

5. Title: The Evaluation of an Experimental Course in the Programmed Teaching of the Thai Language

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Period of Study: Initiated 29 January 1968

OBJECTIVE

The evaluation and further development of an experimental self-instructional course in the Thai language, as a preliminary step in the development of an instrument which may be used to investigate the parameters that influence language acquisition, and the development of a programmed course that will teach U.S. Army medical personnel those language skills that will be most helpful to them in the performance of their duties.

INTRODUCTION

An experimental course in programmed Thai developed at the Institute for Behavioral Research,³ was brought to Thailand for evaluation and further development. The materials developed at IBR include the following: 1) a teaching machine; 2) a linear program (presented on film strips and magnetic tape cartridges, divided into 40 sections); 3) a student manual; 4) a dictionary. The following description of the program is quoted from pages i and ii (Item 13) of the principal investigator's report, dated 15 August 1967:⁴

"A self-instructional foreign language (FL) course in Thai was developed for the purpose of providing military medical personnel, whose duties and training typically involve areas other than FL learning, with fundamental skills in the Thai language.

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- 2 Graduate Student, East-West Center, University of Hawaii, Honolulu, Hawaii 96822. Contracted through IBR, July and August 1968, as consultant to the language project at SEATO Laboratory.
- 3 Reference: Hughes, Heidi B., THAI FOR MILITARY MEDICAL PERSONNEL (DADA 17-68-C-8049; DADA 17-67-C-0013; DADA 17-67-C-7130;) Final Technical Report, August 15, 1966-September 30, 1968, Institute for Behavioral Research, 2426 Linden Lane, Silver Spring, Maryland 20910; Qualified investigators may obtain copies of this report from the Defense Documentation Center, Cameron Station, Alexandria, Virginia 22314. A copy is on file in the Department of Neuropsychiatry, USA Medical Component SEATO.
- 4 Hughes, Heidi B., AN EXPERIMENT IN THE TECHNOLOGY OF PROGRAMMING A SECOND LANGUAGE (THAI), (DADA 17-67-C-0013), Final Technical Report, August 15, 1966-August 15, 1967 (extended to October 15, 1967); Institute for Behavioral Research, Inc., 2426 Linden Lane, Silver Spring, Maryland 20910. Copies of this report are available from the Defense Documentation Center, and a copy is on file in the Department of Neuropsychiatry, USA Medical Component SEATO.

"The content of the course consists of approximately 1500 lexical items, carefully chosen to allow the learner to communicate, both in spoken and in written form, on such basic, everyday topics as food, lodging, directions, time, work and leisure, education, and health.

"The format of the course involves three separate parts: 1) a linear FL Program based on operant conditioning principles, presented to the learner via an audio-visual teaching machine developed for that purpose; 2) a Student Manual which parallels the Program, but in contrast to it represents a deductive approach to the FL and offers grammatical and structural rules, explanations, examples, and practice material; and 3) a Thai/English-English/Thai Dictionary which lists in alphabetical order all (but no more than) the lexical items contained in the course.

"The entire course is divided into 40 lessons and requires a total of 120 to 150 hours for completion. One third of the time is devoted to the programmed material. Upon termination, the student is expected to demonstrate competence in the Thai language at a level comparable to that of students who score between S-1 and S-2 on the proficiency scale used by the Foreign Service Institute of the State Department."

METHOD

A. Phase I: Preparatory phase (29 January - 31 March 1968)

This time was spent in finding suitable working space; obtaining suitable office and laboratory furniture and equipment; setting up and testing the teaching machines; preparing additional copies of student manuals; preparation of testing materials and interview forms; interviewing, testing and selecting suitable subjects; training of personnel.

