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APPENDICES

Appendix A

Extracts of a tape-recorded interview

Q: referring to interviewer's questions

A: referring to respondent's answers

A1: In Thai

Q: ขอทราบชื่อครับ

A: .....

Q: อายุครับ

A: สามสิบหกปี

Q: เป็นคนจังหวัด

A: กรุงเทพฯค่ะ

Q: ที่บ้านพูดภาษาอะไรครับ

A: ภาษาไทยค่ะ

Q: ทำงานมานาน

A: สิบสองปีแล้วค่ะ

Q: ตั้งแต่จบ

A: ตั้งแต่จบ จบ ม.แปดที่มาแตร์เดอีนะค่ะ แล้วก็แค่นั้นเอง แล้วก็ไม่ได้เรียนต่อ ไปทำงานที่โรงแรมนิวอัมรินทร์ ตรงศรีอยุธยา แล้วก็ซักสองสามปีแล้วก็มาทำนี่เป็นรีเซพชันนิสท์ ปีหนึ่งเก้าเจ็ดเก้า

Q: ที่นี่สิบสองปี

A: สิบสาม ปีนี้สิบสาม

Q: ที่นิวอัมรินทร์กี่ปี

A: สามปี

Q: เป็นสิบห้าปี

A: ค่ะ

Q: ที่มาแตร์เรียนตั้งแต่ชั้น

A: อนุบาล

Q: กี่ปี

A: เรียน เรียนมาแตร์ อนุบาล ตั้งแต่อนุบาลถึง ม.แปด จบก็สิบเจ็ดสิบแปด

Q: เป็นสิบสี่ปี

A: จบอายุสิบเจ็ดหรือสิบแปด แล้วเริ่มทำงาน ทีแรกไปเป็นไกด์บริษัทที่พี่เขย ทำงานอยู่สองปีกว่า แล้วก็ไปสอบ ทีแรกสอบเอ็นแล้วไม่ติด เลยไปเป็นไกด์ ทีนี้ คือ ไปฟังเขา พี่อยู่บ้านว่าง ๆ ไม่มีอะไรทำ พี่สาวเลยบอกไปนั่งที่ บริษัท ไปนั่งมั้ย พอนั่ง เขาก็ชวนออกไปทัวร์ ออกไปเขาถามเข้าใจไหม ก็เข้าใจ ก็เลยให้เป็นไกด์ ก็เลย ไม่_รู้_ว่านิกยังไงก็ลง พูดได้ ฟังกัน รู้เรื่องก็ไปกันเลย ทีนี้ ก็เลยพอเสร็จแล้วสอบเอ็นอีกปีหนึ่งไปติดเชียงใหม่ แม่ไม่ให้ไป พ่อเป็นสิงคโปร์ แต่ว่าคุณพ่อไม่เกี่ยวเรื่องภาษาเลย เพราะว่า ไม่ได้ใช้กับพ่อเลย เพราะเวลาอยู่กับคุณพ่อก็ภาษาไทยตลอด

Q: อยู่มาแตร์พูดอังกฤษตลอด

A: ไม่ได้พูดตลอดนะค่ะ เฉพาะวิชาภาษาอังกฤษเท่านั้นเองซึ่งบางครั้งเนี่ย ครู_ที่สอนภาษาอังกฤษเป็นคนเนปาลบ้าง เป็นคนฟิลิปปินส์มั่ง เป็นชาวต่างประเทศที่โรงเรียนนี้คือย่างนิง คือว่า เขาเอาครู_เนี่ย ต่างสัญชาติมาสอนภาษา ทีนี้ ตอนที่ไปฟังที่ ตอนที่ไปทำงานที่นิวอัมรินทร์ที่แรก ไปเป็นรีเซพชันนิสท์กับเพื่อน ๆที่จบที่นครปฐม อัคนจบวิทยาลัยกรุงเทพ หรือไงเนี่ย ไปยืนกันสามคน ฝรั่งก็มาพูด เราฟังเข้าใจแต่สองคนนั้นเขาไม่เข้าใจ ก็แบบดีอย่างเราฟัง สำเนียงออกบ้างเป็นส่วนมาก เพราะว่าฟังเราฟังตั้งแต่เด็กต่างชาติมา ใช่ไหมฮ่ะ เราก็ฟัง เขาคงต้องการอย่างนี้

