Foreword

Paul Wegner in *The Journey from Texts to Translations* lists 130 English translations of the complete Bible or of the Old or New Testament that were published in the twentieth century. Nevertheless, more English versions still appear, as the *English Standard Version*, *Today's NIV*, and the *Holman Christian Standard Bible* in the first decade of this century testify. Many non-English Bible translations are being made as well. In 1959 Ethel Wallis and Mary Bennett wrote *Two Thousand Tongues to Go: The Story of the Wycliffe Bible Translators*. The world's premier non-English Bible translation organization believed that only 2000 languages still needed the Scripture. Recently, however, the Summer Institute of Linguistics (also known as the Graduate Institute of Applied Linguistics) reported the existence of more than 6900 languages worldwide, of which over 2600 do not have a Bible portion. One can see that Bible translation is an ongoing project.

Since the Bible is God's Word and the peoples of the world are each important to God, it is essential to have a methodology for excellence in translating the Bible into the heart languages of these people. In the pages to follow James D. Price sets forth a method for computer-aided translation according to optimal equivalence translation theory. Not all translators practice optimal equivalence; many follow other translation theories.

The literal, word-for-word, theory practiced at least since the second century by Aquila in Greek, later in the fourteenth century by John Wyclif in English, and since then by many others may or may not communicate well in the target language. An example from Wallis and Bennett's time above comes from the late President John Kennedy who declared in German, "*Ich bin ein Berliner,*" a word-for-word translation of English, "I am a Berliner." The latter is good English, but the former is not good German. Proper German, "*Ich bin Berliner,*" in a word-for-word English translation is, "I am Berliner," which is awkward English. Kennedy (or his advisor) weakened his attempt to communicate solidarity with the Berliners because strict word-for-word translations run the constant risk of not communicating well or clearly.

Formal equivalence theory that strictly retains the phrase and clause structures of the original language also often results in "translation English" (or "translation Tagalog," etc.) instead of natural, idiomatic language. For example, in Russian the form of the expression,

"Myenya zavut Ivan," would come across in English as, "Me they call Ivan." However, in declarative English we seldom place the object before the subject and verb. We would properly violate strict formal equivalence by translating, "They call me Ivan," or "My name is Ivan."

The popular dynamic, or functional, thought-for-thought translation theory tries to produce in the contemporary audience the same response(s) as the original writing did in the initial audience. However, some of the encoded ideas (philological, syntactical, or grammatical) in the original document are often omitted. For example, in Prov. 28:8 the Hebrew, "*beneshek vetarbit*," is literally, "by interest and interest," which is clearly redundant in English though not in Hebrew. A functionally equivalent translation such as appears in the NIV and NRSV is, "by exorbitant interest," which loses the concepts that *neshek* is usually interest on a loan of money and *tarbit/marbit* is usually interest on a loan of grain.[1]

A paraphrase or loose translation clearly describes the translator's interpretation of the ideas in the original document, with little or no concern for grammar, philology, syntax, or discourse structure. For example, a paraphrase such as the *Contemporary English Version* translates synonymous parallelisms in Psalms with single clauses without parallelism.

Price's theory of optimal equivalence translation, which falls between dynamic, literal, and formal equivalence, seeks to maintain optimum equivalence between the languages at the word, phrase, clause, sentence, and discourse levels, while still maintaining good literary idiom in the receptor language.

One of the primary reasons for choosing optimal equivalence is the understanding that divine inspiration extends not only to the level of Scripture's thoughts, but also down to the level of the very words and even the implications of the words. Three examples from Paul and Jesus show the importance of paying attention to the exact words of Scripture and implications from the culture. In Gal. 3:16 Paul points out from Genesis (12:3, 7; 13:15; 17:7; 24:7) that God's blessings would come to and through Abraham's *seed*, not his *seeds*.

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[1] Samuel E. Loewenstamm, "נשך and מ/תרבת," *Journal of Biblical Literature* 88 (March 1969]: 79).

