

## Summary of Korean Project with TBTA

A Korean lexicon and grammar were developed sufficient to generate the following passages: Luke 1-10, Ruth, Esther, Daniel, Nahum, Kande's Story, a short story about preventing the spread of Avian Influenza, and another short story about preventing eye infections. Initially each verse required two to three hours of work, but by the end of this experiment, we could easily work through an entire chapter in less than half an hour. The graph in figure 1 below shows that the number of new grammatical rules required for each chapter of text rapidly decreased.

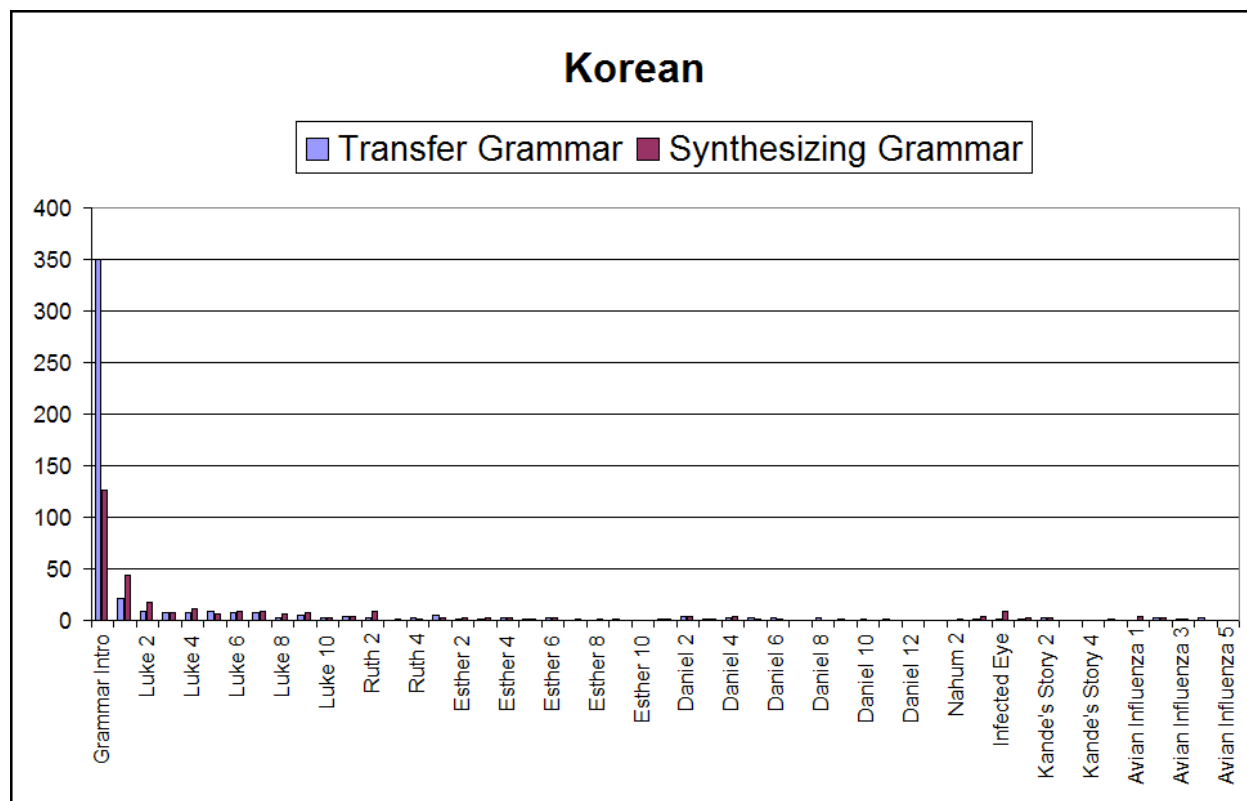


Figure 1. Graph Showing the Number of New Rules Required for each Chapter of Text

After generating drafts of the passages listed above, productivity experiments were performed with 18 experienced Korean translators. Sixteen of the participants were students at Southwestern Seminary, one participant (#7 in Table 1) was an SIL member who has completed a New Testament translation in Papua New Guinea, and the final participant (#18 in Table 1) was a professional certified translator in Dallas. The first 17 translators worked with biblical texts, and the final translator worked with the text about preventing the spread of Avian Influenza. Each translator spent 30 minutes translating English into Korean, and another 30 minutes editing a Korean draft generated by TBTA. Then each participant's ratio of the number of words edited to the number of words translated was calculated. The details of this experiment are listed in Table 1 below. The results of these experiments indicate that using the drafts generated by TBTA more than quadrupled the productivity of these 18 experienced mother-tongue translators.

