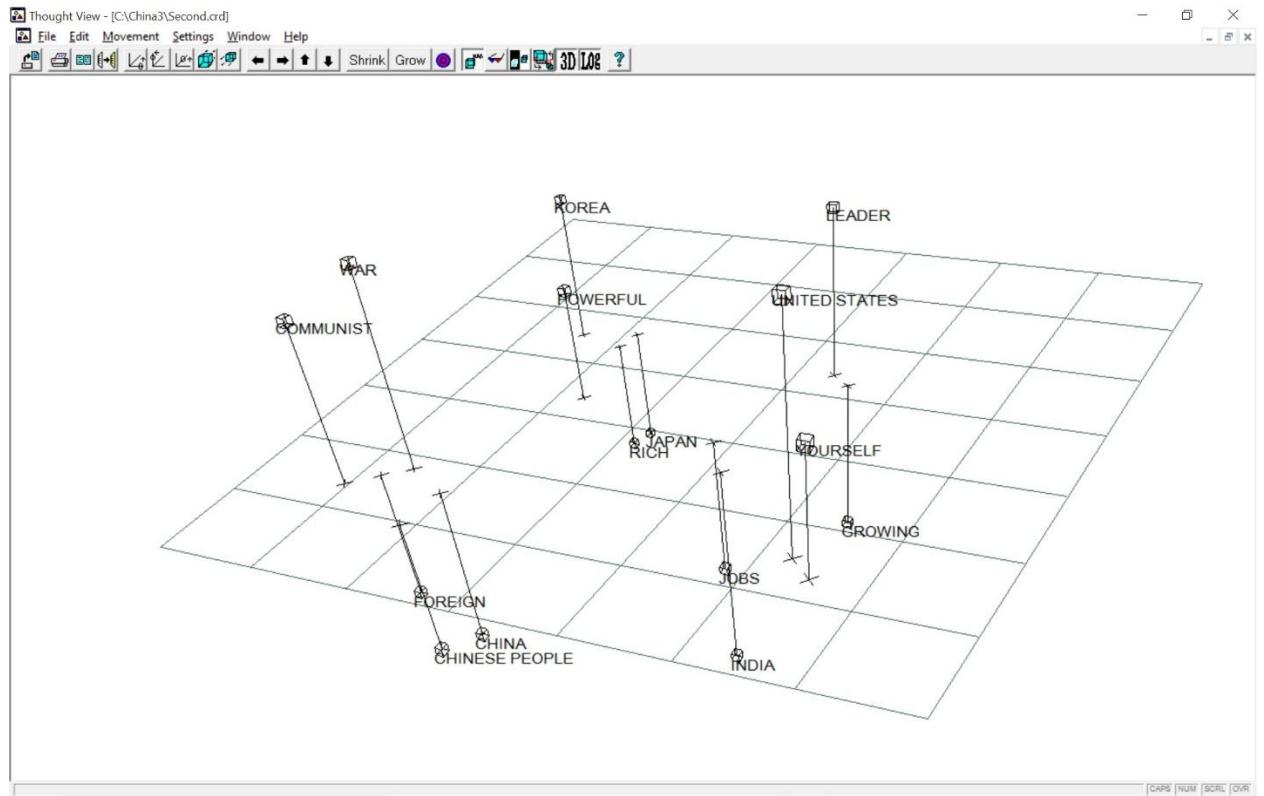
## STANDARD ERRORS OF DIFFERENCES (Z-SCORES)

Objects: CHINA

INDIA

Attribute	Z-Score
=====	=====
CHINA	-4.40 S
JAPAN	-1.71 S
KOREA	-2.16 S
UNITED STATES	-0.14
INDIA	4.40 S
RICH	0.06
LEADER	-0.25
COMMUNIST	-1.18
CHINESE PEOPLE	-2.86 S
POWERFUL	-1.92 S
FOREIGN	-1.10
JOBS	0.34
GROWING	-0.00
WAR	-1.54 S
YOURSELF	-2.18 S

### Coordinate Grid One



### Coordinate Grid Two