Q: พูดอังกฤษกี่ปี ตั้งแต่

A: ครูต่างประเทศ ปอเจ็ดมั้งค่ะ แต่ก่อนมีปอเจ็ด ปอหก ปอเจ็ดได้พูดแล้ว

Q: ทำทัวร์ไม่มีปัญหา

A: ไม่มี พูดฟังได้ ไม่ทราบเหมือนกันนะฮะ ตัวเองยังแปลกใจตัวเองเหมือนกัน ว่าทำไมถึงพูดฟังได้ แล้วก็ภาษาที่เรียนที่มาแต่ร์นะค่ะ สมมติคะแนนซักสามสิบนะค่ะ จะได้แค่สิบเก้า แต่บางทีก็ท้อป แล้วบางทีก็ใกล้ ๆ จะครึ่ง ๆ เลยฮะ มันไม่เยียมและก็ไม่ใช่แย่ซะเลย แต่เป็นบางครั้งเท่านั้นเอง แต่บังเอิญที่ไปทำทัวร์เนีย เขาก็ยังคงอยู่นะฮะ พี่เขยเค้างงว่าทำไมพูดได้ เราก็งงว่าทำไมพูดได้

A2: In English

Q: What's your position?

A: I'm the assistant front office manager.

Q: And what do you do in that position?

A: Just control the staff to work in each section and make sure that they assign the right room to the right guest because we have many corporate guest and most of them request they request a lot like big bed, facing the pool, which floor, high floor, lower floor, so we have to assign the right room to them otherwise we will have a problem upon checking in. Make it smooth, checking in and checking out.

Q: They call in in advance?

A: Yes, they call in, right.

Q: And the guest knows which room..

A: Right, right.

Q: These like a corporate house.

A: Right.

Q: They came here..

A: Right.

Q: What kind of...?

A: Many of them like IBM... something like that. Japanese and also German, ... something like that. Many of them. A lot, a lot of corporate guest.

Q: You pick up a lot at the airport?

A: We will pick them up if they ask for it.

Q: Otherwise they make their own way.

A: Right.

Q: We have our airport representative at the airport to take care. In the morning they'll have all the arrival list. They'll have the arrival list. When guest name and the flight number so they attend to the exit, where the guest coming.

Q: The guest know already if they would be picked up.

A: Right, right. If they request in advance. If they not, our airport representative will arrange the limousine for them.

Q: How long have you worked here?

A: Nearly thirteen years.

Q: Really? Most senior?

A: I found that I was the youngest one at the front office. Now nearly to be the oldest one.

Q: Have you always worked in the front office?

A: Right, only front office. Many positions, like two

year's guest relation officer, front desk supervisor and the rest assistant front office manager.

Q: How many people you have under you?

A: Forty, maybe more.

Q: How long is the shift?

A: Three, twenty-four hours.

Q: Two positions per shift?

A: No, guest relation around four, two to four. Guest relation officer between shift and the receptionist three, three to four and concierge, one to two, and cashier two to three.

Appendix B

The chi-square test

The chi-square test (χ^2) is the test that can be used to compare the frequencies which are actually observed with those that are expected on the basis of some theoretical model. χ^2 is calculated as

$$\chi^2 = \Sigma \frac{(O - E)^2}{E}$$

where

O = observed frequency

E = expected frequency.

The following is an example of the use of χ^2. Table B.1 (taken from Table 5.1 in Chapter 5) presents the frequencies of T(r) variants in the prevocalic position of male and female speakers.