Table 1. Ratios of Edited Words to Translated Words

	Step 4	Step 5	Ratio
Participant #1	Translated Ruth 1:1 to 1:20	Edited Ruth 1:21 to 4:22	1827/470 =3.9
Participant #2	Edited Ruth 1:1 to 2:23	Translated Ruth 3:1 to 4:6	1222/675 =1.8
Participant #3	Translated Esther 1:1 to 1:20B	Edited Esther 1:20C to 5:14	2065/583 =3.5
Participant #4	Edited Esther 1:1 to 5:14	Translated Esther 6:1 to 7:3A	2684/361 =7.4
Participant #5	Translated Esther 6:1 to 7:3	Edited Esther 7:4 to 10:3 (18:50 minutes)	2432/428 =5.7
Participant #6	Edited Esther 6:1 to 9:21	Translated Esther 9:22 to 10:3 (26:40 minutes)	1626/455 =3.6
Participant #7	Edited Esther 1:1 to 2:22A	Translated Esther 2:23 to 3:15	1282/456 =2.8
Participant #8	Translated Luke 2:1 to 2:16	Edited Luke 2:17 to 4:13	1842/319 =5.8
Participant #9	Edited Luke 2:1 to 3:6	Translated Luke 3:7 to 3:32	1180/559 =2.1
Participant #10	Edited Luke 4:1 to 5:20	Translated Luke 5:21 to 5:39	1468/444 =3.3
Participant #11	Translated Luke 4:1 to 4:24A	Edited Luke 4:24B to 6:17	1794/424 =4.2
Participant #12	Translated Luke 1:1 to 19B	Edited Luke 1:20 to 2:18	1422/412 =3.5
Participant #13	Edited Luke 1:1 to 2:26	Translated Luke 2:27 to 2:41	1995/290 =6.9
Participant #14	Translated Luke 7:1 to 7:21	Edited Luke 7:22 to 9:14	2400/461 =5.2
Participant #15	Edited Luke 7:1 to 8:8	Translated Luke 8:9 to 8:27	1440/460 =3.1
Participant #16	Translated Daniel 1:1 to 21A	Edited Daniel 1:22 to 4:23	2811/535 =5.3
Participant #17	Edited Daniel 1:1 to 4:23	Translated Daniel 4:24 to 5:7	3379/640 =5.3
Participant #18	Edited Avian Influenza 1:1 to 3:11 (25 minutes)	Translated Avian Influenza 3:13 to 4:4C (25 minutes)	1166/136 =8.6
		Average Ratio	4.6

After the productivity experiments were completed, questionnaires were developed to ascertain the quality of the edited TBTA drafts. Since TBTA has been designed to generate texts at approximately a sixth grade reading level, TBTA’s edited drafts were compared with the same passages from 쉬운 성경 [swi un seong gyeong] ‘Easy Bible’. The Korean Easy Bible was professionally translated and published in 2001, and is intended for students who read at a junior high level. This translation has become very popular in Korea with annual sales ranging from 100,000 to 200,000. Questionnaires were prepared and given to 102 adults at two Korean churches in the Dallas - Fort Worth area. Each questionnaire included an edited text from TBTA, and the same passage from the Korean Easy Bible. The participants in this experiment weren’t told where either of the texts came from or how they had been produced. The questionnaires asked the adults to read the two texts and then indicate which text is better for sixth grade students who are unfamiliar with the passage. Six questionnaires were prepared for each of the seventeen biblical texts described in Table 1. The results of these evaluations are shown below in Table 2. In the final column, the number after ‘TBTA’ indicates the number of adults who chose the edited TBTA text as being better for sixth grade students, the number after ‘Easy Bible’ indicates the number of adults who chose the Easy Bible text as being better for sixth grade students, and the number after ‘Equal’ indicates the number of adults who said that the two texts are equally appropriate for sixth grade students.