B. Phase II: Initial test (1 April - 31 May 1968)

Five subjects were selected to test the integrity of the equipment, materials, and method of administration of the program. Subjects were selected to represent as heterogeneous a group as possible, considering the small sample. During this time the testing instrument was revised and designed to be used as a pre-test (of prior exposure to Thai as well as of the ability to discriminate among Thai tones, vowels and consonants), and as an achievement test either at the completion of the course, or at significant stages during the program. At the same time a detailed review of each recorded message and film-strip frame, the student manual content, as well as lexical stock of the entire program was begun. Booths were designed and built to house the audio-visual devices in an attempt to cut down outside noise and other distractions and focus the subject's attention on the machine. Access to the Army Language Proficiency Test (Thai) was obtained. Detailed observations were made and recorded concerning the performance of the A-V device, errors per subject per lesson, time per subject per lesson, number of sessions and lessons per subject per week, and subject performance on the ALAT and the pre-test and achievement test. Subjects were interviewed concerning their experiences with the program, and their responses recorded on tape.

Phase III: Start of second group of subjects and continuation of initial group. (1 May - 17 August 1968)

Twelve additional subjects were introduced into the program, when it was felt they could be accommodated and the staff sufficiently experienced in the administration of the program and the techniques of observation, testing, and recording. By the end of this phase all subjects had either completed the program, had dropped the course, or had suspended work without declaring an intention to drop the course.

Phase IV: Preparation and presentation of interim report (17 August - 30 September 1968)

During this period data was assembled and an interim report prepared. This report was based on a complete review of the course content by Anong Jackson,¹ Kennon Breazeale,² and Kenneth Stuart, as well as a review of the first 19 lessons by Aporn Surintramont, and the detailed observations of Gerald S. Suzuki. The report was presented to and discussed with the Chief, Department of Neuropsychiatry, and the Director, USA Medical Component SEATO, and then brought to Walter Reed Army Institute of Research, Washington, D.C., where it was presented to and discussed with the Director and Deputy Director, Division of Neuropsychiatry, and the Director and Deputy Director, WRAIR. At that time the decision was made; 1) to continue work on revision of the program and collection of additional material at the SEATO Laboratory in

FINDINGS:

A. The Subject

The table below provides basic data concerning the population studied:

BASIC SUBJECT DATA

Subject	Sex	Civil Cond.	Age	Status	Years of Formal Education	No. of Months in Thailand	Prior Thai Instruction
1.	M	S	39	Mil/SFC	16	6	No
2.	F	S	50	Mil/LTC	16	8	No
3.	M	M	26	Mil/SP5	16	18	No
4.	M	M	32	Mil/CPT	21	2	No
5.	M	M	33	Mil/SFC	12	7	No
6.	M	M	45	DAC/GS15	21	45	Yes
7.	M	M	30	Mil/CPT	18	5	No
8.	M	M	33	Mil/MAJ	20	7	No
9.	M	M	32	DAC/GS13	21	43	Yes
10.	F	S	53	DAC/GS7	11	9	No
11.	F	M	50	DAC/DEP	13	6	No
12.	M	M	34	Mil/MAJ	21	22	No
13.	M	M	47	DAC/GS13	22	2	No
14.	M	S	25	Mil/1 Lt	18	3	Yes
15.	F	M	38	Mil/DEP	16	29	No
16.	M	M	33	Mil/MAJ	21	29	No
17.	M	M	37	Mil/MAJ	22	4	Yes

Bangkok; 2) to take the project back to WRAIR at the end of March 1969, where work on revision would be continued until the end of June 1969, as an in-house project of the Division of Neuropsychiatry; 3) the revised product would be sent back to the SEATO Laboratory for additional testing.

Phase V: Revision and collection of materials (1 October -- 31 March 1969)

During this period work on program revision and collection of additional language materials from local sources was continued.

Phase VI: Return to WRAIR (1 April -- 30 June)

As planned, the program will be brought back to WRAIR during the Fourth Quarter of FY 1969, for completion of revision of the software, and adaptation to a more suitable audio-visual device.

B. Performance

A number of indices of subject performance were recorded, and the results reported in the previously referenced interim report to Director, WRAIR. From these data some observations may be made concerning the programming.

(a) With increasing difficulty of content, i.e., introduction of Thai script and eventual total elimination of phonemics, and with the enormous increase in vocabulary in later lessons, the required time per lesson increased markedly, and the frequency of lessons per day and/or week decreased.