First, calculate the expected frequencies in each cell by using the formula

$$E = \frac{\text{row total X column total}}{\text{grand total}}$$

Table B.1 - Frequency of T(r) variants by sex

Prevocalic T(r)

	Male	Female
[r]	45	98
[ɹ]	191	67
[l]	1.906	2,021
Total	2.142	2,186

Table B.2 - Frequency of T(r) variants by sex

Prevocalic T(r)

	Male	Female	
[r]	45	98	143
[ɹ]	191	67	258
[l]	1,906	2,021	3,927
Total	2,142	2,186	4,328

Table B.2 presents the row total and grand total of variants used. To get the expected frequency of the first cell (the use of [r] by male), we calculate as follows:

$$E = \frac{2142 \times 143}{4328}$$

$$= 70.7$$

The same process is repeated to find the expected frequencies of the other cells. Table B.3 presents the expected frequencies of all the cells.

Table B.3 - Expected frequency of T(r) variants by male

Prevocalic T(r)

	Male	Female	
[r]	70.7	72.3	143
[ɹ]	127.6	130.4	258
[ɻ]	1,943.5	1,983.5	3,927
Total	2,142	2,186	4,328

Next compare each respective cell of Table B.2 with Table B.3 as follows:

$$\chi^2 = \Sigma \frac{(O - E)^2}{E}$$

$$= \frac{(45-70.7)^2}{70.7} + \frac{(191-127.6)^2}{127.6} + \frac{(1906-1943.5)^2}{1943.5}$$

$$+ \frac{(98-72.3)^2}{72.3} + \frac{(67-130.4)^2}{130.4} + \frac{(2021-1983.5)^2}{1983.5}$$

$$= 9.4 + 31.4 + 0.7 + 72.3 + 30.8 + 0.7$$

$$= 82.1$$

The sum of all the $(O-E)^2/E$ values is the value of the test statistic χ^2, which in the present case is 82.1. We look up for a table of χ^2 values (most statistics texts provide such a table) to determine whether our value is statistically significant. The table requires us to know the number of *degree of freedom*, which means the number of cell entries we are free to vary without also determining the value in additional cells. The general formula for computing degrees of freedom (d.f.) is $(R-1) \times (C-1)$, where R = number of rows in the table and C= number of columns. A χ^2 table tells us that for 2 d.f., a χ^2 value of 13.82 is significant at .001. Our value of 82.1 is far

above 13.82. We conclude that the relationship between sex groups and T(r) variation in Table C.1 is statistically significant at the p = .001 level (Butler 1985:98-126).

Butler (ibid.) says that the chi-square test is unreliable when the expected frequency in any cell falls below 5. However, according to Blalock 1981:292), if the number of cells is relatively large and if only one or two cells have expected frequencies of 5 or less, then it is generally advisable to go ahead with chi-square tests.

Appendix C

The Spearman rank correlation coefficient (r_s)

Correlation is an area of statistics which is concerned with the study of systematic relationships between two (or more) variables. It attempts to answer questions such as: Do high values of variable X tend to go together with high values of variable Y? Or do high values of X go with low values of Y? Or is there some more complex relationship between X and Y, or perhaps no relationship at all? (Butler 1985:137-153).

In order to find out the correlation between two variables, a descriptive statistic known as a correlation coefficient is calculated. The value of the correlation coefficient varies from +1 for perfect positive correlation, through zero for no correlation, to -1 for perfect negative correlation. For ordinal variables, the appropriate measure is the so-called *Spearman rank correlation coefficient*, which is based solely on the ranking of the observations.