Paul bases his theological point on the number of the noun—it is singular, not plural. He does this despite the fact that the singular form of this noun is often used collectively and almost never occurs in the plural anyway. However, he includes in his use of the original word an implication that he and other Jewish readers of his day shared without saying.[2]

In Matt. 22:42-46 Jesus cites Psa. 110:1 to argue on the basis of the single word *Lord* (*kurios*) that the Messiah would be David's superior, despite the fact that he was David's descendant. Jesus' point was partly dependent upon the ancient Near Eastern cultural principle that an ancestor would not normally refer to his descendant as his superior. Jesus forced His listeners to acknowledge that the Messiah was superior to the great King David. To His Jewish audience, Jesus' argument was unanswerable even by His strongest critics. Therefore, not only is the exact wording essential for proper theological understanding, but so is the general cultural worldview. In the pages to follow James Price incorporates the Biblical and target audience worldviews into the plan for optimal equivalence.

To expose the error of the argumentative Sadducees in Matt. 22:31-32 Jesus quotes Exod. 3:6 from the Septuagint with its present tense, "I am...the God of Abraham and the God of Isaac and the God of Jacob." The force of His argument lay partially in the present tense of the verb. The Sadducees could not refute Him by pointing out that the Hebrew text is a verbless sentence, for the present-tense context of the Hebrew was aptly caught by the Septuagint. Christ's theological point was irrefutable based on a grammatical detail and the implications that accompanied it. Price's computer-aided optimal equivalence methodology takes implications from the original language and incorporates them into the target language as well.

In his book Price brings optimal equivalence in translation together with computer-aided translation. The problems with machine translation are disappointing, well-known, understandable, and not simplistically solved. Machine translations have failed to take into account implications, contexts, and idioms. Our author has over a quarter of a century of professional experience in electrical and research engineering, including such work at the renowned Franklin Institute. In order to use computers in a context-sensitive translation that

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[2] A. E. Harvey, *A Companion to the New Testament*, 2nd edition (Cambridge: Cambridge University Press, 2004), 600.

takes into account both grammatical and semantic attributes of a text, the author has already written an analysis grammar (of Modern Hebrew), a transfer grammar, and a synthesis grammar (of English) for translating Modern Hebrew to English. His research on computer-aided translation of Modern Hebrew was sponsored by the U. S. Department of Health, Education, and Welfare. He also brings his experience of five decades of Biblical Hebrew studies, including doctoral studies at Dropsie College in the days when it produced significant scholars, and thirty-five years of teaching Hebrew to seminary students. His experience as the Executive Editor for translating the Old Testament for the *New King James Version* and as a translator for the *Holman Christian Standard Bible* means that he is no stranger to the problems of producing a translation that carries the meaning of the original and yet results in good literary style. With all this preparation Price has much to offer on a theory of Bible translation and using the computer as an essential working aid. He does not take a blindly dogmatic position that there are no thorny problems or sticky issues, and his solution is not simplistic.

In this volume Price shows the design for the practical basis of computer software that supports optimal equivalence in translation. He takes into account that the translation theory requires equivalence at the kernel clause level, the transformational level that produces surface structures, and the inference level. By themselves the first two features historically have proved inadequate since they do not take into account all the complexities of language. Therefore, Price proceeds to set up a discourse grammar with grammatical and semantic restraints and with discourse transformations that produce not merely sensible phrases and clauses but also meaningful discourse text in good literary style. He has included mathematical symbols to facilitate use of computers in the translating of discourse.

Machines have not taken into account inferences and context, but our author's system design accounts for literary context, cultural context, and the author and reader's worldview and general knowledge. Although at first it might appear that a machine could not take context into account, computer software has clearly reached the state where this is being done. Price incorporates a plan for building computer "awareness" (quotation marks because this is still artificial intelligence) of context, such as an operating system that contains a knowledge base that grows through the translation process.

Since differing languages are not exactly equivalent at any level, another essential feature of the book is Price's direction for the mapping of equivalencies between Biblical Hebrew and the receptor language at the word, phrase, and clause levels.

Another advantage of the author's design is that once a complete analysis of the Hebrew Scripture has been completed mechanically and approved by a committee of experts, it need not be altered or redone; it is available as input for translating into any receptor language.

Price has already constructed some of the major software items he describes below and which are experiencing good success. So the description that follows is not merely theoretical or untried, nor does it produce grammatically correct nonsense clauses.

The methodology of this work and the use of the computer do not eliminate the human translator, but they aid and speed up his or her work. The intelligent user is necessary to resolve complex semantic issues. Also, this methodology does not replace the native speakers that translators have traditionally used, but it accumulates their insights to aid in further translation. If translators will utilize James Price's methodology, they should more quickly reach the goal of translating the Bible into the 2600-plus tongues to go than they have in the years since we thought there were only 2000.

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