September 15, 1994

Dr.Hyeon Kim Seoul Systems Co., Ltd. SSC Building 213-5 Nonhyôn-dong, Kangnam-gu, Seoul 135, Korea

Dear Dr. Kim:

It has been fully twenty-one months since we met in Seoul at the offices of the Seoul Systems Company. At that time I was deeply moved, truly, by the warmth of the welcome Chairman Lee and you extended to Professor Song and myself. And we both were immensely gratified to receive your generous offer to undertake the arduous task of making the data files of our Munkwa Project ready for scholarly analysis and publication. Reflecting back on that moment, then, there is no way I can explain, even to myself, why and how it happened that it has taken so long for me to take the first essential step toward achieving the goals for the Munkwa Project we discussed on that occasion. That "first essential step," of course, required me to prepare and send to you the full range of computer data necessary for you to re-create the Munkwa Project within the appropriate operating mode available to you at Seoul Systems. And, now at last, I can report to you that I am able to begin to honor this commitment.

There are a number of comments that need to be made about the data I now am sending to you:

1. The data tape labeled PT 1599 contains the records of all 14607 munkwa passers as these records existed in 1988, when it was used as the source of the Munkwa data file that the programmer, Mary Hyde, accessed in performing the "Mundown" operation. "Mundown" took the MS-DOS alpha-numeric records on Harvard University's IBM main-frame computer and translated them appropriately to create a Chinese character listing of the information available for each of the successful candidates. Copies of programs she wrote for this purpose are found on the HD floppy disk labeled "Mundown Operation."

- 2. A complete copy of the translated data file is included in this shipment. It consists of thirteen 3.5" floppy disks labeled "Mundown Chunk # . . ." These are so-called "text" files, I think (but I do not understand why the icon looks different in some cases).
- 3. Unfortunately, Chinese character codes for Korean software were changed after we completed the Mundown operation, and we were not able to translate the HT88 codes into the so-called KS (Korea Standard) codes until last year, in June 1993. I have included a full copy of this KS translation output file, which of course should be essentially identical to the HT88 output file described in paragraph "1" above. The box containing the KS output file is labeled "MunTransl Data Files", and the floppy disks are labeled "MunTransl 01A . . . 14". This box of disks also contains a disk labeled "MUNKWA PROJECT: Misc. for Seoul Sys."
- 4. There is a meaningful difference, however, in the way the Chinese characters not yet available in the Korean operating system software are represented in these two versions of the MUNKWA PROJECT data. The Mundown operation wrote out the four-digit Telegraph Code (TC) number in such cases, while the KS translation represents the unavailable characters by special symbols (I call them "bar codes") that can be read as numbers. (For example, the "bar code" for TC 9312 is [1] see the complete key to interpreting the bar codes in the attached documentation.) Unlike the TC numbers themselves, the bar code characters each has been assigned its own slot or space (and therefore its own unique hexidecimal code) in the Font Edit document, so that the Chinese character it represents will automatically appear in all of the computer's files as soon as it is drawn.
- 5. The programming that was necessary for translating HT 88 codes into KS codes was done by a Harvard student who meanwhile has graduated and no longer is available for consultation. I have tried to supply all of the documentation you would require to duplicate the KS translation process that we performed. But, unfortunately, I am a rather unsophisticated computer user, and my record-keeping too is sub-standard. Accordingly, I am not certain that I have provided you with all the information you may need. Here is a list of the contents of the box of floppy disks labeled "OPERATING SYSTEMS":
- (1.) Hangul Talk 88 operating system, based on Macintosh System 5.5 -- 4 disks. Disk 4 has a copy of the BLESSER application, which is used to change from one operating system to another.

(2) Hangul Talk 92 "Export" operating system, based on Macintosh system 6.0.7 and using KS codes, 7 disks -- Disk 7 contains a copy of the NISUS word processor that is used with KS versions of Hangul Talk. Disk 7 also has a copy of a "Hangul Talk" Control Panel document. (Please see the message I have written in the "get info" space of this "Hangul Talk" document.)

Note that the "32-Bit QuickDraw" document in the HT 92 system folder may cause trouble by preventing the start-up of the system. If that problem occurs, simply remove this document from the system folder. Note, too, that the HT 92 operating system I am sending you is considerably condensed. If you have difficulties with it you might try calling Yi Kwang-ho 李光告 at 엘렉스 컴퓨터, Tel. 780-4545.