Table 2. Adult Evaluations of the Korean Texts

	Ratio	Evaluations
Participant #1	1827/470 =3.9	TBTA: 3 Easy Bible: 3 Equal: 0

Participant #2	1222/675 =1.8	TBTA: 3 Easy Bible: 2 Equal: 1
Participant #3	2065/583 =3.5	TBTA: 1 Easy Bible: 4 Equal: 1
Participant #4	2684/361 =7.4	TBTA: 4 Easy Bible: 2 Equal: 0
Participant #5	2432/428 =5.7	TBTA: 2 Easy Bible: 2 Equal: 2
Participant #6	1626/455 =3.6	TBTA: 1 Easy Bible: 2 Equal: 3
Participant #7	1282/456 =2.8	TBTA: 2 Easy Bible: 4 Equal: 0
Participant #8	1842/319 =5.8	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #9	1180/559 =2.1	TBTA: 4 Easy Bible: 1 Equal: 1
Participant #10	1468/444 =3.3	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #11	1794/424 =4.2	TBTA: 1 Easy Bible: 1 Equal: 4
Participant #12	1422/412 =3.5	TBTA: 4 Easy Bible: 2 Equal: 0
Participant #13	1995/290 =6.9	TBTA: 3 Easy Bible: 1 Equal: 2
Participant #14	2400/461 =5.2	TBTA: 5 Easy Bible: 1 Equal: 0
Participant #15	1440/460 =3.1	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #16	2811/535 =5.3	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #17	3379/640 =5.3	TBTA: 2 Easy Bible: 4 Equal: 0
	Total Evaluations	TBTA: 43 Easy Bible: 41 Equal: 18

After the adult evaluations were completed, another set of evaluations was performed at a middle school in DeaGu, South Korea. New questionnaires were prepared, and 90 sixth grade children were

asked to compare the edited TBTA texts with the same passages from the Korean Easy Bible. These questionnaires asked the students to indicate which text they considered better. The results of these evaluations are shown below in Table 3.

Table 3. Sixth Graders' Evaluations of the Korean Texts

	Ratio	Evaluations
Participant #1	1827/470 =3.9	TBTA: 5 Easy Bible: 1 Equal: 0
Participant #2	1222/675 =1.8	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #3	2065/583 =3.5	TBTA: 3 Easy Bible: 2 Equal: 1
Participant #4	2684/361 =7.4	TBTA: 0 Easy Bible: 3 Equal: 3
Participant #5	2432/428 =5.7	This text was not evaluated because it is not suitable for children when taken out of context.
Participant #6	1626/455 =3.6	This text was not evaluated because it is not suitable for children when taken out of context.
Participant #7	1282/456 =2.8	TBTA: 3 Easy Bible: 2 Equal: 1
Participant #8	1842/319 =5.8	TBTA: 3 Easy Bible: 2 Equal: 1
Participant #9	1180/559 =2.1	TBTA: 4 Easy Bible: 2 Equal: 0
Participant #10	1468/444 =3.3	TBTA: 5 Easy Bible: 1 Equal: 0
Participant #11	1794/424 =4.2	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #12	1422/412 =3.5	TBTA: 4 Easy Bible: 1 Equal: 1
Participant #13	1995/290 =6.9	TBTA: 2 Easy Bible: 3 Equal: 1
Participant #14	2400/461 =5.2	TBTA: 4 Easy Bible: 2 Equal: 0
Participant #15	1440/460 =3.1	TBTA: 3 Easy Bible: 1

		Equal: 2
Participant #16	2811/535 =5.3	TBTA: 3 Easy Bible: 2 Equal: 1
Participant #17	3379/640 =5.3	TBTA: 2 Easy Bible: 2 Equal: 2
	Total Evaluations	TBTA: 45 Easy Bible: 30 Equal: 15

These evaluation experiments indicate that both the adults and the children consider the edited TBTA texts to be of a quality that is comparable with a professionally translated and published Korean Bible.