(b) In comparing the pre-test and achievement scores, using the identical testing instrument, there appears to be some small improvement in aural and reading comprehension. Reading comprehension improvement, however, must be attributed largely to the use of the Anthony text (Anthony, E.M., A Programmed Course in Reading Thai Syllables, Ann Arbor, Michigan, The University of Michigan press, 1962). In cases where this text was withheld the subjects had not acquired any reading skills from the audio-visually presented material, or from the student manual.

(c) Ability to acquire conversational skills was not demonstrated. Subjects gave evidence of increased vocabularies, but had considerable difficulty with tones and pronunciation of vowels and consonants. Ability to engage in simple conversation was not demonstrated except by those subjects who had considerable prior Thai language instruction or exposure.

C. Content

Much of the Thai content is poor, bad, or unacceptable, in terms of syntax, choice of vocabulary, and incompatibility with normal Thai usage and mode of expression. Much of the structure (and practically all of the last four lessons) is exceedingly poor Thai and obviously word-for-word substitution of Thai words for English words, according to dictionary definitions, without consideration for the appropriate Thai expression or the concepts to be expressed. The results are sometimes merely adequate (in terms of understandability by Thais), often absurd, and sometimes even offensive (to the Thai). Some basic Thai words, word-groups, and forms implicit in Thai normal usage, are repeatedly misused throughout the entire program, indicating a basic lack of understanding of some of these most commonly used forms. Frequently the rather arbitrary "grammatical" explanations are simply not correct, or partially correct, incomplete, or misleading.

The student manual itself is not a programmed work-book, but a supplementary text, and a rather poor one at that.

Far too many of the pictures in the frames (film strip) are complicated, "busy" and confusing, and frequently the textual material on the frames appears to be like a page out of a written text book.

The manner of introduction of the writing system confuses the student. The program requires and depends upon the use of the Anthony text to teach Thai script. Without the Anthony text the program's attempt to teach Thai script is a failure.

D. The Teaching Machine

The machine itself has been found impractical for sustained use:

(a) Current in Bangkok is 220 V 50 cycles;

(b) The machine is too sensitive to very minor influences, such as dust on films, internal mirrors drop out of alignment, tapes catch on playback head, frames do not always line up properly, sound mechanism sometimes fails, push-buttons do not always work properly. The machine requires constant attention and readjustment.

(c) The machine makes no provision for repeating a sound track, for recording the student's verbal productions, or for the optional use of earphones, all of which the students feel are required.

Conclusions and Recommendations

A. The presentation of a self-instructional programmed course in the Thai language by means of an audio-visual device appears to be practicable. The IBR program, however, appears to have fallen very short of its goals of providing the student with basic reading writing or even basic conversational skills.

1) The content is being revised:

- a. to eliminate errors in syntax and word usage;
- b. to eliminate misleading and offensive cultural materials;
- c. to place more emphasis on real-life Thai-American interaction situations;
- d. to separate the learning of Thai script from the learning of conversational Thai;
- e. to include more fluid, colloquial, idiomatic, conversational Thai syntax and vocabulary, and reduce or eliminate stilted formal or archaic Thai;
- f. to eliminate cluttered and confusing frames, and excessively long spoken passages;
- g. to make the transition from simple to complex structure more gradual.

2) The audio-visual device should be exchanged for one which is relatively insensitive to the minor influences which have so seriously affected the operation of the IBR device:

- a. it should be capable of repeating the recorded message;
- b. it should be easy to operate by the subject, and relatively foolproof;
- c. it should require minimal maintenance;
- d. it should be portable, and able to operate on 220 V 50 cycles;
- e. it should accept earphones;
- f. it should accept a recording device for immediate playback of model spoken message and subject's verbal imitation;

B. The recommended content revisions are considered to be the minimal revisions of the program required to render it acceptable as a Thai language teaching program. In order to develop this program as an instrument for studying the learning of languages and communication, more extensive work would be required.

C. The perfection of the content of the program and the acquisition of a suitable A-V device appear to be basic to the larger scientific aims of this project, to study language and language learning in its relation to human communication, human understanding, and the shaping of human behavior.