You also should be aware that the present generation of Macintosh computers will not allow you to use operating systems lower (that is, earlier) than so-called System 7. Because of this, I would strongly recommend that you find one of the earlier "Mac II" machines, which can run both the HT 88 and the HT 92 operating systems.

(3) **Test Trans 6/4/93** -- This is a listing of the 7802 spaces, or "screens,"in the HT 88 system, that contain pre-drawn Chinese characters or that are available for writing Chinese characters. Screens are listed in HT 88 code order, with the appropriate, or corresponding, HT 92 characters (or other graphic elements) given in the adjoining column. Thus this file represents a translation of an HT 88 data file into an equivalent HT 92 data file.

Note that the Chinese character font used in these documents by the HT 92 operating system is the 중명조 font, which looks like this, i 미 II I i ð, on the Font Menu bar. (However, when Chinese characters are accessed from the Font Edit and thus are written on the computer screen, they can be converted from English font codes to Chinese characters in the Munjo font as well.)

(4) Galactic Space Codes -- This is a 33-page document listing 1395 TeleCodes with their original HT 88 code "address" equated with their HT 92 address codes. These characters were written (or were assigned to be written) in an inaccessible area of "screens" that existed separately from the 749 screens that HT 88 assigned for "user" Chinese characters. I think (but I am not completely certain) that it was necessary to access this file for the HT 92 translation process.

- (5) Repertoire Characters -- This is an 82-page document listing 4404 of the 4888 KS repertoire characters in HT 88 code order. (Presumably, the missing 484 characters in the full repertoire have no TC equivalents, meaning that they are not used in the MUNKWA PROJECT.) This list does not contain the equivalent KS codes, and I do not know whether or how this document may have been used in the KS translation process.
- (6)TeleCodes Trans. -- This is a 218-page listing of the numbers 0001~9999, representing the full repertoire of spaces available for TeleCode characters. The bar code assignments are shown whenever they exist, but no KS repertoire characters appear. Again, I assume that this document was created by the programmer (it certainly was not compiled by me!) for use in the KS translation process, but again I am ignorant.
- (7) Translation Dic. This is a 46-page document listing 2120 TeleCodes with four columns of data, thus, for example:

5447	0xD8E4	0xCC77	邁
TC No. for 莒	KS code for 邁	KS bar code for TC 5447	
6770	0xF0E1	0xFC72	趙
TC No.		KS bar code	

Column 1 is the TeleCode number; the hex-codes in Column 2 begin with D441, which is the starting point for HT 88 user codes; the hex-codes in Column 3 identify a non-repertoire character by its KS bar code address; and Column 4 provides a repertoire Chinese character whose KS Code address is that given in Column 2! And finally, approximately two-thirds of this document has no data in Column 4, apparently for a reason related to the fact that the hex-codes in Column 2, after p. 16, go on beyond the end of the codes that are used for the HT 88 repertoire characters. Needless to say, I do not understand the purpose of this document at all, but it must have been created by the programmer as part of his KS translation program.

(8) Translator applications -- HTrans 2.0 K1 is the program created by the Elex Computer people for use in converting the original HT 88 codes to the standardized KS codes. And the Translator 5.0 application is the program created by the student programmer here to convert the HT 88 Mundown records to the KS coding numbers. The Translator 5.0 program may have incorporated all or part of the HTrans 2.0 K1 application, then adding

distinctive features necessary for the full and accurate translation of the MUNKWA PROJECT files.

At last this letter has reached its end. I hope that you will be able to work effectively and successfully with the information I am sending. Of course I realize that I have given you a rather incoherent, and perhaps also incomplete, account of the HT 88 and the KS Translation processes. If necessary, it should be possible for me to contact the student programmer to obtain explanations of his KS translation program. You may contact me, of course, at any time, either by FAX (617 495-8379), or by phone (office: 617 495-8378; home: 617 861-1970). I hope to be able to go to Korea in about a month or so, at which time I will of course contact you immediately.

Meanwhile, please accept my best wishes for your MUNKWA PROJECT endeavor, and please also convey my respects and appreciation to Chairman Lee.

Very sincerely yours,

Edward W. Wagner

Professor of Korean Studies, Emeritus