To calculate the rank correlation coefficients, first rank the set of N scores on the first variable from smallest (1) to largest (N). Next, rank the set of scores on the other variable from 1 to N. If there are

ties, use the arithmetic mean of the ranks that would have been received. For example, if what would have been the fifth and sixth scores are tied, each will be scored 5.5. Thus, each subject (or each case) has two ranks, one on each variable. For each pair of ranks, calculate the difference (d) between the ranks and square it (d^2). The Spearman correlation coefficient (r_s) is calculated as

$$r_s = 1 - \frac{6\Sigma d^2}{N(N^2-1)}$$

If the r_s value as computed from the sample is very low, then it probably will not be either empirically or statistically significant. If the r_s is quite high (e.g. .75 or higher), then it will be empirically significant and probably statistically significant. However, it could fail to be statistically significant if the sample size were very small (Bailey 1980: 344-345). Kurtz (1983:272) gives a table of the range of r_s values and its level of association (see Table C.1). If the r_s is of intermediate value, the researcher may wish to test for statistical significance by using the formula above.

The following is an example of the use of the Spearman correlation coefficient. Table C.2 presents the percentage of [ø] in Thai and [ø] in English of eight Job

level IV Type II/III female subjects (taken from No. 15, Table 7.20 in Chapter 7) To calculate r_s, first rank the percentages of [ø] in Thai from 1 to 8, with the mean rank to the group of tied scores. Then, rank the percentages of [ø] in English from 1 to 8. Next, calculate the difference between ranks for each pair of [ø], and square it. Summation over all eight pairs of [ø] gives Σd^2. These operations are shown in Table C.3.

Table C.1 - r_s value and its level of association

r_s value	Level of association
.75 - 1.00	Very high association
.50 - .74	High association
.25 - .49	Moderate association
.00 - .24	Low association
.00 - -.24	Low association
-.25 - -.49	Moderate association
-.50 - -.74	High association
-.75 - -1.00	Very high association

Table C.2 - Scores (%) of [ø] in Thai and [ø] in English of eight Job level IV Type II/III female subjects

Subjects	[ø] in Thai	[ø] in English
F4-3-1	100.0	77.8
F4-3-2	93.1	77.8
F4-3-3	92.3	100.0
F4-3-4	100.0	61.9
F4-3-5	88.5	50.0
F4-3-6	100.0	53.8
F4-3-7	100.0	18.1
F4-3-8	87.0	20.0

Table C.3 - Ranking of the scores of [ø] in Thai and [ø] in English, and calculation of Σd^2

[ø] in Thai	Rank	[ø] in English	Rank	Rank difference (d)	d^2
100.0	6.5	77.8	6.5	0	0.00
93.1	4.0	77.8	6.5	-2.5	6.25
92.3	3.0	100.0	8.0	-5	25.00
100.0	6.5	61.9	5.0	1.5	2.25
88.5	2.0	50.0	3.0	-1	1.00
100.0	6.5	53.8	4.0	2.5	6.25
100.0	6.5	18.1	1.0	5.5	30.25
87.0	1.0	20.0	2.0	-1	1.00
					$\Sigma d^2=72$

Now calculate r_s as follows:

$$r_s = 1 - \frac{6 \times 72}{8(8^2-1)}$$

$$= 0.143$$

The critical value of r_s for N = 8 at the one per cent level in a non-directional test is 0.881. Since the calculated value is much smaller than the critical value, no significant correlation can therefore be claimed at the one per cent level. In other words, the subjects' use of [ø] in Thai and [ø] in English is not correlated.

Bailey (1978:346) says that it is routine in research reports to report the value of r and also to report r_s^2, interpreted as the percentage of all possible variance that is explained by the relationship. For example, an r_s^2 of 1.00 means that 100 percent of the correlation is explained. He comments further that quite a lagre r_s is required to yield a respectable-looking r_s^2. For example, an r_s of .5 yields an r_s^2 of only .25 (25 percent of the variance explained).

Vita

Mr Boonruang Chunsuvimol was born in Bangkok on July 12th, 1952. He graduated in 1976 from Macquarie University, Australia, with a B.A. in Linguistics and French. He finished M.A. in Applied Linguistics from National University of Singapore in association with SEAMEO Regional Language Centre in 1980. He started to do the doctoral programme in linguistics at Chulalongkorn University in 1987. At present, he is a lecturer in linguistics at Thammasat University.